UNITED PARCEL SERVICE INC
Form 424B5
December 11, 2014
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Filed Pursuant to Rule 424(b)(5)
Registration No: 333-192369

CALCULATION OF REGISTRATION FEE

	Amount to be Registered	**Proposed Maximum Offering Price Per Unit**	**Proposed Maximum Aggregate Offering Price**	**Amount of Registration Fee(1)**
Floating Rate Senior Notes Due 2064	$90,343,000	100%	$90,343,000	$10,497.86

(1) Calculated in accordance with Rule 457(r) and Rule 456(b) of the Securities Act.

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PROSPECTUS SUPPLEMENT

TO PROSPECTUS DATED NOVEMBER 15, 2013

$90,343,000

UNITED PARCEL SERVICE, INC.

Floating Rate Senior Notes due 2064

We will pay interest on the notes quarterly in arrears on March 15, June 15, September 15 and December 15 of each year, beginning on March 15, 2015, and on any maturity date. Interest on each note will be set on December 15, 2014 and reset on March 15, June 15, September 15 and December 15 of each year, beginning on March 15, 2015, based on the 3-month LIBOR Rate less 0.30%. The stated maturity of the notes is December 15, 2064.

We have the option to redeem all or a portion of the notes beginning on December 15, 2044, at the redemption prices listed in this prospectus supplement plus accrued and unpaid interest to the redemption date.

The holders of the notes may require us to repay all or a portion of the notes on December 15 of every year, commencing December 15, 2015, through and including December 15, 2025 and thereafter on December 15 of every subsequent third year through and including December 15, 2061, at the repayment prices listed in this prospectus supplement plus accrued and unpaid interest to the repayment date.

If there is a tax event , we have the right to shorten the maturity of the notes to the extent needed so that the interest we pay on the notes will be deductible for United States Federal income tax purposes. On the new maturity date, we will pay 100% of the principal amount of the notes plus accrued and unpaid interest to the new maturity date.

The notes are a new issue of securities with no established trading market. We do not intend to apply for listing of the notes on any securities exchange or for quotation of the notes on any automated dealer quotation system.

Investing in the notes involves risk. See Risk Factors in our Annual Report on Form 10-K for the year ended December 31, 2013 and our Quarterly Report on Form 10-Q for the quarter ended September 30, 2014, which are incorporated by reference into this prospectus supplement.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus supplement or the accompanying prospectus to which it relates is truthful or complete. Any representation to the contrary is a criminal offense.

	Per Note	Total
Public Offering Price (1)	100.00%	$ 90,343,000
Underwriting Discount	1.00%	$ 903,430
Proceeds (before expenses) to UPS	99.00%	$ 89,439,570

(1) The public offering price set forth above does not include accrued interest, if any. Interest on the notes will accrue from December 15, 2014 and must be paid by the purchasers if the notes are delivered after December 15, 2014.

We expect the notes to be delivered in book-entry form only through The Depository Trust Company on or about December 15, 2014.

Active Bookrunners

UBS Investment Bank

BofA Merrill Lynch

J.P. Morgan

Morgan Stanley

Wells Fargo Securities

The date of this prospectus supplement is December 10, 2014.

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You should rely only on the information contained or incorporated by reference in this prospectus supplement, the accompanying prospectus or any free writing prospectus filed by us with the Securities and Exchange Commission (the SEC). We have not, and the underwriters have not, authorized anyone else to provide you with different or additional information. If anyone provides you with different or additional information, you should not rely on it. We are not, and the underwriters are not, making an offer to sell these securities in any jurisdiction where the offer and sale is not permitted. You should not assume that the information in this prospectus supplement, the accompanying prospectus, any free writing prospectus or any document incorporated by reference is accurate as of any date other than the date of such document. Our business, financial condition, results of operations and prospects may have changed since those dates.

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ABOUT THIS PROSPECTUS SUPPLEMENT

This document has two parts. The first part consists of this prospectus supplement, which describes the specific terms of this offering and the notes offered hereby. The second part, the accompanying prospectus, provides more general information about securities which we may offer, some of which does not apply to this offering. If the description of the offering varies between this prospectus supplement and the accompanying prospectus, you should rely on the information in this prospectus supplement.

Before purchasing any notes, you should carefully read both this prospectus supplement and the accompanying prospectus, together with the additional information described under the heading Incorporation of Certain Documents by Reference in this prospectus supplement.

Unless otherwise indicated, all references in this prospectus supplement to we, our or UPS refer to United Parcel Service, Inc., a Delaware corporation, and its consolidated subsidiaries.

DESCRIPTION OF UPS

We were founded in 1907 as a private messenger and delivery service in Seattle, Washington. Today, we are the world s largest package delivery company, a leader in the U.S. less-than-truckload industry and the premier provider of global supply chain management solutions. We deliver packages each business day for 1.5 million shipping customers to 7.9 million receivers in over 220 countries and territories. In 2013, we delivered an average of 16.9 million pieces per day worldwide, or a total of 4.3 billion packages. Total revenue in 2013 was $55.4 billion.

We are a global leader in logistics, and we create value for our customers through solutions that lower costs, improve service and provide highly customizable supply chain control and visibility. Customers are attracted to our broad set of services that are delivered as promised through our integrated ground, air and ocean global network.

Our services and integrated network allow shippers to simplify their supply chains by using fewer carriers, and to adapt their transportation requirements and expenditures as their businesses evolve. Across our service portfolio, we also provide control and visibility of customers inventories and supply chains via our UPS technology platform. The information flow from UPS technology drives improvements for our customers, as well as for UPS, in reliability, flexibility, productivity and efficiency.

Particularly over the last decade, we have significantly expanded the scope of our capabilities to include more than package delivery. Our logistics and distribution capabilities give companies the power to easily expand their businesses to new markets around the world. By leveraging our international infrastructure, we enable our customers to bridge time zones, cultures, distances and languages to keep the entire supply chain moving smoothly.

We serve the global market for logistics services, which include transportation, distribution, forwarding, ground, ocean and air freight, brokerage and financing. We have three reportable segments: U.S. Domestic Package, International Package and Supply Chain & Freight.

Our principal executive office is located at 55 Glenlake Parkway, N.E., Atlanta, Georgia 30328, telephone (404) 828-6000.

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CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein include certain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Statements in the future tense, and all statements accompanied by terms such as believe, project, expect, estimate, assume, intend, anticipate, target, plan, and variations thereof and similar expressions are intended t forward-looking statements. We intend that all forward-looking statements we make will be subject to safe harbor protection of the federal securities laws pursuant to Section 27A of the Securities Act of 1933, as amended, (the Securities Act) and Section 21E of the Securities Exchange Act of 1934, as amended (the Exchange Act).

Our discussion and analysis in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein contain some forward-looking statements regarding our intent, belief and current expectations about our strategic direction, prospects and future results. Such statements give our current expectations or forecasts of future events; they do not relate strictly to historical or current facts. Management believes that these forward-looking statements are reasonable as and when made. However, caution should be taken not to place undue reliance on any such forward-looking statements because such statements speak only as of the date when made.

Forward-looking statements are subject to certain risks and uncertainties that could cause actual results to differ materially from our historical experience and our present expectations or anticipated results. These risks and uncertainties include, but are not limited to those discussed in our filings with the SEC, including our Annual Report on Form 10-K for the year ended December 31, 2013 and our Quarterly Report on Form 10-Q for the quarter ended September 30, 2014, which are available from the SEC. You should consider the limitations on, and risks associated with, forward-looking statements and not unduly rely on the accuracy of predictions contained in such forward-looking statements. We do not undertake any obligation to update forward-looking statements to reflect events, circumstances, changes in expectations, or the occurrence of unanticipated events after the date of those statements.

USE OF PROCEEDS

We estimate that the net proceeds to us from this offering will be approximately $89.3 million, after deducting the underwriting discount and estimated offering expenses payable by us. We intend to use the net proceeds of this offering for general corporate purposes.

RATIO OF EARNINGS TO FIXED CHARGES

For purposes of calculating the ratio of earnings to fixed charges, earnings are defined as income before income taxes and fixed charges (excluding capitalized interest). Fixed charges include interest (whether capitalized or expensed), amortization of debt issuance costs and any discount or premium relating to any indebtedness (whether capitalized or expensed) and the portion of rent expense considered to represent interest.

The following table sets forth our consolidated ratio of earnings to fixed charges for each of the five years ended December 31, 2013 and the nine months ended September 30, 2014:

	Year Ended December 31,					Nine Months Ended September 30,
	2009	2010	2011	2012	2013	

						2014
Ratio of earnings to fixed charges	5.4x	10.1x	11.0x	2.5x	12.4x	10.4x

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CAPITALIZATION

The table below sets forth our consolidated capitalization as of September 30, 2014 on an actual basis and as adjusted to give effect to the issuance of the notes offered hereby and the application of the net proceeds from the sale of the notes. See Use of Proceeds.

You should read the table together with our consolidated financial statements and the notes thereto incorporated by reference into this prospectus supplement and the accompanying prospectus.

	As of September 30, 2014	
	Actual	As Adjusted
	(amounts in millions)	
Cash and Short-Term Investments		
Cash and Cash Equivalents	$ 4,204	$ 4,293
Marketable Securities	1,367	1,367
Total Cash and Marketable Securities	$ 5,571	$ 5,660
Debt Included in Current Liabilities:		
Current maturities of Long-Term Debt and Commercial Paper	$ 2,393	$ 2,393
Debt Included in Long-Term Liabilities:		
Long-Term Debt, excluding Current Installments	9,858	9,947
Total Debt	$ 12,251	$ 12,340
Shareowners Equity	5,644	5,644
Total Debt and Shareowners Equity	$ 17,895	$ 17,984

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DESCRIPTION OF THE NOTES

We are offering $90,343,000 aggregate principal amount of Floating Rate Senior Notes due December 15, 2064. The notes will constitute a series of senior debt securities described in the accompanying prospectus. The following description supplements and, to the extent it is inconsistent with, replaces the description of the general terms and provisions contained in Description of the Debt Securities in the accompanying prospectus. Any capitalized terms that are defined in the accompanying prospectus have the same meanings in this section unless a different definition appears in this section.

The notes will be issued under the indenture dated as of August 26, 2003, as supplemented from time to time, entered into with The Bank of New York Mellon Trust Company, N.A. (as successor to Citibank N.A.), as trustee. We urge you to read the indenture, because the indenture and the terms included in the notes, not the summaries below and in the accompanying prospectus, define your rights. You may obtain a copy of the indenture from us without charge. See the section entitled Where You Can Find More Information in the accompanying prospectus.

General

The notes:

- will be in an aggregate initial principal amount of $90,343,000, subject to our ability to issue additional notes which may be of the same series as the notes as described under Further Issues,
- will mature on December 15, 2064,
- will bear interest at a rate of three-month LIBOR (as defined) minus 0.30% per annum,
- will be our unsecured and unsubordinated obligations, ranking equally with our other present and future outstanding unsecured and unsubordinated indebtedness,
- will be issued as a separate series under the indenture, in registered, book-entry form only,
- will be issued in U.S. dollars in denominations of $1,000 and integral multiples of $1,000 in excess thereof,
- will be redeemable by us prior to the stated maturity at the times and prices described herein,
- will be repayable at the option of the holders prior to the stated maturity at the times and prices described herein, and

will not be subject to any sinking fund.

In some circumstances, we may elect to discharge our obligations on the notes through defeasance or covenant defeasance. See Description of the Debt Securities Defeasance and Covenant Defeasance in the accompanying prospectus for more information about how we may do this.

The indenture generally does not limit our ability to incur additional debt and does not contain financial or similar restrictive covenants, except as described in the accompanying prospectus under the caption Description of Debt Securities Additional Covenants.

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Interest

We will pay interest on the notes quarterly in arrears on March 15, June 15, September 15 and December 15 of each year and on any maturity date (each, an interest payment date), commencing March 15, 2015 and ending on any maturity date, to the persons in whose names the notes are registered at the close of business on March 1, June 1, September 1 or December 1, as applicable (in each case, whether or not a Business Day), immediately preceding the related interest payment date; *provided, however*, that interest payable on any maturity date shall be payable to the person to whom the principal of such notes shall be payable. Interest on the notes will be computed on the basis of the actual number of days elapsed over a 360-day year.

Notwithstanding anything to the contrary in this prospectus supplement, so long as the notes are in book-entry form, we will make payments of principal and interest through the trustee to The Depository Trust Company (DTC).

Interest payable on any interest payment date or maturity date shall be the amount of interest accrued from, and including, the immediately preceding interest payment date in respect of which interest has been paid or duly provided for (or from and including the original issue date, if no interest has been paid or duly provided for with respect to the notes) to, but excluding, such interest payment date or maturity date, as the case may be. If any interest payment date (other than the maturity date) is not a Business Day at the relevant place of payment, we will pay interest on the next day that is a Business Day at such place of payment as if payment were made on the date such payment was due, except that if such Business Day is in the immediately succeeding calendar month, such interest payment date (other than the maturity date) shall be the immediately preceding Business Day. If the maturity date of the notes is not a Business Day at the relevant place of payment, we will pay interest, if any, and principal and premium, if any, on the next day that is a Business Day at such place of payment as if payment were made on the date such payment was due, and no interest will accrue on the amounts so payable for the period from and after such date to the immediately succeeding Business Day.

Business Day means any day (1) that is not a Saturday or Sunday and that is not a day on which banking institutions are authorized or obligated by law or executive order to close in The City of New York and, for any place of payment outside of The City of New York, in such place of payment, and (2) that is also a London business day , which is a day on which dealings in deposits in U.S. dollars are transacted in the London interbank market.

The term maturity, when used with respect to a note, means the date on which the principal of such note or an installment of principal becomes due and payable as therein provided or as provided in the indenture, whether at the stated maturity or by declaration of acceleration, call for redemption, repayment or otherwise.

Rate of Interest

The interest rate on the notes will be reset quarterly on March 15, June 15, September 15 and December 15 of each year, as applicable, commencing March 15, 2015 (each, an interest reset date). The notes will bear interest at a per annum rate equal to three-month LIBOR (as defined below) for the applicable interest reset period or initial interest period (each as defined below) minus 0.30% (30 basis points); provided, that the rate shall not be less than 0.00%. The interest rate for the initial interest period will be three-month LIBOR, determined as of two London business days prior to the original issue date, minus 0.30% per annum. The initial interest period will be the period from and including the original issue date to but excluding the initial interest reset date. Thereafter, each interest reset period will be the period from and including an interest reset date to but excluding the immediately succeeding interest reset date; *provided* that the final interest reset period for the notes will be the period from and including the interest reset date immediately preceding the maturity date of such notes to but excluding the maturity date.

If any interest reset date would otherwise be a day that is not a Business Day, the interest reset date will be postponed to the immediately succeeding day that is a Business Day, except that if that Business Day is in the immediately succeeding calendar month, the interest reset date shall be the immediately preceding Business Day.

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The interest rate in effect on each day will be (i) if that day is an interest reset date, the interest rate determined as of the interest determination date (as defined below) immediately preceding such interest reset date or (ii) if that day is not an interest reset date, the interest rate determined as of the interest determination date immediately preceding the most recent interest reset date or the original issue date, as the case may be.

Interest Rate Determination

The interest rate applicable to each interest reset period commencing on the related interest reset date, or the original issue date in the case of the initial interest period, will be the rate determined as of the applicable interest determination date. The interest determination date will be the second London business day immediately preceding the original issue date, in the case of the initial interest reset period, or thereafter the applicable interest reset date.

The Bank of New York Mellon Trust Company, N.A., or its successor appointed by us, will act as calculation agent. Three-month LIBOR will be determined by the calculation agent as of the applicable interest determination date in accordance with the following provisions:

(i) With respect to an interest determination date, LIBOR will be the rate for deposits in U.S. dollars having a maturity of three months commencing on the interest reset date that appears on the designated LIBOR page as of approximately 11:00 a.m., London time, on that interest determination date. If no rate appears, LIBOR, in respect of that interest determination date, will be determined as follows: the calculation agent shall request the principal London offices of each of four major reference banks (which may include affiliates of the underwriters) in the London interbank market, as selected and identified by us to provide the calculation agent with its offered quotation for deposits in U.S. dollars for the period of three months, commencing on the interest reset date, to prime banks in the London interbank market at approximately 11:00 a.m., London time, on that interest determination date and in a principal amount that is representative for a single transaction in U.S. dollars in that market at that time. If at least two quotations are provided, then LIBOR on that interest determination date will be the arithmetic mean of those quotations. If fewer than two quotations are provided, then LIBOR on the interest determination date will be the arithmetic mean of the rates quoted at approximately 11:00 a.m., New York City time, on the interest determination date by three major banks (which may include affiliates of the underwriters) in The City of New York selected and identified by us for loans in U.S. dollars to leading European banks, having a three-month maturity and in a principal amount that is representative for a single transaction in U.S. dollars in that market at that time; provided, however, that if the banks selected and identified by us are not providing quotations in the manner described by this sentence, LIBOR for such interest determination date will be LIBOR determined with respect to the immediately preceding interest determination date.

(ii) The designated LIBOR page is the Reuters screen LIBOR01 , or any successor service for the purpose of displaying the London interbank rates of major banks for U.S. dollars. The Reuters screen LIBOR01 is the display designated as the Reuters screen LIBOR01 , or such other page as may replace the Reuters screen LIBOR01 on that service or such other service or services as may be nominated for the purpose of displaying London interbank offered rates for U.S. dollar deposits by ICE Benchmark Administration Limited (IBA) or its successor or such other entity assuming the responsibility of IBA or its successor in calculating the London Interbank Offered Rate in the event IBA or its successor no longer does so.

All percentages resulting from any calculation of any interest rate for the notes will be rounded, if necessary, to the nearest one hundred thousandth of a percentage point, with five one-millionths of a percentage point rounded upward (e.g., 9.876545% (or .09876545) would be rounded to 9.87655% (or .0987655)), and all dollar amounts will be rounded to the nearest cent, with one-half cent being rounded upward. Any percentage resulting from any calculation of any interest rate for the notes less than 0.00% will be deemed to be 0.00% (or .0000).

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Promptly upon such determination, the calculation agent will notify us and the trustee (if the calculation agent is not the trustee) of the interest rate for the new interest reset period. Upon request of a holder of the notes, the calculation agent will provide to such holder the interest rate in effect on the date of such request and, if determined, the interest rate for the next interest reset period.

All calculations made by the calculation agent for the purposes of calculating interest on the notes shall be conclusive and binding on the holders and us, absent manifest errors.

Optional Redemption

The notes may be redeemed at any time, at our option, in whole or in part, in amounts of $1,000 or any multiple of $1,000 in excess thereof, at the following redemption prices (in each case expressed as a percentage of the principal amount), if redeemed during the 12-month period beginning on December 15 of any of the following years:

Year	Redemption Price
2044	105.00%
2045	104.50%
2046	104.00%
2047	103.50%
2048	103.00%
2049	102.50%
2050	102.00%
2051	101.50%
2052	101.00%
2053	100.50%
2054	100.00%

and thereafter at 100% of the principal amount, in each case, together with any accrued and unpaid interest to the redemption date (subject to the right of holders of record on relevant record dates to receive interest due on an interest payment date).

We must mail notice of any redemption at least 30 days but not more than 60 days before the redemption date to each holder of the notes to be redeemed. Unless we default in the payment of the redemption price, on and after the redemption date, interest will cease to accrue on the notes or portions of the notes called for redemption.

In the event of any redemption of less than all the outstanding notes, the particular notes (or portions of notes in multiples of $1,000) to be redeemed shall be selected by the trustee by the method the trustee considers fair and appropriate.

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Repayment at Option of Holder

The notes will be repayable at the option of the holder of the notes, in whole or in part, on the repayment dates and at the repayment prices (in each case expressed as a percentage of the principal amount) set forth in the following table:

Date	Redemption Price
December 15, 2015	98.00%
December 15, 2016	98.00%
December 15, 2017	98.00%
December 15, 2018	98.00%
December 15, 2019	98.00%
December 15, 2020	99.00%
December 15, 2021	99.00%
December 15, 2022	99.00%
December 15, 2023	99.00%
December 15, 2024	99.00%
December 15, 2025	100.00%

and on December 15 of every third year thereafter at 100% of the principal amount, through and including December 15, 2061, in each case, together with any accrued and unpaid interest to the redemption date (subject to the rights of holders of record on relevant record dates to receive interest due on an interest payment date).

In order for a note to be repaid, the paying agent must receive, at least 30 but not more than 60 calendar days before the optional repayment date, (1) the note with the form entitled Option to Elect Repayment on the reverse of the note duly completed or (2) a telegram, facsimile transmission or a letter from a member of a national securities exchange or a member of the Financial Industry Regulatory Authority, Inc. or a commercial bank or trust company in the United States which must set forth:

the name of the holder of the note;

the principal amount of the note;

the principal amount of the note to be repaid;

the certificate number or a description of the tenor and terms of the note;

a statement that the option to elect repayment is being exercised; and

a guarantee that the note is to be repaid.

These items, together with the duly completed form entitled Option to Elect Repayment on the reverse of the note, must be received by the paying agent not later than the fifth Business Day after the date of that telegram, facsimile transmission or letter. The repayment option may be exercised by the holder of a note for less than the entire principal amount of the note but, in that event, the principal amount of the note remaining outstanding after repayment must be in an authorized denomination.

Conditional Right to Shorten Maturity

We intend to deduct interest paid on the notes for United States Federal income tax purposes. However, there have been proposed tax law changes in the past that, among other things, would have prohibited an issuer from deducting interest payments on debt instruments with a maturity of more than 40 years. While none of these proposals has become law, we cannot assure you that similar legislation affecting our ability to deduct interest paid on the notes will not be enacted in the future or that any such legislation would not have a retroactive effective date. As a result, we cannot assure you that a tax event (as defined below) will not occur.

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If a tax event occurs, we will have the right to shorten the maturity of the notes, without the consent of the holders of the notes, to the minimum extent required, in the opinion of nationally recognized independent tax counsel, so that, after shortening the maturity, interest paid on the notes will be deductible for United States Federal income tax purposes or, if that counsel cannot opine definitively as to such a minimum period, the minimum extent so required to maintain our interest deduction to the extent deductible under current law as determined in good faith by our board of directors, after receipt of an opinion of that counsel regarding the applicable legal standards. In that case, the amount payable on those notes on that new maturity date will be equal to 100% of the principal amount of those notes plus interest accrued on those notes to the date those notes mature on that new maturity date. We cannot assure you that we would not exercise our right to shorten the maturity of those notes if a tax event occurs or as to the period that the maturity would be shortened. If we elect to exercise our right to shorten the maturity of the notes when a tax event occurs, we will mail a notice to each holder of notes by first-class mail not more than 60 days after the occurrence of the tax event, stating the new maturity date of the notes. This notice shall be effective immediately upon mailing.

We believe that the notes should constitute indebtedness for United Stated Federal income tax purposes under current law and, in that case, an exercise of our right to shorten the maturity of the notes should not be a taxable event to holders for those purposes. Prospective investors should be aware, however, that our exercise of our right to shorten the maturity of the notes will be a taxable exchange to holders for United States Federal income tax purposes if the notes are treated as equity for United States Federal income tax purposes before the maturity is shortened, and debt after the maturity is shortened for those purposes.

Tax event means that we shall have received an opinion of nationally recognized independent tax counsel to the effect that, as a result of:

- any amendment to, clarification of, or change (including any announced prospective amendment, clarification or change) in any law, or any regulation thereunder, of the United States;
- any judicial decision, official administrative pronouncement, ruling, regulatory procedure, regulation, notice or announcement, including any notice or announcement of intent to adopt or promulgate any ruling, regulatory procedure or regulation (any of the foregoing, an administrative or judicial action); or
- any amendment to, clarification of, or change in any official position with respect to, or any interpretation of, an administrative or judicial action or a law or regulation of the United States that differs from the previously generally accepted position or interpretation,

in each case, occurring on or after December 15, 2014, there is more than an insubstantial increase in the risk that interest paid by us on the notes is not, or will not be, deductible, in whole or in part, by us for United States Federal income tax purposes.

Notes Used as Qualified Replacement Property

Prospective investors seeking to treat the notes as qualified replacement property for purposes of section 1042 of the Internal Revenue Code of 1986, as amended (the Code), should be aware that section 1042 requires the issuer to meet certain requirements in order for the notes to constitute qualified replacement property. In general, qualified replacement property is a security issued by a domestic operating corporation that did not, for the taxable year

preceding the taxable year in which such security was purchased, have passive investment income in excess of 25 percent of the gross receipts of such corporation for such preceding taxable year (the Passive Income Test). For purposes of the Passive Income Test, where the issuing corporation is in control of one or more corporations, all such corporations are treated as one corporation (the Affiliated Group) for the purposes of computing the amount of passive investment income for purposes of section 1042.

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We believe that we qualify as a domestic operating corporation and that less than 25 percent of our Affiliated Group s gross receipts is passive investment income for the taxable year ended December 31, 2013. In making this determination, we have made certain assumptions and used procedures which we believe are reasonable. We cannot give any assurance as to whether we will continue to qualify as a domestic operating corporation or meet the Passive Income Test. It is, in addition, possible that the Internal Revenue Service may disagree with the manner in which we have calculated our Affiliated Group s gross receipts (including the characterization of those gross receipts) and passive investment income and the conclusions reached in this discussion. Prospective purchasers of the notes should consult with their own tax advisors with respect to these and other tax matters relating to the notes.

Further Issues

We may from time to time, without notice to or the consent of the registered holders of notes, create and issue further notes ranking equally with the notes in all respects. Such further notes may be consolidated and form a single series with the notes and have the same terms as to ranking, redemption or otherwise as the notes (other than the issue date and public offering price of such further notes and, if applicable, the first payment of interest following the issue date of such further notes).

Book-Entry System

Upon issuance, the notes will be issued in book-entry form through DTC. The notes will be issued as fully registered securities registered in the name of Cede & Co. (DTC s partnership nominee) or such other name as may be requested by an authorized representative of DTC. Owners of beneficial interests in the notes will receive all payments relating to their debt securities in U.S. dollars. Clearstream and Euroclear may hold interests on behalf of holders of notes through the accounts that each of these systems maintains to facilitate the clearance and settlement of transactions involving the notes.

A description of DTC s procedures with respect to the notes is set forth in the section Description of the Debt Securities Book-Entry, Delivery and Form of Debt Securities in the accompanying prospectus.

Notices

The trustee will mail notices by first class mail, postage prepaid, to each registered holder s address as it appears in the security register. The trustee will only mail these notices to the registered holder of the notes, and consequently holders of beneficial interests will not receive these notices unless we reissue the notes in fully certificated form.

Governing Law

The indenture and the notes for all purposes shall be governed by and construed in accordance with the laws of the State of New York.

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MATERIAL U.S. FEDERAL INCOME TAX CONSEQUENCES

The following summary describes the material U.S. federal income and certain estate tax consequences to you of the purchase, beneficial ownership and disposition of notes. This summary deals only with holders that purchase notes in the initial offering at the issue price (i.e., the first price at which a substantial amount of notes is sold to investors) and that hold such notes as capital assets for U.S. federal income tax purposes. This summary is for general information only and does not address all aspects of U.S. federal income taxation that may be important to you in light of your particular circumstances, and it does not address state, local, foreign, alternative minimum or non-income tax considerations that may be applicable to you. This summary does not apply to you if you are a member of a class of holders subject to special rules, such as:

a dealer in securities or currencies;

a trader in securities that elects to use a mark-to-market method of accounting for your securities holdings;

a bank or financial institution;

an insurance company;

a tax-exempt organization;

a person that owns notes that are a hedge or that are hedged against interest rate risks;

a person that owns notes as part of a straddle or conversion transaction for tax purposes;

a person subject to alternative minimum tax;

a U.S. holder (as defined below) whose functional currency for tax purposes is not the U.S. dollar; or

a U.S. expatriate, controlled foreign corporation, or passive foreign investment company.

This summary is based upon provisions of the Internal Revenue Code of 1986, as amended (the Code), and regulations, rulings and judicial decisions as of the date hereof. Those authorities may be changed, perhaps retroactively, or subject to differing interpretations, so as to result in U.S. federal income tax consequences different from those summarized below.

If an entity classified as a partnership for U.S. federal income tax purposes holds our notes, the tax treatment of a partner will generally depend upon the status of the partner and the activities of the partnership. If you are a partnership holding notes or a partner in a partnership holding notes, you should consult your tax advisor as to the particular U.S. federal income tax consequences applicable to you.

If you are considering the purchase of notes, you should consult your own tax advisor concerning the particular U.S. federal income and estate tax consequences to you of the purchase, beneficial ownership and disposition of notes, as well as the consequences to you arising under the laws of any other taxing jurisdiction, including any state, local or non-U.S. tax consequences.

For purposes of this summary, a U.S. holder means a beneficial owner of a note that is any of the following for U.S. federal income tax purposes:

an individual citizen or resident of the United States;

a corporation (or other entity classified as a corporation under U.S. federal income tax laws) created or organized in or under the laws of the United States, any state thereof, or the District of Columbia;

an estate the income of which is subject to U.S. federal income taxation regardless of its source; or

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a trust if (1) its administration is subject to the primary supervision of a court within the United States and one or more U.S. persons have the authority to control all of its substantial decisions, or (2) it has a valid election in effect under applicable Treasury regulations to be treated as a U.S. person.

A non-U.S. holder means a beneficial owner of a note that is not a U.S. holder and not a partnership for U.S. federal income tax purposes.

Tax Classification of the Notes

As mentioned previously, we believe the notes should constitute indebtedness for U.S. federal income tax purposes under current law. The remainder of this discussion assumes such treatment.

U.S. Holders

Payments of Interest

In general, interest on the notes will be taxable to you as ordinary income at the time it is received by you or accrued, in accordance with your regular method of accounting for U.S. federal income tax purposes.

Sale, Exchange, Retirement or Other Taxable Disposition of the Notes

On the sale, exchange, retirement or other taxable disposition of a note:

you will generally recognize taxable gain or loss equal to the difference between (i) the amount of the cash and the fair market value of any property received by you on such sale, exchange, retirement or other disposition (except to the extent the amount is attributable to accrued interest income not previously included in income, which will be taxable as ordinary income) and (ii) your adjusted tax basis in the note;

your adjusted tax basis in the note will generally be equal to your cost for the note, reduced by any principal payments you previously received in respect of the note; and

your gain or loss will generally be capital gain or loss and will be long-term capital gain or loss if you held the note for more than one year at the time of such sale, exchange, retirement or other disposition. Long-term capital gains of non-corporate taxpayers are eligible for reduced rates of taxation. The deductibility of capital losses is subject to limitations.

Additional Tax on Net Investment Income

U.S. holders who are individuals, estates or certain trusts generally will be subject to a 3.8% tax on the lesser of (1) the U.S. person s net investment income in the case of an individual or undistributed net investment income in the case of an estate or trust, in each case for the relevant taxable year and (2) the excess of the U.S. person s modified adjusted gross income in the case of an individual or adjusted gross income in the case of an estate or trust, in each case for the taxable year over a certain threshold (which in the case of individuals will be between $125,000 and $250,000, depending on the individual s tax return filing status). A U.S. holder s net investment income will generally include any income or gain recognized by the holder with respect to the notes, unless such income or gain is derived in the ordinary course of the conduct of the holder s trade or business (other than a trade or business that consists of

certain passive or trading activities).

Information Reporting and Backup Withholding

Generally, if you are a non-corporate U.S. holder, payments on a note will be subject to information reporting. In addition, a non-corporate U.S. holder may be subject to a backup withholding tax on those payments if it fails to provide its accurate taxpayer identification number to us or our paying agent in the manner required,

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is notified by the Internal Revenue Service (the IRS) that it has failed to report all interest and dividends required to be shown on its U.S. federal income tax return, or otherwise fails to comply with applicable backup withholding tax rules. In addition, U.S. holders may be subject to information reporting and backup withholding tax with respect to the proceeds from a sale, exchange, retirement or other taxable disposition of a note.

Any amounts withheld from payments to you under the backup withholding tax rules may be allowed as a credit against your U.S. federal income tax liability and may entitle you to a refund, provided the required information is timely furnished to the IRS.

Non-U.S. Holders

U.S. Federal Withholding Tax

Subject to the discussion below under Information Reporting and Backup Withholding and Foreign Account Tax Compliance Act (FATCA), payments of principal and stated interest on a note will not be subject to U.S. federal withholding tax, provided that:

- you do not actually (or constructively) own 10% or more of the total combined voting power of all classes of our voting stock within the meaning of the Code and applicable Treasury regulations;
- such interest is not effectively connected with your conduct of a U.S. trade or business; and
- either (a) you provide your name and address on an IRS Form W-8BEN or W-8BEN-E (or other applicable form), and certify, under penalties of perjury, that you are not a U.S. person or (b) you hold your notes through certain foreign intermediaries and satisfy the certification requirements of applicable Treasury regulations.

Special certification and other rules apply to certain non-U.S. holders that are entities rather than individuals.

If you cannot satisfy the requirements described above, payments of interest made to you will be subject to U.S. federal withholding tax at a 30% rate, unless you provide us or our paying agent with a properly executed (1) IRS Form W-8BEN or W-8BEN-E (or other applicable form) claiming an exemption from or reduction in withholding under the benefit of an applicable tax treaty or (2) IRS Form W-8ECI (or other applicable form) stating that interest paid on a note is not subject to withholding tax because it is effectively connected with your conduct of a trade or business in the United States (as discussed below under U.S. Federal Income Tax).

U.S. Federal Income Tax

If you are engaged in a trade or business in the United States and interest on the notes is effectively connected with the conduct of that trade or business (and the interest is attributable to a permanent establishment maintained by you in the United States if that is required by an applicable income tax treaty as a condition for subjecting you to U.S. tax on a net income basis), you will be subject to U.S. federal income tax on that interest on a net income basis (although exempt from the 30% withholding tax, provided you comply with certain certification and disclosure requirements discussed above in U.S. Federal Withholding Tax) in the same manner as if you were a U.S. holder. In addition, if you are a foreign corporation, you may be subject to a branch profits tax equal to 30% (or lower applicable treaty rate) of

your effectively connect earnings and profits for the taxable year, subject to certain adjustments, unless you qualify for a lower rate under an applicable income tax treaty.

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Any gain (other than any portion of the gain that represents accrued interest in which case the tax rules for interest as described above would apply to such portion) realized on the sale, exchange, retirement or other taxable disposition of a note generally will not be subject to U.S. federal income or withholding tax unless:

- the gain is effectively connected with your conduct of a trade or business in the United States (and, if applicable, attributable to a permanent establishment maintained by you in the United States), in which case if you are a foreign corporation the branch profits tax described above may also apply; or
- you are an individual who is present in the United States for 183 days or more in the taxable year of that disposition, and certain other conditions are met.

U.S. Federal Estate Tax

If you are an individual who at death is not a U.S. citizen or resident (as specially defined for U.S. federal estate tax purposes), your estate will not be subject to U.S. federal estate tax on notes beneficially owned by you at the time of your death, provided that (1) you do not actually (or constructively) own 10% or more of the total combined voting power of all classes of our voting stock within the meaning of the Code and applicable Treasury regulations, and (2) interest on those notes would not have been, if received at the time of your death, effectively connected with the conduct by you of a trade or business in the United States.

Information Reporting and Backup Withholding

The amount of interest paid to you, and the amount of any tax withheld with respect to such interest, must be reported annually to the IRS and you. Copies of the information returns reporting the amount of such interest and the amount of any tax withheld may also be made available to the tax authorities in the country in which you reside under the provisions of an applicable income tax treatyntures mature on January 31, 2006 and bear interest at 6% per annum, payable quarterly in cash or, subject to satisfaction of certain conditions, common stock. Any shares of common stock issued to the investors as payment of interest shall be valued at 95% of the average closing price of the common stock during the five consecutive business days ending on the third business day immediately preceding the applicable interest payment date. Commencing six months after issuance, we are required to start repaying the then outstanding principal amount under the January 2004 Debentures in monthly installments amortized over 18 months in cash or, at our option, in shares of common stock. Any shares of common stock issued to the investors as installment payments shall be valued at 95% of the average closing price of the common stock during the 10-day trading period commencing on and including the eleventh trading day immediately preceding the date that the installment is due. The January 2004 Debentures are convertible at the option of the investors at any time through January 31, 2006 into shares of our common stock. The conversion price under the January 2004 Debentures is fixed at $2.53 per share, subject to adjustment for anti-dilution protection for issuance of common stock or securities convertible or exchangeable into common stock at a price less than the conversion price then in effect. In addition, in the event that we do not pay the redemption price at maturity, the Debenture holders, at their option, may convert the balance due at the lower of (a) the conversion price then in effect and (b) 95% of the lowest closing sale price of our common stock during the three trading days ending on and including the conversion date. There are two classes of July 2009 Warrants received by the Investors: Class A and Class B. The Class A warrants are to acquire any time from July 26, 2004 through July 26, 2009 an aggregate of up to 395,257 shares of common stock at a price of $3.29 per share. The Class B warrants are to acquire any time from July 26, 2004 through July 26, 2009 an aggregate of up to 395,257 shares of common stock at a price of $5.06 per share. On January 27, 2005, the exercise price of these July 2009 Class A and Class B Warrants will reset to the lesser of their respective exercise price then in effect or a price equal to the 32 average of the daily price of the common stock between January 27, 2004 and January 26, 2005. The exercise price (and the reset price) under the July 2009 Warrants also is subject to similar adjustments for anti-dilution protection.

Notwithstanding the foregoing, the exercise prices as reset or adjusted for anti-dilution, will in no event be less than $2.58 per share with regard to the Class A warrants or $3.54 per share with regard to the Class B warrants. We also issued to the investors Additional Investment Rights pursuant to which the investors have the right to acquire up to an additional $2,000,000 principal amount of January 2004 Debentures from us. These Debentures are identical to the January 2004 Debentures except that the conversion price is $2.58. The Additional Investment Rights are exercisable commencing on July 26, 2004 (the "Trigger" date) for a period of 90 days from the Trigger Date or 90 days from the date which the registration statement registering the shares issuable upon the conversion of the January 2004 Debentures to be issued pursuant to the Additional Investment Rights is declared effective, whichever is longer. Pursuant to the terms and conditions of the July Debentures, October Debentures and January 2004 Debentures (collectively, the "Debentures"), we have pledged all of our assets, other than our intellectual property, as collateral, and we are subject to comply with certain financial and negative covenants. In addition, we have paid $1,300,000 into the Debenture cash collateral account as required by the terms of the Debentures. The cash collateral account provides additional security for repayment of the Debentures in the event of default. On May 14, 2004, in consideration for the Debenture holders' exercise of all of the June 2008 Warrants, we issued to the holders warrants (the "May 2009 Warrants") to purchase an aggregate of 1,300,000 shares of our common stock. We issued 1,000,000 shares and received gross proceeds of $2,400,000 from the exercise of the June 2008 Warrants. The May 2009 Warrants are to acquire at any time commencing on November 14, 2004 through April 30, 2009 an aggregate of 1,300,000 shares of common stock at a price of $4.50 per share. On May 14, 2005, the exercise price of these May 2009 Warrants will reset to the lesser of the exercise price then in effect or a price equal to the average of the daily price of the common stock between May 15, 2004 and May 13, 2005. The exercise price (and the reset price) under the May 2009 Warrants also is subject to adjustments for anti-dilution protection similar to those in the other Warrants. Notwithstanding the foregoing, the exercise price as reset or adjusted for anti-dilution, will in no event be less than $4.008 per share. We entered into Registration Rights Agreements with the investors in connection with the issuance of (i) the Debentures (including any Debentures issued pursuant to the AIR); (ii) the June 2008, July 2008, October 2008, January 2009 and May 2009 Warrants (collectively, the "Warrants"); and (iii) the shares issued in January 2004. Pursuant to the Registration Rights Agreements we have registered on behalf of the investors the shares issued to them in January 2004 and 135% of the shares issuable upon conversion of the Debentures (including any Debentures issued pursuant to the AIR) and upon exercise of all of the Warrants. If, subject to certain exceptions, sales of all shares so registered cannot be made pursuant to the registration statements, then we will be required to pay to the investors their pro rata share of $.00067 times the outstanding principal amount of the relevant Debentures for each day the above condition exists. By agreement with Cardinal Securities, LLC, for general financial advisory services and in conjunction with the private debenture placements in July and October 2003 and in January 2004, we paid Cardinal Securities, LLC an investment banking fee equal to 7% of the investments made by the two Debenture holders and issued to Cardinal the following common stock purchase warrants: (i) 112,500 exercisable at $2.57 per share; (ii) 87,500 exercisable at $2.42 per share; and (iii) 100,000 exercisable at 33 $3.04 per share. The $2.57 warrants expire on July 10, 2008, the $2.42 warrants expire on October 30, 2008 and the $3.04 warrants expire on January 5, 2009. With regard to the exercise of the June 2008 Warrants and issuance of the May 2009 Warrants, Cardinal received an investment banking fee of 7%, half in cash and half in shares. By agreement with Cardinal, we have registered all of the shares issuable upon exercise of the above mentioned warrants for public sale. Section 713 of the American Stock Exchange ("AMEX") Company Guide provides that we must obtain stockholder approval before issuance, at a price per share below market value, of common stock, or securities convertible into common stock, equal to 20% or more of our outstanding common stock (the "Exchange Cap"). Taken separately, the July 2003, October 2003 and January 2004 Debenture transactions do not trigger Section 713. However, the AMEX has taken the position that the three transactions should be aggregated and, as such, stockholder approval was required for the issuance of common stock for a portion of the potential exercise of the warrants and conversion of the Debentures in connection with the January 2004 Debentures. The amount of potential shares that we could exceed the Exchange Cap amounted to approximately 1,299,000. In accordance with EITF 00-19, Accounting For Derivative Financial Instruments Indexed to and Potentially Settled in a Company's Own Stock, we recorded on January 26, 2004, a redemption obligation of approximately $1,244,000. This liability represents the fair market value of the warrants and beneficial conversion feature related to the 1,299,000 shares. In addition, in accordance with EITF 00-19, we revalued this redemption obligation associated with the beneficial conversion feature and warrants as of March 31, 2004. We recorded an

additional redemption obligation and finance charge of $947,000 as a result of this revaluation. Upon stockholder approval, our redemption obligation will be recorded as additional paid in capital as of the date approval is received. The requisite stockholder approval was obtained at our Annual Meeting of Stockholders on June 23, 2004. In connection with the Debenture agreements, we have outstanding letters of credit of $1 million as additional collateral. On March 11, 2003, we acquired from ISI, ISI's inventory of ALFERON N Injection(R) and a limited license for the production, manufacture, use, marketing and sale of this product. As partial consideration, we issued 487,028 shares of our common stock to ISI Pursuant to our agreements with ISI, we registered these shares for public sale and ISI has reported that it has sold all of these shares. We also agreed to pay ISI 6% of the net sales of ALFERON N Injection(R). On March 11, 2003, we also entered into an agreement to purchase from ISI all of its rights to the product and other assets related to the product including, but not limited to, real estate and machinery. For these assets, we agreed to issue to ISI an additional 487,028 shares and to issue 314,465 shares and 267,296 shares, respectively to the American National Red Cross and GP Strategies Corporation, two creditors of ISI. We have guaranteed the market value of all but 62,500 of these shares to be $1.59 per share on the termination date. GP Strategies and the American National Red Cross have reported that they have sold all of their shares. The termination date for the remaining guarantee to ISI is 24 months after the date of issuance and delivery of the additional 487,028 guaranteed shares to ISI. These shares were issued in March 2004. ISI is permitted to periodically sell certain amounts of its shares. If, within 30 days after the termination date, ISI requests that we honor the guarantee, we will be obligated to reacquire ISI's remaining guaranteed shares and pay it $1.59 per share. 34 We also agreed to satisfy other liabilities of ISI which were past due and secured by a lien on ISI's real estate and to pay ISI 6% of the net sales of products containing natural alpha interferon. On May 30, 2003, we issued the shares to GP Strategies and the American National Red Cross. Pursuant to our agreements with ISI and these two creditors, we have registered the foregoing shares for public sale. As of June 30, 2004, GP Strategies and the American National Red Cross had sold all of their shares. In March 2004, we issued 487,028 shares to ISI to complete the acquisition of the balance of ISI's rights to market its product as well its production facility in New Brunswick, New Jersey. As of June 30, 2004, ISI has sold all of its shares. Prior to our annual meeting of stockholders in September 2003, we had a limited number of shares of Common Stock authorized but not issued or reserved for issuance upon conversion or exercise or outstanding convertible and exercisable securities such as debentures, options and warrants. Prior to the meeting, to permit consummation of the sale of the July Debentures and the related warrants, Dr. Carter agreed that he would not exercise his warrants or options unless and until our stockholders approve an increase in our authorized shares of common stock. For Dr. Carter's waiver of his right to exercise certain options and warrants prior to approval of the increase in our authorized shares, we agreed to compensate Dr. Carter. See "Executive Compensation; Employment Agreements" for details related to how Dr. Carter has been compensated with respect to this matter. On November 6, 2003 we acquired some of the outstanding ISI property tax lien certificates in the aggregate amount of $456,839 from certain investors. These tax liens were issued for property taxes and utilities due for 2000, 2001 and 2002. On May 13, 2004, we issued to the Debenture holders warrants to purchase an aggregate of 1,300,000 shares ("the May 2009 Warrants"). In consideration of the foregoing, the Debenture holders exercised the June 2008 Warrants. As a result, we issued an aggregate of 1,000,000 shares and received gross proceeds of approximately $2,400,000. The May 2009 Warrants are to acquire at any time, commencing on November 14, 2004 through April 30, 2009, an aggregate of 1,300,000 shares of common stock at a price of $4.50 per share. On May 14, 2005, the exercise price of these May 2009 Warrants will reset to the lesser of the exercise price then in effect or a price equal to the average of the daily price of the common stock between May 15, 2004 and May 13, 2005 (but in no event less than $4.008 per share). The exercise price (and the reset price) under the May 2009 Warrants also is subject to adjustments for anti-dilution projection similar to those in the other warrants. In addition, the Debenture holders agreed to amend the provisions of all of the outstanding Debentures (including the Debentures issuable pursuant to the AIR) and Warrants to limit the maximum amount of funds that the holders could receive in lieu of shares upon conversion of the Debentures and/or exercise of the Warrants in the event that the Exchange Cap was reached to 119.9% of the conversion price of the relevant Debentures and 19.9% of the relevant Warrant exercise price. These transactions could result in us recording an additional redemption obligation for the reasons discussed in Note 7 to the unaudited financial statements at and for the three months ended March 31, 2004 and will result in additional financing charges beginning in the second quarter of 2004. Because of our long-term capital requirements, we may seek to access the public equity market whenever conditions are favorable, even if we do not have an immediate need for additional capital at that 35 time. Any

additional funding may result in significant dilution and could involve the issuance of securities with rights, which are senior to those of existing stockholders. We may also need additional funding earlier than anticipated, and our cash requirements, in general, may vary materially from those now planned, for reasons including, but not limited to, changes in our research and development programs, clinical trials, competitive and technological advances, the regulatory process, and higher than anticipated expenses and lower than anticipated revenues from certain of our clinical trials for which cost recovery from participants has been approved. Contractual Obligations as of December 31, 2003 (dollars in thousands) Obligations Expiring by Period Contractual Cash Obligations ---------- Total 2004 2005-2006 2007-2008 ----- ---- --------- --------- Operating Leases $784 $286 $433 $65 Convertible Debentures July 10, 2003 5,426,000 6% Senior Convertible Debenture 4,257 -- 4,257 -- October 29, 2003 $4,142,000 6% Senior Convertible Debenture 2,334 -- 2,334 -- ---------- Total $7,375 $286 $7,024 $65 ========== New Accounting Pronouncements In November 2002, the FASB issued Interpretation No. 45, "Guarantor's Accounting and Disclosure Requirements for Guarantees, including Indirect Guarantees of Indebtedness of Others" ("Interpretation No. 45"). Interpretation No. 45 elaborates on the existing disclosure requirements for most guarantees, including loan guarantees such as standby letters of credit. It also clarifies that at the time a company issues a guarantee, the company must recognize an initial liability for the fair market value of the obligations it assumes under the guarantee and must disclose that information in its interim and annual financial statements. The initial recognition and measurement provisions of Interpretation No. 45 apply on a prospective basis to guarantees issued or modified after December 31, 2002. Interpretation No. 45 did not have an effect on our financial statements. In December 2002, the FASB issued Statement No. 148, "Accounting for Stock-Based Compensation-Transition and Disclosure", and amendment of FASB Statement No. 123 ("SFAS"). SFAS 148 amends FASB Statement No. 123, Accounting for Stock-Based Compensation, to provide alternative method of transition for an entity that voluntarily changes to the fair value based of accounting for stock-based employee compensation. It also amends the disclosure provisions of that Statement to require prominent disclosure about the effects on reported net income of an entity's accounting policy decisions with respect to stock-based employee compensation. Finally, this Statement amends Accounting Principles Board ("APB") Opinion No. 28, Interim Financial Reporting to require disclosure about those effects in interim financial information. SFAS 148 is effective for financial statements for fiscal years ending after December 15, 2002. We will continue to account for stock-based compensation using the intrinsic value 36 method of APB Opinion No. 25, "Accounting for Stock Issued to Employees," but have adopted the enhanced disclosure requirements of SFAS 148. In January 2003, the FASB issued Interpretation No. 46, "Consolidation of Variable Interest Entities" ("Interpretation No. 46"), that clarifies the application of Accounting Research Bulletin No. 51, Consolidated Financial Statements, "to certain entities in which equity investors do not have the characteristics of a controlling financial interest or do not have sufficient equity at risk for the entity to finance its activities without additional subordinated financial support from other parties. Interpretation No. 46 is applicable immediately for variable interest entities created after January 31, 2003. For variable interest entities created prior to January 31, 2003, the provisions of Interpretation No. 46 have been deferred to the first quarter of 2004. This Interpretation did not have an effect on our consolidated financial statements. In May 2003, the FASB issued Statement No. 150, "Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity" ("SFAS 150"). SFAS 150 requires an issuer to classify certain financial instruments, such as mandatory redeemable shares and obligations to repurchase the issuers equity shares, as liabilities. The guidance is effective for financial instruments entered into or modified subsequent to May 31, 2003, and is otherwise effective at the beginning of the first interim period after June 15, 2003. SFAS 150 did not have an impact on our financial condition or results of operations. Disclosure About Off-Balance Sheet Arrangements Prior to our annual meeting of stockholders in September 2003, we had a limited number of shares of Common Stock authorized but not issued or reserved for issuance upon conversion or exercise of outstanding convertible and exercisable securities such as debentures, options and warrants. Prior to the meeting, to permit consummation of the sale of the July Debentures and the related warrants, Dr. Carter agreed that he would not exercise his warrants or options unless and until our stockholders approve an increase in our authorized shares of common stock. For Dr. Carter's waiver of his right to exercise certain options and warrants prior to approval of the increase in our authorized shares, we have agreed to compensate Dr. Carter. See "Executive Compensation; Employment Agreements" for details related to how Dr. Carter has been compensated with respect to this matter. In connection with the Debenture agreements, we have outstanding letters of credit of $1,000,000 as additional collateral. Critical Accounting Policies

Financial Reporting Release No. 60 requires all companies to include a discussion of critical accounting policies or methods used in the preparation of financial statements. Our significant accounting policies are described in Notes to the Consolidated Financial Statements. The significant accounting policies that we believe are most critical to aid in fully understanding our reported financial results are the following: Revenue Revenues for non-refundable license fees are recognized under the Performance Method-Expected Revenue. This method considers the total amount of expected revenue during the performance period, but limits the amount of revenue recognized in a period to total non-refundable cash received to date. This limitation is appropriate because future milestone payments are contingent on future events. 37 Upon receipt, the upfront non-refundable payment is deferred. The non-refundable upfront payments plus non-refundable payments arising from the achievement of defined milestones are recognized as revenue over the performance period based on the lesser of (a) percentage of completion or (b) non-refundable cash earned (including the upfront payment). This method requires the computation of a ratio of cost incurred to date to total expected costs and then apply that ratio to total expected revenue. The amount of revenue recognized is limited to the total non-refundable cash received to date. Revenue from the sale of Ampligen(R) under cost recovery clinical treatment protocols approved by the FDA is recognized when the treatment is provided to the patient. Revenues from the sale of product are recognized when the product is shipped, as title is transferred to the customer. We have no other obligation associated with our products once shipment has occurred. Patents and Trademarks Effective October 1, 2001, we adopted a 17-year estimated useful life for the amortization of our patents and trademark rights in order to more accurately reflect their useful life. Prior to October 1, 2001, we were using a ten year estimated useful life. Patents and trademarks are stated at cost (primarily legal fees) and are amortized using the straight-line method over the life of the assets. We review our patents and trademark rights periodically to determine whether they have continuing value. Such review includes an analysis of the patent and trademark's ultimate revenue and profitability potential on an undiscounted cash basis to support the realizability of our respective capitalized cost. In addition, management's review addresses whether each patent continues to fit into our strategic business plans. Concentration of Credit Risk Financial instruments that potentially subject us to credit risks consist of cash equivalents and accounts receivable. Our policy is to limit the amount of credit exposure to any one financial institution and place investments with financial institutions evaluated as being credit worthy, or in short-term money markets, which are exposed to minimal interest rate and credit risks. At times, we have bank deposits and overnight repurchase agreements that exceed federally insured limits. Concentration of credit risk, with respect to receivables, is limited through our credit evaluation process. We do not require collateral on our receivables. Our receivables consist principally of amounts due from wholesale drug companies as of March 31, 2004. Quantitative And Qualitative Disclosures About Market Risk Excluding obligations to pay us for various licensing related fees, we had approximately $7,238,000 in cash and cash equivalents and short-term investments at March 31, 2004. To the extent that our cash and cash equivalents exceed our near term funding needs, we invest the excess cash in three to six month high quality interest bearing financial instruments. We employ established conservative policies and procedures to manage any risks with respect to investment exposure. 38 We have not entered into, and do not expect to enter into, financial instruments for trading or hedging purposes. OUR BUSINESS We were founded in the early 1970s as a contract researcher for the National Institutes of Health (NIH). Dr. William A. Carter, M.D., joined us in 1976 and ultimately become our CEO in 1988. He has focused us on exploring, understanding and mastering the mechanism of nucleic acid technology to produce a promising new class of drugs for treating chronic viral diseases and disorders of the immune system. In the course of almost three decades, we have established a strong foundation of laboratory, pre-clinical and clinical data with respect to the development of nucleic acids to enhance the natural antiviral defense system of the human body and the development of therapeutic products for the treatment of chronic diseases. Our strategy is to use our proprietary drug, Ampligen(R), to treat diseases for which adequate treatment is not available. We seek the required regulatory approvals which will allow the progressive introduction of Ampligen(R) for Myalgic Encephalomyelitis/Chronic Fatigue Syndrome ("ME/CFS"), HIV, Hepatitis C ("HCV") and Hepatitis B ("HBV") in the U.S., Canada, Europe and Japan. Ampligen(R) is currently in the open label portion of phase III clinical trials in the U.S. for use in treatment of ME/CFS and is in Phase IIb clinical development in the U.S. for the treatment of patients with HIV infection. In March, 2003, we acquired from Interferon Sciences Inc. ("ISI"), all of ISI's raw materials, work-in-progress and finished product of Alferon N Injection(R), together with a limited license for the production, manufacture, use, marketing and sale of the product. Alferon N Injection(R) [interferon alfa- n3 (human derived)] is a natural alpha interferon that has been approved by the U.S. Food and Drug Administration ("FDA") for commercial sale for the

intralesional treatment of refractory or recurring external genital warts in patients 18 years of age or older. We intend to market this product in the United State through sales facilitated via third party marketing agreements. In the future, we expect to implement studies, beyond those conducted by ISI, for testing the potential treatment of HIV, Hepatitis C and other indications, including multiple sclerosis. In March, 2003, we entered into an agreement with ISI subject to certain events that would grant us global rights to sell Alferon N Injection(R) as well as acquire certain other assets of ISI which include but are not limited to, real estate and property, plant and equipment. We acquired these assets in March 2004. We outsource certain components of our research and development, manufacturing, marketing and distribution while maintaining control over the entire process through our quality assurance group and our clinical monitoring group. Ampligen(R) Our proprietary drug technology includes Ampligen(R) and utilizes specially configured ribonucleic acid ("RNA") and currently is protected by more than 250 patents worldwide with over 16 additional patent applications pending to provide further proprietary protection in various international markets. Certain patents apply to the use of Ampligen(R) alone and certain patents apply to the use of Ampligen(R) in combination with certain other drugs. Some composition of matter patents pertain to other new medications which have a similar mechanism of action. In April 2004, we reviewed our patents and patent applications. As a result, various patents and patent applications were elected not to be renewed in the second quarter 2004. The non-renewed patents consisted mostly of international origin or were not conducive to oral application. 39 The main U.S. ME/CFS treatment patent (#6130206) expires January 23, 2015. Our main patents covering HIV treatment (#4795744, #4820696, #5063209, and #5091374) expire on August 26, 2006, September 30, 2008, August 10, 2010, and May 6, 2011, respectively; Hepatitis treatment coverage is conveyed by U.S. patent #5593973 which expires on October 5, 2014. The U.S. Ampligen(R) Trademark (#1,515,099) expires on December 6, 2008 and can be renewed thereafter for an additional 10 years. The U.S. FDA has granted us "orphan drug status" for our nucleic acid-derived therapeutics for ME/CFS, HIV, and renal cell carcinoma and malignant melanoma. Orphan drug status grants us protection against competition for a period of seven years following FDA approval, as well as certain federal tax incentives, and other regulatory benefits. Nucleic acid compounds represent a potential new class of pharmaceutical products that are designed to act at the molecular level for treatment of human diseases. There are two forms of nucleic acids, DNA and RNA. DNA is a group of naturally occurring molecules found in chromosomes, the cell's genetic machinery. RNA is a group of naturally occurring informational molecules which orchestrate a cell's behavior and which regulate the action of groups of cells, including the cells, which comprise the body's immune system. RNA directs the production of proteins and regulates certain cell activities including the activation of an otherwise dormant cellular defense against virus and tumors. Our drug technology utilizes specially configured RNA. Our double-stranded RNA drug product, trademarked Ampligen(R), which is administered intravenously, is (or has been) in human clinical development for various disease indications, including treatment for ME/CFS, HIV, renal cell carcinoma and malignant melanoma. Further studies are planned in cancer treatment but initiation dates have not been set. Based on the results of published, peer reviewed pre-clinical studies and clinical trials, we believe that Ampligen(R) may have broad-spectrum anti-viral and anti-cancer properties. Over 500 patients have received Ampligen(R) in clinical trials authorized by the FDA at over twenty clinical trial sites across the U.S., representing the administration of more than 45,000 doses of this drug. Myalgic Encephalomyelitis/Chronic Fatigue Syndrome (ME/CFS) ME/CFS is a debilitating disease that is difficult to diagnose and for which, at present, there is no cure. People suffering from this illness experience, among other symptoms, a constant tiredness, recurring dull headaches, joint and muscle aches, a feeling of feverishness and chills, low grade fever, depression, difficulty in concentrating on tasks, and tender lymph glands. With progression of the disease they can become bed-ridden, lose their jobs and become dependent upon the state for support and medical care. ME/CFS has been given official recognition by the U.S. Social Security Administration, and some European nations, rendering ME/CFS patients eligible for disability benefits and heightening awareness of this debilitating disease in the medical community. A further scientific publication by independent academicians on the accurate laboratory diagnosis of ME/CFS appeared in a peer-reviewed journal (American Journal of Medicine) in February 2000. The U.S. Centers for Disease Control ("CDC") reconfirmed its research commitment to ME/CFS following an audit by the U.S. Government Accounting Office ("GAO") which was announced July 28, 1999. Estimates of ME/CFS patient numbers in the United States range from a low of 500,000 (1995-Centers for Disease Control, Atlanta, GA) to a high of 1,000,000 (1999-DePaul University study). Estimates of patient numbers in Europe range from 600,000 to 2,200,000 as reported in the British Medical Journal in January 2000. It is believed worldwide patient totals may be as high as ten million. In 1989, we received FDA authorization to conduct a Phase II study of

Ampligen(R) for ME/CFS. In 1991, we completed a 24-week, 92 patient, randomized, placebo-controlled, double-blinded, multi-center 40 trial of Ampligen(R) for treating patients with ME/CFS. The results, published in a peer review journal in 1994, suggested enhanced physical performance, greater cognitive functions and improved ability to perform daily living activities. Patients required reduced medications, while suffering little or no significant adverse side effects. The FDA raised certain issues with respect to this clinical trial, which required further study. These issues were reviewed and satisfactorily resolved. In February 1993, we presented results of our Phase II study of Ampligen(R) for ME/CFS to a FDA Advisory Committee and these results were published in early 1994 in Clinical Infectious Diseases, a peer reviewed medical journal, which emphasizes the understanding and potential treatment of infectious diseases. The results suggested that patients on Ampligen(R), in contrast to those receiving a placebo, showed significant improvement in physical capacity as determined by performance on treadmill testing. The Ampligen(R) treated patient group also required less pain medication than did the placebo group. In 1998, we were authorized by the FDA to initiate a Phase III multicenter, placebo-controlled, randomized, double blind clinical trial to treat 230 patients with ME/CFS in the U.S. The objective of this Phase III, clinical study, denoted as Amp 516, is to evaluate the safety and efficacy of Ampligen(R) as a treatment for ME/CFS. Over the course of the study, we engaged the services of twelve (12) clinical investigators at Medical Centers in California, New Jersey, Florida, North Carolina, Wisconsin, Pennsylvania, Nevada, Illinois, Utah and Connecticut. These clinical investigators are medical doctors with special knowledge of ME/CFS who have recruited, prescreened and enrolled ME/CFS patients for inclusion in the Phase III Amp 516 ME/CFS clinical trial. This clinical trial enrolled and randomized over 230 ME/CFS patients. We recently completed the stage I, forty week, double-blind, randomized, placebo-controlled portion of the clinical trial. At present, 14 patients remain in the stage II or the open label treatment portion of the clinical trial. We anticipate that the last patient will complete this segment by August 2004. To date there have been no reported serious adverse events definitely related to the study medication. The next stage in our program is the completion of stage II and the final data collection, quality assurance of data to insure its accuracy and analysis of the data according to regulatory guidelines to facilitate filing for commercial approval to sell. Human Immunodeficiency Virus (HIV) Over fifteen antiviral drugs are currently approved by the FDA for the treatment of HIV infection. Most target the specific HIV enzymes, reverse transcriptase ("RT") and protease. The use of various combinations of three or more of these drugs is often referred to as Highly Active Anti-Retroviral Therapy ("HAART"). HAART involves the utilization of several antiretrovirals with different mechanisms of action to decrease viral loads in HIV-infected patients. The goal of these combination treatments is to reduce the amount of HIV in the body ("viral load") to as low as possible. Treatments include different classes of drugs, but they all work by stopping parts of the virus so the virus cannot reproduce. Experience has shown that using combinations of drugs from different classes is a more effective strategy than using only one or two drugs. HAART has provided dramatic decreases in morbidity and mortality of HIV infection. Reduction of the viral load to undetectable levels in patients with wild type virus (i.e., non-drug-resistant virus)is routinely possible with the appropriate application of HAART. HIV mainly infects important immune system cells called CD4 cells. After HIV has infected a CD4 cell, the CD4 cell becomes damaged and is eventually destroyed. Fewer CD4 cells means more damage to the immune system and, ultimately, results in AIDS. Originally, reduction of HIV loads was seen as possibly allowing the reconstitution of the immune system and led to early speculation that HIV might be eliminated by HAART. Subsequent experience has provided a more realistic view of HAART and the realization that chronic HIV suppression using HAART, as currently practiced, would require treatment for life with resulting significant cumulative toxicities. The various reverse transcriptase and protease inhibitor drugs that go into HAART have significantly reduced the morbidity and mortality connected with HIV; however 41 there has been a significant cost due to drug toxicity. It is estimated that 50% of HIV deaths are from the toxicity of the drugs in HAART. Current estimates suggest that it would require as many as 60 years of HAART for elimination of HIV in the infected patient. Thus the toxicity of HAART drugs and the enormous cost of treatment make this goal impractical. Although more potent second generation drugs are under development which target the reverse transcriptase and protease genes as well as new HIV targets, such as HIV integrase and HIV fusion inhibitors, the problem of drug toxicities, the complex interactions between these drug classes, and the likelihood of life-long therapy will remain a serious drawback to their usage. Failure of antiretroviral therapies over time and the demonstration of resistance have stimulated intensive searches for appropriate combinations of agents, or sequential use of different agents, that act upon the same or different viral targets. This situation has created interest in our drug technology, which operates by a different mechanism. We believe that the concept of Strategic Therapeutic

Interruption ("STI") of HAART provides a unique opportunity to minimize the current deficiencies of HAART while retaining the HIV suppression capacities of HAART. STI is the cessation of HAART until HIV again becomes detectable (i.e., rebounds) followed by resumption of HAART with subsequent suppression of HIV. By re-institution of HAART, HIV may be suppressed before it can inflict damage to the immune system of the patient. Based on recent publications (AIDS 2001,15: F19-27 and AIDS 2001, 15:1359-1368) in peer reviewed medical literature, it is expected that in just 30 days after stopping HAART approximately 80% to 90%, of the patients will suffer a relapse evidencing detectable levels of HIV. We believe that Ampligen(R) combined with the STI approach may offer a unique opportunity to retain HAART's superb ability to suppress HIV while potentially minimizing its deficiencies. All present approved drugs block certain steps in the life cycles of HIV. None of these drugs address the immune system, as Ampligen(R) potentially does, although HIV is an immune-based disease. By using Ampligen(R) in combination with STI of HAART, we will undertake to boost the patients' own immune system's response to help them control their HIV when they are off of HAART. Our minimum expectation is that Ampligen(R) has potential to lengthen the HAART-free time interval with a resultant decrease in HAART-induced toxicities. The ultimate potential, which of course requires full clinical testing to accept or reject the hypothesis, is that Ampligen(R) may potentiate STI of HAART to the point that the cell mediated immune system will be sufficient to eliminate requirement for HAART. Clinical results of using our technology has been presented at several International AIDS Scientific Forums in 2003, including the XVI International Conference on Antiviral Research in Savannah, Georgia in April 2003 and the 2nd IAS Conference on HIV Pathogenesis and Treatment in Paris, France in July 2003. Our AMP 720 HIV clinical trial is being conducted with individuals infected with HIV who are responding well to HAART at the moment. Patients in this study are required to meet minimum immune system requirements of CD4 cell levels greater than 400, maximum HIV infection levels of less that 50 copies/ml, and a HAART regimen containing at least one anti-viral drug showing therapeutic synergy with Ampligen(R) based on recently reported ex vivo study in a peer-reviewed scientific journal (Reference: Robinson W. McDougall B and Essay R. Mixed Dose Effect Analysis of a Biological Response Modifier (Ampligen) with 14 FDA-approved anti-HIV Agents. Antiviral Res, 46:A48, No. 46, 2000). All patients are chronically HIV infected and will have been receiving the indicated HAART regimen prior to starting the STI. The trial applies strategic treatment interruption of HAART based on the hypothesis that careful management of HIV rebound following STI may have potential to result in the development of protective immune responses to HIV in order to achieve control of HIV replication. We believe that the addition of Ampligen(R), with its potential immunomodulatory properties, may reasonably achieve this outcome. Half of 42 the participants in the trial are given 400 mg of Ampligen(R) twice a week and once they start the STI will remain off of HAART until such time as their HIV rebounds. The other half of the participants (the control group) are on STI, but they are given no Ampligen(R) during the "control" portion of the clinical test. The targeted enrollment in the AMP 720 Clinical Trial is 120 HIV-infected persons who meet the criteria. We expect to have 60 people on STI with Ampligen(R) and 60 people on STI without Ampligen(R). Presently, this study is approximately 35% enrolled at approximately ten medical centers around the U.S. Other Diseases We are evaluating potential novel clinical programs which would involve using Ampligen(R) to treat both HCV and HIV when they coexist on the same patient. We expect to commence these studies in collaboration with one or more prospective corporate partners. A collaborative Clinical study in Europe, in conjunction with Laboratorios Del Dr. Esteve S.A., is expected to commence in 2004. We have acquired a series of patents on Oragen(TM), potentially a set of oral broad spectrum antivirals, immunological enhancers through a licensing agreement with Temple University in Philadelphia, PA. We were granted an exclusive worldwide license from Temple for the Oragen(TM) products. Pursuant to the arrangement, we are obligated to pay royalties of 2% on sales of Oragen(TM), depending on how much technological assistance is required of Temple. We currently pay minimum royalties of $30,000 per year to Temple. These compounds have been evaluated in various academic laboratories for application to chronic viral and immunological disorders. An FDA authorized Phase I/II study of Ampligen(R) in cancer, including patients with renal cell carcinoma was completed in 1994. The results of this study indicated that patients receiving high doses (200-500mg) twice weekly experienced an increase in medium survival compared to the low dose group and as compared to an historical control group. We received authorization from the FDA to initiate a Phase II study using Ampligen(R) to treat patients with metastatic renal cell carcinoma. Patients with metastatic melanoma were included in the Phase I/II study of Ampligen(R) in cancer. The FDA has authorized us to conduct a Phase II clinical trial using Ampligen(R) in melanoma. We do not expect to devote any significant resources to funding these studies in the near future and are seeking strategic partnerships to expand these

promising studies. ALFERON N INJECTION(R) Interferons are a group of proteins produced and secreted by cells to combat diseases. Researchers have identified four major classes of human interferon: alpha, beta, gamma and omega. The ALFERON N Injection(R) product contains a multi-species form of alpha interferon. The worldwide market for injectable alpha interferon-based products has experienced rapid growth and various alpha interferon injectable products are approved for many major medical uses worldwide. Alpha interferons are manufactured commercially in three ways: by genetic engineering, by cell culture, and from human white blood cells. All three of these types of alpha interferon are or were approved for commercial sale in the U.S. Our natural alpha interferon is produced from human white blood cells. The potential advantages of natural alpha interferon over recombinant interferon may be based upon their respective molecular compositions. Natural alpha interferon is composed of a family of proteins containing many molecular species of interferon. In contrast, recombinant alpha interferon each contain only a single species. Researchers have reported that the various species of interferons may have differing antiviral activity depending upon the type of virus. Natural alpha interferon presents a broad complement of species, which we believe may account for its higher activity in laboratory studies. Natural alpha interferon 43 is also glycosylated (partially covered with sugar molecules). Such glycosylation is not present on the currently U.S. marketed recombinant alpha interferons. We believe that the absence of glycosylation may be, in part, responsible for the production of interferon-neutralizing antibodies seen in patients treated with recombinant alpha interferon. Although cell culture-derived interferon is also composed of multiple glycosylated alpha interferon species, the types and relative quantity of these species are different from our natural alpha interferon. On October 10, 1989, the FDA approved ALFERON N Injection(R) for the intralesional (within lesions) treatment of refractory (resistant to other treatment) or recurring external genital warts in patients 18 years of age or older. Certain types of human papillomaviruses ("HPV") cause genital warts, a sexually transmitted disease ("STD"). A published report estimates that approximately eight million new and recurrent causes of genital warts occur annually in the United States alone. Basically, our interest in acquiring Alferon N Injection(R)was driven by two factors; (1) Our belief that the use of Alferon N in combination with Ampligen(R) has the potential to increase the positive therapeutic responses in chronic life threatening viral diseases. Combinational therapy is evolving to the standard of acceptable medical care based on a detailed examination of the Biochemistry of the body's natural antiviral immune response; and (2) New knowledge about the competitive products in the interferon arena that we believe implies a large untapped market and potential new therapeutic indication for Alferon N Injection(R)which could accelerate its revenues in the near term. Specifically, the recombinant DNA derived alpha interferon are now reported to have decreased effectiveness after one year, probably due to antibody formation and other severe toxicities. These detrimental effects have not been reported with Alferon N Injection which could allow this product to assume a much larger market share. These revenues would provide operational capital to complete the Phase III clinical trials of our experimental drug, Ampligen(R)in a more cost effective, non-dilutive manner on a shareholder's equity. Alferon N Injection(R) [Interferon alfa-n3 (human leukocyte derived)] is a highly purified, natural-source, glycosylated, multispecies alpha interferon product. There are essentially no antibodies observed against natural interferon to date and the product has a relatively low side-effect profile. Alferon is the only natural-source, multispecies alpha interferon currently sold in the U.S. The Alferon N Injection(R)targeted market consists of urologists, proctologists, dermatologists, and obstetricians/gynecologists. These physicians normally see patients with papilloma concondylomas (genital warts) in their practice. For our marketing plans, see "Marketing/Distribution" below. According to the NIH, there are one million new cases of venereal warts every year. Pipeline Products (Alpha Interferon) The following products, together with other assets were acquired in March 2004, upon the closing of the second ISI agreement. ALFERON N Injection(R) -Other Applications ALFERON N Injection(R) has been approved by the U.S. FDA for the intralesional treatment of 44 refractory or recurring external genital warts in patients 18 years of age or older and has been studied for the potential treatment of HIV, Hepatitis C and other indications. ISI, the company from which we obtained our rights to ALFERON N Injection(R) has conducted clinical trials with regard to the use of ALFERON N Injection(R) in the treatment of HIV and Hepatitis C. While ISI found the results to be encouraging, in both instances, the FDA determined that additional trials were necessary. We anticipate initiating clinical trials to evaluate the use of Alferon N Injection(R) to treat west Nile Virus infections and SARS that is dependent on NIH providing the funds needed. ALFERON LDO ALFERON LDO is an experimental low-dose, oral liquid formulation of Natural Alpha Interferon. Two Phase 2 clinical trials using ALFERON LDO for the treatment of HIV-infected patients have been completed. We are entering an active phase of Alferon LDO research. The FDA has recently authorized a new Phase II clinical

study designed to investigate the activity and safety of Alferon LDO(R) in HIV positive subjects in early stage disease. The endpoints of the study include an increase or upregulation of expression of genes known to be mediators of the natural immune response using cutting edge gene chip technology, as well as, absolute CD4 cell counts and plasma HIV RNA level. There can be no assurance that any of these proposed products will be cost-effective, safe, and effective or that we will be able to obtain FDA approval for such use. Furthermore, even if such approval is obtained, there can be no assurance that such products will be commercially successful or will produce significant revenues or profits for us. European Operations Our European operations were set up to prepare for the introduction of Hemispherx products and to accelerate market penetration into the European market once full approval is obtained from the European Medicine Evaluation Agency ("EMEA"). The EMEA is the equivalent of the United States FDA. From a regulatory point of view the member countries of the European Economic Union ("EEU") represent a common market under the jurisdiction of the EMEA. However, from a practical point of view, every country is different regarding developing relations with the medical community, patient associations and obtaining reimbursement for treatment from the equivalent of Social Security Agencies and insurance carriers. This program will be integrated into our new commercial asset, ALFERON N Injection(R), as well. Our European operations have assisted the growth of a number of patient/physician educational associations. The French Chronic Fatigue Syndrome Association has grown from ten members in the year 2000 to 800 currently. Every major country now has an active educational association with substantial numbers of members who regularly meet and "network". These programs have been modeled on the successful experience in the U.S. of conducting twice a year meetings on ME/CFS with Health and Human Services, FDA, NIH and Centers for Disease Control. We maintain contact with the EMEA, keeping the agency aware of our activities, as well as the health ministries in numerous countries in the European Union. In early 2001, our application for "orphan" drug status for the use of Ampligen(R) in ME/CFS was rejected because the Board found that the prevalence of ME/CFS was significantly above the five person per 10,000 limit required to grant orphan drug status in the European Union. Although no applications are on file currently with the EEU, we are exploring various ways to accelerate the commercial availability of our products in the various nations of the EEU, including potential appreciation of the "foreign import" rule for accepting products already approved in the U.S. 45 Limited numbers of ME/CFS patients were treated during 2003 with Ampligen(R) in the United Kingdom, Austria and Belgium under existing regulatory procedures in these countries, which allow the therapeutic use of an experimental drug under certain conditions. These procedures allowed us to recover the cost of Ampligen(R) used as well as to collect additional clinical data. Corresponding procedures are being considered in several other countries at the request of locally based physicians. Our European operations are considering implementing clinical trials in Europe for the use of Ampligen(R) in the treatment of HIV/AIDS on the basis of the new U.S. Protocols involving the use of the drug either in combination with "cocktail" therapies or as part of a strategic interruption of the "cocktail" therapies. We presented results of one these programs (AMP 720) at the LAS Conference on HIV Pathogenesis and Treatment in Paris, France, in July 2003. The efforts of our European operation have started to produce results. In March 2002, our European subsidiary Hemispherx Biopharma Europe, S.A. ("Hemispherx, S.A.") entered into a Sales and Distribution Agreement with Laboratorios Del Dr. Esteve S.A. ("Esteve"). Pursuant to the terms of the Agreement, Esteve was granted the exclusive right to market Ampligen(R) in Spain, Portugal and Andorra ("Territory") for the treatment of ME/CFS. In addition to other terms and other projected payments, Esteve paid an initial and non-refundable fee of 625,000 Euros (approximately $563,000) to Hemispherx, S.A. on April 24, 2002. Esteve is to pay a fee of 1,000,000 Euros after U.S. FDA approval of Ampligen(R) for the treatment of ME/CFS and a fee of 1,000,000 Euros upon Spain's approval of the final marketing authorization for using Ampligen(R) for the treatment of ME/CFS. The agreement runs for the longer of ten years from the date of first arms-length sale in the Territory, the expiration of the last Hemispherx patent exploited by Esteve or the period of regulatory data protection for Ampligen(R) in the applicable territory. Pursuant to the terms of the agreement Esteve is to conduct clinical trials using Ampligen(R) to treat patients with both HCV and HIV and is required to purchase certain minimum annual amounts of Ampligen(R) following regulatory approval. The agreement is terminable by either party if Ampligen(R) is withdrawn from the territory for a specified period due to serious adverse health or safety reasons, bankruptcy, insolvency or related issues of one of the parties; or material breach of the agreement. Hemispherx may transform the agreement into a non-exclusive agreement or terminate the agreement in the event that Esteve does not meet specified percentages of its annual minimum purchase requirements under the agreement. Esteve may terminate the agreement in the event that Hemispherx fails to supply Ampligen(R) to the territory for a specified period of time or certain clinical trials being

conducted by Hemispherx are not successful. We executed a Memorandum of Understanding (MOI) in January 2004 with Fujisawa Deutschland GmbH, ("Fuji"), a major pharmaceutical corporation, granting them an exclusive option for a limited number of months to enter a Sales and Distribution Agreement with exclusive rights to market Ampligen(R) for ME/CFS in Germany, Austria and Switzerland. The option period ends 12 weeks after the later of Fuji's review of the full report on the results of our Amp 516 clinical trial and Fuji's meeting with three of the trial's principal investigators. We received an initial fee of 400,000 Euros (approximately $497,000 US). The MOI provides that if we have not provided Fuji with the full report on the results of our AMP 516 Clinical Trial with Fuji by May 31, 2004 and Fuji did not wish to exercise its options, we would have to refund one half of the 400,000 Euro fee to Fuji on May 31, 2004. Our initial report was submitted to Fuji on May 28, 2004 and we now await their response. We expect that Fuji will be requesting additional information as they review the initial report. The MOI provides that if we have not provided Fuji the full report by December 31, 2004 and Fuji does not wish to exercise its option we will be required to refund the entire fee to Fuji. If Fuji exercises the option, Fuji would be required to pay us an additional 1,600,000 Euros upon execution of the Sales and Distribution agreement, purchase Ampligen(R) exclusively from us and meet certain annual minimum purchase quotas. We would be required to file an application with the EMEA for commercial sale of Ampligen(R) for ME/CFS on or before December 31, 2005. Upon our filing of that application, we would be paid by Fuji an additional 1,000,000 Euros and, upon approval by the EMEA, an additional 2,000,000 Euros. If we failed to meet 46 the December 31, 2005 filing deadline, we would be required to return 40% of all payments that we had received from Fuji. We would be required to sell Ampligen(R) to Fuji at a 20% price discount until the aggregate amount of the discount reached $1,000,000 Euros (representing 50% of the initial 2,000,000 fee paid to us on and prior to execution of the definitive agreement). The foregoing is a summary of the memorandum of understanding. We cannot assure that we can prepare and issue the AMP 516 report within the time frames noted or that Fuji will exercise the option or that the proposed terms of the Sales and Distribution Agreement will not change materially. We continue negotiations with other prospective partners for the marketing and distribution of Ampligen(R) in other European territories. Manufacturing Historically, we outsourced the manufacturing of Ampligen(R) to certain contractor facilities in the United States and South Africa while maintaining full quality control and supervision of the process. Nucleic Acid polymers constitute the raw material used in the production of Ampligen(R). We acquire our raw materials from Ribotech, Ltd. ("Ribotech") located in South Africa. Ribotech, is jointly owned by us (24.9%) and Bioclones (Proprietary), Ltd. (75.1%). Bioclones manages and operates Ribotech. There are a limited number of manufacturers in the United States available to provide the polymers if Ribotech is unable to supply our needs based on product specifications and pricing. Sourcing our needs from U.S. suppliers could result in a cost increase for our raw materials. Until 1999, we distributed Ampligen(R) in the form of a freeze-dried powder to be formulated by pharmacists at the site of use. We perfected a production process to produce ready to use liquid Ampligen(R) in a dosage form, which will mainly be used upon commercial approval of Ampligen(R). At the present time, we have engaged the services of Schering-Plough Products to mass produce ready-to-use Ampligen(R) doses. There are other pharmaceutical processing companies that can supply our production needs. Bioclones (PTY) Ltd. is headquartered in South Africa and is the majority owner in Ribotech, Ltd. (we own 24.9%) which produces most of the polymers used to date in manufacturing Ampligen(R). The licensing agreement with Bioclones presently includes South Africa, South America, Ireland, Australia, New Zealand and the United Kingdom. The agreement imposes certain clinical trial requirements on Ribotech, as well as, certain GMP standards on their facilities. We plan to consult and work with Bioclones in 2004 to assure GMP compliance of a new manufacturing facility. Bioclones has conducted limited clinical studies in patients with ME/CFS in Australia and South Africa. We currently occupy and use the New Brunswick, New Jersey laboratory and production facility that we acquired from ISI. This facility is approved by the FDA for the manufacture of Alferon N Injection(R). GMP's require that a product be consistently manufactured to an identical potency (strength) and purity with each lot, and that the manufacturing facility itself and all the equipment therein, be certified to operate within a strict set of performance standards. Our facilities in New Jersey (Alferon) and Maryland (Ampligen) meet these performance standards. Marketing/Distribution Our marketing strategy for Ampligen(R) reflects the differing health care systems around the world, and the different marketing and distribution systems that are used to supply pharmaceutical products to those systems. In the U.S., we expect that, subject to receipt of regulatory approval, Ampligen(R) will be utilized in four medical arenas: physicians' offices, clinics, hospitals and the home treatment setting. We 47 currently plan to use a service provided in the home infusion (non-hospital) segment of the U.S. market to execute direct marketing activities, conduct physical distribution of the

product and handle billing and collections. Accordingly, we are developing marketing plans to facilitate the product distribution and medical support for indication, if and when they are approved, in each arena. We believe that this approach will facilitate the generation of revenue without incurring the substantial costs associated with a sales force. Furthermore, management believes that the approach will enable us to retain many options for future marketing strategies. In February 1998, we and Accredo Health Services (formerly Gentiva Health Services) entered into a Distribution/Specialty Agreement for the distribution of Ampligen(R) for the treatment of ME/CFS patients under the U.S. treatment protocols. In Europe, we plan to adopt a country-by-country and, in certain cases, an indication-by-indication marketing strategy due to the heterogeneity regulation and alternative distribution systems in these areas. We also plan to adopt an indication-by-indication strategy in Japan. Subject to receipt of regulatory approval, we plan to seek strategic partnering arrangements with pharmaceutical companies to facilitate introductions in these areas. The relative prevalence of people from target indications for Ampligen(R) varies significantly by geographic region, and we intend to adjust our clinical and marketing planning to reflect the specialty of each area. We have a marketing arrangement with Bioclones pursuant to the Bioclones Agreement that covers South America, the United Kingdom, Ireland, Africa, Australia, Tasmania, New Zealand, and certain other countries and territories. In Spain, Portugal and Andorra we have entered into a Sales Distribution Agreement with Esteve, and, in Germany, Austria and Switzerland, we have entered into a memorandum of understanding with Fuji (see "European Operations" above). Our marketing and distribution plan for Alferon N Injection(R) is focused on increasing the sales of Alferon N Injection(R) for the intralesional treatment of refractory and recurring external genital warts in adults. We will reach out to a targeted audience of physicians consisting of OB/GYNs, Urologists, Proctologists and Dermatologists and simultaneously create product awareness in the patient population through several media and health organizations. Different regional meetings and seminars are scheduled during which guest speakers will explain the therapeutic benefits and safety profile of Alferon. Additional exposure will be created by exhibiting at several STD related conferences, expanded web presence, mailings and publications. We also have engaged a contract sales organization in order to build up a nationwide network of dedicated representatives in the U.S. We obtained the foreign marketing rights to Alferon N Injection(R) at the second asset closing in March 2004 and we expect to amend the current marketing/distribution agreements with Biovail, Esteve, Bioclones and Fujisawa to include Alferon N Injection(R). For more information about our arrangements with Accredo Health Services, Inc., Bioclones, Esteve and Biovails, see "Research And Development/Collaborative Agreements" below. In August 2003, we entered into a non-exclusive Sales and Marketing agreement with Engitech, a pharmaceutical contract sales organization, to launch Alferon N Injection(R) on a nationwide scale in the United States. The agreement stipulates that Engitech will deploy a sales force of 100 sales representatives within one year in the U.S. domestic market and further expand the sales team up to 250 sales representatives in the second year and after that as many as it takes to continually drive market share.Engitech will also develop and implement a strategic and tactical marketing action plan as well as organize a scientific and educational program towards a targeted audience of physicians and consumers. Engitech has been in business since 1987. This privately held company has several clients in the pharmaceutical industry. Competition Our potential competitors are among the largest pharmaceutical companies in the world, are well known to the public and the medical community, and have substantially greater financial resources, product development, and manufacturing and marketing capabilities than we have. 48 These companies and their competing products may be more effective and less costly than our products. In addition, conventional drug therapy, surgery and other more familiar treatments will offer competition to our products. Furthermore, our competitors have significantly greater experience than we do in pre-clinical testing and human clinical trials of pharmaceutical products and in obtaining FDA, EMEA Health Protection Branch ("HPB") and other regulatory approvals of products. Accordingly, our competitors may succeed in obtaining FDA, EMEA and HPB product approvals more rapidly than us. If any of our products receive regulatory approvals and we commence commercial sales of our products, we will also be competing with respect to manufacturing efficiency and marketing capabilities, areas in which we have no experience. Our competitors may possess or obtain patent protection or other intellectual property rights that prevent, limit or otherwise adversely affect our ability to develop or exploit our products. The major competitors with drugs to treat HIV diseases include Gilead Pharmaceutical, Pfizer, Bristol-Myers, Abbott Labs, Glaxo Smithkline, Merck and Schering-Plough Corp. ("Schering"). ALFERON N Injection(R) currently competes with a product produced by Schering for treating genital warts. 3M Pharmaceutical also has received FDA approval for its immune response modifier product for the treatment of genital and perianal warts. Government Regulation Regulation by governmental authorities in the U.S. and foreign

countries is and will be a significant factor in the manufacture and marketing of ALFERON N products and our ongoing research and product development activities. Ampligen(R) and the products developed from the ongoing research and product development activities will require regulatory clearances prior to commercialization. In particular, new human drug products for humans are subject to rigorous preclinical and clinical testing as a condition for clearance by the FDA and by similar authorities in foreign countries. The lengthy process of seeking these approvals, and the ongoing process of compliance with applicable statutes and regulations, has required, and will continue to require the expenditure of substantial resources. Any failure by us or our collaborators or licensees to obtain, or any delay in obtaining, regulatory approvals could materially adversely affect the marketing of any products developed by us and our ability to receive product or royalty revenue. We have received orphan drug designation for certain therapeutic indications, which might, under certain conditions, accelerate the process of drug commercialization. ALFERON N Injection(R) is only approved for use in intralesional treatment of refractory or recurring external genital warts in patients 18 years of age or older. Use of Alferon N Injection(R) for other applications requires regulatory approval. A "Fast-Track" designation by the FDA, while not affecting any clinical development time per se, has the potential effect of reducing the regulatory review time by fifty percent (50%) from the time that a commercial drug application is actually submitted for final regulatory review. Regulatory agencies may apply a "Fast Track" designation to a potential new drug to accelerate the approval and commercialization process. Criteria for "Fast Track" include: a) a devastating disease without adequate therapy and b) laboratory or clinical evidence that the candidate drug may address the unmet medical need. As of this date, we have not received a Fast-Track designation for any of our potential therapeutic indications although we have received "Orphan Drug Designation" for both ME/CFS and HIV/AIDS in the U.S. We will continue to present data from time to time in support of obtaining accelerated review. We have not yet submitted any New Drug Application (NDA) for Ampligen(R) or any other drug to a North American regulatory authority. Assuming the results are positive, we expect to finalize the data of our double-blind, placebo controlled AMP516 ME/CFC Phase III clinical trial and submit an NDA by year end 2004. There are no assurances that such designation will be granted, or if granted, there are no assurances that Fast Track designation will materially increase the prospect of a successful commercial application. In 2000 we submitted an 49 emergency treatment protocol for clinically-resistant HIV patients, which was withdrawn by us during the statutory 30 day regulatory review period in favor of a set of individual physician-generated applications. There are no assurances that authorizations to commence such treatments will be granted by any regulatory authority or that the resultant treatments, if any, will support drug efficacy and safety. In 2001, we did receive FDA authorization for two separate Phase IIb HIV treatment protocols in which our drug is combined with certain presently available antiretroviral agents. Interim results were presented in 2002 and 2003 at various international scientific meetings. We are subject to various federal, state and local laws, regulations and recommendations relating to such matters as safe working conditions, laboratory and manufacturing practices, the experimental use of animals and the use of and disposal of hazardous or potentially hazardous substances, including radioactive compounds and infectious disease agents, used in connection with our research work. We believe that our Rockville, Maryland manufacturing and quality assurance/control facility is in substantial compliance with all material regulations applicable to these activities as advanced by the European Union Inspections team which conducted detailed audits in year 2000. The laboratory and production facility in New Brunswick, New Jersey, which we acquired from ISI, is approved for the manufacture of Alferon N Injection(R) and we believe it is in substantial compliance with all material regulations. However, we cannot give assurances that facilities owned and operated by third parties, including those operated by Bioclones Ltd. and Ribotech, Ltd., that are utilized in the manufacture of our products, are in substantial compliance, or if presently in substantial compliance, will remain so. These third party facilities include manufacturing operations in San Juan, Puerto Rico; Cape Town, South Africa; Columbia, Maryland, and Melbourne, Australia. Research And Development/Collaborative Agreements In 1994, we entered into a licensing agreement with Bioclones (Proprietory) limited ("Bioclones") for manufacturing and international market development in Africa, Australia, New Zealand, Tasmania, the United Kingdom, Ireland and certain countries in South Africa, of Ampligen(R) and Oragen(TM). Bioclones is to pursue regulatory approval in the areas of its franchise and is required to conduct Hepatitis clinical trials, based on international GMP and GLP standards. Thus far, these Hepatitis studies have not yet commenced to a meaningful level. Bioclones has been given the first right of refusal, subject to pricing, to manufacture that amount of polymers utilized in the production of Ampligen(R) sufficient to satisfy at least one-third of the worldwide sales requirement of Ampligen(R) and other nucleic

acid-derived drugs. Pursuant to this arrangement, we received: 1) access to worldwide markets, 2) commercial-scale manufacturing resources, 3) a $3 million cash payment in 1995 from Bioclones, 4) a 24.9% ownership in Ribotech, Ltd., a company set up by Bioclones to develop and manufacture RNA drug compounds, and 5) royalties of 8% on Bioclones nucleic acid-derived drug sales in the licensed territories. The agreement with Bioclones terminates three years after the expiration of the last of the patents supporting the license granted to Bioclones, subject to earlier termination by the parties for uncured defaults under the agreement, or bankruptcy or insolvency of either party. The last patent expires on December 22, 2012. In August, 1998, we entered into a strategic alliance with Accredo to develop certain marketing and distribution capacities for Ampligen(R) in the United States. Accredo is one of the nation's largest home health care companies with over 400 offices and sixty thousand caregivers nationwide. Pursuant to the agreement, Accredo assumed certain responsibilities for distribution of Ampligen(R) for which they received a fee. Through this arrangement, Hemispherx may mitigate the necessity of incurring certain up-front costs. Accredo has also worked with us in connection with the Amp 511 ME/CFS cost recovery treatment program, Amp 516 ME/CFS Phase III clinical trial and the Amp 719 (combining Ampligen with other antiviral drugs in HIV-salvage therapy and Amp 720 HIV Phase IIb clinical trials now under way). There can be no assurances that this alliance will develop a significant commercial position in any of its targeted chronic disease markets. The agreement had an initial one year term from February 9, 1998 with successive 50 additional one year terms unless either party notifies the other not less than 180 days prior to the anniversary date of its intent to terminate the agreement. Also, the agreement may be terminated for uncured defaults, or bankruptcy, or insolvency of either party and will automatically terminate upon our receiving an NDA for Ampligen(R) from the FDA, at which time, a new agreement will need to be negotiated with Accredo or another major drug distributor. There were no initial fees and subsequent fees paid under this agreement total approximately $15,000 for services performed in 2003. We have acquired a series of patents on Oragen(TM), potentially an oral broad spectrum antiviral, immunological enhancer through a licensing agreement with Temple University. We were granted an exclusive worldwide license from Temple for the Oragen(TM) products. Pursuant to the arrangement, we are obligated to pay royalties of 2% to 4% on sales of Oragen(TM), depending on how much technological assistance is required of Temple. There were no initial fees and we currently pay minimum royalties of $30,000 per year to Temple. These compounds have been evaluated in various academic laboratories for application to chronic viral and immunological disorders. This agreement is to remain in effect until the date that the last licensed patent expires unless terminated sooner by mutual consent or default due to royalties not being paid. The last Oragen(TM) patent expires on August 22, 2015. In December, 1999, we entered into an agreement with Biovail Corporation International ("Biovail"). Biovail is an international full service pharmaceutical company engaged in the formulation, clinical testing, registration and manufacture of drug products utilizing advanced drug delivery systems. Biovail is headquartered in Toronto, Canada. The agreement grants Biovail the exclusive distributorship of our product in the Canadian territories subject to certain terms and conditions. In return, Biovail agrees to conduct certain pre-marketing clinical studies and market development programs, including without limitation, expansion of the Emergency Drug Release Program in Canada with respect to our products. In addition, Biovail agrees to work with us in preparing and filing a New Drug Submission with Canadian Regulatory Authorities at the appropriate time. Biovail invested $2,250,000 in Hemispherx equity at prices above the then current market price and agreed to make an additional investment of $1,750,000 based on receiving approval to market Ampligen(R) in Canada from the appropriate regulatory authorities in Canada. The agreement requires Biovail to buy exclusively from us and penetrate certain market segments at specific rates in order to maintain market exclusivity. The agreement terminates on December 15, 2009, subject to successive two-year extensions by the parties and subject to earlier termination by the parties for uncured defaults under the agreement, bankruptcy or insolvency of either party, or withdrawal of our product from Canada for a period of more than ninety days for serious adverse health or safety reasons. In 1998, we invested $1,074,000 for a 3.3% equity interest in R.E.D. Laboratory ("R.E.D."). R.E.D. is a privately held biotechnology company for the development of diagnostic markers for Chronic Fatigue Syndrome and other chronic immune diseases. Primarily, R.E.D.'s research and development is based on certain technology owned by Temple University and licensed to R.E.D. We have an informal collaboration arrangement with R.E.D. to assist in this development. We have supplied scientific data with respect to ME/CFS and engaged R.E.D. to conduct certain blood tests for our ME/CFS clinical trials. We have no other obligations to R.E.D. R.E.D. is headquartered in Belgium. The investment was recorded at cost in 1998. During the three months ended June 2002 and December 2002 respectively, we recorded a non-cash charge of $678,000 and $396,000, respectively, to operations with respect to our investment

in R.E.D. These charges were the result of our determination that R.E.D.'s business and financial position had deteriorated to the point that our investment had been permanently impaired. In May 2000, we acquired an interest in Chronix Biomedical Corp. ("CHRONIX"). Chronix focuses upon the development of diagnostics for chronic diseases. We issued 100,000 shares of common stock to Chronix toward a total equity investment of $700,000. Pursuant to a strategic alliance agreement, we provided Chronix with $250,000 to conduct research in an effort to develop intellectual property on potential new products for diagnosing and treating various chronic illnesses such as ME/CFS. The strategic 51 alliance agreement provides us certain royalty rights with respect to certain diagnostic technology developed from this research and a right of first refusal to license certain therapeutic technology developed from this research. The strategic alliance agreement provides us with a royalty payment of 10% of all net sales of diagnostic technology developed by Chronix for diagnosing Chronic Fatigue Syndrome, Gulf War Syndrome and Human Herpes Virus-6 associated diseases. The royalty continues for the longer of 12 years from September 15, 2000 or the life of any patent(s) issued with regard to the diagnostic technology. The strategic alliance agreement also provides us with the right of first refusal to acquire an exclusive worldwide license for any and all therapeutic technology developed by Chronix on or before September 14, 2012 for treating Chronic Fatigue Syndrome, Gulf War Syndrome and Human Herpes Virus-6 associated diseases. During the quarter ended December 31, 2002, we recorded a noncash charge of $292,000 with respect to our investment in Chronix. This impairment reduces our carrying value to reflect a permanent decline in Chronix's market value based on its then proposed equity offerings. In April, 1999 we acquired a 30% equity position in the California Institute of Molecular Medicine ("CIMM") for $750,000. CIMM'S research is focused on developing therapies for use in treating patients affected by Hepatitis C ("HCV"). We use the equity method of accounting with respect to this investment. During the fourth quarter of 2001 we recorded a non-cash charge of $485,000 with respect to our investment in CIMM. This was a result of our determination that CIMM's operations have not yet evolved to the point where the full carrying value of our investment could be supported based on that company's financial position and operating results. During 2002, CIMM continued to suffer significant losses resulting in a deterioration of its financial condition. The $485,000 written off during 2001 represented the unamortized balance of goodwill included as part of our investment. Additionally, during 2001 we reduced our investment in CIMM based on our percentage interest in CIMM's continued operating losses. Our remaining investment at December 31, 2001 in CIMM, representing our 30% interest in CIMM's equity at such date, was not deemed to be permanently impaired, but was completely written off during 2002. Such amount was not material. These charges are reflected in the Consolidated Statements of Operations under the caption "Equity loss in unconsolidated affiliate". We still believe CIMM will succeed in their efforts to advance therapeutic treatment of HCV. We believe that CIMM's Hepatitis C diagnostic technology has great promise and will fill a long-standing global void in the collective abilities to diagnose and treat Hepatitis C infection at an early stage of the disorder. In March 2002, our European subsidiary Hemispherx S.A. entered into a Sales and Distribution agreement with Esteve. Pursuant to the terms of the Agreement, Esteve was granted the exclusive right to market Ampligen(R) in Spain, Portugal and Andorra for the treatment of ME/CFS. In addition to other terms and other projected payments, Esteve agreed to conduct certain clinical trials using Ampligen(R) in the patient population coinfected with HCV and HIV viruses. The Agreement runs for the longer of ten years from the date of first arms-length sale in the Territory, the expiration of the last Hemispherx patent exploited by Esteve or the period of regulatory data protection for Ampligen(R) in the applicable territory. Pursuant to the terms of the agreement Esteve is to conduct clinical trials using Ampligen(R) to treat patients with both HCV and HIV and is required to purchase certain minimum annual amounts of Ampligen(R) following regulatory approval. We expect Esteve to start HIV/HCV clinical trials in Spain in late 2004. The agreement is terminable by either party if Ampligen(R) is withdrawn from the territory for a specified period due to serious adverse health or safety reasons; bankruptcy, insolvency or related issues of one of the parties; or material breach of the agreement. Hemispherx may transform the agreement into a non-exclusive agreement or terminate the agreement in the event that Esteve does not meet specified percentages of its annual minimum purchase requirements under the agreement. Esteve may terminate the agreement in the event that Hemispherx fails to supply Ampligen(R) to the territory for a specified period of time or certain clinical trials being conducted by Hemispherx are not successful. The last patent with respect to this agreement expires on June 5, 2012. 52 The development of our nucleic acid based products requires the commitment of substantial resources to conduct the time-consuming research, preclinical development, and clinical trials that are necessary to bring pharmaceutical products to market and to establish commercial-scale production and marketing capabilities. During our last three fiscal years, we have directly

spent approximately $13,876,000 in research and development, of which approximately $3,150,000 was expended in the year ended December 31, 2003. These direct costs do not include the overhead and administrative costs necessary to support the research and development effort. Our European subsidiary has an exclusive license on all the technology and support from us concerning Ampligen(R) for the use of ME/CFS and other applications for all countries of the European Union (excluding the UK where Bioclones has a marketing license) and Norway, Switzerland, Hungary, Poland, the Balkans, Russia, Ukraine, Romania, Bulgaria, Slovakia, Turkey, Iceland and Liechtenstein. As mentioned above, Hemispherx S.A. entered into a Sales and Distribution Agreement with Esteve. Pursuant to the terms of this agreement, Esteve has been granted the exclusive right in Spain, Portugal and Andorra to market Ampligen(R) for the treatment of ME/CFS. See "European Operations", above for more detailed information. Human Resources As of June 21, 2004, we had 42 personnel consisting of 31 full time employees, 11 regulatory/research medical personnel on a part-time basis. Part time personnel are paid on a per diem or monthly basis. 34 personnel are engaged in our research, development, clinical, and manufacturing effort. Eight of our personnel perform regulatory, general administration, data processing, including bio-statistics, financial and investor relations functions. We believe that the combination of Hemispherx and ISI Scientific employees has 1) significantly strengthened our overall organization, 2) added expertise to monitor and complete our ongoing clinical trials and 3) improved our data management and system administration. While we have been successful in attracting skilled and experienced scientific personnel, there can be no assurance that we will be able to attract or retain the necessary qualified employees and/or consultants in the future. Scientific Advisory Board We reestablished a Scientific Advisory Board in October 2003 consisting of individuals who we believe have particular scientific and medical expertise in Virology, Cancer, Immunology, Biochemistry and related fields. These individuals will advise us about current and long term scientific planning including research and development. The Scientific Advisory Board will hold periodic meetings as needed by the clinical studies in progress by us. In addition, individual Scientific Advisory Board Members sometimes will consult with, and meet informally with our employees. All members of the Scientific Advisory are employed by others and may have commitments to and/or consulting agreements with other entities, including our potential competitors. Members of the Scientific Advisory Board are compensated at the rate of $1,000 per meeting attended or per day devoted to our affairs. In January 2004 a meeting was held in Philadelphia where certain Scientific Advisory Board members from Cornell University, University of Virginia and the Pasteur Institute gathered to review and make suggestions pertaining to our clinical and research programs in 2004. A member of our Board of Directors, Dr. William Mitchell of Vanderbilt University, also attended the meeting. 53 Facilities We currently lease and occupy a total of approximately 18,850 square feet of laboratory and office space in two states and some office space in Paris, France. Our headquarters is located in Philadelphia, Pennsylvania consisting of a suite of offices of approximately 15,000 square feet. We also lease space of approximately 3,850 square feet in Rockville, Maryland for research and development, our pharmacy, packaging, quality assurance and quality control laboratories, as well as additional office space. Approximately 2,000 square feet are dedicated to the pharmacy, packaging, quality assurance and control functions. We believe that our Rockville facilities will meet our requirements, for planned clinical trials and treatment protocols through 2004 and possibly longer after which time we may need to increase our Rockville facilities either through third parties or by building or acquiring commercial-scale facilities. We currently occupy and use the New Brunswick, New Jersey laboratory and production facility that we acquired from ISI. These facilities consist of two buildings located on 2.8 acres. One building is a two story facility consisting of a total of 31,300 square feet. This facility has offices, laboratories and production space and shipping and receiving areas. Building Two has 11,670 square feet consisting of offices, laboratories and warehouse space. The property has parking space for approximately 100 vehicles. We also have a 24.9% interest in Ribotech, Ltd. located in South Africa. Ribotech was established by Bioclones to develop and operate a manufacturing facility. Manufacturing at the pilot facility commenced in 1996. We expect that Ribotech will start construction on a new commercial production facility in the future, although no assurance can be given that this will occur. We have no obligation to fund this construction. Our interest in Ribotech, is a result of the marketing and manufacturing agreement executed with Bioclones in 1994. Legal Proceedings On September 30, 1998, we filed a multi-count complaint against Manuel P. Asensio, Asensio & Company, Inc. ("Asensio"). The action included claims of defamation, disparagement, tortuous interference with existing and prospective business relations and conspiracy, arising out of Asensio's false and defamatory statements. The complaint further alleged that Asensio defamed and disparaged us in furtherance of a manipulative, deceptive and unlawful short-selling scheme in August and September, 1998. In 1999, Asensio filed an

answer and counterclaim alleging that in response to Asensio's strong sell recommendation and other press releases, we made defamatory statements about Asensio. We denied the material allegations of the counterclaim. In July 2000, following dismissal in federal court for lack of subject matter jurisdiction, we transferred the action to the Pennsylvania State Court. In March 2001, the defendants responded to the complaints as amended and a trial commenced on January 30, 2002. A jury verdict disallowed the claims against the defendants for defamation and disparagement and the court granted us a directed verdict on the counterclaim. On July 2, 2002 the Court entered an order granting us a new trial against Asensio for defamation and disparagement. Thereafter, Asensio appealed the granting of a new trial. This appeal is now pending in the Superior Court of Pennsylvania. In June 2002, a former ME/CFS clinical trial patient and her husband filed a claim in the Superior Court of New Jersey, Middlesex County, against us, one of our clinical trial investigators and others alleging that she was harmed in the ME/CFS clinical trial as a result of negligence and breach of warranties. On June 25, 2004 all claims against us were dismissed with prejudice. In June 2002, a former ME/CFS clinical trial patient in Belgium filed a claim in Belgium, against Hemispherx Biopharma Europe, NV/SA, our Belgian subsidiary, and one of our clinical trial investigators alleging that she was harmed in the Belgium ME/CFS clinical trial as a result of negligence and breach of 54 warranties. We believe the claim is without merit and we are defending the claim against us through our product liability insurance carrier. In June 2004, One Penn Associates, L.P. filed a claim in the Philadelphia Municipal Court for the Commonwealth of Pennsylvania seeking $44,242.68 for alleged unpaid rent and charges related to our offices in One Penn Center in Philadelphia. We believe this claim is without merit and are defending same pursuant to the terms of our lease as we were damaged and deprived of the use of a portion of the offices due to water from the landlord's faulty sprinkler system. MANAGEMENT The following sets forth biographical information about each of our directors and executive officers as of the date of this prospectus: Name Age Position William A. Carter, M.D. 66 Chairman, Chief Executive Officer, and President Robert E. Peterson 67 Chief Financial Officer David R. Strayer, M.D. 58 Medical Director, Regulatory Affairs Mei-June Liao, Ph.D. 53 Vice President of Regulatory Affairs, Quality Control and Research and Development Robert Hansen 60 Vice President of Manufacturing Carol A. Smith, Ph.D. 54 Director of Process Development Richard C. Piani 77 Director William M. Mitchell, M.D. 69 Director Ransom W. Etheridge 65 Director, Secretary and General Counsel Iraj Eqbhal Kiani, Ph.D. 58 Director Antoni Esteve, Ph.D. 45 Director Each director has been elected to serve until the next annual meeting of stockholders, or until his earlier resignation, removal from office, death or incapacity. Each executive officer serves at the discretion of the Board of Directors, subject to rights, if any, under contracts of employment. WILLIAM A. CARTER, M.D., the co-inventor of Ampligen, joined us in 1978, and has served as: (a) our Chief Scientific Officer since May 1989; (b) the Chairman of our Board of Directors since January 1992; (c) our Chief Executive Officer since July 1993; (d) our President since April, 1995; and (e) a director since 1987. From 1987 to 1988, Dr. Carter served as our Chairman. Dr. Carter was a leading innovator in the development of human interferon for a variety of treatment indications including various viral diseases and cancer. Dr. Carter received the first FDA approval to initiate clinical trials on a beta interferon product manufactured in the U.S. under his supervision. From 1985 to October 1988, Dr. Carter served as our Chief Executive Officer and Chief Scientist. He received his M.D. degree from Duke University and underwent his 55 post-doctoral training at the National Institutes of Health and Johns Hopkins University. Dr. Carter also served as Professor of Neoplastic Diseases at Hahnemann Medical University, a position he held from 1980 to 1998. Dr. Carter served as Director of Clinical Research for Hahnemann Medical University's Institute for Cancer and Blood Diseases, and as a professor at Johns Hopkins School of Medicine and the State University of New York at Buffalo. Dr. Carter is a Board certified physician and author of more than 200 scientific articles, including the editing of various textbooks on anti-viral and immune therapy. ROBERT E. PETERSON has served as our Chief Financial Officer since April, 1993 and served as an Independent Financial Advisor to us from 1989 to April, 1993. Also, Mr. Peterson has served as Vice President of the Omni Group, Inc., a business consulting group based in Tulsa, Oklahoma since 1985. From 1971 to 1984, Mr. Peterson worked for PepsiCo, Inc. and served in various financial management positions including Vice President and Chief Financial Officer of PepsiCo Foods International and PepsiCo Transportation, Inc. Mr. Peterson is a graduate of Eastern New Mexico University. DAVID R. STRAYER, M.D. who served as Professor of Medicine at the Medical College of Pennsylvania and Hahnemann University, has acted as our Medical Director since 1986. He is Board Certified in Medical Oncology and Internal Medicine with research interests in the fields of cancer and immune system disorders. Dr. Strayer has served as principal investigator in studies funded by the Leukemia Society of America, the American Cancer Society, and the National Institutes of Health. Dr. Strayer attended the School of

Medicine at the University of California at Los Angeles where he received his M.D. in 1972. MEI-JUNE LIAO, Ph.D. has served as Vice President of Regulatory Affairs, Quality and Research & Development since October 2003 and as Vice President of Research & Development since March 2003 with responsibilities for the regulatory, quality control and product development of Alferon(R). Before the acquisition of certain assets of ISI, Dr. Liao was Vice President of Research and Development from 1995 to 2003 and held senior positions in the Research and Development Department of ISI from 1983 to 1994. Dr. Liao received her Ph.D. from Yale University in 1980 and completed a three year postdoctoral appointment at the Massachusetts Institute of Technology under the direction of Nobel Laureate in Medicine, Professor H. Gobind Khorana. Dr. Liao has authored many scientific publications and invention disclosures. ROBERT HANSEN joined us as Vice President of Manufacturing in 2003 upon the acquisition of certain assets of ISI. He is responsible for the manufacture of Alferon N(R). Mr. Hansen had been Vice President of Manufacturing for ISI since 1997, and served in various capacities in manufacturing since joining ISI in 1987. He has a B.S. degree in Chemical Engineering from Columbia University in 1966. CAROL A. SMITH, Ph.D. is Director of Process Development and has served as our Director of Manufacturing and Process Development since April 1995, as Director of Operations since 1993 and as the Manager of Quality Control from 1991 to 1993, with responsibility for the manufacture, control and chemistry of Ampligen(R). Dr. Smith was Scientist/Quality Assurance Officer for Virotech International, Inc. from 1989 to 1991 and Director of the Reverse Transcriptase and Interferon Laboratories and a Clinical Monitor for Life Sciences, Inc. from 1983 to 1989. She received her Ph.D. from the University of South Florida College of Medicine in 1980 and was an NIH post-doctoral fellow at the Pennsylvania State University College of Medicine. RICHARD C. PIANI has been a director since 1995. Mr. Piani has been employed as a principal delegate for Industry to the City of Science and Industry, Paris, France, a billion dollar scientific and educational complex. Mr. Piani provided consulting to us in 1993, with respect to general business strategies for our European operations and markets. Mr. Piani served as Chairman of Industrielle du Batiment-Morin, a building materials corporation, from 1986 to 1993. Previously Mr. Piani was a Professor of International Strategy at Paris Dauphine University from 1984 to 1993. From 1979 to 1985, Mr. Piani served as Group Director in Charge of International and Commercial Affairs for Rhone-Poulenc and from 1973 to 1979 he 56 was Chairman and Chief Executive Officer of Societe "La Cellophane", the French company which invented cellophane and several other worldwide products. Mr. Piani has a Law degree from Faculte de Droit, Paris Sorbonne and a Business Administration degree from Ecole des Hautes Etudes Commerciales, Paris. RANSOM W. ETHERIDGE has been a director since October 1997, and presently serves as our secretary and general counsel. Mr. Etheridge first became associated with us in 1980 when he provided consulting services to us and participated in negotiations with respect to our initial private placement through Oppenheimer & Co., Inc. Mr. Etheridge has been practicing law since 1967, specializing in transactional law. Mr. Etheridge is a member of the Virginia State Bar, a Judicial Remedies Award Scholar, and has served as President of the Tidewater Arthritis Foundation. He is a graduate of Duke University, and received his Law degree from the University of Richmond School of Law. WILLIAM M. MITCHELL, M.D., Ph.D. has been a director since July 1998. Dr. Mitchell is a Professor of Pathology at Vanderbilt University School of Medicine. Dr. Mitchell earned a M.D. from Vanderbilt and a Ph.D. from Johns Hopkins University, where he served as an Intern in Internal Medicine, followed by a Fellowship at its School of Medicine. Dr. Mitchell has published over 200 papers, reviews and abstracts dealing with viruses and anti-viral drugs. Dr. Mitchell has worked for and with many professional societies, including the International Society for Interferon Research, and committees, among them the National Institutes of Health, AIDS and Related Research Review Group. Dr. Mitchell previously served as one of our directors from 1987 to 1989. IRAJ EQHBAL KIANI, M.B.A., Ph.D., was appointed to the Board of Directors on May 1, 2002. Dr. Kiani is a citizen of England and resides in Newport, California. Dr. Kiani served in various local government position including the Governor of Yasoi, Capital of Boyerahmand, Iran. In 1980, Dr. Kiani moved to England, where he established and managed several trading companies over a period of some 20 years. Dr. Kiani is a planning and logistic specialist who is now applying his knowledge and experience to build a worldwide immunology network, which will use our proprietary technology. Dr. Kiani received his Ph.D. degree from the University of Warwick in England. ANTONI ESTEVE, Ph.D. became a member of our Board of Directors in November 2003. Dr. Esteve is a Member of the Executive Committee and Director of Scientific and Commercial Operations for Laboratorios del Dr. Esteve S.A. He has been engaged at Laboratorios del Dr. Esteve since 1984. Since 1986 he is Professor at the Autonomous University of Barcelona, School of Pharmacy. In 2001 he was elected as member of the Advisory Board for R&D of the Spanish Ministry of Science and Technology. Since 2002 he also has been President of Centre de Transfussio i Banc de Teixits

(the Transfusion and Tissues Bank Center of Catalonia). Dr. Esteve received a degree in Pharmacy from the University of Barcelona, Faculty of Pharmacy, in 1981 and a Ph.D. in Pharmaceutical Science in 1990. Committees of the Board The board of directors maintains the following committees: Audit Committee. Our Audit Committee of the Board of Directors consists of Richard Piani, Committee Chairman, William Mitchell, M.D. and Iraj-Eqhbal Kiani. Mr. Piani, Dr. Mitchell and Iraj-Eqhbal Kiani are Independent Directors. We do not have a financial expert as defined in Securities and Exchange Commission rules on the committee in the true sense of the description. However, Mr. Piani is a Businessman and has 40 years of experience of working with budgets, analyzing financials and dealing with financial institutions. We believe Mr. Piani, Dr. Mitchell and Iraj-Eqhbal Kiani to be independent of management and free of any relationship that would interfere with their exercise of independent judgment as members of this committee. Our audit committee is responsible for annually recommending independent accountants, preparing the reports or statements as may be required by AMEX or the 57 securities laws, and reviewing: (i) the adequacy of our system of internal accounting controls; (ii) our audited financial statements and reports and discussing the statements and reports with management, including any significant adjustments, management judgments and estimates, new accounting policies and disagreements with management; and (iii) disclosures by independent accountants concerning relationships with our company and the performance of our independent accountants. Executive Committee. The Executive Committee is composed of William A. Carter, Chief Executive Officer and President, Ransom W. Etheridge, Secretary and General Counsel, and Iraj-Eqhbal Kiani. The Executive Committee makes recommendations to management regarding general business matters of Hemispherx. Compensation Committee. The Compensation Committee is composed of William Mitchell, director, and Richard C. Piani, director. The Compensation Committee makes recommendations concerning salaries and compensation for employees of and consultants to Hemispherx. Nominating Committee. The nominating committee is composed of William Mitchell, Iraj Eqhbal Kiani and Richard Piani, all independent directors, and is responsible for recommending to the Board the slate of nominees to be put forth for election by the stockholders at our annual meeting. This committee also reviews proposals for nominations from stockholders that are submitted in accordance with the procedures published in our proxy statement. Compensation of Directors Board member compensation consists of an annual retainer of $100,000 to be paid 50% in cash and 50% in our common stock. In addition, prior to September 2003, two independent directors received an aggregate of $55,750 in 2003 for special project work performed on our behalf. Pursuant to the American Stock Exchange definition of Independence set forth in Section 121A of the AMEX Company Guide the Board of Directors adopted a policy to cease all Independent Director special project work and related compensation. Historically, all directors have been granted options to purchase common stock under our 1990 Stock Option Plan and/or Warrants to purchase common stock. We believe such compensation and payments are necessary in order for us to attract and retain qualified outside directors. 58 EXECUTIVE COMPENSATION The summary compensation table below sets forth the aggregate compensation paid or accrued by us for the fiscal years ended December 31, 2003, 2002 and 2001 to (i) our Chief Executive Officer and (ii) our four most highly paid executive officers other than the CEO who were serving as executive officers at the end of the last completed fiscal year and whose total annual salary and bonus exceeded $100,000 (collectively, the "Named Executives"). EXECUTIVE COMPENSATION SUMMARY COMPENSATION TABLE Name and Principal Year Salary ($) Restricted Warrants & All Other Position Stock Options Awards Compensation Awards (1)

William A. Carter 2003 (4)$582,461 -- (5)1,450,000 $37,175 Chairman of the 2002 (4) 565,514 -- (8)1,000,000 25,747 Board and CEO 2001 (4) 551,560 -- (2) 386,650 22,917 -- Robert E. Peterson 2003 (9)$230,450 -- -- -- Chief Financial 2002 151,055 -- (8) 200,000 -- Officer 2001 146,880 -- (3) 40,000 -- David R. Strayer, M.D. 2003 (6)$190,096 -- -- -- Medical Director 2002 (6) 178,594 -- (8) 50,000 -- 2001 (6) 174,591 -- (7) 10,000 -- Carol A. Smith, Ph.D. 2003 $140,576 -- -- -- Director of 2002 128,346 -- (8) 20,000 -- Manufacturing 2001 124,800 -- (7) 10,000 -- Robert Hansen, V.P. of 2003 (10)$104,500 -- -- -- Manufacturing 2002 -- -- -- -- 2001 -- -- -- -- ---

(1) Consists of insurance premiums paid by us with respect to term life and disability insurance for the benefit of the named executive officer. (2) Consists of 188,325 warrants to purchase common stock at $6.00 per share and 188,325 warrants to purchase common stock at $9.00 per share. Also includes a stock option grant of 10,000 shares exercisable at $4.03 per share. (3) Consist of a stock option grant of 10,000 shares exercisable at $4.03 per share and 30,000 warrants to purchase common stock at $5.00 per share. 59 (4) Includes bonuses of $94,952, $96,684 and $99,481 in 2001, 2002 and 2003, respectively. Also includes funds previously paid to Dr. Carter by Hahnemann Medical University where he served as

a professor until 1998. This compensation was continued by us and totaled $79,826 in 2001, $82,095 in 2002 and $84,776 in 2003. (5) Represents warrants to purchase common stock exercisable at $2.20 per share. (6) Includes $98,926 paid by Hahnemann Medical University where Dr. Strayer served as a professor until 1998. This compensation was continued by us in 2001, 2002 and 2003. (7) Consist of stock option grant of 10,000 shares exercisable at $4.03 per share. (8) Represents number of warrants to purchase shares of common stock at $2 per share. (9) 2003 includes a bonus of $74,464 paid in 2004. (10) Compensation since March 2003. Employed by ISI prior to that. The following table sets forth certain information regarding stock warrants granted during 2003 to the executive officers named in the Summary Compensation Table.

---------- Individual Grants ---------- Percentage Of Number Of Total Warrants Potential Realizable Value At Securities Granted To Assumed Rates Of Stock Price Underlying Employees In Exercise Appreciation For Warrants Term Warrants Fiscal Year Price Per Expiration ---------- Name Granted (1) 2003(2) Share (3) Date 5% (4) 10%(4) ---------- Carter, W.A. 1,450,000 100% $2.20 9/8/08 $4,071,338 $5,137,527 ---------- (1) These warrants became exercisable on March 17, 2004 when the second ISI asset acquisition was completed. (2) Total warrants issued to employees in 2003 were 1,450,000. (3) The exercise price is equal to the closing price of our common stock at the date of issuance. (4) Potential realizable value is based on an assumption that the market price of the common stock appreciates at the stated rates compounded annually, from the date of grant until the end of the respective option term. These values are calculated based on requirements promulgated by the Securities and Exchange Commission and do not reflect our estimate of future stock price appreciation. 60 The following table sets forth certain information regarding the stock options held as of December 31, 2003 by the individuals named in the above Summary Compensation Table. AGGREGATED OPTION EXERCISES IN LAST FISCAL YEAR AND FISCAL YEAR-END OPTION VALUE Securities Underlying Value of Unexercise Unexercised Warrants/ In-the-Money-Options Options at Fiscal At Fiscal Year End (1) Year End Numbers Dollars Name Shares Value Exercisable Unexercisable Exercisable Unexercisable Acquired on Realized ($) Exercise (#) ---------- William Carter -- -- 3,805,378(2) 1,950,000(3) $367,150 $217,000 Robert Peterson -- -- 403,750(4) 0 52,000 0 David Strayer -- -- 130,000(5) 0 13,000 0 Carol Smith -- v- 41,791(6) 0 5,200 0 ---------- (1) Computation based on $2.26, the December 31, 2003 closing bid price for the common stock on the American Stock Exchange. (2) Consist of (i) 500,000 warrants exercisable at $2.00 per share expiring on August 13, 2007 (ii) 188,325 warrants exercisable at $6.00 per share expiring on February 22, 2006 (iii) 188,325 warrants exercisable at $9.00 per share expiring on February 22, 2006 (iv) 100,000 warrants exercisable at $6.25 per share expiring on April 8, 2004 (v) 25,000 warrants exercisable at $6.50 per share expiring on September 17, 2004 (vi) 25,000 warrants exercisable at $8.00 per share expiring on September 17, 2004 (vii) 10,000 stock option exercisable at $4.03 per share expiring on January 3, 2011 and (viii) 73,728 stock options exercisable at $2.71 per share until exercised. Also include 2,695,000 warrants and options held in the name of Carter Investments, L.C. of which W.A. Carter in the principal beneficiary. These securities consist of (i) 340,000 warrants exercisable at $4.00 per share expiring on January 1, 2008,(ii) 170,000 warrants exercisable at $5.00 per share expiring on January 1, 2005,(iii) 300,000 warrants exercisable at $6.00 per share expiring on January 1, 2005 (iv) 20,000 warrants exercisable at $4.00 per share expiring on 2008,(v) 465,000 warrants exercisable at $1.75 expiring on June 3, 2005, and 1,400,000 warrants exercisable at $3.50 per share expiring on October 16, 2004. (3) Consists of (i) 500,000 warrants exercisable at $2.00 per share expiring on August 13, 2007 and (ii) 1,450,000 warrants exercisable at $2.20 per share expiring on September 8, 2008. (4) Consists of (i) 10,000 stock options exercisable at $4.03 per share expiring on January 3, 2011 (ii) 13,750 stock options exercisable at $3.50 per share expiring on January 22, 2007, (iii) 200,000 warrants exercisable at $2.00 per share expiring on August 13, 2007, (iv) 50,000 warrants exercisable at $3.50 expiring on March 1, 2006, (v) 100,000 warrants exercisable at $5.00 per share 61 expiring on April 14, 2006 and (vi) 30,000 warrants exercisable at $5.00 per share expiring on February 28, 2009. (5) Consists of (i) 50,000 warrants exercisable at $2.00 per share expiring on August 13, 2007, (ii) 50,000 warrants exercisable at $4.00 per share expiring on February 28, 2008, (iii) 10,000 stock options exercisable at $4.03 expiring on January 3, 2011 and (iv) 20,000 stock options exercisable at $3.50 per share expiring on January 22, 2007.

(6) Consists of (i) 20,000 warrants exercisable at $2.00 per share expiring on August 13, 2007, (ii) 5,000 warrants exercisable at $4.00 per share expiring on June 7, 2008, (iii) 10,000 stock options exercisable at $4.03 per share expiring on January 3, 2016, and (iv) 6,791 stock options exercisable at $3.50 per share expiring on January 22, 2007. The following table gives information about our Common Stock that may be issued upon the exercise of options, warrants and rights under all of our equity compensation plans as of December 31, 2003. Number of securities Remaining available for Weighted-average future issuance under Number of Securities to Exercise price of equity compensation be issued upon exercise Outstanding plans(excluding of outstanding options, options, warrants securities reflected in warrants and rights and rights column (a)) ---------- ---------- ---------- Plan Category ---------- (a) (b) (c) Equity compensation plans approved by security holders: 433,134 $ 3.16 -- Equity compensation plans not approved by -- -- -- security holders: Total 433,134 $ 3.16 -- In September, 2003 our Board of Directors changed the non-employee Board Member compensation to be 50% cash and 50% stock. The Board's stock compensation is to be paid on the first day of each calendar quarter. The number of shares paid shall have a value of $12,500 with the value of the shares being determined by the closing price of our common stock on the American Stock Exchange on the last trading day of the preceding quarter. In no event shall the number of shares issued under this plan exceed 1,000,000 shares over a ten year period. 62 Employment Agreements We entered into an amended and restated employment agreement with our President and Chief Executive Officer, Dr. William A. Carter, dated as of December 3, 1998, as amended in August 2003, which provided for his employment until May 8, 2008 at an initial base annual salary of $361,586, subject to annual cost of living increases. In addition, Dr. Carter could receive an annual performance bonus of up to 25% of his base salary, at the sole discretion of the board of directors. Dr. Carter will not participate in any discussions concerning the determination of his annual bonus. Dr. Carter is also entitled to an incentive bonus of 0.5% of the gross proceeds received by us from any joint venture or corporate partnering arrangement, up to an aggregate maximum incentive bonus of $250,000 for all such transactions. Dr. Carter's agreement also provides that he be paid a base salary and benefits through May 8, 2004 if he is terminated without "cause", as that term is defined in the agreement. This agreement was extended to May 8, 2008. Pursuant to his original agreement, as amended on August 8, 1991, Dr. Carter was granted options to purchase 73,728 shares of our common stock at an exercise price of $2.71 per share. We entered into an engagement agreement with Robert E. Peterson dated June 23, 2004 which provides for Mr. Peterson's employment as our Chief Financial Officer until June 30, 2006 at an annual base salary of $198,000 per year, subject to annual cost of living increases. In addition, Mr. Peterson shall receive bonus compensation upon Federal Drug Administration approval of Ampligen .. Mr. Peterson's agreement also contains a provision for severance pay equal to twelve months compensation. 2004 Equity Incentive Plan Our 2004 Equity Incentive Plan ("2004 Plan") provides for the grant of non-qualified and incentive stock options, stock appreciation rights, restricted stock and other stock awards to our employees, directors, officers, consultants and advisors for the purchase of up to an aggregate of 8,000,000 shares of common stock. The 2004 plan is administered by the board of directors, which has complete discretion to select eligible individuals to receive and to establish the terms of grants under the plan. Stock options awarded under the Equity Incentive Plan may be exercisable at such times (not later than 10 years after the date of grant) and at such exercise prices (not less than fair market value at the date of grant) as the Board may determine. The Board may provide for options to become immediately exercisable upon a "change in control" as defined in the plan. The number of shares of common stock available for grant under the 2004 Plan is subject to adjustment for changes in capitalization. As of June 30, 2004, 7,950,000 shares were available for grants under the 2004 Plan. Unless sooner terminated, the Equity Incentive Plan will continue in effect for a period of 10 years from its effective date. 1990 Stock Option Plan Our 1990 Stock Option Plan, as amended ("1990 Plan"), provides for the grant of options to our employees, directors, officers, consultants and advisors for the purchase of up to an aggregate of 460,798 shares of common stock. The 1990 plan is administered by the Compensation Committee of the board of directors, which has complete discretion to select eligible individuals to receive and to establish the terms of option grants. The number of shares of common stock available for grant under the 1990 Plan is subject to adjustment for changes in capitalization. As of December 31, 2003, no options were available for grants under the 1990 plan. This plan remains in effect until terminated by the Board of Directors or until all options are issued. 63 401(K) Plan In December 1995, we established a defined contribution plan, effective January 1, 1995, entitled the Hemispherx Biopharma employees 401(K) Plan and Trust Agreement. All of our full time employees are eligible to participate in the 401(K) plan following one year of employment. Subject to certain limitations imposed by federal tax laws, participants are eligible to contribute up to 15% of their salary (including bonuses and/or commissions) per

annum. Participants' contributions to the 401(K) plan may be matched by Hemispherx at a rate determined annually by the board of directors. Each participant immediately vests in his or her deferred salary contributions, while our contributions will vest over one year. In 2003 we provided matching contributions to each employee for up to 6% of annual pay for a total of $34,000 for all eligible employees. PRINCIPAL STOCKHOLDERS The following table sets forth as of June 30, 2004, the number and percentage of outstanding shares of common stock beneficially owned by: o Each person, individually or as a group, known to us to be deemed the beneficial owners of five percent or more of our issued and outstanding common stock; o each of our directors and the Named Executives; and o all of our officers and directors as a group. This table is based upon information supplied by Schedules 13D and 13G, if any, filed with the Securities and Exchange Commission, and information obtained from our directors and named executives. For purposes of this table, a person or group of persons is deemed to have "beneficial ownership" of any shares of common stock which such person has the right to acquire within 60 days of June 30, 2004. For purposes of computing the percentage of outstanding shares of common stock held by each person or group of persons named in the table, any security which such person or persons has or have the right to acquire within such date is deemed to be outstanding but is not deemed to be outstanding for the purpose of computing the percentage ownership of any other person. Except as indicated in the footnotes to this table and pursuant to applicable community property laws, we believe, based on information supplied by such persons, that the persons named in this table have sole voting and investment power with respect to all shares common stock which they beneficially own. As of June 30, 2004, 44,193,036 shares of our common stock were outstanding. Unless otherwise noted, the address of each of the principal stockholders is care of us at One Penn Center, 1617 JFK Boulevard, Philadelphia, Pennsylvania 19103. Shares % Of Share Name and Address Beneficially Beneficially of Beneficial Owner Owned Owned ---------- William A. Carter, M.D. 5,747,868 (1) 11.6 Robert E. Peterson 454,250 (2) * Ransom W. Etheridge 417,788(3) * 2610 Potters Rd. Virginia Beach, VA 23452 64 Richard C. Piani 221,440(4) * 97 Rue Jeans-Jaures Levaillois-Perret France 92300 William M. Mitchell, M.D. 220,333(5) * Vanderbilt University Department of Pathology Medical Center North 21st and Garland Nashville, TN 37232 Antoni Esteve, Ph.D. 350,918(6) * Laboratorios Del Dr. Esteve S.A. AV. Mare de Deu de Montserat Barcelona, 08041, Spain David R. Strayer, M.D. 138,746(7) * Carol A. Smith, Ph.D. 41,791(8) * Iraj-Eqhbal Kiani, Ph.D. 12,000(9) * Orange County Immune Institute 18800 Delaware Street Huntingdon Beach, CA 92648 Mei-June Liao, Ph.D. 0 0 Robert Hansen 0 0 All directors and executive officers as a group (11 persons) 7,605,134 15.0% ---------- * Less than 1% (1) Includes (i) an option to purchase 73,728 shares of common stock from Hemispherx at an exercise price of $2.71 per share and expiring on August 8, 2004, (ii) Rule 701 Warrants to purchase 1,400,000 shares of common stock at a price of $3.50 per share, originally expiring on September 30, 2002 was extended to September 30,2007; (iii) warrants to purchase 465,000 shares of common stock at $1.75 per share issued in connection with the 1995 Standby Financing Agreement and expiring on June 30, 2005; (iv) 340,000 common stock warrants exercisable at $4.00 per share and originally expiring on January 1, 2003 was extended to January 1, 2008; (v) 170,000 common stock warrants exercisable at $5.00 per share and expiring on January 2, 2005;(vi) 25,000 warrants to purchase common stock at $6.50 per share and expiring on September 17, 2004;(vii) 25,000 warrants to purchase common stock at $8.00 per share and expiring on September 17, 2004;(viii) 100,000 warrants to purchase common stock at $6.25 per share and expiring on April 8, 2004; (ix) 20,000 65 warrants to purchase common stock at $4.00 per share originally expiring January 1, 2003 was extended to January 1, 2008, (x) 188,325 common stock warrants exercisable at $6.00 per share and expiring on February 22, 2006; (xi) 188,325 common stock warrants exercisable at $9.00 per share and expiring on February 22, 2006 (xii) 300,000 common stock warrants granted in 1998 that are exercisable at $6.00 per share and expiring on January 1, 2006 (xiii) options to purchase 10,000 shares of common stock at $4.03 per share and expiring on January 3, 2011 (xiv) 500,000 warrants exercisable $2.00 per share in August 13, 2007 (xv) 1,450,000 warrants exercisable at $2.20 per share expiring on September 9, 2008 and (xvi) 492,490 shares of common stock. Does not include 500,000 warrants exercisable at $2.00 per share expiring on August 13, 2007 that have not vested. (2) Includes (i) 13,750 options to purchase common stock at an exercise price of $3.50 per share, expiring on January 7, 2007; (ii) warrants to purchase 50,000 shares of Common stock at an exercise price of $3.50 per share, expiring on March 1, 2006; (iii) warrants to purchase 100,000 shares of common stock at $5.00 per share, expiring on April 14, 2006; (iv) 30,000 warrants to purchase common stock at $5.00 per share an expiring on February 28, 2009 (v) options to purchase 10,000 shares at $4.03 per share that expire on January 3, 2011 (vi) 200,000 warrants exercised at $2.00 per share expiring on November 13, 2007, (vii) 50,000 options to purchase common stock at $3.44 per share expiring on

June 22, 2014 and (viii) 500 shares of common stock. (3) Includes 20,000 warrants to purchase common stock at $4.00 per share, originally expiring on January 1, 2003 and was extended to January 1, 2008; 25,000 warrants to purchase common stock at $6.50 per share; 25,000 warrants to purchase common stock at $8.00 per share, all expiring on September 12, 2004; 100,000 warrants exercisable $2.00 per share expiring on August 13, 2007; 200,000 stock options exercisable at $2.75 per share and expiring on December 4, 2013 and 72,481 shares of common stock. (4) Includes (i) 20,000 warrants to purchase common stock at $4.00 per share; (ii) warrants to purchase 25,000 shares of common stock at $6.50 per share; (iii) 25,000 warrants to purchase common stock at $8.00 per share, all expiring on September 17, 2004;(vi) 100,000 warrants exercisable at $2.00 per share expiring on August 13, 2007, (vi) 33,540 shares of common stock owned by Mr. Piani (vi) 12,900 shares of common stock owned jointly by Mr. and Mrs. Piani; and (vii) 5000 shares of common stock owned by Mrs. Piani. (5) Includes (I) warrants to purchase 12,000 shares of common stock at $6.00 per share, expiring on August 25, 2008; (ii) 25,000 warrants to purchase common stock at $6.50 per share; (iii) 25,000 warrants to purchase common stock at $8.00 per share all expiring on September 17, 2004; (iv) 100,000 warrants exercisable at $2.00 per share expiring in August 13, 2007 and 38,333 shares of common stock. (6) Consists of 347,446 shares of our common stock owned by Provesan S.A., an affiliate of Laboratorios del Dr. Esteve S.A. Dr. Antoni Esteve is a member of the executive committee and director of Scientific and Commercial Operations of Laboratorios del Dr. Esteve S.A. Dr. Esteve personally owns 3,472 shares of common stock. (7) Includes (i) stock options to purchase 20,000 shares of common stock at $3.50 per share; (ii) 50,000 warrants to purchase common stock at $4.00 per share; (iii) 10,000 stock options exercisable at $4.03 per share and expiring on January 3, 2011; 50,000 warrants to purchase common stock at $2.00 per share and expiring on August 13, 2007 and; (iv) 8,746 shares of common stock. (8) Consists of 5,000 warrants to purchase common stock at $4.00 per share expiring June 7, 2008; 6,791 stock options exercisable at $3.50 expiring January 22, 2007, 20,000 warrants exercisable at 66 $2.00 per share expiring in August 13, 2007 and options to purchase 10,000 shares of common stock at $ 4.03 per share expiring on January 3, 2011. (9) Consist of 12,000 warrants exercisable at $3.86 per share expiring on April 30, 2005. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS Ransom W. Etheridge, one of our officers and directors, is an attorney in private practice who has rendered corporate legal services to us from time to time, for which he has received fees. Mr. Etheridge received $60,000 for his professional services in 2003. Richard C. Piani, one of our directors, lives in Paris, France. Prior to September 2003, he assisted our European subsidiary in its dealings with medical institutions and the European Medical Evaluation Authority. Prior to September 2003, William M. Mitchell, M.D., another of our directors, worked with David R. Strayer, M.D. (our Medical Director) in establishing clinical trial protocols as well as other scientific work for us from time to time. For these services, these two directors were paid an aggregate of $40,100 in the year 2003. In September, 2003 the Board of Directors adopted a policy to cease all Independent Director special project work and related compensation pursuant to the American Stock Exchange definition of Independence set forth in Section 121A of the AMEX Company Guide. William A. Carter, our Chief Executive Officer, received an aggregate of $12,106 in short term advances in 2002 which were repaid as of December 31, 2002. We loaned $60,000 to Mr. Etheridge in November 2001 for the purpose of exercising 15,000 Class A Redeemable warrants. This loan bears interest at 6% per annum. Dr. Carter's short term advances and Mr. Etheridge's loan were approved by the Board of Directors. We paid $57,750, $33,450 and $18,800 for the years ending December 31, 2001, 2002 and 2003, respectively, to Carter Realty for the rent of property used at various times in 2001, 2002 and 2003. The property is owned by others and managed by Carter Realty. Carter Realty is owned by Robert Carter, the brother of William A. Carter, our Chief Executive Officer. Antoni Esteve, Ph.D., one of our directors, is a member of the Executive Committee and Director of Scientific and Commercial Operations of Laboratorios Del Dr. Esteve S.A. In March 2002, our European subsidiary, Hemispherx Biopharma S.A., entered into a Sales and Distribution Agreement with Laboratorios Del Dr. Esteve S.A. In addition, in March 2003, we issued 347,445 shares of common stock to Provesan S.A., an affiliate of Laboratorios Del Dr. Esteve S.A., in exchange for 1,000,000 Euros of convertible preferred equity certificates of Hemispherx S.A., owned by Laboratorios Del Dr. Esteve S.A. SELLING STOCKHOLDERS We have registered all 10,741,090 shares of common stock covered by this prospectus on behalf of the selling stockholders named in the table below. We issued the shares, the Debentures convertible into shares, and the warrants exercisable for shares to the selling stockholders in private transactions. We have registered the shares to permit the selling stockholders and their respective transferees, assignees or other successors-in-interest that receive their shares from a selling stockholder to resell the shares, from time to time, when they deem appropriate. The table below identifies the selling stockholders who will be offering shares and other

information regarding the beneficial ownership of the common stock held by each of the selling stockholders. For the Debenture holders (the first two stockholders listed below), the second column lists the number of shares of common stock beneficially owned by each selling stockholder as of June 30, 2004, based on each selling stockholder's ownership of shares of common stock, Debentures, warrants 67 and additional investment rights, and assumes the conversion of all the Debentures, the payment of all interest in stock and the exercise of all warrants and additional investment rights. Because the conversion price of the Debentures and the exercise price of the warrants are subject to adjustment for anti-dilution protection, the interest on the Debentures may be paid in cash or common stock, and the value attributed to any shares issued to the investors as interest (the "Interest Shares") depends on the average closing price of the common stock during the five consecutive business days ending on the third business day immediately preceding the applicable interest payment date, and the number of repayment shares depends on the amount of our consolidated revenues, the numbers listed in the second column may change. For the other selling stockholders, the second column lists the number of shares of common stock beneficially owned by the selling stockholder as of June 30, 2004, based on each selling stockholder's ownership of shares of common stock, and, except as set forth in the relevant footnotes, does not assume the conversion of any of the Debentures, the exercise of any warrants or additional investment rights or the payment of any interest on the Debentures in the form of common stock rather than cash. The third column lists each selling stockholder's portion, based on agreements with us, of the 10,741,090 shares of common stock being offered by this prospectus. With regard to the first two selling stockholders, the number of shares being offered by this prospectus was determined in accordance with the terms of the registration rights agreements with them, in which we agreed to register the resale of an aggregate of 158,103 shares and 135% of (w) the number of shares of common stock issuable upon conversion of the July, October and January 2004 Debentures (including the January 2004 Debentures issuable upon exercise of the additional investment rights), plus (x) the number of shares of common stock issuable upon exercise of the related July 2008, October 2008 and July 2009 Warrants, plus (y) an estimate of the number of Interest Shares that may be issued to the selling stockholders as interest payments on the July, October and January 2004 Debentures (including the January 2004 Debentures issuable upon exercise of the additional investment rights) and assuming interest is paid exclusively in Interest Shares over the full term of these debentures, rather than in cash, plus (z) the number of shares of common stock issuable upon exercise of the May 2009 Warrants. As we stated above, the number of shares that will actually be issued may be more or less than the 10,741,090 shares being offered by this prospectus. Under the terms of the foregoing debentures and related warrants, no selling stockholder who owns any of these securities may convert any of their debentures or exercise any of the foregoing warrants to the extent that the conversion or exercise would cause the selling stockholder, together with its affiliates, to beneficially own more than 4.99% of the shares of our then outstanding common stock following such conversion or exercise. For purposes of making this determination, shares of common stock issuable upon conversion of those debentures which have not been converted and upon exercise of the warrants which have not been exercised are excluded. The number of shares in the second and third columns does not reflect this limitation. Any selling stockholder may sell all, some or none of its respective shares in this offering. See "How The Shares May Be Distributed" below. 68 Common Stock Common Stock Owned Prior No. of Shares Owned After Selling Stockholder To Offering Being Offered The Offering ---------- ---------- ---------- ----------

---------- Portside Growth & Opportunity Fund 2,645,034(1) 3,667,311 -- ---------- Leonardo L.P. 4,103,835(2) 5,800,757 -- ---------- Cardinal Securities LLC 511,250(3) 511,250(3) -- ---------- H. David Coherd 511,250(4) 511,250(4) -- ---------- Robert L. Rosenstein 511,250(4) 511,250(4) -- ---------- Bridge Ventures, Inc. 315,160(5) 315,160(5) -- ---------- Sharon Will 363,500(6) 263,500(6) -- ---------- Saggi Capital 100,000(6) 100,000(6) -- ---------- CEOCast, Inc. 45,000(7) 45,000(7) -- ---------- Christopher Chipman 15,000(8) 15,000(8) -- ---------- Fried Epstein & Rettig LLP 5,000(9) 5,000 -- ---------- Peter W. Adolph 237,591(10) 4,255 233,336 ---------- Business Asia Consultants, Inc. 4,602(11) 4,602 -- ---------- Marc E. Komorsky 237,591(10) 4,255 233,336

---------- (1) Represents (a) up to 253,551 shares of common stock issuable upon exercise of the July 2008 Warrants, (b) up to 205,067 shares of common stock issuable upon exercise of the October 2008 Warrants) (c) up to 1,123,110 shares of common stock issuable upon conversion of the January 2004 Debentures (including the debentures issuable upon exercise of the additional investment rights), (d) up to 395,256 shares of common stock issuable upon exercise of the July 2009 Warrants, and (e) up to 650,000 shares of common stock issuable upon exercise of the May 2009 warrants and 18,050 shares. Ramius Capital Group, LLC ("Ramius Capital") is the investment adviser of Portside Growth & Opportunity Fund ("Portside") and consequently has voting control and investment discretion over securities held by Portside. Ramius Capital disclaims beneficial ownership of the shares held by Portside. Peter A. Cohen, Morgan B. Stark, Thomas W. Strauss and Jeffrey M. Solomon are the sole managing members of C4S& Co., LLC, the sole managing member of Ramius Capital. As a result, Messrs. Cohen, Stark, Strauss and Solomon may be considered beneficial owners of any shares deemed to be beneficially owned by Ramius Capital. Messrs. Cohen, Stark, Strauss and Solomon disclaim beneficial ownership of these shares. (2) Represents (a) up to 317,461 shares of common stock issuable upon conversion of the July Debentures, (b) up to 253,552 shares of common stock issuable upon exercise of the July 2008 Warrants, (c) up to 1,025,336 shares of common stock issuable upon conversion of the October Debentures, (d) up to 205,067 shares of common stock issuable upon exercise of the October 2008 Warrants, (e) up to 1,178,111 shares of common stock issuable upon conversion of the January 2004 Debentures (including the debentures issuable upon exercise of the additional investment rights), (f) up to 650,000 shares of common stock issuable upon exercise of the May 2009 warrants, (g) up to 395,257 shares of common stock issuable upon exercise of the July 2009 Warrants and (h) 79,052 shares. Angelo, Gordon & Co., L.P. ("Angelo, Gordon") is the sole director of the general partner of Leonardo, L.P. ("Leonardo") and consequently has voting control and investment discretion over securities held by Leonardo. Angelo, Gordon disclaims beneficial ownership of the shares held by Leonardo. Mr. John M. Angelo, the Chief Executive Officer of Angelo, Gordon, and Mr. Michael L. Gordon, the Chief Operating Officer of Angelo, Gordon, are the sole general partners of AG Partners, L.P., the sole general partner of Angelo, 69 Gordon. As a result, Messrs. Angelo and Gordon may be considered beneficial owners of any shares deemed to be beneficially owned by Angelo, Gordon. Messrs. Angelo and Gordon disclaim beneficial ownership of these shares. (3) Represents up to 511,250 shares of common stock issuable upon exercise of warrants owned by Cardinal of which (i) 11,250 are exercisable at a price of $1.74 per share, (ii)112,500 are exercisable at a price of $2.57 per share, (iii) 200,000 shares of common stock issuable upon exercise of additional warrants at an exercise price of $2.50 per share, (iv) 87,500 exercisable at $2.42 per share, and (v) 100,000 are exercisable at $3.04 per share. The members of Cardinal, who share voting control and investment discretion, are H. David Coherd, Robert Rosenstein and Scott Koch. (4) The selling stockholder is one of the three members of Cardinal Securities LLC. Accordingly, the shares beneficially owned by Cardinal are deemed to be beneficially owned by each of Cardinal's members. In the second column up to 511,250 shares of common stock issuable upon exercise of warrants owned by Cardinal of which (i) 11,250 are exercisable at a price of $1.74 per share, (ii)112,500 are exercisable at a price of $2.57 per share, (iii) 200,000 shares of common stock issuable upon exercise of additional warrants at an exercise price of $2.50 per share, (iv) 87,500 shares of common stock exercisable at $2.42 per share and (v) 100,000 are exercisable at $3.04 per share. The third column includes all of the shares issuable upon exercise of the warrants owned by Cardinal. (5) In the second column, represents 230,000 shares issuable upon exercise of warrants exercisable at $1.75 per share expiring on June 30, 2005; and 85,160 shares issuable upon exercise of warrants exercisable at $3.50 expiring on October 15, 2004. The principal shareholders, officers and directors of Bridge Ventures are Harris Freedman and Annelies Freedman. (6) Sharon Will is the sole shareholder, officer and director of Saggi Capital Corp. For Sharon Will, represents 260,000 shares issuable upon exercise of warrants exercisable at $1.75 per shares expiring on June 30, 2005 and 3,500 shares of stock owned of record by Sharon Will, plus 100,000 shares issuable upon exercise of warrants exercisable at $3.50 per share expiring on October 15, 2004 owned by Saggi Capital Corp. The numbers for Saggi Capital Corp. do not include the shares issuable upon exercise of the Will warrants. (7) Messrs. Ken Sgro and Rachel Glicksman share voting control and investment discretion over the shares. CEOCast provides investor relations consulting services to us. (8) Represents a) 5,000 shares issuable upon exercise of warrants exercisable at $3.91 per shares expiring on February 28, 2009, b) 5,000 shares issuable upon exercise of warrants exercisable at $4.25 per shares expiring on January 31, 2009 and 5,000 shares issuable upon the exercise of warrants at $3.51 per share expiring March 31, 2009. Mr. Chipman provides us with financial and accounting consulting services. (9) Represents shares issued to Fried Epstein & Rettig

LLP, a law firm, for legal services provided to us. The three named partners share voting control and investment discretion over the shares. (10) For each stockholder, the second column includes an aggregate of 233,336 shares issuable upon the exercise of outstanding warrants in each of their names. These stockholders, together, provide financial consulting and investment banking services to us. 70 (11) Business Asia Consultants, Inc. provides consulting services related to obtaining distribution channels in China. It is owned by Lawrence Kronick. THE SELLING STOCKHOLDERS HAVE NOT BEEN EMPLOYED BY, HELD OFFICE IN, OR HAD ANY OTHER MATERIAL RELATIONSHIP WITH US OR ANY OF OUR AFFILIATES WITHIN THE PAST THREE YEARS EXCEPT AS DESCRIBED ABOVE IN THE FOOTNOTES ABOVE. HOW THE SHARES MAY BE DISTRIBUTED The shares to be sold in this offering have been or are in the process of being listed on the American Stock Exchange, subject to official notice of issuance. In the event that the American Stock Exchange determines not to list some of the shares issued or to be issued to the first two Selling Stockholders because the exchange takes the position that its rules require that our stockholders approve the issuance of such shares, the selling stockholders will not be able to sell these shares unless and until our stockholders approve them. In such event, we have agreed to promptly seek stockholder approval. The selling stockholders may sell their shares of common stock from time to time in various ways and at various prices. The shares may be sold in one or more transactions at fixed prices, at prevailing market prices at the time of the sale, at varying prices determined at the time of sale, or at negotiated prices. These sales may be effected in transactions that may involve crosses or block transactions. Some of the methods by which the selling stockholders may sell the shares include: o on any national securities exchange or quotation service on which the shares may be listed or quoted at the time of sale; o in the over-the-counter market; o in transactions otherwise than on these exchanges or systems or in the over-the-counter market; o through the writing of options, whether such options are listed on an options exchange or otherwise; o ordinary brokerage transactions and transactions in which the broker solicits purchasers; o privately negotiated transactions; o block trades in which the broker or dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction; o purchases by a broker or dealer as principal and resale by that broker or dealer for the selling stockholder's account under this prospectus; o sales under Rule 144 rather than by using this prospectus; o through the settlement of short sales; o a combination of any of these methods of sale; or o any other legally permitted method. In connection with sales of the shares or otherwise, the selling stockholders may enter into hedging transactions with broker-dealers, which may in turn engage in short sales of the shares in the course of hedging in positions they assume. The selling stockholders may also sell shares short and deliver shares to close out short positions, provided that the selling stockholders may not close out short positions entered into prior to the effective date of the registration statement of which this prospectus is a part with any shares included in this prospectus. The selling stockholders may also pledge their shares as collateral for a margin loan under their customer agreements with their brokers. If there is a default by the selling stockholders, the brokers may offer and sell the pledged shares from time to time under this prospectus or an amendment to this prospectus under Rule 424(b)(3) or other applicable provisions of the 71 Securities Act amending the list of selling stockholders to include the pledgee, transferee or other successors in interest as selling stockholders under this prospectus. Brokers or dealers may receive commissions or discounts from the selling stockholders (or, if the broker-dealer acts as agent for the purchaser of the shares, from that purchaser) in amounts to be negotiated. These commissions may exceed those customary in the types of transactions involved. We cannot estimate at the present time the amount of commissions or discounts, if any, that will be paid by the selling stockholders in connection with sales of the shares. The selling stockholders and any broker-dealers or agents that participate with the selling stockholders in sales of the shares may be deemed to be "underwriters" within the meaning of the Securities Act in connection with such sales. In that event, any commissions received by the broker-dealers or agents and any profit on the resale of the shares purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act. The selling stockholders have advised us that they have not entered into any agreements, understandings or arrangements with any underwriters or broker-dealers regarding the sale of the shares. There is no underwriter or coordinating broker acting in connection with the proposed sale of shares by the selling stockholders. In addition, each of the selling stockholders who is a registered broker-dealer or is affiliated with a registered broker-dealer has advised us that: o it purchased the shares in the ordinary course of business; and o at the time of the purchase of the shares to be resold, it had no agreements or understandings, directly or indirectly, with any person to distribute the shares. Under the securities laws of certain states, the shares may be sold in those states only through registered or licensed broker-dealers. In addition, the shares

may not be sold unless they have been registered or qualified for sale in the relevant state or unless they qualify for an exemption from registration or qualification. We do not know whether any selling stockholder will sell any or all of the shares registered by the shelf registration statement of which this prospectus forms a part. We have agreed to pay all fees and expenses incident to the registration of the shares, including certain fees and disbursements of counsel to certain of the selling stockholders. We have agreed to indemnify the selling stockholders against certain losses, claims, damages and liabilities, including liabilities under the Securities Act. Certain of the selling stockholders have also agreed to indemnify us, our directors, officers, agents and representatives against certain liabilities, including certain liabilities under the Securities Act. The selling stockholders and other persons participating in the distribution of the shares offered under this prospectus are subject to the applicable requirements of Regulation M promulgated under the Exchange Act in connection with sales of the shares. We have agreed with the selling stockholders to keep the registration statement of which this prospectus is a part effective until all the shares registered under the registration statement have been resold. 72 DESCRIPTION OF SECURITIES BEING REGISTERED The following section does not purport to be complete and is qualified in all respects by reference to the detailed provisions of our certificate of incorporation and by-laws, as amended, copies of which have been filed with the Securities and Exchange Commission. Our authorized capital stock consist of: (i) 100,000,000 shares of common stock, $.001 par value; and (ii) 5,000,000 shares of preferred stock, $.01 par value. 44,193,036 shares of common stock were issued and outstanding as of the date of this prospectus. Common Stock Shares of our common stock are entitled to one vote per share, either in person or by proxy, on all matters that may be voted upon by the owners of our shares at meetings of our stockholders. There is no provision for cumulative voting with respect to the election of directors by the holders of common stock. Therefore, the holder of more than 50% of our shares of outstanding common stock can, if they choose to do so, elect all of our directors. In this event, the holders of the remaining shares of common stock will not be able to elect any directors. The holders of common stock: o have equal rights to dividends from funds legally available therefore, when and if declared by our board of directors; o are entitled to share ratably in all of our assets available for distribution to holders of common stock upon liquidation, dissolution or winding up of our affairs; and o do not have preemptive rights, conversion rights, or redemption of sinking fund provisions. The outstanding shares of our common stock are duly authorized, validly issued, fully paid and nonassessable. Anti-Takeover Provisions Delaware Law We are subject to the provisions of Section 203 of the Delaware General Corporation Law, as amended, which restricts certain business combinations with interested stockholders even if such a combination would be beneficial to all stockholders. In general, Section 203 would require a two-thirds vote of stockholders for any business combination (such as a merger or sale of all or substantially all of our assets) between us and an "interested stockholder" unless such transaction is approved by a majority of the disinterested directors or meets certain other requirements. An "interested stockholder" is a person who, together with affiliates and associates, owns (or within three years, did own) 15% or more of our voting stock. These provisions could deprive stockholders of an opportunity to receive a premium for their common stock as part of a sale of us or may otherwise discourage a potential acquirer from attempting to obtain control of us. 73 Certificate of Incorporation Provisions of our Certificate of Incorporation may make it more difficult for someone to acquire control of us or for our stockholders to remove existing management, and might discourage a third party from offering to acquire us, even if a change in control or in management would be beneficial to our stockholders. For example, our Certificate of Incorporation allows us to issue shares of preferred stock without any vote or further action by our stockholders. Our Board of Directors has the authority to fix and determine the relative rights and preferences of preferred stock. Our Board of Directors also has the authority to issue preferred stock without further stockholder approval. As a result, our Board of Directors could authorize the issuance of a series of preferred stock that would grant to holders the preferred right to our assets upon liquidation, the right to receive dividend payments before dividends are distributed to the holders of common stock and the right to the redemption of the shares, together with a premium, prior to the redemption of our common stock. Shareholder rights plan In November, 2002 we adopted a shareholder rights plan and, under the Plan, our Board of Directors declared a dividend distribution of one Right for each outstanding share of Common Stock to stockholders of record at the close of business on November 29, 2002. Each Right initially entitles holders to buy one unit of preferred stock for $30.00. The Rights generally are not transferable apart from the common stock and will not be exercisable unless and until a person or group acquires or commences a tender or exchange offer to acquire, beneficial ownership of 15% or more of our common stock. However, for William A. Carter, M.D., our chief executive officer, who already beneficial owns 11.6% of our common stock, the Plan's threshold will be 20%, instead of 15%. The

Rights will expire on November 19, 2012, and may be redeemed prior thereto at $.01 per Right under certain circumstances. The rights have certain anti-takeover effects. The rights will cause substantial dilution to a person or group that attempts to acquire us on terms not approved by our Board of Directors. The rights should not interfere with any merger or business combination approved by the Board of Directors. Transfer Agent And Registrar The transfer agent and registrar for our common stock and warrants is Continental Stock Transfer and Trust Co., 17 Battery Place, 8th Floor, New York, New York 10004. LEGAL MATTERS The validity of the common stock offered in this prospectus has been passed upon for us by Silverman Sclar Shin & Byrne PLLC, 381 Park Avenue South, Suite 1601, New York, New York 10016. EXPERTS Our consolidated financial statements included in this prospectus have been audited by BDO Seidman, LLP, independent registered public accountants, to the extent and for the periods set forth in their report appearing elsewhere herein, and are included in reliance upon such report given upon the authority of said firm as experts in auditing and accounting. The consolidated financial statements and schedule of Interferon Sciences, Inc. as of December 31, 2003 and 2002 and for each of the years in the three year period ended December 31, 2003 included in 74 this prospectus have been so included in reliance on the report of Eisner LLP, independent registered public accounting firm, given on authority of said firm as experts in auditing and accounting. WHERE YOU CAN FIND MORE INFORMATION We have filed with the Securities and Exchange Commission a registration statement (which contains this prospectus) on Form S-1 under the Securities Act of 1933. The registration statement relates to the shares offered by the selling stockholders. This prospectus does not contain all of the information set forth in the registration statement and the exhibits and schedules to the registration statement. Please refer to the registration statement and its exhibits and schedules for further information with respect to us, the common stock, the debentures and the warrants. Statements contained in this prospectus as to the contents of any contract or other document are not necessarily complete and, in each instance, we refer you to the copy of that contract or document filed as an exhibit to the Registration Statement. You may read and obtain a copy of the registration statement and its exhibits and schedules from the SEC, as described below. We file annual, quarterly and special reports, proxy statements and other information with the Securities and Exchange Commission. You may read and copy any document we file at the Securities and Exchange Commission's public reference rooms at 450 Fifth Street, N.W., Washington, D.C. 20549. Please call the Securities and Exchange Commission at 1-800-SEC-0330 for further information on the public reference rooms. Many of our Securities and Exchange Commission filings are also available to the public from the Securities and Exchange Commission's Website at "http://www.sec.gov." 75 HEMISPHERX BIOPHARMA, INC. AND SUBSIDIARIES Index to Financial Section Item Page No. ---- -------- Financials for the Year Ended F-2 December 31, 2001, 2002, and 2003 for Hemispherx Financials for the three months F-38 Ended March 31, 2004 for Hemispherx Financials as of December 31, 2003 F-52 and for the years ended December 31, 2003 and 2002 for Interferon Sciences, Inc. and subsidiaries ("ISI") Financials as of December 31, 2002 F-71 and for the years ended December 31, 2002 and 2001 for ISI and subsidiaries Unaudited Proforma Financial F-96 Statement of Operations Related to the Acquisition of Certain Assets of ISI by Hemispherx F-1 HEMISPHERX BIOPHARMA, INC. AND SUBSIDIARIES Index to Consolidated Financial Statements - 2003 Report of Independent Registered Public Accountants ..... F-3 Consolidated Balance Sheets at December 31, 2002 and 2003 ..... F-4 Consolidated Statements of Operations for each of the years in the three-year period ended December 31, 2003 ..... F-5 Consolidated Statements of Changes in Stockholders' Equity and Comprehensive (Loss) for each of the years in the three-year period ended December 31, 2003 ..... F-6 Consolidated Statements of Cash Flows for each of the years in the three-year period ended December 31, 2003 ..... F-7 Notes to Consolidated Financial Statements ..... F-9 F-2 Report of Independent Registered Public Accountants The Board of Directors and Stockholders Hemispherx Biopharma, Inc. We have audited the accompanying consolidated balance sheets of Hemispherx Biopharma, Inc. and subsidiaries as of December 31, 2002 and 2003 the related consolidated statements of operations, changes in stockholders' equity and comprehensive loss and cash flows for each of the three years in the period ended December 31, 2003. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We conducted our audits in accordance with the standards of the Public Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as

evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion. In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Hemispherx Biopharma, Inc. and subsidiaries as of December 31, 2002 and 2003 and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2003 in conformity with accounting principles generally accepted in the United States of America. /s/ BDO SEIDMAN, LLP Philadelphia, Pennsylvania February 13, 2004 F-3 HEMISPHERx BIOPHARMA, INC. AND SUBSIDIARIES Consolidated Balance Sheets December 31, 2002 and 2003 (in thousands) December 31, ---------- 2002 2003 --------- --------- ASSETS Current assets: Cash and cash equivalents ..... $ 2,256 $ 3,764 Short term investments (Note 5) ..... 555 1,495 Inventory (Note 3) ..... -- 2,896 Accounts and other receivables (Note 15) ..... 1,507 282 Prepaid expenses and other current assets ..... 71 170 --------- --------- Total current assets ..... 4,389 8,607 Property and equipment, net ..... 155 94 Patent and trademark rights, net ..... 995 1,027 Investment ..... 408 408 Deferred acquisition costs (Note 4) ..... -- 1,546 Deferred financing costs ..... -- 393 Advance receivable (Note 7) ..... -- 1,300 Other assets ..... 93 29 --------- --------- Total assets ..... $ 6,040 $ 13,404 ========= ========= LIABILITIES AND STOCKHOLDERS' EQUITY Current liabilities: Accounts payable ..... $ 786 $ 488 Accrued expenses (Note 6) ..... 678 1,119 --------- --------- Total current liabilities ..... 1,464 1,607 --------- --------- Long-Term Debt-net of current portion (Note 7) ..... -- 2,058 Commitments and contingencies (Notes 10, 12, 13 and 15) Minority Interest in subsidiary (Note 8c) ..... 946 -- Redeemable common stock (Note 4) ..... -- 491 Stockholders' equity (Note 8): Common stock ..... 33 39 Additional paid-in capital ..... 107,155 123,054 Accumulated other comprehensive income ..... 35 -- Accumulated deficit ..... (99,073) (113,843) Treasury stock ..... (4,520) (2) --------- --------- Total stockholders' equity ..... 3,630 9,248 --------- --------- Total liabilities and stockholders' equity ..... $ 6,040 $ 13,404 ========= ========= See accompanying notes to consolidated financial statements. F-4 HEMISPHERX BIOPHARMA, INC. AND SUBSIDIARIES Consolidated Statements of Operations For each of the years in the three-year period ended December 31, 2003 (in thousands, except share and per share data) December 31, ---------- 2001 2002 2003 ---------- ---------- ---------- Revenues: Sales of product net ..... $ -- $ -- $ 509 Clinical treatment programs 390 341 148 License Fee income (Note 12) ..... -- 563 -- ---------- ---------- ---------- Total Revenues: ..... 390 904 657 Costs and expenses: Production/cost of goods sold ..... -- -- 502 Research and development ..... 5,780 4,946 3,150 General and administrative ..... 3,412 2,015 4,257 ---------- ---------- ---------- Total costs and expenses ..... 9,192 6,961 7,909 Equity loss and write offs of investments in unconsolidated affiliates (Note 2c) ..... (565) (1,470) -- Interest and other income ..... 284 103 80 Interest expense ..... -- -- (253) Financing costs (Note 7) ..... -- -- (7,345) ---------- ---------- ---------- Net loss ..... $ (9,083) $ (7,424) $ (14,770) ========== ========== ========== Basic and diluted loss per share .. $ (.29) $ (.23) $ (.42) ========== ========== ========== Weighted average shares outstanding ..... 31,433,208 32,085,776 35,234,526 ========== ========== ========== See accompanying notes to consolidated financial statements. F-5 HEMISPHERx BIOPHARMA, INC. AND SUBSIDIARIES Consolidated Statements of Changes in Stockholders' Equity and Comprehensive (loss) For each of the years in the three-year period ended December 31, 2003 (in thousands except share data) Accumulated Common Common Additional other Treasury Stock Stock .001 paid-in Comprehensive Accumulated stock Shares Par Value capital Income (loss) deficit shares ------ --------- ------- ---------- ------- ------ Balance at December 31, 2000 $30,367,888 $ 30 $ 97,984 $ 34 $ (82,566) 395,646 Common stock issued 2,155,900 3 8,072 -- -- -- Purchase of equity investment 12,000 -- 72 -- -- -- Treasury stock purchased -- -- -- -- -- 120,060 Note issued for purchase of stock -- -- (60) -- -- -- Stock issued in settlement of debt 21,198 -- 91 -- -- -- Stock and stock warrant compensation expense 19,000 -- 673 -- -- -- Net comprehensive (loss) (17) (9,083) ---------- ---------- ---------- -------- ---------- --------- Balance at December 31, 2001 32,575,986 33 106,832 17 (91,649) 515,706 Common stock issued 25,800 -- 37 -- -- -- Treasury stock Purchased -- -- -- -- -- 27,500 Stock issued in settlement of debt 48,392 -- 154 -- -- -- Stock and stock warrant compensation expense -- 132 -- -- -- -- Net comprehensive (loss) -- -- -- 18 (7,424) -- ---------- ---------- ---------- -------- ---------- --------- Balance at December 31, 2002 32,650,178 33 107,155 35 (99,073) 543,206 Debt conversion and interest payments 4,334,916 4 6,741 Fair value ascribed to debenture beneficial conversion features and related warrants

issued 9,363 Warrants exercised 790,745 1 1,234 Common stock issued in connection with ISI acquisition (Note 4) 1,068,789 1 1,667 Reclassification of redeemable Common Stock in connection with ISI acquisition (Note 4) (491) Treasury stock purchased 43,000 Treasury Stock retired (339,543) (4,272) (339,543) Conversion of minority interest of subsidiary into common stock (Note (8c) 347,445 946 Stock issued in settlement of debt 215,047 474 (246,220) Stock warrant compensation expense 237 Net comprehensive loss (35) (14,770) ---------- ---------- ---------- -------- ---------- --------- Balance at December 31, 2003 39,067,577 39 $ 123,054 $ -- $ (113,843) 443 ========== ========== ========== --====== ========== ========= Total Treasury stockholders Stock equity ---------- ---------- Balance at December 31, 2000 $ (3,910) $ 11,572 Common stock issued -- 8,075 Purchase of equity investment -- 72 Treasury stock purchased (560) (560) Note issued for purchase of stock -- (60) Stock issued in settlement of debt -- 91 Stock and stock warrant compensation expense -- 673 Net comprehensive (loss) (9,100) ---------- ---------- Balance at December 31, 2001 (4,470) 10,763 Common stock issued -- 37 Treasury stock Purchased (50) (50) Stock issued in settlement of debt -- 154 Stock and stock warrant compensation expense -- 132 Net comprehensive (loss) -- (7,406) ---------- ---------- Balance at December 31, 2002 (4,520) 3,630 Debt conversion and interest payments 6,745 Fair value ascribed to debenture beneficial conversion features and related warrants issued 9,363 Warrants exercised 1,235 Common stock issued in connection with ISI acquisition (Note 4) 1,668 Reclassification of redeemable Common Stock in connection with ISI acquisition (Note 4) (491) Treasury stock purchased (83) (83) Treasury Stock retired 4,144 (128) Conversion of minority interest of subsidiary into common stock (Note (8c) 946 Stock issued in settlement of debt 457 931 Stock warrant compensation expense 237 Net comprehensive loss (14,805) ---------- ---------- Balance at December 31, 2003 $ (2) $ 9,248 ========== ========== See accompanying notes to consolidated financial statements F-6 HEMISPHERx BIOPHARMA, INC. AND SUBSIDIARIES Consolidated Statements of Cash Flows for each of the years in the three-year period ended December 31, 2003 (in thousands) December 31, ---------- 2001 2002 2003 -------- -------- -------- Cash flows from operating activities: Net loss ..... $ (9,083) $ (7,424) $(14,770) Adjustments to reconcile net loss to net cash used in operating activities: Depreciation of property and equipment ..... 127 91 80 Amortization of patent and trademark rights ..... 397 206 122 Amortization of deferred financing costs ..... -- -- 7,345 Equity loss and write offs of investments in unconsolidated affiliates ..... 565 1,470 -- Stock option and warrant compensation and service expense ..... 673 132 237 Changes in assets and liabilities: Inventory ..... -- -- (1,429) Accounts and other receivables ..... 52 (1,293) 1,225 Prepaid expenses and other current assets ..... 202 104 (98) Accounts payable ..... (271) (67) (298) Accrued expenses ..... 139 385 558 Other assets ..... (82) (13) 6 -------- -------- -------- Net cash used in operating activities ..... (7,281) (6,409) (7,022) -------- -------- -------- Cash flows from investing activities: Purchase of property and equipment ..... -- -- (19) Additions to patent and trademark rights ..... (218) (176) (154) Maturity of short term investments ..... 4,613 5,293 520 Purchase of short term investments ..... (5,293) (520) (1,496) Investments in unconsolidated affiliates ..... (22) -- -- Deferred acquisition cost ..... -- -- (638) -------- -------- -------- Net cash (used in) provided by investing activities ..... (920) 4,597 (1,787) -------- -------- -------- F-7 (CONTINUED) HEMISPHERX BIOPHARMA, INC. AND SUBSIDIARIES Consolidated Statements of Cash Flows (Continued) (in thousands) December 31, ---------- 2001 2002 2003 -------- -------- -------- Cash flows from financing activities: Proceeds from stock subscriptions and issuance of common stock, net ..... $ 72 $ 65 -- Deferred financing costs ..... -- -- (835) Proceeds from issuance of preferred stock certificates of Subsidiary ..... -- 946 -- Proceeds from long-term borrowing ..... -- -- 11,300 Advance receivable ..... -- -- (1,300) Proceeds from exercise of stock warrants ..... 8,075 -- 1,235 Purchase of treasury stock ..... (560) (50) (83) -------- -------- -------- Net cash provided by financing activities ..... 7,587 961 10,317 -------- -------- -------- Net increase (decrease) in cash and cash equivalents ..... (614) (851) 1,508 Cash and cash equivalents at beginning of year ..... 3,721 3,107 2,256 -------- -------- -------- Cash and cash equivalents at end of year ..... $ 3,107 $ 2,256 $ 3,764 ======== ======== ======== Supplemental disclosures of cash flow information: Issuance of common stock for accrued expenses ..... $ 91 $ 154 $ 931 ======== ======== ======== Issuance of common stock for note receivable ..... $ 60 $ -- $ -- Issuance of Common Stock for ..... ======== ======== ======= Acquisition of ISI assets, including deferred acquisition costs ..... $ -- $ -- $ 1,668 ======== ======== Common Stock Issued for Compensation ..... $ 637 $ 132 $ 237 Issuance of Common Stock for ..... ======== ========

======== Debt Conversion and Interest Payments ..... $ -- $ -- $ 6,741 ======== ======== ======== Common Stock Issued for Conversion of Minority Interest in Subsidiary ..... -- -- $ 946 ======== ======== ======== ======== See accompanying notes to consolidated financial statements. F-8 HEMISPHERX BIOPHARMA, INC. AND SUBSIDIARIES NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (1) Business Hemispherx Biopharma, Inc. and subsidiaries (the Company) is a pharmaceutical company using nucleic acid technologies to develop therapeutic products for the treatment of viral diseases and certain cancers. The Company's drug technology uses specially configured ribonucleic acid (RNA). The Company's double-stranded RNA drug product, trademarked Ampligen(R), is in human clinical development for various therapeutic indications. The potential efficacy and safety of Ampligen(R) is being evaluated clinically for three anti-viral indications: myalgic encephalomyelitis, also known as chronic fatigue syndrome ("ME/CFS"), human immunodeficiency virus (HIV) associated disorders, and chronic hepatitis C (HVC) virus infection. The Company also has clinical experience with Ampligen(R) used in treating patients with certain cancers including renal cell carcinoma (kidney cancer) and metastatic malignant melanoma. The Company has other compounds to be evaluated. On March 11, 2003, we acquired from Interferon Sciences, Inc. ("ISI") ISI's inventory of ALFERON N Injection(R), a pharmaceutical product used for the treatment of certain types of genital warts, and a limited license for the production, manufacturing, use, marketing and sale of this product. On March 11, 2003, we also entered into an agreement to purchase from ISI all of its rights to the product and other assets related to the product including, but not limited to, real estate and machinery. This purchase is contingent on us receiving appropriate ISI shareholder approval for the real estate transaction. The consolidated financial statements include the financial statements of Hemispherx BioPharma, Inc. and its wholly-owned subsidiaries BioPro Corp., BioAegean Corp. and Core BioTech Corp. which were incorporated in September 1994, and are inactive, and Hemispherx Biopharma-Europe N.V./S.A. which was incorporated in 1998 and Hemispherx Biopharma Europe S.A., which was incorporated during 2002. All significant intercompany balances and transactions have been eliminated in consolidation. On May 1, 1997, the Company received permission from the U.S. Food and Drug Administration ("FDA") to recover the cost of Ampligen(R) from patients enrolled in the Company's AMP-511 ME/CFS open-label treatment protocol. The cost of Ampligen(R) to the patient is $2,100 for the first eight weeks of treatment and $2,400 for each additional eight-week period thereafter. In 1998, the Company initiated the recruitment of clinical investigators to enroll ME/CFS patients in the confirmatory Phase III double blind placebo-controlled clinical study of Ampligen(R). This clinical trial was approved by the FDA in 1998 and is designed to test the safety and efficiency of Ampligen(R) in treating ME/CFS. We recently completed the double-blind segment of our AMP 516 ME/CFS Phase III clinical trial for use of Ampligen(R) in the treatment of ME/CFS. Ampligen is also currently in two Phase IIb studies for the treatment of HIV to overcome multi-drug resistance, virus mutation and toxicity associated with current HAART therapies. One study, the AMP-719, is a Salvage Therapy, conducted in the U.S. and evaluating the potential synergistic efficacy of Ampligen in multi-drug resistant HIV patients for immune enhancement. The second study, the AMP-720, is a clinical trial designed to evaluate the effect of Ampligen under Strategic Treatment Intervention and is also conducted in the U.S. The ME/CFS Cost Recovery Treatment Program in Belgium was started in 1994 with the approval of the Belgian Regulatory authorities. Since its inception, over F-9 150 patients have participated in this program. Clinical data collected in the treatment of these ME/CFS patients will be used to support the Company's European Medical Evaluation Agency ("EMEA") Drug Approval Application and in applications in other regulatory jurisdictions. A similar program underway in Austria is undergoing expansion. (2) Summary of Significant Accounting Policies (a) Cash and Cash Equivalents Cash equivalents consist of money market certificates and overnight repurchase agreements collateralized by money market securities with original maturities of less than three months, with both a cost and fair value of $2,256,000 and $3,764,000 at December 31, 2002 and 2003, respectively. (b) Short-term Investments Investments with original maturities of more than three months and marketable equity securities are considered available for sale. The investments classified as available for sale include debt securities and equity securities carried at estimated fair value of $555,000 and $1,495,000 at December 31, 2002 and 2003 respectively. The unrealized gains and losses are recorded as a component of shareholders' equity. (c) Investments in unconsolidated affiliates Investments in companies in which the Company owns 20% or more and not more than 50% are accounted for using the equity method of accounting. Investments in companies in which the Company owns less than 20% of and does not exercise a significant influence are accounted for using the cost method of accounting. In 1998, the Company invested $1,074,000 for a 3.3% equity interest in R.E.D. Laboratory ("R.E.D."). R.E.D. is a privately held biotechnology

company for the development of diagnostic markers for Chronic Fatigue Syndrome and other chronic immune diseases. We have a research collaboration agreement with R.E.D. to assist in this development. R.E.D. is headquartered in Belgium. The investment was recorded at cost. During the three months ended June 30, 2002 and December 31, 2002 we recorded non-cash charges of $678,000 and $396,000 respectively, to operations with respect to our investment in R.E.D. These charges were the result of our determination that R.E.D.'s business and financial position had deteriorated to the point that our investments had been permanently impaired. In April, 1999 we acquired a 30% equity position in the California Institute of Molecular Medicine ("CIMM") for $750,000 and entered into a research and development arrangement. CIMM'S research is focused on developing therapies for use in treating patients affected by Hepatitis C ("HCV"). We use the equity method of accounting with respect to this investment. During the fourth quarter of 2001 we recorded a non-cash charge of $485,000 with respect to our investment in CIMM. This was a result of our determination that CIMM's operations have not yet evolved to the point where the full carrying value of our investment could be supported based on that company's financial position and operating results. During 2002, CIMM continued to suffer significant losses resulting in a deterioration of its financial condition. The $485,000 written off during 2001 represented the unamortized balance of goodwill included as part of the Company's investment. Additionally, during 2001 the Company reduced its investment in CIMM based on its percentage interest in CIMM's continued operating losses. The Company's remaining investment at December 31, 2001 in F-10 CIMM, representing its 30% interest in CIMM's equity at such date, was not deemed to be permanently impaired, but was completely written off during 2002. Such amount was not material. These charges are reflected in the Consolidated Statements of Operations under the caption "Equity loss in unconsolidated affiliates". We still believe CIMM will succeed in their efforts to advance therapeutic treatment of HCV. We believe that CIMM's Hepatitis C diagnostic technology has great promise and fills a long-standing global void in the collective abilities to diagnose and treat Hepatitis C infection at an early stage of the disorder. The Company's investment in Ribotech, Ltd. is also accounted for using the equity method of accounting. The Company received 24.9% of Ribotech, Ltd. as partial compensation under the license agreement described in note 12. Ribotech, Ltd. has incurred net losses since inception. The Company does not share in those losses in accordance with the licensing agreement and is not obligated to fund such losses. The net investment in Ribotech is zero at all year end periods presented. During 2000, the Company prepaid $500,000 to Ribotech, Ltd. for raw material purchases. $110,000 of materials were delivered in 2000 and the balance of $390,000 was applied towards the purchase of materials during 2001. Investments include an initial equity investment of $290,625 in Chronix Biomedical ("Chronix"). Chronix focuses upon the development of diagnostics for chronic diseases. This initial investment was made in May 31, 2000 by the issuance of 50,000 shares of Company common stock from the treasury. On October 12, 2000, the Company issued an additional 50,000 shares of its common stock and on March 7, 2001 the Company issued 12,000 more shares of its common stock from the treasury to Chronix for an aggregate equity investment of $700,000. The percentage ownership in Chronix is approximately 5.4% and is accounted for under the cost method of accounting. During the quarter ended December 31, 2002, we recorded a non cash charge of $292,000 with respect to our investment in Chronix. This impairment reduces our carrying value to reflect a permanent decline in Chronix's market value based on its then proposed investment offerings. During 2000, pursuant to a strategic alliance agreement, the Company provided Chronix with $250,000 to conduct research in an effort to develop intellectual property on potential new products for diagnosing and treating various chronic illnesses including chronic fatigue syndrome. The strategic alliance agreement provides the Company certain royalty rights with respect to certain diagnostic technology developed from this research and a right of first refusal to license certain therapeutic technology developed from this research. The payment of $250,000 was charged to research and development expense during 2000. (d) Property and Equipment (000 omitted) December 31, ---------- 2002 2003 ------- ------- Furniture, fixtures, and equipment $ 760 $ 779 Leasehold improvements 85 85 ------- ------- Total property and equipment 845 864 Less accumulated depreciation 690 770 ------- ------- Property and equipment, net $ 155 $ 94 ======= ======= Property and equipment consists of furniture, fixtures, office equipment, and leasehold improvements and is recorded at cost. Depreciation and amortization is computed using the straight-line method over the estimated useful lives of the respective assets, ranging from five to seven years. Depreciation and amortization expense was $127,000, $91,000 and $80,000 for 2001, 2002 and 2003, respectively. In 2002, fully depreciated equipment in the amount of $418,000 and F-11 fully depreciated leasehold improvements in Europe in the amount of $12,000 were written-off due to the closing of European offices. (e) Patent and Trademark Rights Effective October 1, 2001, the Company adopted a 17 year estimated useful life for amortization of its patent and trademark

rights in order to more accurately reflect their useful life. Prior to October 1, 2001, the Company was using a 10 year estimated useful life. The adoption of the 17 year life has been accounted for as a change in accounting estimate. Patents and trademarks are stated at cost (primarily legal fees) and are amortized using the straight line method over the life of the assets. The Company reviews its patents and trademark rights periodically to determine whether they have continuing value. Such review includes an analysis of the patent and trademark's ultimate revenue and profitability potential on an undiscounted cash flow basis to support the realizability of its respective capitalized cost. Management's review addresses whether each patent continues to fit into the Company's strategic business plans. During the years ended December 31, 2001, 2002 and 2003, the Company decided not to pursue the technology in certain countries for strategic reasons and recorded charges of $38,000 $5,000, and $5,000 respectively. Amortization expense was $359,000, $201,000 and $122,000 in 2001, 2002 and 2003, respectively. The accumulated amortization as of December 31, 2002 and 2003 is $2,096,000 and $2,150,000, respectively. As of December 31, 2003, the weighted average remaining life of the patents and trademarks was 8.6 years. Amortization of patents and trademarks for each of the next five is as follows: 2004 - $96,000, 2005 - $94,000, 2006 - $90,000, 2007 - $89,000 and 2008 - $87,000. (f) Revenue and License Fee Income On March 20, 2002 our European Subsidiary Hemispherx Biopharma Europe, S.A. ("Hemispherx, S.A.") entered into a Sales and Distribution agreement with Laboratorios del Dr. Esteve S.A. ("Esteve"). Pursuant to the terms of the Agreement, Esteve was granted the exclusive right to market Ampligen(R)in Spain, Portugal and Andorra for the treatment of Myalgic Encephalitis/Chronic Fatigue Syndrome ("ME/CFS"). Esteve paid the initial and non refundable fee of 625,000 Euros (approximately $563,000) to Hemispherx S.A. on April 24, 2002. The terms of the agreement granting the licensee marketing rights for Ampligen(R) for the treatment of myalgic/chronic fatigue syndrome ("ME/CFS") in Spain, Portugal and Andorra require the Company to provide the licensee with technical, scientific and commercial information. The Company fulfilled the requirements during the first quarter of 2002. The agreement terms required no additional performance on the part of the Company. The agreement also requires the licensee to pay of 1,000,000 Euros after FDA approval of Ampligen(R) for the treatment of ME/CFS and a fee of 1,000,000 after issuance in Spain of final marketing approval authorization for Ampligen(R) for the treatment of ME/CFS. Revenues for non-refundable license fees are recognized under the Performance Method-Expected Revenue. This method considers the total amount of expected revenue during the performance period, but limits the amount of revenue recognized in a period to total non-refundable cash received to date. This limitation is appropriate because future milestone payments are contingent on future events. Upon receipt, the upfront non-refundable payment is deferred. The non-refundable upfront payments plus non-refundable payments arising from the achievement of defined milestones are recognized as revenue over the performance period based on the lesser of (a) F-12 percentage of completion or (b) non-refundable cash earned (including the upfront payment). This method requires the computation of a ratio of cost incurred to date to total expected costs and then apply that ratio to total expected revenue. The amount of revenue recognized is limited to the total non-refundable cash received to date. The percentage of expenses incurred to date to total expected expenses in connection with the research and development project, exceed the percentage of license fees received compared to total license fees to be earned per the agreement. Therefore the amount of revenue recognized by the Company was limited to the total non-refundable cash received to date of approximately $563,000. Revenue from the sale of Ampligen(R) under cost recovery clinical treatment protocols approved by the FDA is recognized when the treatment is provided to the patient. Revenues from the sale of Alferon N Injection(R) are recognized when the product is shipped, as title is transferred to the customer. The Company has no other obligation associated with its products once shipment has occurred. During the years ending December 31, 2001, 2002 and 2003 the Company did not receive any grant monies from local, state and or Federal Agencies. (g) Net Loss Per Share Basic and diluted net loss per share is computed using the weighted average number of shares of common stock outstanding during the period. Equivalent common shares, consisting of stock options and warrants, are excluded from the calculation of diluted net loss per share since their effect is antidilutive. (h) Accounting for Income taxes Deferred income tax assets and liabilities are determined based on differences between the financial statement reporting and tax bases of assets and Liabilities and are measured using the enacted tax rates and laws in effect when the differences are expected to reverse. The measurement of deferred income tax assets is reduced, if necessary, by a valuation allowance for any tax benefits, which are not expected to be realized. The effect on deferred income tax assets and liabilities of a change in tax rates is recognized in the period that such tax rate changes are enacted. (i) Comprehensive (loss) Comprehensive (loss) consists of net loss and net unrealized gains (losses) on securities and is presented in the consolidated statements of

changes in stockholders' equity and comprehensive (loss). (j) Use of Estimates The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses for the reporting period. Actual results could differ from those estimates. (k) Foreign currency translations Assets and liabilities of the Company's foreign operations are generally translated into U.S. dollars at current exchange rates as of balance sheet date. F-13 Revenues and expenses are translated at average exchange rates during each period. Transaction gains and losses that arise from exchange rate fluctuations are included in the results of operations as incurred. The resulting translation adjustments are immaterial for all years presented. (l) Recent Accounting Standard and Pronouncements: In November, 2002, the FASB issued Interpretation No. 45, "Guarantor's Accounting and Disclosure Requirements for Guarantees, including Indirect Guarantees of Indebtedness of Others" ("Interpretation No. 45"). Interpretation No. 45 elaborates on the existing disclosure requirements for most guarantees, including loan guarantees such as standby letters of credit. It also clarifies that at the time a company issues a guarantee, the company must recognize an initial liability for the fair market value of the obligations it assumes under the guarantee and must disclose that information in its interim and annual financial statements. The initial recognition and measurement provisions of Interpretation No. 45 apply on a prospective basis to guarantees issued or modified after December 31, 2002. Interpretation No. 45 did not have an effect on our financial statements. In December 2002, the FASB issued Statement No. 148, "Accounting for Stock-Based Compensation-Transition and Disclosure", and amendment of FASB Statement No. 123 ("SFAS"). SFAS 148 amends FASB Statement No. 123, Accounting for Stock-Based Compensation, to provide alternative method of transition for an entity that voluntarily changes to the fair value based of accounting for stock-based employee compensation. It also amends the disclosure provisions of that Statement to require prominent disclosure about the effects on reported net income of an entity's accounting policy decisions with respect to stock-based employee compensation. Finally, this Statement amends Accounting Principles Board ("APB") Opinion No. 28, Interim Financial Reporting to require disclosure about those effects in interim financial information. SFAS 148 is effective for financial statements for fiscal years ending after December 15, 2002. The Company will continue to account for stock-based compensation using the intrinsic value method of APB Opinion No. 25, "Accounting for Stock Issued to Employees, "but has adopted the enhanced disclosure requirements of SFAS 148. In January 2003, the FASB issued Interpretation No. 46, "Consolidation of Variable Interest Entities" ("Interpretation No. 46"), that clarifies the application of Accounting Research Bulletin No. 51, Consolidated Financial Statements, "to certain entities in which equity investors do not have the characteristics of a controlling financial interest or do not have sufficient equity at risk for the entity to finance its activities without additional subordinated financial support from other parties. Interpretation No. 46 is applicable immediately for variable interest entities created after January 31, 2003. For variable interest entities created prior to January 31, 2003, the provision of Interpretation No. 46 have been deferred to the first quarter of 2004. This Interpretation did not have an effect on the consolidated financial statements. In May 2003, the FASB issued Statement No. 150, "Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity" ("SFAS 150"). SFAS 150 requires an issuer to classify certain financial instruments, such as mandatory redeemable shares and obligations to repurchase the issuers equity shares, as liabilities. The guidance is effective for financial instruments entered into or modified subsequent to May 31, 2003, and is otherwise effective at the beginning of the first interim period after June 15, 2003. SFAS 150 did not have an impact on our financial condition or results of operations. F-14 (m) Research and Development Costs Research and development related to both future and present products are charged to operation as incurred. (n) Stock Based Compensation The Company follows Statement of Financial Accounting Standards (SFAS) No. 123, "Accounting for Stock-Based Compensation." We chose to apply Accounting Principal Board Opinion 25 and related interpretations in accounting for stock options granted to our employees. The Company provides pro forma disclosures of compensation expense under the fair market value method of SFAS No. 123, "Accounting for Stock-Based Compensation," and SFAS No. 148, "Accounting for Stock-Based Compensation - Transition and Disclosure." The weighted average assumptions used for the years presented are as follows: December 31, 2001 2002 2003 ---- ---- ---- Risk-free interest rate 4.23% 5.23% 5.23% Expected dividend yield -- -- -- Expected lives 3.0 yrs 2.5 yrs 2.5 yrs Expected volatility 74.9% 63.17% 98.07% Had compensation cost for the Company's option plan been determined using the fair value method at the grant dates, the effect on the Company's net loss and loss per share for the years ended December 31, 2001, 2002, and 2003 would have been as follows: (In Thousands except for per share data) For the years ended December 31, 2001

2002 2003 ---------- ---------- ---------- Net (loss)as reported $ (9,083) $ (7,424) $(14,770) Add: Stock based compensation included in net loss as reported, net of related tax effects -- -- -- Deduct: Stock based compensation determined under fair value based method for all awards, net of related tax effects (632) (1,085) (1,825) ---------- ---------- ---------- Pro forma - net loss $ (9,715) $ (8,509) $(16,595) ========== ========== ========== Basic and diluted loss per share - as reported $ (.29) $ (.23) $ (.42) ========== ========== ========== Basic and diluted loss per share - pro forma $ (.31) $ (.27) $ (.47) ========== ========== ========== For stock warrants granted to non-employees, the Company measures fair value of the equity instruments utilizing the Black-Scholes method if that value is more reliably measurable than the fair value of the consideration or service received. The Company amortizes such cost over the related period of service. F-15 The exercise price of all stock warrants granted was equal to the fair market value of the underlying common stock as defined by APB 25 on the date of the grant. (0) Accounts Receivable Concentration of credit risk, with respect to accounts receivable, is limited due to the Company's credit evaluation process. The Company does not require collateral on its receivables. The Company's receivables primarily consist of amounts due from the wholesale drug companies as of December 31, 2003. (3) Inventories The Company uses the lower of first-in, first-out ("FIFO") cost or market method of accounting for inventory. Inventories consist of the following: December 31, 2003 ---------- Raw materials and work in process $1,729 Finished goods 1,167 ---------- $2,896 ========== (4) ACQUISITION OF ASSETS OF INTEFERON SCIENCES, INC. On March 11, 2003, we acquired from Interferon Sciences, Inc.'s ("ISI") inventory of ALFERON N Injection, a pharmaceutical product used for the treatment of certain types of genital warts, and a limited license for the production, manufacture, use, marketing and sale of this product. As consideration, we issued 487,028 shares of our common stock, assumed certain liabilities and agreed to pay ISI 6% of the net sales of product. Pursuant to our agreements with ISI, we have registered the foregoing shares for public sale. Except for 62,500 of the shares issued to ISI, we have guaranteed the market value of the shares retained by ISI as of March 11, 2005, the termination date, to be $1.59 per share. ISI is permitted to periodically sell certain amounts of its shares. If, within 30 days after the termination date, holders of the guaranteed shares request that we honor the guarantee, we will be obligated to reacquire the holders' remaining guaranteed shares and pay the holders $1.59 per share for a total of $675,000. Accordingly, certain shares issued in connection with this transaction were initially recorded as redeemable common stock outside of stockholders' equity. As of February 10, 2004, ISI had sold the 427,528 guaranteed shares at prices in excess of $1.59 per share. On March 11, 2003, we also entered into an agreement to purchase from ISI all of its rights to the product and other assets related to the product including, but not limited to, real estate and machinery. For these assets, we agreed to issue to ISI an additional 487,028 shares and to issue 314,465 shares and 267,296 shares, respectively to The American National Red Cross and GP Strategies, two creditors of ISI, to continue to pay royalties of 6% on net sales of Alferon N and other consideration, e.g., paying off a third creditor and paying a real estate tax liability. F-16 On May 30, 2003, we issued the shares to GP Strategies and the American National Red Cross. Pursuant to our agreements with ISI and these two creditors, we have agreed to register the foregoing shares for public sale. The acquisition of the real estate and machinery is contingent on our receiving appropriate ISI stockholder approval. The value of these guaranteed shares totaled $925,000 and these shares are redeemable under certain conditions, accordingly they were initially reflected as redeemable common stock and deferred acquisition costs on the accompanying financial statements as of December 31, 2003. As of February 10, 2004 GP Strategies had sold their 247,296 shares. Additionally other liabilities associated with the real estate in the amount of $621,000 have been recorded as deferred acquisition costs. It is expected that ISI stockholder approval will be obtained in March 2004 with substantially the entire amount of the deferred purchase price being allocated to real estate. As of December 31, 2003 all but 314,465 guaranteed shares had been sold. As a result, the remaining liability for redeemable stock was $491,000. Except for 62,500 of the 487,028 shares to be issued to ISI at closing of this second asset acquisition, we have guaranteed the market value of the shares retained by ISI on terms substantially similar to those for the guaranteed shares issued to ISI on the first acquisition of ISI assets. Pursuant to our agreement with ISI, we plan to register the foregoing shares for public sale. We will account for these transactions as a Business Combination under Statement of Financial Accounting Standards ("SFAS") No. 141 Accounting for Business Combinations. As a result of the first agreement, the following table summarizes the estimated fair value of the assets and liabilities assumed at the initial acquisition date. At March 11, 2003 ---------- Inventory $ 1,840,762 Fair Value of liabilities Assumed (1,081,041) ---------- Fair Value of Common Shares Issued $ 759,721 ========== The following table represents the Unaudited pro forma results of operations as though the acquisition, described in the first agreement, of certain net assets of ISI

occurred on January 1, 2002. F-17 Years Ended December 31, ---------- 2002 2003 ---------- ---------- (in thousands except for share data) Net revenues $ 2,830 $ 899 Expenses (14,699) (16,215) ---------- ---------- Net Loss $ (11,869) $ (15,316) ========== ========== Basic and diluted loss per share $ (.36) $ (.43) ---------- ---------- Weighted average shares outstanding 32,572,804 35,326,594 ========== ========== In giving effect to the additional shares that would be issued as a result of the second agreement with ISI the weighted average shares outstanding during the Years Ending December 31, 2002 and 2003 would have been 33,641,593 and 36,055,994 resulting in a pro forma loss per share as adjusted of $(.36) and $(.45) for said periods respectively. (5) Short-term investments: Securities classified as available for sale consisted of General Motors commercial paper at December 31, 2003 where its cost approximated its market value of $1,495,000 and matures in April and May 2004, and Calamos Mutual Market at December 31, 2002 where its carrying value of $555,000 exceeded its cost by $34,000. (6) Accrued Expenses Accrued expenses at December 31, 2002 and 2003 consists of the following: (000's omitted) December 31, ---------- 2002 2003 ------- ------- Compensation ..... $ 6 $ 366 Interest ..... -- 158 Commissions and royalties ..... -- 100 Professional fees ..... -- 126 Other expenses ..... 222 369 Fees associated with litigation settlement ..... 450 -- ------- ------- $ 678 $ 1,119 ======= ======= (7) Debenture Financing On March 12, 2003, we issued an aggregate of $5,426,000 in principal amount of 6% Senior Convertible Debentures due January 2005 (the "March Debentures") and an aggregate of 743,288 warrants to two investors in a private placement for aggregate proceeds of $4,650,000. Pursuant to the terms of the March Debentures, $1,550,000 of the proceeds from the sale of the March Debentures were to have been held back and released to us if, and only if, we acquired ISI's facility within a set timeframe. Although we had not acquired ISI's facility, these funds were released to us in June 2003. The March Debentures were to mature on January 31, 2005 with interest at 6% per annum, payable F-18 quarterly in cash or, subject to satisfaction of certain conditions, common stock. Any shares of common stock issued to the investors as payment of interest were valued at 95% of the average closing price of the common stock during the five consecutive business days ending on the third business day immediately preceding the applicable interest payment date. Pursuant to the terms and conditions of the March Debentures, we pledged all of our assets, other than our intellectual property, as collateral and were subject to comply with certain financial and negative covenants, which include but was not limited to the repayment of principal balances upon achieving certain revenue milestones. The March Debentures were convertible at the option of the investors at any time through January 31, 2005 into shares of our common stock. The conversion price under the March Debentures was fixed at $1.46 per share, subject to adjustment for anti-dilution protection for issuance of common stock or securities convertible or exchangeable into common stock at a price less than the conversion price then in effect. The investors also received Warrants to acquire at any time through March 12, 2008 an aggregate of 743,288 shares of common stock at a price of $1.68 per share. On March 12, 2004, the exercise price of the Warrants was to reset to the lesser of the exercise price then in effect or a price equal to the average of the daily price of the common stock between March 13, 2003 and March 11, 2004 (but in no event less than $1.176 per share). The exercise price (and the reset price) under the Warrants also was subject to similar adjustments for anti-dilution protection. All of these warrants have been exercised. We entered into a Registration Rights Agreement with the investors in connection with the issuance of the March Debentures and the Warrants. The Registration Rights Agreement requires that we register the shares of common stock issuable upon conversion of the Debentures, as interest shares under the Debentures and upon exercise of the Warrants. In accordance with this agreement, we have registered these shares for public sale. As of December 31, 2003 the investors had converted the $5,426,000 principal of the March Debentures into 3,716,438 shares of our common stock. The total imputed interest on the debenture was $111,711 of which $17,290 was paid in cash and $94,421 was paid by the issuance of 39,080 shares of common stock. The investors exercised the 743,288 warrants in July 2003 which produced proceeds in the amount of $1,248,724 On July 10, 2003, we issued an aggregate of $5,426,000 in principal amount of 6% Senior Convertible Debentures due July 31, 2005 (the "July Debentures") and an aggregate of 507,102 Warrants (the "July 2008 Warrants") to the same investors who purchased the March 12, 2003 Debentures, in a private placement for aggregate anticipated gross proceeds of $4,650,000. Pursuant to the terms of the July Debentures, $1,550,000 of the proceeds from the sale of the July Debentures were to have been held back and will be released to us if, and only if, we acquired ISI's facility within a set timeframe. Although we had not acquired ISI's facility, these funds were released to us in October 2003. The July Debentures mature on July 31, 2005 and bear interest at 6% per annum, payable quarterly in cash or, subject to satisfaction of certain conditions, common stock. Any shares of common stock

issued to the investors as payment of interest shall be valued at 95% of the average closing price of the common stock during the five consecutive business days ending on the third business day immediately preceding the applicable interest payment date. F-19 The July Debentures are convertible at the option of the investors at any time through July 31, 2005 into shares of our common stock. The conversion price under the July Debentures was fixed at $2.14 per share; however, as part of the debenture placement closed on October 29, 2003 (see below), the conversion price under the July Debentures was lowered to $1.89 per share. The conversion price is subject to adjustment for anti-dilution protection for issuance of common stock or securities convertible or exchangeable into common stock at a price less than the conversion price then in effect. The July 2008 Warrants received by the investors, as amended, are to acquire at any time commencing on July 26, 2004 through January 31, 2009 an aggregate of 507,102 shares of common stock at a price of $2.46 per share. On July 10, 2004, the exercise price of these July 2008 Warrants will reset to the lesser of the exercise price then in effect or a price equal to the average of the daily price of the common stock between July 11, 2003 and July 9, 2004 (but in no event less than $2.14 per share). The exercise price (and the reset price) under the July 2008 Warrants also is subject to similar adjustments for anti-dilution protection. We entered into a Registration Rights Agreement with the investors in connection with the issuance of the July Debentures and the July 2008 Warrants. The Registration Rights Agreement requires that we register on behalf of the holders the shares of common stock issuable upon conversion of the Debentures, as interest shares under the Debentures and upon exercise of the July 2008 Warrants. These shares have been registered for public sale. On June 25, 2003, we issued to each of the March 12, 2003 Debenture holders a warrant to acquire at any time through June 25, 2008 an aggregate of 500,000 shares of common stock at a price of $2.40 per share. On June 25, 2004, the exercise price of these June 2008 Warrants will reset to the lesser of the exercise price then in effect or a price equal to the average of the daily price of the common stock between June 26, 2003 and June 24, 2004 (but in no event less than $1.68 per share). The exercise price (and the reset price) under the June 2008 Warrants also is subject to adjustments for anti-dilution protection similar to those in the July 2008 Warrants. Pursuant to our agreement with the Debenture holders, we have registered the shares issuable upon exercise of these June 2008 Warrants for public sale. On October 29, 2003, we issued an aggregate of $4,142,357 in principal amount of 6% Senior Convertible Debentures due October 31, 2005 (the "October Debentures") and an aggregate of 410,134 Warrants (the "October 2008 Warrants") in a private placement for aggregate anticipated gross proceeds of $3,550,000. Pursuant to the terms of the October Debentures, $1,550,000 of the proceeds from the sale of the October Debentures have been held back and will be released to us if, and only if, we acquired ISI's facility within 90 days of October 29, 2003 and provide a mortgage on the facility as further security for the October Debentures. The debenture holders have extended the deadline to 90 days after January 26, 2004. The October Debentures mature on October 31, 2005 and bear interest at 6% per annum, payable quarterly in cash or, subject to satisfaction of certain conditions, common stock. Any shares of common stock issued to the investors as payment of interest shall be valued at 95% of the average closing price of the common stock during the five consecutive business days ending on the third business day immediately preceding the applicable interest payment date. Upon completing the sale of the October Debentures, we received $3,275,000 in net proceeds consisting of $1,725,000 from the October Debentures and $1,550,000 that had been withheld from the July Debentures. As noted above, F-20 $1,550,000 of the proceeds from the October Debentures have been held back pending our completing the acquisition of the ISI facility. The October Debentures are convertible at the option of the investors at any time through October 31, 2005 into shares of our common stock. The conversion price under the October Debentures is fixed at $2.02 per share, subject to adjustment for anti-dilution protection for issuance of common stock or securities convertible or exchangeable into common stock at a price less than the conversion price then in effect. The October 2008 Warrants, as amended, received by the investors are to acquire at any time commencing on July 26, 2004 through April 30, 2009 an aggregate of 410,134 shares of common stock at a price of $2.32 per share. On October 29, 2004, the exercise price of these October 2008 Warrants will reset to the lesser of the exercise price then in effect or a price equal to the average of the daily price of the common stock between October 29, 2003 and October 27, 2004 (but in no event less than $2.19 per share). The exercise price (and the reset price) under the October 2008 Warrants also is subject to similar adjustments for anti-dilution protection. We entered into a Registration Rights Agreement with the investors in connection with the issuance of the October Debentures and the October 2008 Warrants. The Registration Rights Agreement requires that we register on behalf of the holders the shares of common stock issuable upon conversion of the October Debentures, as interest shares under the October Debentures and upon exercise of the 2008 Warrants. If, subject to certain exceptions, sales of all shares required to be registered cannot be made pursuant

to the registration statement, then we will be required to pay to the investors their pro rata share of $3,635 for each day such conditions exist. On January 26, 2004, we issued an aggregate of $4,000,000 in principal amount of 6% Senior Convertible Debentures due January 31, 2006 (the "January 2004 Debentures"), an aggregate of 790,514 warrants (the "2009 Warrants") and 158,103 shares of common stock, and Additional Investment Rights (to purchase up to an additional $2,000,000 principal amount of January 2004 Debentures commencing in six months) in a private placement for aggregate anticipated net proceeds of $3,695,000. The January 2004 Debentures mature on January 31, 2006 and bear interest at 6% per annum, payable quarterly in cash or, subject to satisfaction of certain conditions, common stock. Any shares of common stock issued to the investors as payment of interest shall be valued at 95% of the average closing price of the common stock during the five consecutive business days ending on the third business day immediately preceding the applicable interest payment date. Commencing six months after issuance, the Company is required to start repaying the then outstanding principal amount under the January 2004 Debentures in monthly installments amortized over 18 months in cash or, at the Company's option, in shares of common stock. Any shares of common stock issued to the investors as installment payments shall be valued at 95% of the average closing price of the common stock during the 10-day trading period commencing on and including the eleventh trading day immediately preceding the date that the installment is due. The January 2004 Debentures are convertible at the option of the investors at any time through January 31, 2006 into shares of our common stock. The conversion price under the January 2004 Debentures is fixed at $2.53 per share, subject to adjustment for anti-dilution protection for issuance of common stock or securities convertible or exchangeable into common stock at a price less than the conversion price then in effect. F-21 There are two classes of July 2009 warrants received by the Investors: Class A and Class B. The Class A warrants are to acquire any time from July 26, 2004 through July 26, 2009 an aggregate of up to 395,257 shares of common stock at a price of $3.29 per share. The Class B warrants are to acquire any time from July 26, 2004 through July 26, 2009 an aggregate of up to 395,257 shares of common stock at a price of $5.06 per share. On January 27, 2005, the exercise price of these July 2009 Class A and Class B Warrants will reset to the lesser of their respective exercise price then in effect or a price equal to the average of the daily price of the common stock between January 27, 2004 and January 26, 2005 (but in no event less than $2.58 per share with regard to the Class A warrants and $3.54 per share with regard to the Class B warrants). The exercise price (and the reset price) under the July 2009 Warrants also is subject to similar adjustments for anti-dilution protection. The Company also issued to the investors Additional Investment Rights pursuant to which the investors have the right to acquire up to an additional $2,000,000 principal amount of January 2004 Debentures from the Company. These Debentures are identical to the January 2004 Debentures except that the conversion price is $2.58. The Additional Investment Rights are exercisable commencing on July 26, 2004 (the "Trigger" date) for a period of 90 days from the Trigger Date or 90 days from the date which the registration statement registering the shares issuable upon the conversion of the January 2004 Debentures to be issued pursuant to the Additional Investment Rights is declared effective, whichever is longer. The Company entered into a Registration Rights Agreement with the investors in connection with the issuance of the January 2004 Debentures (including any Debentures issued pursuant to the Additional Investment Rights), the shares, and the January 2009 Warrants. The Registration Rights Agreement requires that the Company register on behalf of the investors the shares issued to the investors and 135% of the shares issuable upon conversion of the Debentures (including payment of interest thereon) and upon exercise of the January 2009 Warrants. If the Registration Statement containing these shares is not filed within the time period required by the agreement, not declared effective within the time period required by the agreement or, after it is declared effective and subject to certain exceptions, sales of all shares required to be registered thereon cannot be made pursuant thereto, then we will be required to pay to the investors their pro rata share of $3,635 for each day any of the above conditions exist with respect to this Registration Statement. By agreement between the Company and the investors, the date upon which all warrants previously issued to the investors may become exercisable is now July 26, 2004 and the exercise periods of these warrants have been extended accordingly. By agreement with Cardinal Securities, LLC, for general financial advisory services and in conjunction with the private debenture placements in March, July and October 2003 and in January 2004, we paid Cardinal Securities, LLC an investment banking fee equal to 7% of the investments made by the two Debenture holders and issued to Cardinal certain warrants. A portion of the investment banking fee was paid with the issuance of 30,000 shares of our common stock. Cardinal also received 612,500 warrants to purchase common stock, of which 112,500 are exercisable at $1.74 per share, 112,500 are exercisable at $2.57 per share, 200,000 are exercisable at $2.50 per share, 87,500 are exercisable at $2.42 per share and 100,000 are exercisable at $3.04 per share. The $1.74 warrants

expire on July 10, 2008, the $2.57 and $2.50 warrants expire on March 12, 2008, the $2.42 warrants expire on October 30, 2008 and the $3.04 warrants expire on January 25, 2009. By agreement F-22 with Cardinal, we have registered 542,500 shares for public sale and have agreed to register the balance. In connection with the debenture agreements, we have outstanding letters of credit of $1 Million as additional collateral. As of December 31, 2003, the investors have converted $6,595,000 of debt from the March and July Debentures into 4,334,916 shares of our common stock. The March Debentures have been fully converted. The remaining principal balance on the remaining debentures is convertible into shares of our stock at the option of the investors at any time, through the maturity date. In addition, we have paid $1,300,000 into the debenture cash collateral account as required by the terms of the October Debentures. The amounts paid through December 31, 2003 have been accounted for as advances receivable and are reflected as such on the accompanying balance sheet as of December 31, 2003. The cash collateral account provides partial security for repayment of the July and October 2003 and January 2004 Debentures in the event of default. The March, July, and October 2003 debenture issuances of $5,426,000, $5,426,000, and $4,142,357, respectively, and warrant issuances, were accounted for in accordance with EITF 98-5: Accounting for convertible securities with beneficial conversion features or contingency adjustable conversion and with EITF No. 00-27: Application of issue No. 98-5 to Certain convertible instruments. The Company determined the fair values to be ascribed to detachable warrants issued with the convertible debentures utilizing the Black-Scholes method. As a result, the Company recorded debt discounts of approximately $11.8 million for the 2003 debenture issuances which, in effect, reduced the carrying value of our debt. As debt is converted to common stock, the remaining unamortized debt discount is charged to finance costs. These costs were initially deferred and charged to finance costs over the life of the debentures. As of December 31, 2003, the amount of debt discount amortized to finance cost totaled approximately $7.3 million. Costs associated with the financings aggregated approximately $1.3 million. These costs are also deferred and expensed as finance costs over the life of the debentures. Excluding the application of related accounting standards, and remaining debt discounts of $4.5 million, the Company's outstanding debt as of December 31, 2003 totaled $6.6 million and is due during 2005. (8) Stockholders' Equity (a) Preferred Stock The Company is authorized to issue 5,000,000 shares of $.01 per value preferred stock with such designations, rights and preferences as may be determined by the board of directors. There were no preferred shares issued and outstanding at December 31, 2002 and 2003. (b) Common Stock .. On July 31, 2003, we had approximately 104,000 shares of our $.001 authorized shares of $.001 par value Common Stock that were not issued or reserved for issuance. In order to accommodate the shares needed for the July Debenture, Dr. Carter, our Chief Executive Officer and Cardinal Capital, the placement agent, agreed that they would not exercise their warrants or options unless and F-23 until our stockholders approved an increase in our authorized shares of common stock (see note 11). This action freed up 3,206,650 shares. One of the proposals for the annual meeting of our stockholders that was held in September 2003 was an amendment to our certificate of incorporation to increase the authorized shares of common stock from 50,000,000 to 100,000,000 (the "Proposal"). We could not be assured that the Proposal would be approved. Our stockholders approved an amendment to our corporate charter at the Annual Shareholder meeting held in Philadelphia, PA on September 10, 2003. This amendment increased our authorized shares from 50,000,000 to 100,000,000. As of December 31, 2002 and 2003, 32,106,972 and 39,067,134 shares, net of shares held in the treasury, were outstanding, respectively. (c) Minority Shareholder Interest On March 20, 2002 our European Subsidiary Hemispherx Biopharma Europe, S.A. ("Hemispherx, S.A.") entered into a Sales and Distribution agreement with Laboratorios del Dr. Esteve S.A. ("Esteve"). Pursuant to the terms of the Agreement, Esteve was granted the exclusive right to market Ampligen(R) in Spain Portugal and Andorra for the treatment of Myalgic Encephalitis/Chronic Fatigue Syndrome ("ME/CFS"). In addition to other terms and other projected payments, Esteve paid an initial and non refundable fee of 625,000 Euros (approximately $563,000) to Hemispherx S.A. on April 24, 2002 as the first part of a series of milestone based payments. During March 2002, Hemispherx Biopharma Europe, S.A. (Hemispherx S.A.) was authorized to issue up to 22,000,000 Euros of seven percent (7%) convertible preferred securities. Such securities will be guaranteed by the parent company and will be converted into a specified number of shares of Hemispherx S.A. pursuant to the securities agreement. Conversion is to occur on the earlier of an initial public offering of Hemispherx S.A. on a European stock exchange or September 30, 2003. Esteve purchased 1,000,000 Euros of Hemispherx Biopharma Europe S.A.'s convertible preferred equity certificates on May 23, 2002. During 2002, the terms and conditions of these securities were changed so that these preferred equity certificates could be converted into the common stock of Hemispherx Biopharma, Inc. (HEB) in the event that a European IPO is not completed by September 30, 2003. The conversion rate is to be 300 shares of Hemispherx

Biopharma, Inc.'s common shares for each 1,000 Euro convertible preferred certificate. As a result the Company recorded approximately $946,000 as minority interest in subsidiary on its balance sheet at December 31, 2002. On December 18, 2002, we proposed that Esteve convert their convertible preferred equity certificates into Hemispherx common stock pursuant to the terms of the agreement and all unpaid dividends at the market price on that conversion date. On January 9, 2003, Esteve accepted our proposal and we registered these shares for public sale. On March 13, 2003, we issued 347,445 shares of our common stock to Provesan SA, an affiliate of Esteve S.A., in exchange for 1,000,000 Euros of convertible preferred equity certificates and any unpaid dividends. As a result of the exchange, the minority interest in subsidiary was transferred to stockholders' equity on such date. The contingent conversion price was more than the then market value of the parent company's or subsidiaries' common stock at each of the respective measurement dates. As a result and in accordance with Emerging Issues Task F-24 Force (EITF) No. 00-27 "Application of Issue No. 98-5 (Accounting for Convertible Securities with Beneficial Conversion Features or Contingently Adjustable Conversion Ratios) to Certain Convertible Instruments", the Company did not ascribe any value to any contingent conversion feature. (d) Common Stock Options and Warrants (i) Stock Options The 1990 Stock Option Plan provides for the grant of options to purchase up to 460,798 shares of the Company's Common Stock to employees, directors, and officers of the Company and to consultants, advisors, and other persons whose contributions are important to the success of the Company. The recipients of options granted under the 1990 Stock Option Plan, the number of shares to be converted by each option, and the exercise price, vesting terms, if any, duration and other terms of each option shall be determined by the Company's board of directors or, if delegated by the board, its Compensation Committee. No option is exercisable more than 10 years and one month from the date as of which an option agreement is executed. These shares become vested through various periods not to exceed four years from the date of grant. The option price represents the fair market value of each underlying share of Common Stock at the date of grant, based upon the public trading price. Information regarding the options approved by the Board of Directors under the 1990 Stock Option Plan is summarized below: 2001 2002 2003 ---------- ---------- ---------- Weighted Weighted Weighted Average Average Average Option Exercise Option Exercise Option Exercise Shares Price Price Shares Price Price Shares Price Price ------ ----- ----- ------ ----- ----- ------ ----- ----- Outstanding, beginning of year 218,567 $1.06-6.81 $3.45 306,263 $1.06-4.34 $3.58 294,665 $1.06-4.34 $3.50 Granted 94,000 $4.03 $4.03 -- -- -- 200,000 $2.75 $2.75 Canceled (6,304) $4.34-6.81 $5.91 (11,598) $3.00-4.34 $3.71 (61,531) $3.80-4.03 $3.97 Exercised -- -- -- -- -- -- -- -- Outstanding, end of year 306,263 $1.06-4.34 $3.58 294,665 $1.06-4.34 $3.57 433,134 $1.06-4.34 $3.10 ======= ======= ======= Exercisable 234,263 $1.06-4.34 $4.67 252,746 $1.06-4.34 $3.50 433,134 $1.06-4.34 $3.10 ======= ======= ======= Weighted average remaining contractual 3.57 3.68 3.37 ----- ----- ----- life (years) years years years ===== ===== ===== Exercised in current and prior years (37,791) (37,791) (37,791) ======= ======= ======= Available for future grants 116,744 128,342 -0- ======= ======= ======= In December 1992, the Board of Directors approved the 1992 Stock Option Plan (the 1992 Stock Option Plan) which provides for the grant of options to F-25 purchase up to 92,160 shares of the Company's Common Stock to employees, directors, and officers of the Company and to consultants, advisers, and other persons whose contributions are important to the success of the Company. The recipients of the options granted under the 1992 Stock Option Plan, the number of shares to be covered by each option, and the exercise price, vesting terms, if any, duration and other terms of each option shall be determined by the Company's board of directors. No option is exercisable more than 10 years and one month from the date as of which an option agreement is executed. To date, no options have been granted under the 1992 Stock Option Plan. The Company's 1993 Employee Stock Purchase Plan (the 1993 Purchase Plan) was approved by the board of directors in July 1993. The outline of the 1993 Purchase Plan provides for the issuance, subject to adjustment for capital changes, of an aggregate of 138,240 shares of Common Stock to employees. The 1993 Purchase Plan is administered by the Compensation Committee of the board of directors. Under the 1993 Purchase Plan, Company employees are eligible to participate in semi-annual plan offerings in which payroll deductions may be used to purchase shares of Common Stock. The purchase price for such shares is equal to the lower of 85% of the fair market value of such shares on the date of grant or 85% of its fair market value of such shares on the date such right is exercised. There have been no offerings under the 1993 Purchase Plan to date and no shares of Common Stock have been issued thereunder. During 2003, the Company issued options to acquire 200,000 shares to its general counsel under the 1990 plan for services rendered. As a result, the Company charged operating expenses in the amount of $237,000. (ii) Stock warrants Number of warrants exercisable into shares of common stock 2001 2002 2003 ----------

---------- ---------- Weighted Weighted Weighted Average Average Average Option Exercise Option Exercise Option Exercise Shares Price Price Shares Price Price Shares Price Price ------ ----- ----- ------ ----- ----- ------ ----- ----- Outstanding beginning of year 11,624,168 $1.75-12.00 $4.05 6,927,110 $1.75-16.00 $4.77 7,967,810 $1.75-16.00 $3.18 Granted 856,650 $5.00-16,00 $9.89 1,802,000 $2.00-6.00 $2.07 4,623,024 $1.68-2.57 $2.32 Canceled (3,396,508) $2.50-4.00 $3.89 (750,000) $3.50-6.00 $3.72 (276,000) $4.00-10.00 $6.54 Exercised (2,157,200) $1.75-4.00 $3.75 (11,300) $1.75-7.50 $3.30 (812,038) $1.68-1.75 $1.69 ---------- --------- ---------- Outstanding end of year 6,927,110 $1.75-16.00 $4.77 7,967,810 $1.75-16.00 $3.18 11,502,796 $1.74-16.00 $3.57 ========== ========= ========== Exercisable 6,927,110 $1.75-16.00 $4.77 6,345,810 $1.75-16.00 $3.48 8,635,560 $1.74-16.00 $4.11 ========== ========= ========== Weighted average remaining contractual life (years) 4.05 years 4.03 years 4.04 years ========== ========== ========== Years exercisable 2002-2006 2003-2008 2004-2008 ========= ========= ========= F-26 The following table summarizes information about stock warrants outstanding at December 31, 2003: Exercise price range Total $1.74-$5.00 $6.00-$9.00 $10.00-$16.00 $1.74-$16.00 ---------- ---------- ---------- ---------- Outstanding warrants Number outstanding 9,545,346 1,357,450 600,000 11,502,796 Weighted average remaining contractual life(years) 4.84 1.51 1.46 4.04 Weighted average exercise price $2.56 $6.77 $12.33 $3.57 Exercisable warrants Number outstanding 6,678,110 1,357,450 600,000 8,635,560 Weighted average exercise price $2.70 $6.77 $12.33 $4.11 Certain of the stock warrants outstanding are subject to adjustments for stock splits and dividends. Warrants issued to stockholders At December 31, 2000, there were 305,160 warrants remaining. In 2001, 73,000 were converted to common stock. At December 31, 2001 there were 232,160 warrants remaining. In 2002, 10,000 were converted to common stock. At December 31, 2002 and 2003 there were 222,160 warrants remaining. These warrants have an exercise price of $3.50 per share and expire in October 2004. Other stock warrants In addition, the Company has other issued warrants outstanding - totaling 11,280,636 which consists of the following: In November 1994, the Company granted Rule 701 Warrants to purchase an aggregate of 2,080,000 shares of Common Stock to certain officers and directors. These Warrants are exercisable at $3.50 per share and, if not exercised, were to expire in September, 1999. On February 19, 1999 the Board of Directors extended the expiration date for three more years. In 1999 235,000 warrants were exercised and 5,000 warrants were exercised in 2000. At December 31, 2000, there were 1,840,000 Rule 701 warrants remaining. In 2001 20,000 of these warrants expired, leaving a balance of 1,820,000 in warrants outstanding at December 31, 2001. During 2002, 420,000 warrants expired and the Company extended the expiration date of the remaining balance of 1,400,000 for a period of five years to now expire on September 30, 2007. These stock warrants have an exercise price of $3.50. In accordance with FASB Interpretation No. 44, Accounting for Certain Transactions involving Stock Compensation, no compensation expense was recognized as the exercise price at the extension date exceeded the fair value of the underlying common stock. In May 1995, the Company and certain officers, directors and shareholders entered into a standby finance agreement pursuant to which the parties agreed to provide an aggregate of $5,500,000 in financing to the Company during 1995 in the event that existing and additional financing was insufficient to cover the cash needs of the Company through December 31, 1996. In exchange, the Company issued warrants to purchase an aggregate of 2,750,000 shares of Common F-27 Stock at $1.75 per share to the parties. In 1999, 290,000, in 2000, 216,500, in 2001, 200,000, 2002, 1,300 and in 2003 35,000 of these warrants were exercised, leaving a balance of these warrants of 1,415,200. These warrants expire June 30, 2005. In the years 2001, 2002 and 2003, the Company issued 450,000, 25,000 and no warrants, respectively, exclusive of warrants issued in connection with the Company's 2003 Debenture issuances (see below), to investment banking firms for services performed on behalf of the Company. Accordingly, the Company recorded stock compensation of 637,000, 133,000 and none for the years 2001, 2002 and 2003, respectively. These warrants have various vesting dates and exercisable prices ranging from $4.00 to $16.00 per share. 1,193,800 warrants were outstanding at December 31, 2002. In 2003, 225,000 of these warrants expired leaving a balance of 968,800 warrants at December 31, 2003. These warrants are exercisable in five years from the date of issuance. In 2001, 2002 and 2003 the Company had non-public warrants outstanding of 2,254,650, 3,701,650 and 5,100,650 respectively. These warrants are exercisable at rates of $2.20 to $10.00 per share of common stock. The exercise price was equal to the fair market value of the stock on the date of grant. During 2003 the company granted 1,450,000 warrants to employees with an exercise price of $2.20 for services performed and 51,000 warrants expired. During 2002, the Company granted 1,777,000 warrants to employees for services performed. These warrants have a weighted average exercise price of $2.07 per share, and have been included in the pro-forma loss calculation in note 2(n). During 2001, 370,000 of the non public warrants were

exercised and 415,000 expired without being exercised. 2,254,650 of the non-public warrants were outstanding at December 31, 2001. During 2002, none of these warrants were exercised and 750,000 expired. 3,701,650 of the non-public warrants were outstanding at December 31, 2002. During 2002 the Company also extended the expiration date of 322,000 of these warrants for a period of five years to now expire in the years ending 2007 and 2008. These stock warrants have exercise prices ranging from $3.50 to $4.00 In accordance with FASB Interpretation No. 44, Accounting for Certain Transactions involving Stock Compensation, no compensation expense was recognized as the exercise price at the extension date exceeded the fair value of the underlying common stock. In 2003 the company issued warrants to acquire 3,173,024 shares in connection with the financing of the purchase of the assets of Interferon Sciences, Inc. During 2003, 777,038 of these warrants were exercised leaving a balance of 2,395,986 at December 31, 2003. (e) Stock Repurchase The Company's repurchases of shares of common stock are recorded as "Treasury Stock" and result in a reduction of "Stockholders' equity." When treasury shares are reissued, the Company uses a first-in, first-out method and the excess of repurchase cost over reissuance price is treated as a reduction of "Additional paid-in capital." At December 31, 2003 there were 443 shares in the treasury. During 2003 most of the then existing treasury shares were either re-issued or retired. (f) Rights offering On November 19, 2002, the Board of Directors of Hemispherx Biopharma, Inc. (the "Company") declared a dividend distribution of one Right for each outstanding share of Common Stock to stockholders of record at the close of business on November 29, 2002 (the "Record Date"). Each Right entitles the F-28 registered holder to purchase from the Company a unit consisting of one one-hundredth of a share (a "Unit") of Series A Junior Participating Preferred Stock, par value $.01 per share (the "Series A Preferred Stock") at a Purchase Price of $30.00 per Unit, subject to adjustment. The description and terms of the Rights are set forth in a Rights Agreement (the "Rights Agreement") between the Company and Continental Stock Transfer & Trust Company, as Rights Agent. Initially, the Rights are attached to all Common Stock certificates representing shares then outstanding, and no separate Rights Certificates will be distributed. Subject to certain exceptions specified in the Rights Agreement, the Rights will separate from the Common Stock and a Distribution Date will occur upon the earlier of (i) 10 days following a public announcement that a person or group of affiliated or associated persons (an "Acquiring Person") has acquired beneficial ownership of 15% or more (or 20% or more for William A. Carter, M.D.) of the outstanding shares of Common Stock (the "Stock Acquisition Date"), other than as a result of repurchases of stock by the Company or certain inadvertent actions by institutional or certain other stockholders or (ii) 10 business days (or such later date as the Board shall determine) following the commencement of a tender offer or exchange offer that would result in a person or group becoming an Acquiring Person. Until the Distribution Date, (i) the Rights will be evidenced by the Common Stock certificates and will be transferred with and only with such Common Stock certificates, (ii) new Common Stock certificates issued after the Record Date will contain a notation incorporating the Rights Agreement by reference and (iii) the surrender for transfer of any certificates for Common Stock outstanding will also constitute the transfer of the Rights associated with the Common Stock represented by such certificate. Pursuant to the Rights Agreement, the Company reserves the right to require prior to the occurrence of a Triggering Event (as defined below) that, upon any exercise of Rights, a number of Rights be exercised so that only whole shares of Preferred Stock will be issued. (9) Segment and Related Information The Company operates in one segment, which performs research and development activities related to Ampligen(R) and other drugs under development, and sales and marketing of Alferon(R). F-29 The following table presents revenues by country based on the location of the use of the product services. (000's omitted) 2001 2002 2003 ---- ---- ---- United States ..... $274 $237 $655 Belgium ..... 107 74 2 Other ..... 9 30 -- ---- ---- ---- $390 $341 $657 ==== ==== ==== In addition, in 2002, the Company recorded License Fee Income in the amount of $563,000 from a Company located in Europe. The Company employs an insignificant amount of net property and equipment in its foreign operations. (10) Research, Consulting and Supply Agreements In December, 1999, the Company entered into an agreement with Biovail Corporation International ("Biovail"). Biovail is an international full service pharmaceutical company engaged in the formulation, clinical testing, registration and manufacture of drug products utilizing advanced drug delivery systems. Biovail is headquartered in Toronto, Canada. The agreement grants Biovail the exclusive distributorship of the Company's product in the Canadian territories subject to certain terms and conditions. In return, Biovail agrees to conduct certain pre-marketing clinical studies and market development programs, including without limitation, expansion of the Emergency Drug Release Program in Canada with respect to the Company' products. Biovail agrees to work with the Company in preparing and filing of a New Drug Submission with Canadian Regulatory Authorities. Biovail invested $2.25 million in Hemispherx equity at prices above the then current market price and agreed to make

further payments based on reaching certain regulatory milestones. The Agreement requires Biovail to penetrate certain market segments at specific rates in order to maintain market exclusivity. The Company has entered into agreements for consulting services, which are performed at medical research institutions and by medical and clinical research individuals. The Company's obligation to fund these agreements can be terminated after the initial funding period, which generally ranges from one to three years or on an as-needed monthly basis. During the year ending December 31, 2001, 2002 and 2003 the Company incurred approximately $595,000, $395,000 and $389,000 respectively, of consulting service fees under these agreements. These costs are charged to research and development expense as incurred. (11) 401(K) Plan The Company has a defined contribution plan, entitled the Hemispherx Biopharma Employees 401(K) Plan and Trust Agreement (the 401(K) Plan). Full time employees of the Company are eligible to participate in the 401(K) Plan following one year of employment. Subject to certain limitations imposed by federal tax laws, participants are eligible to contribute up to 15% of their salary (including bonuses and/or commissions) per annum. Participants' contributions to the 401(K) Plan may be matched by the Company at a rate determined annually by the Board of Directors. F-30 Each participant immediately vests in his or her deferred salary contributions, while Company contributions will vest over one year. In 2001, 2002 and 2003 the Company provided matching contributions to each employee for up to 6% of annual pay aggregating $48,000, $38,000 and $34,000 respectively. (12) Royalties, License, and Employment Agreements The Company also has entered into a licensing agreement with a group of individuals and Hahnemann University relating to their contributions to the development of certain compounds, including Ampligen(R), and to obtain exclusive information and regulatory rights relating to these compounds. Under this agreement, the Company will pay 2% of net sales proceeds of Ampligen(R) not to exceed an aggregate amount of $6 million per year through 2005. In August 1988, the Company entered into a pharmaceutical use license agreement with Temple University (the Temple Agreement). In July, 1994, Temple terminated the Temple Agreement. In November 1994, the Company filed suit against Temple in the Superior Court of the State of Delaware seeking a declaratory judgment that the agreement was unlawfully terminated by Temple and therefore remained in full force and effect. Temple filed a separate suit against the Company seeking a declaratory judgment that its agreement with the Company was properly terminated. These legal actions have now been settled. Under the settlement, the parties have entered into a new pharmaceutical use license agreement (New Temple Agreement) that is equivalent in duration and scope to the previous license. Under the terms of the New Temple Agreement, Temple granted the Company an exclusive world-wide license for the term of the agreement for the commercial sale of Oragen products using patents and related technology held by Temple, which license is exclusive except to the extent Temple is required to grant a license to any governmental agency or non-profit organization as a condition of funding for research and development of the patents and technology licensed to the Company. In October 1994, the Company entered into a licensing agreement with Bioclones (Propriety) Limited (SAB/Bioclones) with respect to co-development of various RNA drugs, including Ampligen(R), for a period ending three years from the expiration of the last licensed patents. The licensing agreement provides SAB/Bioclones with an exclusive manufacturing and marketing license for certain southern hemisphere countries (including certain countries in South America, Africa and Australia as well as the United Kingdom and Ireland (the licensed territory). In exchange for these marketing and manufacturing rights, the licensing agreement provides for: (a) a $3 million cash payment to the Company, all of which was received during the year ended December 31, 1995; (b) the formation and issuance to the Company of 24.9% of the capital stock of Ribotech, Ltd., a company which developed and operates a new manufacturing facility that produces raw material components of Ampligen(R) and (c) royalties of 6% to 8% of net sales of the licensed products in the licensed territories as defined, after the first $50 million of sales. SAB/Bioclones will be granted a right of first refusal to manufacture and supply to the Company licensed products for not less than one third of its world-wide sales of Ampligen(R), excluding SAB/Bioclones related sales. In addition, SAB/Bioclones will have the right of first refusal for oral vaccines in the licensed territory. In 2000, the Company paid to Ribotech a total of $500,000 for the current and future purchases and delivery of polymers. Of the $500,000 advanced in 2000, a balance of $390,000 was included in other assets in 2000 and was used for purchases of polymers in 2001. In 2002, $262,000 was paid to Ribotech for delivery of Polymers. In October 1994, the Board of Directors granted a director of the Company the right to receive 3% of gross proceeds of any licensing fees received by the Company pursuant to the SAB/Bioclones licensing agreement, a fee of .75% of F-31 gross proceeds in the event that SAB Bioclones makes a tender offer for all or substantially all of the Company's assets, including a merger, acquisition or related transaction, and a fee of 1% on all products manufactured by SAB Bioclones. The Company may prepay in full its obligation to

provide commissions within a ten year period. On March 20, 2002, our European subsidiary Hemispherx Biopharma Europe, S.A. ("Hemispherx S.A.") entered into a sales and Distribution agreement with Laboratories Del Dr. Esteve S.A. ("Esteve"). Pursuant to the terms of the agreement, Esteve was granted the exclusive right to market Ampligen(R) in Spain, Portugal and Andorra for the treatment of Myalgic/Chronic Fatigue Syndrome ("ME/CFS"). In addition to other terms and other projected payments, Esteve paid an initial and non-refundable fee of 625,000 Euros (approximately $563,000) to Hemispherx S.A. on April 24, 2002. Esteve is to pay a fee of 1,000,000 Euros after U.S. Food and Drug Administration approval of Ampligen(R) for the treatment of ME/CFS and a fee of 1,000,000 Euros upon Spain's approval of the final marketing authorization for using Ampligen(R) for the treatment of ME/CFS. In connection with the two agreements entered into with ISI, the Company is obligated to pay ISI a 6% royalty on the net sales of the Alferon N Injection product. The Company has contractual agreements with two of its officers. The aggregate annual base compensation under these contractual agreements for 2001, 2002 and 2003 was $603,000, $620,000 and $637,000 respectively. In addition, certain of these officers are entitled to receive performance bonuses of up to 25% of the annual base salary (in addition to the bonuses described below). In 2001 and 2002 no performance bonuses were granted. In 2003, bonuses of $266,100 were granted. In 2001, certain officers were granted warrants and options to purchase 426,650 shares of Common Stock at $4.01 per share. In 2002, certain officers were granted warrants and option to purchase 1,220,000 shares of common stock at $2.00 - $4.03 per share. In 2003, the Chief Executive Officer of the Company was granted warrants to purchase 1,450,000 shares of common stock at $2.20 per share. The Chief Executive Officer's employment agreement provides for bonuses based on gross proceeds received by the Company from any joint venture or corporate partnering agreement. In order to facilitate the Company's need to obtain financing and prior to our shareholders approving an amendment to our corporate charter to merge the number of authorized shares, Dr. Carter, the Company's Chief Executive Officer, agreed to waive his right to exercise certain warrants and options unless and until our shareholder approved an increase in our authorized shares of Common Stock. In October 2003, in recognition of this action as well as Dr. Carter's prior and on-going efforts relating to product development securing critically needed financing and the acquisition of a new product line, the Compensation Committee determined that Dr. Carter be awarded bonus compensation in 2003 consisting of $196,636 and a grant of 1,450,000 stock warrants with an exercise price of $2.20 per share. This additional compensation was reviewed by an independent valuation firm and found to be fair and reasonable within the context of total compensation paid to chief executive officers of comparable biotechnology companies. These warrants vest upon the earlier of the second ISI Asset closing or the filing by the Company with the U.S. Food and Drug Administration of a new drug application. Upon the occurrence of either of these events, the Company will expense the intrinsic value, if any, of the warrants. F-32 (13) Leases The Company has several noncancelable operating leases for the space in which its principal offices are located and certain office equipment. Future minimum lease payments under noncancelable operating leases are as follows: (000's omitted) Year ending Operating December 31, leases ---------- --------- 2004 ..... 286 2005 ..... 240 2006 ..... 193 2007 ..... 65 ---- Total minimum lease payments ..... $784 ==== Rent expense charged to operations for the years ended December 31, 2001, 2002 and 2003 amounted to approximately $294,000, $307,000 and $266,000 respectively. The term of the lease for the Rockville, Maryland facility is through June, 2005 with an average rent of $8,000 per month, plus applicable taxes and charges. The term of the lease for the Philadelphia, Pennsylvania offices is through April, 2007 with an average rent of $15,000 per month, plus applicable taxes and charges. (14) Income Taxes As of December 31, 2003, the Company has approximately $73,000,000 of federal net operating loss carryforwards (expiring in the years 2004 through 2024) available to offset future federal taxable income. The Company also has approximately $17,000,000 of state net operating loss carryforwards (expiring in the years 2004 through 2008) available to offset future state taxable income. The utilization of certain state net operating loss carryforwards may be subject to annual limitations. Under the Tax Reform Act of 1986, the utilization of a corporation's net operating loss carryforward is limited following a greater than 50% change in ownership. Due to the Company's prior and current equity transactions, the Company's net operating loss carryforwards may be subject to an annual limitation generally determined by multiplying the value of the Company on the date of the ownership change by the federal long-term tax exempt rate. Any unused annual limitation may be carried forward to future years for the balance of the net operating loss carryforward period. Deferred income taxes reflect the net tax effects of temporary differences between carrying amounts of assets and liabilities for financial reporting purposes and the carrying amounts used for income tax purposes. In assessing the realizability of deferred tax assets, management considers whether it is more likely than not that some portion or all of

the deferred tax assets will not be realized. The realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which temporary differences representing net future deductible amounts become deductible. Due to the uncertainty of the Company's ability to realize the benefit of the deferred tax asset, the deferred tax assets are fully offset by a valuation allowance at December 31, 2002 and 2003. F-33 The components of the net deferred tax asset of December 31, 2002 and 2003 consists of the following: (000,s omitted) Deferred tax assets: 2002 2003 -------- -------- Net operating losses $ 22,440 $ 24,700 Accrued Expenses and Other (16) 12 Capitalized Research and development costs 3,763 2,825 -------- -------- 26,187 27,537 Less: Valuation Allowance (26,187) (27,537) -------- -------- Balance $ -0- $ -0- ======== ======== (15) Contingencies On September 30, 1998, we filed a multi-count complaint against Manuel P. Asensio, Asensio & Company, Inc. ("Asensio"). The action included claims of defamation, disparagement, tortuous interference with existing and prospective business relations and conspiracy, arising out of the Asensio's false and defamatory statements. The complaint further alleged that Asensio defamed and disparaged us in furtherance of a manipulative, deceptive and unlawful short-selling scheme in August and September, 1998. In 1999, Asensio filed an answer and counterclaim alleging that in response to Asensio's strong sell recommendation and other press releases, we made defamatory statements about Asensio. We denied the material allegations of the counterclaim. In July 2000, following dismissal in federal court for lack of subject matter jurisdiction, we transferred the action to the Pennsylvania State Court. In March 2001, the defendants responded to the complaints as amended and a trial commenced on January 30, 2002. A jury verdict disallowed the claims against the defendants for defamation and disparagement and the court granted us a directed verdict on the counterclaim. On July 2, 2002 the Court entered an order granting us a new trial against Asensio for defamation and disparagement. Thereafter, Asensio appealed the granting of a new trial. This appeal is now pending in the Superior Court of Pennsylvania. In June 2002, a former ME/CFS clinical trial patient and her husband filed a claim in the Superior Court of New Jersey, Middlesex County, against us, one of our clinical trial investigators and others alleging that she was harmed in the ME/CFS clinical trial as a result of negligence and breach of warranties. We believe the claim is without merit and we are defending the claim against us through our product liability insurance carrier. In June 2002, a former ME/CFS clinical trial patient in Belgium filed a claim in Belgium, against Hemispherx Biopharma Europe, NV/SA, our Belgian subsidiary, and one of our clinical trial investigators alleging that she was harmed in the Belgium ME/CFS clinical trial as a result of negligence and breach of warranties. We believe the claim is without merit and we are defending the claim against us through our product liability insurance carrier. In July 2002, we filed suit in the United States District Court for the Eastern District of Pennsylvania against our insurance company seeking (1) a judicial order declaring our rights and the obligations of our insurance carrier under the insurance policy our insurance carrier sold to us (2) monetary damage for F-34 breach of contract resulting from our insurance carrier refusal to fully defend us in connection with the Asensio litigation (3) monetary damages to compensate us for our insurance carrier breach of its fiduciary duty faith and dealing and (4) monetary damages, interest, cost, and attorneys fees to compensate us for violation of the Pennsylvania Bad Faith Statute. On March 31, 2003 we settled our outstanding claim with our insurance carrier for $1,500,000 relating to reimbursement of expenses in connection with our Asensio law suits. We realized approximately $1,050,000 of this amount after payment of expenses related to the settlement. Such amount was recorded during the fourth quarter 2002 as a reduction in General and Administrative expenses in our statement of operations. On September 16, 2003, HEB filed and subsequently served and moved for expedited proceedings on, a complaint filed in the Court Of Chancery of the State of Delaware, New Castle County, against ISI. The Complaint seeks specific performance, and declaratory and injunctive relief related to the Inventory and Asset Purchase Agreements with ISI. Specifically, HEB alleges that ISI has delayed its performance pursuant to the Inventory and Asset Purchase Agreement and, as a result, the Asset Purchase Agreement did not close within 180 days of the date of the execution of the agreements. Paragraph 7.7 of the Asset Purchase Agreement states that either party to the agreement may terminate the agreement if there is no closing within 180 days of the date of the agreement. HEB requested that the Court require ISI to specifically perform its obligations under the agreement or, in the alternative, that paragraph 7.7 of the agreement be eliminated or reformed to eliminate ISI's ability to terminate pursuant to that paragraph. HEB also requested that ISI, as a result of its conduct, not be permitted to terminate the Asset Purchase Agreement pursuant to paragraph 7.7 or due to the passage of time. At a hearing held on September 29, 2003, the Court set a trial of the case for January 6-7, 2004 which has been postponed at the request of both parties until March 4-5, 2004. The parties have agreed that neither party shall have the right to terminate the Asset Purchase Agreement pursuant to paragraph 7.7 until the date which is at least two weeks following trial, and only then, unless

the Court has ruled, upon five days written notice to the other party. The current court date of March 4 and 5, 2004 will be rescheduled to allow for the ISI shareholders to meet on March 9, 2004 as now scheduled. The results of the Shareholders Meeting and subsequent actions of ISI management will determine if we proceed with this lawsuit. (16) Related Party Transactions We have employment agreements with certain of our executive officers and have granted such officers and directors of the Company options and warrants to purchase common stock of the Company, as discussed in Notes 2(n) and 9. A director of the Company, is an attorney in private practice, who has rendered corporate legal services to us from time to time, for which he has received fees and options to purchase Company stock valued at $237,000 using the Black Scholes pricing model and recorded as stock compensation expense. A Director of the Company, lives in Paris, France and assists our European subsidiaries in their dealings with medical institutions and the European Medical Evaluation Authority. A Director of the Company, assists us in establishing clinical trial protocols as well as performs other scientific work for us from time to time. For these services, these Directors were paid an aggregate of $144,955, $170,150 and $100,100 for the years ending December 31, 2001, 2002 and 2003 respectively. Through November 2002, William A. Carter, Chief Executive Officer of the Company, received an aggregate of $12,106 in short term advances which were repaid as of December 31, 2002. All advances bore interest at 6% per annum. The F-35 Company loaned $60,000 to, a Director of the Company in November, 2001 for the purpose of exercising 15,000 class A redeemable warrants. This loan bears interest at 6% per annum. We paid $57,750, $33,450 and $18,800 for the years ending December 31, 2001, 2002 and 2003, respectively to Carter Realty for the rent of property used at various times in years 2001, 2002 and 2003 by us. The property is owned by others and managed by Carter Realty. Carter Realty is owned by Robert Carter, the brother of William A. Carter. (17) Concentrations of credit risk Financial instruments, which potentially subject the Company to concentrations of credit risk, consist principally of cash, cash equivalents and investments. The Company places its cash with high-quality financial institutions. At times, such amount may be in excess of Federal Deposit Insurance Corporation insurance limits of $100,000. (18) Quarterly Results of Operation (unaudited) (in thousand except per share data) 2003 (1) ---------- First Second Third Fourth Quarter Quarter Quarter Quarter Total -------- -------- -------- -------- -------- Revenue $ 66 $ 94 $ 194 $ 303 $ 657 Costs and expenses 1,658 1,730 1,960 2,561 7,909 Net loss (1,617) (3,689) (5,422) (4,042) (14,770) -------- -------- -------- -------- -------- Basic and diluted loss per share $ (.05) $ (.11) $ (.15) $ (.11) $ (.42) -------- -------- -------- -------- -------- (1) During the fourth quarter 2003, the Company recorded stock compensation of $237,000. 2002 (2) ---------- First Second Third Fourth Quarter Quarter Quarter Quarter Total ------- ------- ------- ------- ------- Revenues and license fee income $ 613 $ 134 $ 79 $ 78 $ 904 Costs and expenses 2,121 2,097 1,961 782 6,961 Net loss (1,488) (2,634) (1,891) (1,411) (7,424) ------- ------- ------- ------- ------- Basic and diluted loss per share $ (.05) $ (.08) $ (.06) $ (.04) $ (.23) ------- ------- ------- ------- ------- (2) During the fourth quarter of 2002, the Company recorded write offs of certain investments in unconsolidated affiliates of approximately $688,000. F-36 (See note 2(c)). Additionally, during the fourth quarter of 2002, the Company recorded as a reduction of general and administrative expenses, an amount of $1,050,000 representing the net settlement with its insurance carrier. (See Note 12) F-37 HEMISPHERx BIOPHARMA, INC. AND SUBSIDIARIES CONSOLIDATED BALANCE SHEETS (in thousands) December 31, March 31, 2003 2004 --------- ---------- (Unaudited) ASSETS Current assets: Cash and cash equivalents $ 3,764 $ 3,249 Short term investments 1,495 3,989 Inventory 2,896 2,785 Accounts and other receivables 282 280 Prepaid expenses and other current assets 170 139 --------- --------- Total current assets 8,607 10,442 Property and equipment, net 94 3,387 Patent and trademark rights, net 1,027 992 Investments 408 408 Deferred acquisition costs 1,546 -- Deferred financing costs 393 495 Advance receivable 1,300 1,300 Other assets 29 29 --------- --------- Total assets $ 13,404 $ 17,053 ========= ========= LIABILITIES AND STOCKHOLDERS' EQUITY Current liabilities: Accounts payable $ 488 $ 424 Accrued expenses 1,119 899 Deferred Revenue -- 497 Current portion of long-term debt -- 670 Other Current Liability -- 2,191 --------- --------- Total current liabilities 1,607 4,681 Long-Term Debt-net of current portion 2,058 1,916 Commitments and contingencies: Redeemable Common Stock 491 1,909 Stockholders' equity: Common stock 39 42 Additional paid-in capital 123,054 130,393 Treasury stock - at cost (2) (2) Accumulated deficit (113,843) (121,886) --------- --------- Total stockholders' equity 9,248 8,547 --------- --------- Total liabilities and stockholders' equity $ 13,404 $ 17,053 ========= ========= See accompanying notes to condensed consolidated financial statements. F-38 HEMISPHERx BIOPHARMA, INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF OPERATIONS (in thousands, except share and per share data) For the Three months ended March 31, 2003 2004 ---------- ---------- (Unaudited) (Unaudited) Revenues: Sales of product, net $ 19 $ 259

Clinical treatment programs 47 49 ---------- ---------- 66 308 Costs and expenses: Production/cost of goods sold 118 601 Research and development 873 964 General and administrative 667 2,844 ---------- ---------- Total cost and expenses 1,658 4,409 Interest and other income 50 11 Interest expenses (17) (101) Financing costs (58) (3,851) ---------- ---------- Net loss $ (1,617) $ (8,042) ========== ========== Basic and diluted loss per share $ (.05) $ (.20) ========== ========== Basic and diluted weighted average common shares outstanding 32,393,754 40,668,478 ========== ========== See accompanying notes to condensed consolidated financial statements. F-39 HEMISPHERx BIOPHARMA, INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF CASH FLOWS (in thousands) (Unaudited) For the Three months ended ---------- March 31, 2003 2004 ------- ------- Cash flows from operating activities: Net loss $(1,617) $(8,042) Adjustments to reconcile net loss to net cash used in operating activities: Depreciation of property and equipment 22 23 Amortization of patents rights 36 134 Amortization of deferred financing costs 57 3,851 Stock warrant compensation expense -- 1,769 Changes in assets and liabilities: Inventory -- 111 Accounts receivable (12) 2 Deferred Revenue -- 497 Prepaid expenses and other current assets (72) 30 Accounts payable 189 21 Accrued expenses (336) (118) Other assets 41 -- ------- ------- Net cash used in operations (1,692) (1,722) ======= ======= Cash flows from investing activities: Purchase of land and building -- (1,689) Deferred acquisition costs -- 1,546 Additions to patent rights (18) (99) Maturity of short term investments 520 1,496 Purchase of short term investments -- (3,986) ------- ------- Net cash provided by(used in) investing activities 502 (2,732) ------- ------- Cash flows from financing activities: Proceeds from exercise of stock warrants -- 244 Proceeds from long-term borrowings 3,100 4,000 Payments on long-term borrowings (440) -- Deferred financing costs (268) (305) Purchase of treasury stock (49) -- ------- ------- Net cash provided by (used in) financing activities 2,343 3,939 ------- ------- Net increase (decrease) in cash and cash equivalents 1,153 (515) Cash and cash equivalents at beginning of period 2,256 3,764 ------- ------- Cash and cash equivalents at end of period $ 3,409 $ 3,249 ======= ======= Supplementary disclosures of cash flow information: Issuance of common stock for accounts payable $ -- $ 85 Issuance of common stock for purchase of building $ -- $ 1,626 Issuance of common stock for debt conversion and interest payments $ -- $ 3,641 See accompanying notes to condensed consolidated financial statements. F-40 HEMISPHERx BIOPHARMA, INC. AND SUBSIDIARIES NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS NOTE 1: BASIS OF PRESENTATION The accompanying consolidated financial statements include the accounts of Hemispherx BioPharma, Inc., a Delaware corporation and its subsidiaries. All significant intercompany accounts and transactions have been eliminated. In the opinion of management, all adjustments necessary for a fair presentation of such consolidated financial statements have been included. Such adjustments consist of normal recurring items. Interim results are not necessarily indicative of results for a full year. The interim consolidated financial statements and notes thereto are presented as permitted by the Securities and Exchange Commission (SEC), and do not contain certain information which will be included in our annual consolidated financial statements and notes thereto. These consolidated financial statements should be read in conjunction with our consolidated financial statements for the year ended December 31, 2003. NOTE 2: STOCK BASED COMPENSATION The Company follows Statement of Financial Accounting Standards(SFAS) No. 123, "Accounting for Stock-Based Compensation." We chose to apply Accounting Principal Board Opinion 25 and related interpretations in accounting for stock options granted to our employees. The Company provides pro forma disclosures of compensation expense under the fair value method of SFAS No. 123, "Accounting for Stock-Based Compensation," and SFAS No. 148, "Accounting for Stock-Based Compensation- Transition and Disclosure." The weighted average assumptions used for the period presented are as follows: March 31, ---------- 2003 2004 ---- ---- Risk-free interest rate 5.23% - % Expected dividend yield - - Expected lives 2.5 years - years Expected volatility 63.17% - % Had compensation cost for the Company's option plans been determined using the fair value method at the grant dates, the effect on the Company's net loss and loss per share for the three months ended March 31, 2003 and 2004 would have been as follows: F-41 (In Thousands) Three Months Ended March 31, ---------- 2003 2004 ------- --------- Net (loss) as reported $(1,617) $ (8,042) Add: Stock based employee compensation expense Included in reported net loss, net of Related tax effects -- -- Deduct: Total stock based employee compensation determined under fair value method for all awards, net of related tax effects (137) -- ------- --------- Pro forma net loss $(1,754) $ (8,042) ======= ========= Basic and diluted loss per share As reported $ (.05) $ (.20) Pro forma $ (.05) $ (.20) Note 3: INVESTMENT IN UNCONSOLIDATED AFFILIATES Investments include an initial equity investment of $290,625 in Chronix Biomedical ("Chronix"). Chronix focuses upon the development of diagnostics for chronic diseases. This initial investment was made in May

31, 2000 by the issuance of 50,000 shares of the Company's common stock from the treasury. On October 12, 2000, the Company issued an additional 50,000 shares of its common stock and on March 7, 2001 the Company issued 12,000 more shares of its common stock from the treasury to Chronix for an aggregate equity investment of $700,000. The percentage ownership in Chronix is approximately 5.4% and is accounted for under the cost method of accounting. During the quarter ended December 31, 2002, we recorded a non cash charge of $292,000 with respect to our investment in Chronix. This impairment reduces our carrying value to reflect a permanent decline in Chronix's market value based on its then proposed investment offerings. NOTE 4: INVENTORIES The Company uses the lower of first-in, first-out ("FIFO") cost or market method of accounting for inventory. Inventories consist of the following: March 31, 2004 December 31, 2003 ---------- ---------- Raw materials-work in process $ 1,729,000 $1,729,000 Finished goods 1,056,000 1,167,000 ---------- ---------- $ 2,785,000 $2,896,000 ========== ========== NOTE 5: REVENUE AND LICENSING FEE INCOME We executed a Memorandum of Understanding in January 2004 with Fujisawa Deutschland GmbH, ("Fuji") a major pharmaceutical corporation, granting them an exclusive option for a limited number of months to enter a Sales and Distribution Agreement with exclusive rights to market Ampligen(R) for ME/CFS in Germany, Austria and Switzerland. The option period ends 12 weeks after Fuji has had a chance to review the report on the results of our Amp 516 clinical trial and meet with the trial's principal investigators. We received F-42 an initial fee of 400,000 Euros (approximately $497,000 US). If we do not provide Fuji with the full report by May 31, 2004 we will be required to repay half of this fee and if we do not provide them with the report by December 31, 2004, we will be required to refund the entire fee. If Fuji exercises the option, Fuji would be required to pay us an additional 1,600,000 Euros upon execution of the Sales and Distribution agreement, purchase Ampligen(R) exclusively from us and meet certain annual minimum purchase quotas. We would be required to file an application with the EMEA for commercial sale of Ampligen(R) for ME/CFS on or before December 31, 2005. Upon our filing of that application, we would receive an additional 1,000,000 Euros and, upon approval by the EMEA, an additional 2,000,000 Euros. If we failed to meet the December 31, 2005 filing deadline, we would be required to return 40% of all payments that we had received from Fuji. We would be required to sell Ampligen(R) to Fuji at a 20% price discount until the aggregate amount of the discount reached $1,000,000 Euros (representing 50% of the initial 2,000,000 fee paid to us on and prior to execution of the definitive agreement). The foregoing is a summary of the memorandum of understanding. Although we anticipate preparing and issuing the AMP 516 report in the time frame noted, we cannot ensure this will occur. We also cannot ensure that Fuji will exercise the option or that the proposed terms of the Sales and Distribution Agreement will not change materially. Revenues for non-refundable license fees are recognized under the Performance Method-Expected Revenue. This method considers the total amount of expected revenue during the performance period, but limits the amount of revenue recognized in a period to total non-refundable cash received to date. This limitation is appropriate because future milestone payments are contingent on future events. Upon receipt, the upfront non-refundable payment is deferred. The non-refundable upfront payments plus non-refundable payments arising from the achievement of defined milestones are recognized as revenue over the performance period based on the lesser of (a) percentage of completion or (b)non-refundable cash earned (including the upfront payment). This method requires the computation of a ratio of cost incurred to date to total expected costs and then apply that ratio to total expected revenue. The amount of revenue recognized is limited to the total non-refundable cash received to date. The Fuji initial fee of $497,000 has been deferred as of March 31, 2004. During the periods ending December 31, 2003 and March 31, 2004. The Company did not receive any grant monies from local, state and or Federal Agencies. Revenue from the sale of Ampligen(R) under cost recovery clinical treatment protocols approved by the FDA is recognized when the treatment is provided to the patient. Revenues from the sale of product are recognized when the product is shipped, as title is transferred to the customer. The Company has no other obligation associated with its products once shipment has occurred. Note 6: ACQUISITION OF ASSETS OF INTERFERON SCIENCES, INC. On March 11, 2003, we acquired from Interferon Sciences, Inc.'s ("ISI") inventory of ALFERON N Injection, a pharmaceutical product used for the treatment of certain types of genital warts, and a limited license for the production, manufacture, use, marketing and sale of this product. As consideration, we issued 487,028 shares of our common stock, assumed certain liabilities and agreed to pay ISI 6% of the net sales of product. Pursuant to our agreements with ISI, we registered the foregoing shares for public sale. F-43 Except for 62,500 of the shares issued to ISI, we had guaranteed the market value of the shares retained by ISI as of March 11, 2005, the termination date, to be $1.59 per share. ISI is permitted to periodically sell certain amounts of its shares. If, within 30 days after the termination date, holders of the guaranteed shares request that we honor the guarantee, we

would have been obligated to reacquire the holders' remaining guaranteed shares and pay the holders $1.59 per share for a total of $675,000. Accordingly, certain shares issued in connection with this transaction were initially recorded as redeemable common stock outside of stockholders' equity. As of March 31, 2004, ISI had sold the 424,528 guaranteed shares at prices in excess of $1.59 per share. On March 11, 2003, we also entered into an agreement to purchase from ISI all of its rights to the product and other assets related to the product including, but not limited to, real estate and machinery. For these assets, we agreed to issue to ISI an additional 487,028 shares and to issue 314,465 shares and 267,296 shares, respectively to The American National Red Cross and GP Strategies, two creditors of ISI, to continue to pay royalties of 6% on net sales of Alferon N and other consideration, e.g., paying off a third creditor and paying a real estate tax liability. On May 30, 2003, we issued the shares to GP Strategies and the American National Red Cross. Pursuant to our agreements with ISI and these two creditors, we registered the foregoing shares for public sale. The value of these guaranteed shares totaled $925,000 and these shares were redeemable under certain conditions, accordingly they were initially reflected as redeemable common stock and deferred acquisition costs on the balance sheet as of December 31, 2003. As of March 31, 2004, GP Strategies had sold all of their 267,296 shares and the American National Red Cross had not sold their 314,465 shares. Additionally other liabilities associated with the real estate in the amount of $621,000 had been recorded as deferred acquisition costs. Upon ISI stockholder approval, which occurred on March 17, 2004, substantially all of the deferred purchase price was allocated to real estate. Additionally, in March 2004, we issued 487,028 shares to ISI to complete the acquisition of the balance of ISI's rights to market its product as well as its production facility in New Brunswick, NJ. Except for 62,500 of the 487,028 shares issued to ISI at closing of this second asset acquisition, we have guaranteed the market value of the shares retained by ISI on terms substantially similar to those for the guaranteed shares issued to ISI on the first acquisition of ISI assets. As a result, the liability for ISI redeemable stock was $675,000 as of March 31, 2004. Pursuant to our agreement with ISI, we registered the foregoing shares for public sale. On March 17, 2004, the Company acquired the land and buildings located in New Brunswick, NJ. The aggregated cost of the land and buildings was approximately $3,316,000. The cost of the land and buildings was allocated as follows: Land $ 423,000 Buildings 2,893,000 ---------- Total cost $ 3,316,000 ========== As of March 31, 2004 the 314,465 guaranteed shares held by the American National Red Cross had not been sold. As a result, the liability for this redeemable stock was $491,000. We accounted for these transactions as a Business Combination under Statement of Financial Accounting Standards ("SFAS") No. 141 Accounting for Business Combinations. F-44 The following table represents the Unaudited pro forma results of operations as though the ISI acquisitions had occurred on January 1, 2002. Three Months Ended March 31, ------------------------------ 2003 2004 ------------ ------------ (in thousands except for share data) Net revenues $ 308 $ 308 Expenses (2,493) (8,365) ------------ ------------ Net Loss $ (2,185) $ (8,057) ============ ============ Basic and diluted loss per share $ (.07) $ (.20) ------------ ------------ Weighted average shares outstanding 33,046,092 41,080,579 ============ ============ Note 7: DEBENTURE FINANCING On March 12, 2003, we issued an aggregate of $5,426,000 in principal amount of 6% Senior Convertible Debentures due January 2005 (the "March Debentures") and an aggregate of 743,288 warrants to two investors in a private placement for aggregate proceeds of $4,650,000. Pursuant to the terms of the March Debentures, $1,550,000 of the proceeds from the sale of the March Debentures were to have been held back and released to us if, and only if, we acquired ISI's facility within a set timeframe. Although we had not acquired ISI's facility, these funds were released to us in June 2003. The March Debentures were to mature on January 31, 2005 with interest at 6% per annum, payable quarterly in cash or, subject to satisfaction of certain conditions, common stock. Any shares of common stock issued to the investors as payment of interest were valued at 95% of the average closing price of the common stock during the five consecutive business days ending on the third business day immediately preceding the applicable interest payment date. Pursuant to the terms and conditions of the March Debentures, we pledged all of our assets, other than our intellectual property, as collateral and were subject to comply with certain financial and negative covenants, which include but was not limited to the repayment of principal balances upon achieving certain revenue milestones. The March Debentures were convertible at the option of the investors at any time through January 31, 2005 into shares of our common stock. The conversion price under the March Debentures was fixed at $1.46 per share, subject to adjustment for anti-dilution protection for issuance of common stock or securities convertible or exchangeable into common stock at a price less than the conversion price then in effect. The investors also received Warrants to acquire at any time through March 12, 2008 an aggregate of 743,288 shares of common stock at a price of $1.68 per share. On March 12, 2004, the exercise price of the Warrants was to reset to the lesser of the exercise price then in effect or a

price equal to the average of the daily price of the common stock between March 13, 2003 and March 11, 2004 (but in no event less than $1.176 per share). The exercise price (and the reset price) under the Warrants also was subject to similar adjustments for anti-dilution protection. All of these warrants have been exercised. We entered into a Registration Rights Agreement with the investors in connection with the issuance of the March Debentures and the Warrants. The Registration Rights Agreement requires that we register the shares of common stock issuable upon conversion of the Debentures, as interest shares under the Debentures and upon exercise of the Warrants. In accordance with this agreement, we have registered these shares for public sale. F-45 As of December 31, 2003 the investors had converted the $5,426,000 principal of the March Debentures into 3,716,438 shares of our common stock. The total imputed interest on these Debentures was $111,711 of which $17,290 was paid in cash and $94,421 was paid by the issuance of 39,080 shares of common stock. The investors exercised the 743,288 warrants in July 2003 which produced proceeds in the amount of $1,248,724 On July 10, 2003, we issued an aggregate of $5,426,000 in principal amount of 6% Senior Convertible Debentures due July 31, 2005 (the "July Debentures") and an aggregate of 507,102 Warrants (the "July 2008 Warrants") to the same investors who purchased the March 12, 2003 Debentures, in a private placement for aggregate anticipated gross proceeds of $4,650,000. Pursuant to the terms of the July Debentures, $1,550,000 of the proceeds from the sale of the July Debentures were to have been held back and will be released to us if, and only if, we acquired ISI's facility within a set timeframe. Although we had not acquired ISI's facility, these funds were released to us in October 2003. The July Debentures mature on July 31, 2005 and bear interest at 6% per annum, payable quarterly in cash or, subject to satisfaction of certain conditions, common stock. Any shares of common stock issued to the investors as payment of interest shall be valued at 95% of the average closing price of the common stock during the five consecutive business days ending on the third business day immediately preceding the applicable interest payment date. Pursuant to the terms and conditions of the July Debentures, we pledged all of our assets, other than our intellectual property, as collateral and were subject to comply with certain financial and negative covenants. The July Debentures are convertible at the option of the investors at any time through July 31, 2005 into shares of our common stock. The conversion price under the July Debentures was fixed at $2.14 per share; however, as part of the debenture placement closed on October 29, 2003 (see below), the conversion price under the July Debentures was lowered to $1.89 per share. The conversion price is subject to adjustment for anti-dilution protection for issuance of common stock or securities convertible or exchangeable into common stock at a price less than the conversion price then in effect. The July 2008 Warrants received by the investors, as amended, are to acquire at any time commencing on July 26, 2004 through January 31, 2009 an aggregate of 507,102 shares of common stock at a price of $2.46 per share. On July 10, 2004, the exercise price of these July 2008 Warrants will reset to the lesser of the exercise price then in effect or a price equal to the average of the daily price of the common stock between July 11, 2003 and July 9, 2004 (but in no event less than $2.14 per share). The exercise price (and the reset price) under the July 2008 Warrants also is subject to similar adjustments for anti-dilution protection. We entered into a Registration Rights Agreement with the investors in connection with the issuance of the July Debentures and the July 2008 Warrants. The Registration Rights Agreement requires that we register on behalf of the holders the shares of common stock issuable upon conversion of the Debentures, as interest shares under the Debentures and upon exercise of the July 2008 Warrants. These shares have been registered for public sale. On June 25, 2003, we issued to each of the March 12, 2003 Debenture holders a warrant (collectively, the "June 2008 Warrants") to acquire at any time through June 25, 2008 an aggregate of 500,000 shares of common stock at a price of $2.40 per share. On June 25, 2004, the exercise price of these June 2008 Warrants will reset to the lesser of the exercise price then in effect or a price equal to the average of the daily price of the common stock between June 26, 2003 and June 24, 2004 (but in no event less than $1.68 per share). The exercise price (and the reset price) under the June 2008 Warrants also is subject to adjustments for anti-dilution protection similar to those in the July 2008 Warrants. Pursuant to our agreement with the Debenture F-46 holders, we have registered the shares issuable upon exercise of these June 2008 Warrants for public sale. On October 29, 2003, we issued an aggregate of $4,142,357 in principal amount of 6% Senior Convertible Debentures due October 31, 2005 (the "October Debentures") and an aggregate of 410,134 Warrants (the "October 2008 Warrants") in a private placement for aggregate anticipated gross proceeds of $3,550,000. Pursuant to the terms of the October Debentures, $1,550,000 of the proceeds from the sale of the October Debentures have been held back and will be released to us if, and only if, we acquired ISI's facility within 90 days of October 29, 2003 and provide a mortgage on the facility as further security for the October Debentures. The debenture holders extended the deadline to 90 days after January 26, 2004. The October Debentures mature on

October 31, 2005 and bear interest at 6% per annum, payable quarterly in cash or, subject to satisfaction of certain conditions, common stock. Any shares of common stock issued to the investors as payment of interest shall be valued at 95% of the average closing price of the common stock during the five consecutive business days ending on the third business day immediately preceding the applicable interest payment date. Pursuant to the terms and conditions of the October Debentures, we pledged all of our assets, other than our intellectual property, as collateral and were subject to comply with certain financial and negative covenants. Upon completing the sale of the October Debentures, we received $3,275,000 in net proceeds consisting of $1,725,000 from the October Debentures and $1,550,000 that had been withheld from the July Debentures. As noted above, $1,550,000 of the proceeds from the October Debentures were held back pending our completing the acquisition of the ISI facility and our mortgaging that facility to the debentureholders. On March 17, 2004, we closed on the acquisition of all of the worldwide rights of Alferon N as well as the FDA approved biological production facility in the New Brunswick, New Jersey, from ISI. As a result, the proceeds held back from the October Debenture amounting to $1,550,000 were released to the Company in April 2004. As required by the Debentures, we are in the process of providing a mortgage on the facility as further security for the Debentures. The October Debentures are convertible at the option of the investors at any time through October 31, 2005 into shares of our common stock. The conversion price under the October Debentures is fixed at $2.02 per share, subject to adjustment for anti-dilution protection for issuance of common stock or securities convertible or exchangeable into common stock at a price less than the conversion price then in effect. In addition, in the event that we do not pay the redemption price at maturity, the Debenture holders, at their option, may convert the balance due at the lower of (a) the conversion price then in effect and (b) 95% of the lowest closing sale price of our common stock during the three trading days ending on and including the conversion date. The October 2008 Warrants, as amended, received by the investors are to acquire at any time commencing on July 26, 2004 through April 30, 2009 an aggregate of 410,134 shares of common stock at a price of $2.32 per share. On October 29, 2004, the exercise price of these October 2008 Warrants will reset to the lesser of the exercise price then in effect or a price equal to the average of the daily price of the common stock between October 29, 2003 and October 27, 2004 (but in no event less than $2.19 per share). The exercise price (and the reset price) under the October 2008 Warrants also is subject to similar adjustments for anti-dilution protection. We entered into a Registration Rights Agreement with the investors in connection with the issuance of the October Debentures and the October 2008 Warrants. The Registration Rights Agreement requires that we register on behalf of the holders the shares of common stock issuable upon conversion of the October Debentures, as interest shares under the October Debentures and upon exercise of the 2008 Warrants. If, subject to certain exceptions, sales F-47 of all shares required to be registered cannot be made pursuant to the registration statement, then we will be required to pay to the investors their pro rata share of $3,635 for each day such conditions exist. As of January 26, 2004, with respect to the July and October 2003 Debenture Amendments, specifically, the extension of time of the investor's ability to exercise warrants, the Company revalued the July and October 2003 warrants, using the Black Scholes Method. This revaluation resulted in an increased adjustment to Debenture discounts of $282,000, reflected as additional paid in capital, and an adjustment to the amortization of Debenture discounts of approximately $77,000, reflected in financing costs, for the three months ended March 31, 2004. On January 26, 2004, we issued an aggregate of $4,000,000 in principal amount of 6% Senior Convertible Debentures due January 31, 2006 (the "January 2004 Debentures", an aggregate of 790,514 warrants (the "2009 Warrants") and 158,103 shares of common stock, and Additional Investment Rights (to purchase up to an additional $2,000,000 principal amount of January 2004 Debentures commencing in six months) ("AIR") in a private placement for aggregate anticipated net proceeds of $3,695,000. The January 2004 Debentures mature on January 31, 2006 and bear interest at 6% per annum, payable quarterly in cash or, subject to satisfaction of certain conditions, common stock. Any shares of common stock issued to the investors as payment of interest shall be valued at 95% of the average closing price of the common stock during the five consecutive business days ending on the third business day immediately preceding the applicable interest payment date. Commencing six months after issuance, the Company is required to start repaying the then outstanding principal amount under the January 2004 Debentures in monthly installments amortized over 18 months in cash or, at the Company's option, in shares of common stock. Any shares of common stock issued to the investors as installment payments shall be valued at 95% of the average closing price of the common stock during the 10-day trading period commencing on and including the eleventh trading day immediately preceding the date that the installment is due. Pursuant to the terms and conditions of the January 2004 Debentures, we pledged all of our assets, other than our intellectual property, as collateral and were subject to comply with certain financial and negative covenants. The

January 2004 Debentures are convertible at the option of the investors at any time through January 31, 2006 into shares of our common stock. The conversion price under the January 2004 Debentures is fixed at $2.53 per share, subject to adjustment for anti-dilution protection for issuance of common stock or securities convertible or exchangeable into common stock at a price less than the conversion price then in effect. There are two classes of July 2009 warrants received by the Investors: Class A and Class B. The Class A warrants are to acquire any time from July 26, 2004 through July 26, 2009 an aggregate of up to 395,257 shares of common stock at a price of $3.29 per share. The Class B warrants are to acquire any time from July 26, 2004 through July 26, 2009 an aggregate of up to 395,257 shares of common stock at a price of $5.06 per share. On January 27, 2005, the exercise price of these July 2009 Class A and Class B Warrants will reset to the lesser of their respective exercise price then in effect or a price equal to the average of the daily price of the common stock between January 27, 2004 and January 26, 2005 (but in no event less than $2.58 per share with regard to the Class A warrants and $3.54 per share with regard to the Class B warrants). The exercise price (and the reset price) under the July 2009 Warrants also is subject to similar adjustments for anti-dilution protection. The Company also issued to the investors Additional Investment Rights ("AIR") pursuant to which the investors have the right to acquire up to an additional $2,000,000 principal amount of January 2004 Debentures from the Company. These Debentures are identical to the January 2004 Debentures except that the conversion price is $2.58. The AIR are exercisable commencing on July 26, F-48 2004 (the "Trigger" date) for a period of 90 days from the Trigger Date or 90 days from the date which the registration statement registering the shares issuable upon the conversion of the January 2004 Debentures to be issued pursuant to the AIR is declared effective, whichever is longer. The Company entered into a Registration Rights Agreement with the investors in connection with the issuance of the January 2004 Debentures (including any Debentures issued pursuant to the AIR), the shares, and the January 2009 Warrants. Pursuant to the Registration Rights Agreement the Company registered on behalf of the investors the shares issued to the investors and 135% of the shares issuable upon conversion of the Debentures (including payment of interest thereon) and upon exercise of the January 2009 Warrants. If the Registration Statement containing these shares had not been filed within the time period required by the agreement, had not declared effective within the time period required by the agreement or, after it was declared effective and subject to certain exceptions, sales of all shares required to be registered thereon cannot be made pursuant thereto, then we would have been required to pay to the investors their pro rata share of $3,635 for each day any of the above conditions exist with respect to this Registration Statement. As of April 26, 2004, the investors have converted $11,902,610 of debt from the March, July and October Debentures into 7,073,234 shares of our common stock. The March Debentures have been fully converted. The remaining principal balance on the remaining debentures is convertible into shares of our stock at the option of the investors at any time, through the maturity date. In addition, we have paid $1,300,000 into the debenture cash collateral account as required by the terms of the October Debentures. The amounts paid through March 31, 2004 have been accounted for as advances receivable and are reflected as such on the accompanying balance sheet as of March 31, 2004. The cash collateral account provides partial security for repayment of the July and October 2003 and January 2004 Debentures in the event of default. By agreement with Cardinal Securities, LLC, for general financial advisory services and in conjunction with the private debenture placements in March, July and October 2003 and in January 2004, we paid Cardinal Securities, LLC an investment banking fee equal to 7% of the investments made by the two Debenture holders and issued to Cardinal certain warrants. A portion of the investment banking fee was paid with the issuance of 30,000 shares of our common stock. Cardinal also received 612,500 warrants to purchase common stock, of which 112,500 are exercisable at $1.74 per share, 112,500 are exercisable at $2.57 per share, 200,000 are exercisable at $2.50 per share, 87,500 are exercisable at $2.42 per share and 100,000 are exercisable at $3.04 per share. The $1.74 warrants expire on July 10, 2008, the $2.57 and $2.50 warrants expire on March 12, 2008, the $2.42 warrants expire on October 30, 2008 and the $3.04 warrants expire on January 5, 2009. By agreement with Cardinal, we have registered all shares issuable upon exercise of the warrants for public sale. In connection with the debenture agreements, we have outstanding letters of credit of $1 Million as additional collateral. The March 2003, July 2003, October 2003, and January 2004 debenture issuances of $5,426,000, $5,426,000, $4,142,357, and $4,000,000, respectively, and warrant issuances, were accounted for in accordance with EITF 98-5: Accounting for convertible securities with beneficial conversion features or contingency adjustable conversion and with EITF No. 00-27: Application of issue No. 98-5 to Certain convertible instruments. The Company determined the fair values to be ascribed to detachable warrants issued with the convertible debentures utilizing the Black-Scholes method. As a result, the Company recorded debt discounts of approximately $11.8 and $2.9 million for the 2003 and 2004

debenture issuances, respectively, which, in effect, reduced the carrying value of our debt. As debt is converted to F-49 common stock, the remaining unamortized debt discount is charged to finance costs. These costs were initially deferred and charged to finance costs over the life of the debentures. As of March 31, 2004, the amount of debt discount amortized to finance cost totaled approximately $10.2 million. Costs associated with the financings aggregated approximately $1.3 million. These costs are also deferred and expensed as finance costs over the life of the debentures. Excluding the application of related accounting standards, and remaining debt discounts of $4.4 million, the Company's outstanding debt as of March 31, 2004 totaled $7.1 million with $2.0 million maturing in 2004 and the balance in 2005. Section 713 of the American Stock Exchange ("AMEX") Company Guide provides that the Company must obtain stockholder approval before issuance, at a price per share below market value, of common stock, or securities convertible into common stock, equal to 20% or more of its outstanding common stock (the "Exchange Cap"). Taken separately, the July 2003, October 2003 and January 2004 Debenture transactions do not trigger Section 713. However, the AMEX has taken the position that the three transactions should be aggregated and, as such, stockholder approval is required for the issuance of common stock for a portion of the potential exercise of the warrants and conversion of the Debentures in connection with the January 2004 Debentures. The amount of potential shares that the Company could exceed the Exchange Cap amounted to approximately 1,299,000. In accordance with EITF 00-19, Accounting For Derivative Financial Instruments Indexed to and Potentially Settled in a Company's Own Stock, the Company recorded on January 26, 2004, a redemption obligation of approximately $1,244,000. This liability represents the fair market value of the warrants and beneficial conversion feature related to the 1,299,000 shares. In addition, in accordance with EITF 00-19, the Company revalued this redemption obligation associated with the beneficial conversion feature and warrants as of March 31, 2004. The Company recorded an additional redemption obligation and finance charge of $947,000 as a result of this revaluation. If the Company obtains stockholder approval, the Company's redemption obligation will be recorded as additional paid in capital on the date approval is received. Note 8: EXECUTIVE COMPENSATION In order to facilitate the Company's need to obtain financing and prior to our stockholders approving an amendment to our corporate charter to increase the number of authorized shares, Dr. Carter agreed to waive his right to exercise certain warrants and options unless and until our stockholders approved an increase in our authorized shares of Common Stock. In October 2003, in recognition of this action as well as Dr. Carter's prior and on-going efforts relating to product development securing critically needed financing and the acquisition of a new product line, the Compensation Committee determined that Dr. Carter be awarded bonus compensation in 2003 consisting of $196,636 and a grant of 1,450,000 stock warrants with an exercise price of $2.20 per share. This additional compensation was reviewed by an independent valuation firm and found to be fair and reasonable within the context of total compensation paid to chief executive officers of comparable biotechnology companies. In the quarter ended March 31, 2004, Dr. Carter was awarded an additional bonus of $99,481 by the Compensation Committee. In addition, The Company recorded a non-cash stock compensation charge of $1,769,000 during the current quarter resulting from warrants issued to Dr. Carter in 2003 that vested upon the execution of the second ISI asset closing on March 17, 2004. This was F-50 determined by subtracting the exercise price from the stock closing price on March 17, 2004 and multiplying the result by the number of warrants. Note 9 - SUBSEQUENT EVENT On May 14, 2004, we issued to the debentureholders warrants to purchase an aggregate of 1,300,000 shares ("the May 2009 Warrants"). In consideration of the foregoing, the debentureholders exercised the June 2008 warrants. As a result, we issued an aggregate of 1,000,000 shares and received gross proceeds of approximately $2,400,000. The May 2009 warrants are to acquire at any time, commencing on November 14, 2004 through April 30, 2009, an aggregate of 1,300,000 shares of common stock at a price of $4.50 per share. On May 14, 2005, the exercise price of these May 2009 Warrants will reset to the lesser of the exercise price then in effect or a price equal to the average of the daily price of the common stock between May 15, 2004 and May 13, 2005 (but in no event less than $4.008 per share). The exercise price (and the reset price) under the May 2009 Warrants also is subject to adjustments for anti-dilution projection similar to those in the other warrants. In addition, the debentureholders agreed to amend the provisions of all of the outstanding warrants and debentures (including the debentures issuable pursuant to the AIR) to limit the maximum amount of funds that the holders could receive in lieu of shares upon conversion of the debentures and/or exercise of the warrants in the event that the Exchange Cap was reached to 119.9% of the conversion price of the relevant debentures and 19.9% of the relevant warrant exercise price. These transactions could result in us recording an additional redemption obligation for the reasons discussed in Note 7 and will result in additional financing charges beginning in the second quarter of 2004. F-51 Interferon Sciences, Inc.

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS ---------- Page ---- Report of Independent Registered Public Accounting Firm F-53 Financial Statements: Consolidated Balance Sheet - December 31, 2003 F-54 Consolidated Statements of Operations - Years ended December 31, 2003 and 2002 F-55 Consolidated Statements of Changes in Capital Deficiency - Years ended December 31, 2003 and 2002 F-56 Consolidated Statements of Cash Flows - Years ended December 31, 2003 and 2002 F-57 Notes to Consolidated Financial Statements F-58 F-52 Report of Independent Registered Public Accounting Firm The Board of Directors and Stockholders Interferon Sciences, Inc. We have audited the accompanying consolidated balance sheet of Interferon Sciences, Inc. and subsidiary (the "Company") as of December 31, 2003 and the related consolidated statements of operations, changes in capital deficiency and cash flows for each of the years in the two-year period ended December 31, 2003. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion. In our opinion, the financial statements enumerated above present fairly, in all material respects, the consolidated financial position of Interferon Sciences, Inc. and subsidiary as of December 31, 2003 and the consolidated results of their operations and their consolidated cash flows for each of the years in the two-year period ended December 31, 2003, in conformity with U.S. generally accepted accounting principles. In connection with our audits of the financial statements referred to above, we audited Schedule II -- Valuation and Qualifying Accounts for 2003 and 2002. In our opinion, this schedule, when considered in relation to the financial statements taken as a whole, presents fairly, in all material respects, the information stated therein. On March 17, 2004, the Company completed the sale of its remaining fixed and intangible assets and certain liabilities were assumed by the purchaser (See Note 1). Eisner LLP New York, New York March 18, 2004 F-53 INTERFERON SCIENCES, INC. AND SUBSIDIARY CONSOLIDATED BALANCE SHEET DECEMBER 31,2003 Proforma ---------- (unaudited)* ASSETS Current assets Cash and cash equivalents $ 848,573 $ 848,573 Investment - available for sale 1,665,636 Other receivables 49,700 49,700 Notes receivable, net 371,063 371,063 Prepaid expenses and other current assets 18,782 18,782 ---------- ---------- Total current assets 1,288,118 2,953,754 ---------- ---------- Property, plant and equipment, at cost Land 140,650 Buildings and improvements 7,793,242 Equipment 4,920,942 ---------- 12,854,834 Less accumulated depreciation (11,566,022) ---------- 1,288,812 ---------- Patent costs, net of accumulated amortization of $415,104 106,057 Other assets 11,350 11,350 ---------- ---------- $ 2,694,337 $ 2,965,104 ========== ========== LIABILITIES AND CAPITAL DEFICIENCY Current liabilities Accounts payable $ 528,689 $ 528,689 Accrued expenses 51,834 51,834 Obligations subject to closing of sale of assets: Due to American Red Cross 1,434,636 Note payable and amount due GP Strategies 422,745 Past due real estate taxes 643,729 Convertible Notes payable 285,000 285,000 ---------- ---------- Total current liabilities 3,366,633 865,523 ---------- ---------- Commitments Capital deficiency Preferred stock, par value $.01 per share; authorized - 5,000,000 shares; none issued and outstanding Common stock, par value $.01 per share; authorized - 55,000,000 shares; issued and outstanding - 37,339,286 shares 373,393 373,393 Capital in excess of par value 136,970,283 136,970,283 Accumulated deficit (138,015,972) (135,244,095) ---------- ---------- Total capital(deficiency) equity (672,296) 2,099,581 ---------- ---------- $ 2,694,337 $ 2,965,104 ========== ========== * The proforma balance sheet assumes the sale of certain assets to Hemispherx Biopharma had taken place on December 31, 2003 (See Note 7). The accompanying notes are an integral part of these consolidated financial statements. F-54 INTERFERON SCIENCES, INC. AND SUBSIDIARY CONSOLIDATED STATEMENTS OF OPERATIONS YEARS ENDED DECEMBER 31, 2003 2002 ---------- ---------- Revenue Sales - ALFERON N Injection, net $ 241,637 $ 1,926,466 Bulk sale of remaining Alferon inventory and license fee 1,149,112 Royalty income 31,000 ---------- ---------- Total revenue 1,421,749 1,926,466 ---------- ---------- Costs and expenses Cost of goods sold and excess/idle production costs 267,054 1,482,006 Research and development 176,091 1,514,286 General and administrative 1,431,911 1,818,194 ---------- ---------- Total costs and expenses 1,875,056 4,814,486 ---------- ---------- Loss from operations before other (453,307) (2,888,020) income (expense) Interest income 26,520 7,122 Interest expense (306,741) (385,775) Service fee income 560,101 Gain on Metacine settlement

1,550,000 Gain on sale of securities 444,337 Gain on settlement of liability 228,913 ---------- ---------- Income (loss) before income tax benefit 2,049,823 (3,266,673) Income tax benefit Gain on sale of state net operating loss carryovers 279,402 528,276 ---------- ---------- Net income (loss) $ 2,329,225 $ (2,738,397) ========== ========== Basic net income (loss) per share $ .07 $ (.13) ========== ========== Diluted net income (loss) per share $ .04 $ (.13) (potential common shares limited to ========== ========== authorized shares available) As if adjusted for authorized shares, diluted net income (loss) per share (potential common shares not limited to authorized shares available) $ .03 $ (.13) ========== ========== Weighted average number of shares outstanding - basic 33,737,263 20,575,948 ========== ========== Weighted average number of shares outstanding - diluted (potential common shares limited to authorized shares available) 55,000,000 20,575,948 ========== ========== As if adjusted for authorized shares, weighted average number of shares outstanding (potential common shares not limited to authorized shares available) 83,237,263 20,575,948 ========== ========== The accompanying notes are an integral part of these consolidated financial statements. F-55 INTERFERON SCIENCES, INC. AND SUBSIDIARY CONSOLIDATED STATEMENTS OF CHANGES IN CAPITAL DEFICIENCY Capital in Total Common stock excess of Accumulated (capital Shares Amount par value deficit deficiency) ---------- ---------- ---------- ---------- Balance at January 1, 2002 20,308,031 203,080 136,239,499 (137,606,800) (1,164,221) Common stock issued under Company 401(k) plan 722,374 7,224 71,119 78,343 Fair value of warrants issued with convertible notes and value of beneficial conversion feature 500,000 500,000 Net loss (2,738,397) (2,738,397) ---------- ---------- ---------- ---------- Balance at December 31, 2002 21,030,405 210,304 136,810,618 (140,345,197) (3,324,275) Net proceeds from sale of common stock and warrants 15,000,000 150,000 1,000 151,000 Common stock issued under Company 401(k) plan 308,881 3,089 18,665 21,754 Common stock issued to Metacine for settlement of obligation 1,000,000 10,000 140,000 150,000 Net income 2,329,225 2,329,225 ---------- ---------- ---------- ---------- Balance at December 31, 2003 37,339,286 $373,393 $ 136,970,283 $(138,015,972) $(672,296) The accompanying notes are an integral part of these consolidated financial statements. F-56 INTERFERON SCIENCES, INC. AND SUBSIDIARY CONSOLIDATED STATEMENTS OF CASH FLOWS YEARS ENDED DECEMBER 31, 2003 2002 ---------- ---------- Cash flows from operating activities: Net income (loss) $ 2,329,225 $(2,738,397) Adjustments to reconcile net income (loss) to net cash used for operating activities: Receipt of shares of Hemispherx Biopharma, Inc. for Alferon inventory and assumption of certain liabilities (1,149,112) Gain on sale of securities (444,337) Gain on Metacine settlement (1,550,000) Depreciation and amortization 418,888 425,077 Gain on settlement of liability (228,913) Stock-based compensation expense 21,754 78,343 Debt discount 218,137 281,863 Amortization of interest income (7,313) Change in operating assets and liabilities: Accounts and other receivables (6,961) 80,650 Inventories 6,564 81,424 Prepaid expenses and other current assets (6,603) 5,429 Accounts payable and accrued expenses 91,244 551,385 Amount due to GP Strategies 9,000 18,000 ---------- ---------- Net cash used for operating activities (298,427) (1,216,226) ---------- ---------- Cash flows from investing activities: Proceeds from sale of investment 1,207,337 Additions to notes receivable (375,000) Reduction of other assets 10,000 ---------- ---------- Net cash provided by investing activities 832,337 10,000 ---------- ---------- Cash flows from financing activities: Proceeds from convertible notes payable 100,000 500,000 Repayment of convertible notes payable (315,000) Proceeds from loans and advances 250,000 Repayment of loans and advances (250,000) Net proceeds from sale of common stock and warrants 151,000 Repayment of note payable to GP Strategies (100,000) ---------- ---------- Net cash (used for) provided by financing activities (64,000) 400,000 ---------- ---------- Net increase (decrease) in cash and cash equivalents 469,910 (806,226) Cash and cash equivalents at beginning of year 378,663 1,184,889 ---------- ---------- Cash and cash equivalents at end of year $ 848,573 $ 378,663 ========== ========== The accompanying notes are an integral part of these consolidated financial statements. F-57 INTERFERON SCIENCES, INC. AND SUBSIDIARY NOTES TO CONSOLIDATED FINANCIAL STATEMENTS Note 1. Organization and Business Until March 11, 2003, Interferon Sciences, Inc. (the "Company" or "ISI") was a biopharmaceutical company that operated in a single segment and was engaged in the study, manufacture, and sale of ALFERON(R) N Injection, a highly purified, multispecies, natural source alpha interferon product. ALFERON(R) N Injection has been approved by the United States Food and Drug Administration ("FDA") for the treatment of certain types of genital warts and been studied for its potential use in the treatment of HIV, hepatitis C, and other indications. For the years ended December 31, 2003 and 2002, domestic sales totaled $241,637 and $1,926,466, respectively, and there were no foreign sales. All identifiable assets are located in the

United States. On March 11, 2003, the Company sold all its inventory related to ALFERON N Injection and granted a license to sell the product to Hemispherx Biopharma, Inc. ("HEB"). In exchange for the inventory and license, the Company received 424,528 shares of HEB common stock with a guaranteed value of $675,000, an additional 62,500 shares of HEB common stock without a guaranteed value, and future royalties equal to 6% of the net sales of ALFERON N Injection. In addition, HEB assumed approximately $408,000 of the Company's payables and various other commitments. On March 11, 2003, the Company and HEB entered into another agreement, which was consummated on March 17, 2004, pursuant to which the Company sold to HEB, the Company's real estate property, plant, equipment, furniture and fixtures, rights to ALFERON N Injection and all of its patents, trademarks and other intellectual property related to its natural alpha interferon business. In exchange, the Company received 424,528 shares of HEB common stock with a guaranteed value of $ 675,000, an additional 62,500 shares of HEB common stock without a guaranteed value and future royalties equal to 6% of the net sales of all products sold containing natural alpha interferon. The fair value of HEB common stock received was approximately $ 1,666,000. In addition, approximately $2.5 million of the Company's indebtedness which encumbered its assets was repaid by HEB. Prior to the completion of this transaction, HEB funded certain operating costs of the Company's facility such as insurance, heat, light, air conditioning and equipment maintenance (See Note 7). Note 2. Summary of Significant Accounting Policies Principles of consolidation -- The consolidated financial statements include the operations of the Company and Interferon Sciences Development Corporation ("ISD"), its wholly owned subsidiary. All significant intercompany transactions and balances have been eliminated. Cash and cash equivalents -- The Company considers all highly liquid instruments with maturities of three months or less from purchase date to be cash equivalents. Property, plant and equipment -- Property, plant and equipment are carried at cost. Major additions and improvements are capitalized while maintenance and repairs, which do not extend the lives of the assets, are expensed. Depreciation -- The Company provides for depreciation and amortization of plant and equipment following the straight-line method over the estimated useful lives of such assets as follows: Class of Assets Estimated Useful Lives ---------- ---------- Buildings and Improvements 15 to 30 years Equipment 5 to 10 years Depreciation expense for the years ended December 31, 2003 and 2002 was $392,758 and $396,922, respectively. Patent costs -- The Company capitalized costs to obtain patents and licenses. Patent costs are amortized over 17 years or their estimated economic useful life, if shorter, on a straight-line basis. To the extent the value of a patent is determined to be impaired, the related net capitalized cost attributable to the impaired value is expensed. F-58 Revenue recognition -- Title passes to the customer at the shipping point and revenue is therefore recognized when the product is shipped. The Company has no other obligation associated with its products once shipment has occurred. Royalty revenue recognition -- Revenue from royalties is recognized ratably over the royalty period based on periodic reports submitted by the royalty obligor. Research and Development Costs -- Research and development are expensed when incurred. The types of costs included in research and development are: salaries, supplies, clinical costs, facility costs and depreciation. All of these expenditures were for Company sponsored research and development programs. Inventories -- Inventories, consisting of raw materials, work in process and finished goods, are stated at the lower of cost or market on a FIFO basis. Inventory in excess of the Company's estimated usage requirements is written down to its estimated net realizable value. Inherent in the estimates of net realizable value is management estimates related to the Company's future manufacturing schedules, customer demand, possible alternative uses and ultimate realization of potentially excess inventory. On March 11, 2003, the Company sold all of its inventory to HEB (See Note 7). Long-Lived Assets -- The Company reviews long-lived assets and certain identifiable intangibles for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to future net cash flows expected to be generated by the assets. If such assets are considered to be impaired, the impairment to be recognized is measured by the amount by which the carrying amount of the assets exceeds the estimated fair value of the assets. Assets to be disposed of are reported at the lower of the carrying amount or estimated fair value less costs to sell. Stock option plan -- The Company accounts for its stock-based compensation to employees and members of the Board of Directors in accordance with the provisions of Accounting Principles Board ("APB") Opinion No. 25, "Accounting for Stock Issued to Employees," and related interpretations. As such, compensation is recorded on the date of issuance or grant as the excess of the current market value of the underlying stock over the purchase or exercise price. Any deferred compensation is amortized over the respective vesting periods of the equity instruments, if any. The Company has adopted the disclosure provisions of Statement of Financial Accounting Standards No. 123 ("SFAS No. 123"),

"Accounting for Stock-Based Compensation," and Statement of Financial Accounting Standards No. 148, "Accounting for Stock-Based Compensation - Transition and Disclosure," which was released in December 2002 as an amendment of SFAS 123. The following table illustrates the effect on net loss and loss per share if the fair value based method had been applied to all awards. Year Ended December 31, 2003 2002 Reported net income (loss) $2,329,225 $(2,738,397) Stock-based employee compensation expense included in reported net income (loss), net of related tax effects -- -- Stock based employee compensation determined under the fair value based method, net of related tax effects -- (94,165) Pro forma net income (loss) $2,329,225 (2,832,562) Net income (loss) per share basic As reported $ .07 $ (.13) Pro forma $ .07 $ (.14) Net income (loss) per share diluted (potential common shares limited to authorized shares available) As reported $ .04 $ (.13) Pro forma $ .04 $ (.14) F-59 Net income (loss) per share, as if adjusted for authorized shares, diluted (potential common shares not limited to authorized shares available) As reported $ .03 $ (.13) Pro forma $ .03 $ (.14) During 2003 and 2002, the Company did not grant any stock options. All remaining employee stock options expired on December 31, 2003. Net Income (Loss) Per Share -- Basic net income (loss) per share has been computed using the weighted average number of shares of common stock of the Company outstanding for each period presented. For 2003, the dilutive effect of stock options and other potential common shares is included in the calculation of diluted net income per share using the treasury stock method. For 2002, stock options and other potential common shares are not included in the calculation of net loss per share as the effect would be anti-dilutive. Potential common shares at December 31, 2002 were: Stock options - 1,908,075 Warrants - 66,069,569 2003 2002 ---------- ---------- Weighted average shares used to compute basic EPS 33,737,263 20,575,948 Effect of potential common shares limited to authorized shares available 21,262,737 0 ---------- ---------- Weighted average shares - diluted 55,000,000 20,575,948 ========== ========== Effect of potential common shares not limited to authorized shares available 49,500,000 0 ---------- ---------- As if adjusted for authorized shares, weighted average shares - diluted 83,237,263 20,575,948 ========== ========== Use of Estimates in the Preparation of Financial Statements -- The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, and disclosure of contingent assets and liabilities, at the date of the financial statements, and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from those estimates. Income taxes -- Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and for operating loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in the results of operations in the period that includes the enactment date. At December 31, 2003 and 2002, the Company has recorded a full valuation allowance for the net deferred tax asset. Recently Issued Accounting Standards In April 2002, the FASB issued SFAS No. 145, "Rescission of FAS Statements 4, 44 and 64, Amendment of FAS Statement 13 and Technical Corrections." SFAS No. 145 eliminates Statement 4 (and Statement 64, as it amends Statement 4), which required gains and losses from extinguishment of debt to be aggregated and, if material, classified as an extraordinary item, and thus, also the exception to applying Opinion 30 is eliminated as well. This statement is effective for fiscal years beginning after May 2002 for the provisions related to the rescission of Statements 4 and 64 and for all transactions entered into beginning May 2002 for the provision related to the amendment of Statement 13. The adoption of SFAS No. 145 did not have a material impact on its results of operations or financial position. F-60 In June 2002, the FASB issued SFAS No. 146, "Accounting for Costs associated with Exit or Disposal Activities." SFAS No. 146 requires recording costs associated with exit or disposal activities at their fair values when a liability has been incurred. Under previous guidance, certain exit costs were accrued upon management's commitment to an exit plan. The Company adopted SFAS No. 146 on January 1, 2003. The adoption of SFAS No. 146 did not have a material impact on its results of operations or financial position. In April 2003, the FASB issued SFAS No. 149, "Amendment of Statement No. 133 on Derivative Instruments and Hedging Activities." Among other things, this Statement requires that contracts with comparable characteristics be accounted for similarly and clarifies under what circumstances a contract with an initial net investment meets the characteristics of a derivative. SFAS No. 149 is effective July 1, 2003. The Company does not expect this pronouncement to have a material impact on its results of operations or financial condition. In May 2003, the FASB issued SFAS No. 150, "Accounting for Certain Financial Instruments with Characteristics of Both

Liabilities and Equity." SFAS No. 150 establishes standards for classifying and measuring certain financial instruments with characteristics of both liabilities and equity. SFAS No. 150 has a variety of effective dates. The Company does not expect this pronouncement to have a material impact on its results of operations or financial condition. Effective January 1, 2003, the Company adopted the recognition and measurement provisions of FASB Interpretation No. 45 ("Interpretation 45"), "Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others." This interpretation elaborates on the disclosures to be made by a guarantor in interim and annual financial statements about the obligations under certain guarantees. Interpretation 45 also clarifies that a guarantor is required to recognize, at the inception of a guarantee, a liability for the fair value of the obligation undertaken in issuing the guarantee. The initial recognition and initial measurement provisions of this interpretation are applicable on a prospective basis to guarantees issued or modified after December 31, 2002. The Company does not currently provide significant guarantees on a routine basis. As a result, this interpretation has not had a material impact on the Company's financial statements. In December 2003, the FASB issued FASB Interpretation No. 46 (revised December 2003) ("Interpretation 46"), "Consolidation of Variable Interest Entities." Application of this interpretation is required in the Company's financial statements for interests in variable interest entities that are considered to be special-purpose entities for the year ended December 31, 2003. The Company determined that it does not have any arrangements or relationships with special-purpose entities. Application of Interpretation 46 for all other types of variable interest entities is effective March 31, 2004. Interpretation 46 addresses the consolidation of business enterprises to which the usual condition (ownership of a majority voting interest) of consolidation does not apply. This interpretation focuses on controlling financial interests that may be achieved through arrangements that do not involve voting interests. It concludes that in the absence of clear control through voting interests, a company's exposure (variable interest) to the economic risks and potential rewards from the variable interest entity's assets and activities are the best evidence of control. If an enterprise holds a majority of the variable interests of an entity, it would be considered the primary beneficiary. The primary beneficiary is required to include assets, liabilities and the results of operations of the variable interest entity in its financial statements. The adoption of FIN 46 did not have an impact on the financial position or operations of the Company. Note 3. Operations As of December 31, 2003, the Company sold all of the shares of HEB common stock and received net proceeds of $1,207,337, resulting in a gain of $ 444,337, which is included in the consolidated statement of operations for the year ended December 31, 2003. On October 17, 2003, ISI and Amphioxus Cell Technologies, Inc. ("ACT"), a development stage company, entered into a non-binding letter of intent pursuant to which ISI (or a wholly owned subsidiary of ISI) will acquire ACT. ACT is a biotechnology company that applies liver biology solutions to problems in drug discovery and human therapeutics. The shareholders of ACT will receive preferred stock of F-61 ISI, convertible into a number of common shares of ISI equal to 75% of the fully diluted capitalization of ISI (see Note 8). In December, 2003, the Company settled a liability resulting in a gain of $ 228,913, which is included in the consolidated statement of operations for the year ended December 31, 2003. At December 31, 2003, the Company had approximately $849,000 of cash and cash equivalents, with which to support future operating activities and to satisfy its financial obligations as they become payable. The Company has experienced significant operating losses since its inception in 1980. As of December 31, 2003, the Company had an accumulated deficit of approximately $138.0 million. For the years ended December 31, 2003 and 2002, the Company had net income of approximately $2.3 million and incurred a net loss of approximately $2.7 million, respectively. Based on the Company's current cash position, the proceeds from the sale of the 487,028 shares of HEB Common Stock, estimates of expenses, and the timing of repayment to creditors, management believes that the Company has sufficient resources to enable the Company to continue operations through March 31, 2005. However, actual results may differ materially from such estimate, and no assurance can be given that additional funding will not be required sooner than anticipated or that such additional funding, whether from financial markets or from other sources, will be available when needed or on terms acceptable to the Company. Insufficient funds will require the Company to curtail or terminate operations. Note 4. Agreement with GP Strategies Corporation Pursuant to an agreement dated March 25, 1999, GP Strategies Corporation ("GP Strategies") loaned the Company $500,000 (the "GP Strategies Debt"). In return, the Company granted GP Strategies (i) a first mortgage on the Company's real estate, (ii) a two-year option (which has expired) to purchase the Company's real estate, provided that the Company has terminated its operations and a certain liability to the American Red Cross (the "Red Cross") has been repaid, and (iii) a two-year right of first refusal (which has expired) in the event the Company desires to sell its real estate. In addition, the Company issued GP Strategies 500,000 shares (the "GP Shares") of common stock and

five-year warrant (the "GP Warrant") to purchase 500,000 shares of common stock at a price of $1 per share. The GP Shares and GP Warrant were valued at $500,000 and recorded as a financing cost and amortized over the original period of the GP Strategies Debt in 1999. Pursuant to the agreement, the Company has issued a note to GP Strategies representing the GP Strategies Debt, which note was originally due on September 30, 1999 (but extended to June 30, 2001) and bears interest, payable at maturity, at the rate of 6% per annum. In addition, at that time, the Company negotiated a subordination agreement with the Red Cross pursuant to which the Red Cross agreed that its lien on the Company's real estate is subordinate to GP Strategies' lien. On March 27, 2000, the Company and GP Strategies entered into an agreement pursuant to which (i) the GP Strategies Debt was extended until June 30, 2001 and (ii) the Management Agreement between the Company and GP Strategies was terminated and all intercompany accounts between the Company and GP Strategies (other than the GP Strategies Debt) in the amount of approximately $130,000 were discharged which was recorded as a credit to capital in excess of par value. On August 23, 2001, the Company and GP Strategies entered into an agreement pursuant to which the GP Strategies Debt was extended to March 15, 2002. During 2001, the Company paid GP Strategies $100,000 to reduce the GP Strategies Debt. In addition, in January 2002, the Company paid GP Strategies $100,000 to further reduce the GP Strategies Debt. In connection with the Asset Sale Transactions (as hereafter defined, see Note 7), the Company, HEB and GP Strategies entered into an agreement pursuant to which GP Strategies agreed to forbear from exercising its rights until May 31, 2003 and GP Strategies agreed to accept HEB common stock with a guaranteed value of $425,000 in full settlement of all the Company's obligations to GP Strategies. On June 2, 2003, HEB delivered the HEB common stock to GP Strategies in accordance with HEB's obligation under the terms of the forbearance agreement. However the forbearance agreement provided that in addition to the issuance by HEB of the HEB common stock to GP Strategies, HEB was obligated to register the HEB common stock for resale and any shares of HEB shares received by GP Strategies which remain unsold after November 30, 2004 may be put to HEB at a price of $ 1.59 per share. The GP Strategies obligations were legally extinguished by HEB on June 2, 2003. The Asset Sale Transaction with HEB closed on March 17, 2004. If the transaction had F-62 not closed, HEB would have had a claim against ISI for the satisfaction of the GP Strategies obligations. For accounting purposes, these transactions were treated as integral parts of the Asset Sale Transactions and accordingly, the obligations remained on the balance sheet until the closing of the transaction on March 17, 2004, at which time the amount of such obligations will be recognized as extinguished for accounting purposes. Note 5. Agreement with the Red Cross The Company obtained human white blood cells used in the manufacture of ALFERON N Injection from several sources, including the Red Cross pursuant to a supply agreement dated April 1, 1997 (the "Supply Agreement"). As of November 23, 1998, the Company owed the Red Cross approximately $1.46 million plus interest at the rate of 6% per annum accruing from April 1, 1998 (the "Red Cross Liability") for white blood cells purchased pursuant to the Supply Agreement. Pursuant to an agreement dated November 23, 1998, the Company granted the Red Cross a security interest in certain assets to secure the Red Cross Liability, issued to the Red Cross 300,000 shares of common stock and agreed to issue additional shares at some future date as requested by the Red Cross to satisfy any remaining amount of the Red Cross Liability. The Red Cross agreed that any net proceeds received by it upon sale of such shares would be applied against the Red Cross Liability. In January 1999, the Company granted the Red Cross a security interest (the "Security Interest") in, among other things, the Company's real estate, equipment inventory, receivables, and New Jersey net operating loss carryovers to secure repayment of the Red Cross Liability, and the Red Cross agreed to forbear from exercising its rights under the Supply Agreement, including with respect to collecting the Red Cross Liability until June 30, 1999 (which was subsequently extended until December 31, 1999). On December 29, 1999, the Company, the Red Cross and GP Strategies entered in an agreement pursuant to which the Red Cross agreed that until September 30, 2000 it would forbear from exercising its rights under (i) the Supply Agreement, including with respect to collecting the Red Cross Liability, and (ii) the Security Interest. In connection with the Asset Sale Transactions (see Note 7), the Company, HEB and the Red Cross entered into an agreement pursuant to which the Red Cross agreed to forbear from exercising its rights until May 31, 2003 and the Red Cross agreed to accept HEB common stock with a guaranteed value of $500,000 in full settlement of all of the Company's obligations to the Red Cross. On June 2, 2003, HEB delivered the HEB common stock to the Red Cross in accordance with HEB's obligation under the terms of the forbearance agreement. However the forbearance agreement provided that in addition to the issuance by HEB of the HEB common stock to the Red Cross, HEB was obligated to register the HEB common stock for resale and any shares of HEB shares received by the Red Cross which remain unsold after May 31, 2004 may be put to HEB at a price of $ 1.59 per

share. The Red Cross Liability was legally extinguished by HEB on June 2, 2003. The Asset Sale Transaction with HEB closed on March 17, 2004. If the transaction had not closed, HEB would have had a claim against ISI for the satisfaction of the Red Cross Liability. For accounting purposes, these transactions were treated as integral parts of the Asset Sale Transactions and accordingly, the obligations remained on the balance sheet until the closing of the transaction on March 17, 2004, at which time the amount of such obligations will be recognized as extinguished for accounting purposes. Note 6. Agreement with Metacine, Inc. On July 28, 2000, the Company acquired an option for $100,000 to purchase certain securities of Metacine, Inc. ("Metacine"), a company engaged in research using dendritic cell technology. On April 9, 2001, the Company exercised its option to acquire an 82% equity interest in Metacine. Pursuant to the agreement, as amended, the Company received 700,000 shares of Metacine common stock and a five-year warrant to purchase, at a price of $12.48 per share, 282,794 shares of Metacine common stock in exchange for $300,000 in cash, an obligation to pay Metacine $ 1,850,000 and $250,000 of services to be rendered by the Company by June 30, 2002. In addition, the Company issued Metacine 2,000,000 shares of the Company's common stock. On August 29, 2003, the Company and Metacine entered into an agreement pursuant to which the Company relinquished all rights to the shares and warrants of Metacine F-63 held by the Company and issued Metacine 1,000,000 shares of the Company's common stock and Metacine relieved the Company of its $1,700,000 obligation to Metacine. In addition, Metacine retained the 2,000,000 shares of the Company's common stock issued on April 9, 2001. The issuance of the 1,000,000 shares (valued at $.05 per share which was the closing price of the Company's common stock on August 29, 2003) and the Company's agreement to allow Metacine to retain the 2,000,000 shares previously issued (valued at $.05 per share which was the closing price of the Company's common stock on August 29, 2003) was recorded as a credit to the Company's equity of $150,000 which resulted in a gain of $1,550,000 and is shown on the consolidated statements of operations for the year ended December 31, 2003 as a gain on Metacine settlement. Note 7. Agreement with Hemispherx Biopharma, Inc. ("HEB") On March 11, 2003, the Company executed two agreements with HEB to sell certain assets of the Company (the two asset sale transactions are hereinafter jointly referred to as the "Asset Sale Transactions" and individually referred to as the "First Asset Sale" and the "Second Asset Sale") and consummated the First Asset Sale. In the first agreement with HEB (the "First Asset Sale Agreement"), the Company sold all of its inventory related to ALFERON N Injection(R) (the "Product") and granted a three-year license for the production, manufacture, use, marketing and sale of the Product in the United States. For these assets, the Company: (i) received 424,528 shares of HEB common stock (the "HEB Common Stock") which had a Guaranteed Value (as defined in the First Asset Sale Agreement) of $675,000; (ii) received an additional 62,500 shares of HEB Common Stock without a Guaranteed Value; and (iii) will receive a royalty equal to 6% of the net sales of the Product. In addition, HEB assumed $408,000 of ISI payables and certain other obligations related to the Product. The consummation of the First Asset Sale Agreement resulted in a gain of $1,149,112, which is included in the consolidated statement of operations for the year ended December 31, 2003. ISI received a service fee until October 31, 2003 for providing certain transitional services. Such service fee is shown on the consolidated statements of operations for the year ended December 31, 2003 as service fee income in the amount of $560,101. As of December 31, 2003, the Company sold all 487,028 shares of HEB Common Stock and realized net proceeds of $1,207,000, resulting in a gain of $ 447,337, which is included in the consolidated statement of operations for the year ended December 31, 2003. In the second agreement with the Company (the "Second Asset Sale Agreement"), which was consummated on March 17, 2004, the Company sold to HEB all of its rights to the Product and other assets related to the natural alpha interferon business including, but not limited to, real estate, machinery and equipment. For these assets, the Company: (i) received 424,528 shares of HEB Common Stock which has a Guaranteed Value (as defined in the Second Asset Sale Agreement) of $675,000; (ii) received an additional 62,500 shares of HEB Common Stock without a Guaranteed Value; and (iii) will receive a royalty equal to 6% of the net sales of any products containing natural alpha interferon sold by HEB (or a Marketing Partner, as defined in the Second Asset Sale Agreement). The Second Asset Sale Agreement obligates HEB to register the 487,028 shares of HEB Common Stock, sets periodic limits on the number of these shares that may be sold and requires HEB to pay the Company an amount equal to the product received by multiplying (i) the number of guaranteed shares remaining unsold on March 17, 2006, and (ii) $ 1.59. The remaining guaranteed shares will then be returned to HEB. In addition, HEB satisfied the Company's obligations to (i) the American Red Cross in the amount of $1,435,000, (ii) GP Strategies Corp. in the amount of $423,000, and (iii) MD Sass in the amount of $644,000 (for unpaid local property taxes and water and sewer charges). F-64 Note 8. Note Receivable - Agreement with Amphioxus Cell Technologies, Inc. ("Amphioxus" or

"ACT") On March 20, 2003, the Company entered into a collaterialized note agreement, as amended (the "Note") with Amphioxus to advance up to $500,000. Pursuant to the Note, the Company advanced $375,000 as of December 31, 2003. The Note is due on March 19, 2004, bears interest at the rate of 10% per annum and is collaterialized by all of the assets of Amphioxus. In addition, the Company received a warrant, exercisable until March 2008, to purchase for $100,000, an aggregate of 20% of the common stock of Amphioxus on a fully diluted basis. The warrant is valued at $15,000, is prorated based on the amount of monies advanced and is amortized as interest income over the term of the Note. On October 17, 2003, ISI and Amphioxus Cell Technologies, Inc. entered into a non-binding letter of intent pursuant to which ISI (or a wholly owned subsidiary of ISI) will acquire ACT. The shareholders of ACT will receive preferred stock (the "ACT Preferred Stock") of ISI, convertible into a number of common shares of ISI equal to 75% of the fully diluted capitalization of ISI. The ACT Preferred Stock will be convertible at the option of the holder at any time, and subject to mandatory conversion if, prior to the date which is two years after the merger, the sum of the proceeds received from (i) the sale of the assets of ISI at the date of merger, and (ii) common equity capital raised at a pre-money valuation in excess of $10 million, exceed $2.5 million. Certain debt (the "ACT Debt") aggregating approximately $2.9 million that is currently owed to shareholders of ACT will continue as secured non-interest bearing debt of ISI, upon completion of the merger. The ACT Debt will be non-interest bearing and repayable by ISI on the fourth anniversary of the date of the merger, subject to accelerated payment of 25% of the net after tax profits of ACT over $1 million on a cumulative basis. The ACT Debt shall be fully payable upon a change of control of ISI (excluding the transactions whereby the ACT stockholders convert the ACT Preferred Stock). In addition, the ACT Debt shall also be repaid to the extent of the net proceeds from the sale of any equity securities of ISI exceeding $8 million. In addition, certain additional debt aggregating approximately $200,000 owed to a shareholder of ACT will be repayable on the fifth anniversary of the date of the merger. In addition, preferred stock (the "Junior Preferred Stock") held by a shareholder of ACT will continue as non-accruing preferred stock in the face amount of $2 million, senior in right of preference as to dividends and distributions in liquidation to the ACT Preferred Stock and common stock of ISI. The Junior Preferred Stock will be repayable by ISI on the fourth anniversary of the date of the merger, subject to accelerated payment from 25% of the net after tax profits of ISI available after payment of the ACT Debt. The Junior Preferred Stock will also be subject to reset upon the following conditions: the redemption value and liquidation preference of Junior Preferred Stock shall be increased if either the market capitalization of ISI or the amount to be paid by any third party for ISI values the common stock and any other equity securities or debt convertible into equity securities at (i) greater than $25 million, in which case the Junior Preferred Stock shall be increased to $2.75 million, or (ii) greater than $35 million, in which case the Junior Preferred Stock shall be increased to $3.5 million (each a "Reset Event"). If not sooner redeemed and paid, the Junior Preferred Stock shall be fully redeemed and retired (subject only to the prior payment of the ACT Debt) at any time upon a change of control of the surviving company (excluding the transaction whereby the ACT stockholders convert their ACT Preferred Stock), or to the extent of the net proceeds from the sale of any equity securities of ISI exceeds $10.9 million. In addition, on the merger date, three officers of ISI have agreed to grant ISI the option to terminate their employment agreements in exchange for (i) a one-year consulting agreement at the rate of $4,000 per month, (ii) common stock or options exercisable into approximately 1.25% of ISI and (iii) an amount by which 10% of the proceeds from the sale of certain assets of ISI exceed $200,000. The Letter of Intent is subject to the execution of definitive documents and final due diligence. F-65 Note 9. Equity Transaction In March 2003, the Company sold 15,000,000 shares of its common stock in a private placement transaction to an investor for $150,000. In connection with this private placement, the Company also sold, for $1,000, 15,000,000 warrants exercisable (subject to shareholder approval) at $0.01 per share and expiring in March 2008. Note 10. Notes Payable In August 2002, the Company completed a private placement of $500,000 of convertible notes to accredited investors. Each note is convertible into the Company's common stock at a price of $.05 per share (subject to adjustment to 70% of the market price of the Company's common stock under certain circumstances) and bears interest at the rate of 10% per annum. A $250,000 convertible note was due January 31, 2003 and the other $250,000 of the convertible notes were due December 31, 2003. For each $100,000 principal amount of notes issued, the investors received warrants to purchase an additional 10.2 million shares of the Company's common stock exercisable at $.01 per share. The warrants were valued at $400,000 and are amortized as interest expense over the terms of the respective notes. The conversion of the convertible notes and the exercise of the warrants are subject to approval of a sufficient number of authorized common shares by the shareholders of the Company. The terms of the notes, as amended, include the Company obtaining stockholder approval by April 30,

2004 to increase its authorized shares so that the number of authorized but unissued common shares is at least 200% of the number of common shares issuable on conversion of the notes and exercise of the warrants. Failure to obtain stockholder approval for the increase in the authorized number of shares and to file with the Delaware Secretary of State an amendment to the Company's Certificate of Incorporation, on or before April 30, 2004 to increase its authorized shares, would require the Company to make cash payments to each warrant holder, for each 30-day period such approval has not been obtained, equal to the difference between the exercise price and volume weighted average market price (for that 30-day period) for all warrants not exercisable because of the failure to obtain the approval. Further the note holders have registration rights whereby, for the period commencing April 30, 2004 but no later than August 7, 2005, upon written request from at least 50% of the holders of the shares issuable upon the exercise of the warrants, the Company is to file a registration statement within 30 days and have such registration statement declared effective 90 days thereafter, to register the common shares underlying the convertible notes and warrants. The Company's failure to file a registration statement or have one declared effective by the required dates would result in the Company paying liquidated damages to each of the above note-holders in an amount equal to 2% per month for each 30 day period or part thereof, a registration station was not filed. In addition, these notes are convertible into common stock at a beneficial rate. The beneficial conversion feature was valued at $100,000 and accounted for as debt discount and was amortized over the term of the notes. The $250,000 note due on January 31, 2003 was repaid in full (including accrued interest) in November 2003. The $250,000 notes due December 31, 2003 remain unpaid. In June and July 2003, the Company received an aggregate of $100,000 and issued convertible notes payable to private investors. The notes are due June 30, 2004 and bear interest at the rate of 6% per annum. Each note is convertible into the Company's common stock at a price of $.06 per share (which exceeded the closing price of the Company's common stock on the date of issuance). During August and September 2003, the Company repaid an aggregate of $65,000 of such notes. Note 11. Income Taxes As a result of the loss allocation rules contained in the Federal income tax consolidated return regulations, approximately $5,600,000 of net federal operating loss carryforwards, which expire from 2004 to 2006, are available to the Company upon ceasing to be a member of GP Strategies's consolidated return group in 1991. In addition, the Company has net federal operating loss carryforwards for periods subsequent to May 31, 1991, and through December 31, 2003 of approximately $107,000,000 that expire from 2006 to 2022. In addition, the Company had state net operating loss carryforwards of approximately $31,000,000 that expire from 2005 to 2010. F-66 The Company believes that the events culminating with the closing of its Common Stock Private Offering on November 6, 2000 may result in an "ownership change" under Internal Revenue Code, Section 382, with respect to its stock. The Company believes that as a result of the ownership change, the future utility of its pre-change net operating losses may be significantly limited. Further, the issuance of 51,000,000 warrants in August 2002 could also result in an ownership change and further limit use of the net operating losses carried forward. The tax effects of temporary differences that give rise to deferred tax assets and liabilities consist of the following as of December 31, 2003: Deferred tax assets ---------- Net operating loss carryforwards $40,072,000 Property and equipment, principally due to differences in basis and depreciation 735,000 ---------- Gross deferred tax asset 40,807,000 Valuation allowance (40,807,000) ---------- Net deferred taxes $ -- ========== A valuation allowance is provided when it is more likely than not that some portion of the deferred tax asset will not be realized. The Company has determined, based on the Company's history of annual net losses, that a full valuation allowance is appropriate. The decrease in the valuation allowance in 2003 was $1,256,000. The Company participates in the State of New Jersey's corporation business tax benefit certificate transfer program (the "Program"), which allows certain high technology and biotechnology companies to transfer unused New Jersey net operating loss carryovers to other New Jersey corporation business taxpayers. During 1999, the Company submitted an application to the New Jersey Economic Development Authority (the "EDA") to participate in the Program and the application was approved. The EDA then issued a certificate certifying the Company's eligibility to participate in the Program and the amount of New Jersey net operating loss carryovers the Company has available to transfer. Since New Jersey law provides that net operating losses can be carried over for up to seven years, the Company may be able to transfer its New Jersey net operating losses from the last seven years. The Program requires that a purchaser pay at least 75% of the amount of the surrendered tax benefit. During 2003 and 2002, the Company completed the sale of approximately $3.5 million and $6.5 million of its New Jersey tax loss carryovers and received approximately $0.28 and $0.53 million, which were recorded as a tax benefit from gains on sale of state net operating loss carryovers on its Consolidated Statement of Operations in 2003 and 2002, respectively. Note 12. Common Stock, Stock Options, Warrants and Other Shares

Reserved The Company has a stock option plan (the "Plan"), which authorizes a committee of the Board of Directors to grant options, to purchase shares of Common Stock, to officers, directors, employees and consultants of the Company. Pursuant to the terms of the Plan, no option may be exercised after 10 years from the date of grant. The Plan permits options to be granted at a price not less than 85% of the fair market value, however, the options granted to date have been at fair market value of the common stock at the date of the grant. Employee stock option activity for options under the Plan during the periods indicated is as follows: F-67 Number of Weighted-Average Shares Exercise Price ---------- ---------- Balance at January 1, 2002 1,930,621 .28 Forfeited (22,546) .41 ---------- Balance at December 31, 2002 1,908,075 .27 Forfeited (1,908,075) .27 ---------- Balance at December 31, 2003 -0- -- ---------- At December 31, 2003, there were no stock options outstanding. Information regarding all Options and Warrants Changes in options and warrants outstanding during the years ended December 31, 2003 and 2002 and options and warrants exercisable and shares reserved for issuance at December 31, 2003 are as follows: The following table includes all options and warrants including employee options (which are discussed above). Price Range Number of Per Share Shares ---------- ---------- Outstanding at January 1, 2002 .25 - 36.00 17,027,154 Warrants Issued .01 - .01 51,000,000 Terminated .25 - 36.00 (49,510) ---------- ---------- Outstanding at December 31, 2002 .01 - 1.50 67,977,644 Warrants Issued .01 - .01 15,000,000 Terminated .25 - 1.25 (1,908,075) ---------- ---------- Outstanding at December 31, 2003 .01 - 1.50 81,069,569 ========== Exercisable: December 31, 2003 .66 - 1.50 15,069,569 ========== Shares reserved and to be reserved for issuance: December 31, 2003 81,069,569 ========== Options and warrants outstanding and exercisable, and shares reserved for issuance, at December 31, 2003, include 500,000 shares under a warrant agreement with GP Strategies. The warrants are priced at $1.00 per share and expire on March 25, 2004. Options and warrants outstanding and exercisable, and shares reserved for issuance, at December 31, 2003, include 11,635,451 shares under warrant agreements with the purchasers of a 2000 private offering. The warrants are priced at $1.50 per share and expire on April 17, 2005. Options and warrants outstanding and exercisable, and shares reserved for issuance, at December 31, 2003, include 2,934,118 shares under a warrant agreement to purchase 1,467,059 units. Each unit consists of a share of common stock and a warrant to purchase an additional share of common stock at a price of $1.50 per share, exercisable at a price of $.66 per unit. The units were issued as compensation for services rendered to the Company in the 2000 private offering and expire on April 17, 2005. Options and warrants outstanding and shares reserved for issuance, at December 31, 2003, include 51,000,000 shares under warrant agreements (subject to shareholder approval) with the purchasers of the convertible notes. The warrants are exercisable at $.01 per share upon shareholder approval and expire in 2007. F-68 Options and warrants outstanding and shares reserved for issuance, at December 31, 2003, include 15,000,000 shares under a warrant agreement (subject to shareholder approval) with an investor. The warrants are exercisable at $.01 per share upon shareholder approval and expire in March 2008. Note 13. Savings Plan The ISI Savings Plan (the "Savings Plan") permits pre-tax contributions to the Savings Plan by participants pursuant to Section 401(k) of the Internal Revenue Code of up to 15% of base compensation. The Company will match up to the 6% level of the participants' eligible contributions. The Savings Plan matches 40% in cash and 60% in the Company's common stock up to the 6% level. For 2003, the Company's contribution to the Savings Plan, which was fully vested, was $32,000, consisting of $10,000 in cash and $22,000 in stock. For 2002, the Company's contribution to the Savings Plan was $131,000, consisting of $53,000 in cash and $78,000 in stock. In August 2003, the Savings Plan was terminated. Note 14. Profit Sharing Plan The Company has a Profit Sharing Plan (the "Profit Sharing Plan") providing key employees and consultants with an opportunity to share in the profits of the Company. The Profit Sharing Plan is administered by the Company's Compensation Committee. Pursuant to the terms of the Profit Sharing Plan, the Compensation Committee, in its sole discretion, based upon the significance of the employee's contributions to the operations of the Company, selects certain key employees and consultants of the Company who are entitled to participate in the Profit Sharing Plan and determines the extent of their participation. The amount of the Company's profits available for distribution to the participants (the "Distribution Pool") is the lesser of (a) 10% of the Company's income before taxes and profit sharing expense and (b) an amount equal to 100% of the base salary for such year of all the participants in the Profit Sharing Plan. The Compensation Committee may require as a condition to participation that a participant remain in the employ of the Company until the end of the fiscal year for which payment is to be made. Payments required to be made under the Profit Sharing Plan must be made within 10 days of the filing of the Company's tax return. Through December 31, 2003, there have been no contributions by the Company under the Profit Sharing Plan. Note 15. Supplemental Statement of Cash Flow Information The Company paid no income taxes or interest during the two-year

period ended December 31, 2003, except for $32,718 of interest paid in 2003. During the years ended December 31, 2003 and 2002, the following non-cash financing and investing activities occurred: 2003: The Company issued 1,000,000 shares of common stock to Metacine for the settlement of an obligation. 2002: None Note 16. Fair Value of Financial Instruments The carrying values of financial instruments, including cash and cash equivalents, notes and other receivables, accounts payable, accrued expenses and notes payable approximate fair values, because of the short term nature or interest rates that approximate current rates. F-69 Note 17. Quarterly Financial Data (unaudited) The following summarizes the Company's unaudited quarterly results for 2003 and 2002. 2003 Quarters First Second Third Fourth --------- -------- ------- -------- Thousands of dollars except per share data Revenue $ 1,391 $ -- $ 14 $ 16 Gross profit 1,124 -- 14 16 Net income (loss) 684 (227) 1,125 747 Basic net income (loss) per share 0.03 (0.01) 0.03 0.02 Diluted net income (loss) per share 0.01 (0.01) 0.02 0.01 2002 Quarters First Second Third Fourth --------- -------- ------- -------- Thousands of dollars except per share data Revenues $ 784 $ 176 $ 687 $ 279 Gross profit (loss) (1) 369 (149) 254 (30) Net loss (493) (949) (639) (457) Basic and diluted net loss per share (.03) (.05) (.03) (.02) (1) Gross profit (loss) is calculated as revenue less cost of goods sold and excess/idle production costs. F-70 INTERFERON SCIENCES, INC. AND SUBSIDIARY SCHEDULE II - VALUATION AND QUALIFYING ACCOUNTS Additions Balance at Charged to Balance at Beginning Costs, Provisions End of Description Of Period and Expenses Deductions(a) Period ---------- ---------- ---------- ---------- ---------- Year ended December 31, 2003 Valuation and qualifying accounts deducted from assets to which they apply: Reserve for excess inventory $4,678,659 $ $4,678,659 $ -- Year ended December 31, 2002 Valuation and qualifying accounts deducted from assets to which they apply: Reserve for excess inventory $5,538,413 $ $ 859,754 $4,678,659 Notes: (a) Deductions are for the usage of a portion of the reserve for excess inventory. F-71 Interferon Sciences, Inc. INDEX TO CONSOLIDATED FINANCIAL STATEMENTS ---------- Page ---- Report of Independent Registered Public Accounting Firm F-73 Financial Statements: Consolidated Balance Sheet - December 31, 2002 F-74 Consolidated Statements of Operations - Years ended December 31, 2002 and 2001 F-75 Consolidated Statements of Changes in Stockholders' Capital Deficiency - Years Ended December 31, 2002 and 2001 F-76 Consolidated Statements of Cash Flows - Years ended December 31, 2002 and 2001 F-77 Notes to Consolidated Financial Statements F-78 F-72 Report of Independent Registered Public Accounting Firm The Board of Directors and Stockholders Interferon Sciences, Inc. We have audited the accompanying consolidated balance sheet of Interferon Sciences, Inc. and subsidiary as of December 31, 2002 and the related consolidated statements of operations, changes in stockholders' capital deficiency and cash flows for each of the years in the two-year period ended December 31, 2002. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). These standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion. In our opinion, the consolidated financial statements enumerated above present fairly, in all material respects, the consolidated financial position of Interferon Sciences, Inc. and subsidiary as of December 31, 2002 and the consolidated results of their operations and their consolidated cash flows for each of the years in the two-year period ended December 31, 2002, in conformity with U.S. generally accepted accounting principles. The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 3 to the financial statements, the Company has experienced a significant net losses in each of the years in the two-year period ended December 31, 2002 and at December 31, 2002, has a capital deficiency and a negative working capital position. These factors raise substantial doubt about its ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 3. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty. In connection with our audits of the financial statements referred to above, we audited Schedule II - Valuation and Qualifying Accounts for 2002 and 2001. In our opinion, this schedule, when considered in relation to the financial statements taken as a whole, presents fairly, in all material respects, the information stated therein. Eisner LLP New York, New York June 10, 2003 F-73 INTERFERON SCIENCES, INC. AND SUBSIDIARY CONSOLIDATED BALANCE SHEETS December 31, 2002 ASSETS Current assets Cash and cash equivalents $ 378,663 Accounts and other receivables

42,739 Inventories, net of reserves of $4,678,659 28,489 Prepaid expenses and other current assets 12,179 ---------- Total current assets 462,070 ---------- Property, plant and equipment, at cost Land 140,650 Buildings and improvements 7,793,242 Equipment 4,920,942 ---------- 12,854,834 Less accumulated depreciation (11,173,264) ---------- 1,681,570 ---------- Patent costs, net of accumulated amortization of $388,974 132,187 Other assets 100 ---------- $ 2,275,927 ========== LIABILITIES AND CAPITAL DEFICIENCY Current liabilities Accounts payable $ 1,387,462 Accrued expenses 414,262 Due to American Red Cross 1,402,870 ISI stock subject to resale agreement and in-kind services due Metacine 1,700,000 Note payable and amount due GP Strategies 413,745 Convertible Notes payable, net of debt discount 281,863 ---------- Total current liabilities 5,600,202 ---------- Commitments Capital deficiency Preferred stock, par value $.01 per share; authorized - 5,000,000 shares; none issued and outstanding Common stock, par value $.01 per share; authorized - 55,000,000 shares; 21,030,405 shares issued and outstanding 210,304 Capital in excess of par value 136,810,618 Accumulated deficit (140,345,197) ---------- Total capital deficiency (3,324,275) ---------- $ 2,275,927 ========== The accompanying notes are an integral part of these consolidated financial statements. F-74 INTERFERON SCIENCES, INC. AND SUBSIDIARY CONSOLIDATED STATEMENTS OF OPERATIONS YEARS ENDED DECEMBER 31, 2002 2001 ---------- ---------- Revenues ALFERON N Injection $ 1,926,466 $ 1,498,603 Research products and other revenues ---------- ---------- Total revenues 1,926,466 1,498,603 ---------- ---------- Costs and expenses Cost of goods sold and excess/idle production costs 1,482,006 1,485,962 Research and development 1,514,286 2,286,300 General and administrative 1,818,194 2,646,734 Acquisition of in-process technology 2,341,418 ---------- ---------- Total costs and expenses 4,814,486 8,760,414 ---------- ---------- Loss from operations (2,888,020) (7,261,811) Interest income 7,122 108,351 Interest expense (385,775) (91,469) Equity in loss of Metacine (158,582) ---------- ---------- Loss before income tax benefit (3,266,673) (7,403,511) Income tax benefit: Gain on sale of state net operating loss carryovers 528,276 968,553 ---------- ---------- Net loss $ (2,738,397) $ (6,434,958) ========== ========== Basic and diluted net loss per share $ (.13) $ (.33) ========== ========== Weighted average number of shares outstanding 20,575,948 19,576,312 ========== ========== The accompanying notes are an integral part of these consolidated financial statements. F-75 INTERFERON SCIENCES, INC. AND SUBSIDIARY CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' CAPITAL DEFICIENCY Total Capital in stockholders' Common stock excess of Accumulated equity Shares Amount par value deficit (deficiency) ---------- ---------- ---------- ---------- Balance at 17,931,838 179,318 136,113,070 (131,171,842) 5,120,546 December 31, 2000 Common stock 2,000,000 20,000 (20,000) issued to Metacine Common stock issued 50,000 500 12,780 13,280 as compensation Common stock issued 323,949 3,239 106,095 109,334 under Company 401(k) plan Proceeds from exercise 2,244 23 538 561 of common stock options Employee stock option compensation 5,553 5,553 Settlement shares sold 21,463 21,463 Net loss, as restated (6,434,958) (6,434,958) ---------- Balance at December 31, 2001 20,308,031 203,080 136,239,499 (137,606,800) (1,164,221) Common stock issued 722,374 7,224 71,119 78,343 under Company 401(k) plan Fair value of warrants issued with convertible notes and value of beneficial conversion feature 500,000 500,000 Net loss (2,738,397) (2,738,397) ---------- Balance at December 31, 2002 21,030,405 $ 210,304 $ 136,810,618 $(140,345,197) $ (3,324,275) The accompanying notes are an integral part of these consolidated financial statements. F-76 INTERFERON SCIENCES, INC. AND SUBSIDIARY CONSOLIDATED STATEMENTS OF CASH FLOWS YEARS ENDED DECEMBER 31, ---------- 2002 2001 ---------- ---------- Cash flows from operating activities: Net loss $(2,738,397) $(6,434,958) Adjustments to reconcile net loss to net cash used for operating activities: Depreciation and amortization 425,077 507,507 Acquisition of in-process research and development 2,341,418 Equity in loss of Metacine 158,582 Provision for notes receivable 87,500 Non-cash compensation expense 78,343 128,167 Debt discount 281,863 Change in operating assets and liabilities: Accounts and other receivables 80,650 1,551,409 Inventories 81,424 (4,439) Prepaid expenses and other current assets 5,429 (120) Accounts payable and accrued expenses 551,385 95,845 Amount due to GP Strategies 18,000 29,106 ---------- ---------- Net cash used for operating activities (1,216,226) (1,539,983) ---------- ---------- Cash flows from investing activities: Additions to property, plant and equipment (46,994) Investments in Metacine and other assets (787,500) Reduction of other assets 10,000 ---------- ---------- Net cash provided by (used for) investing activities 10,000 (834,494) ---------- ---------- Cash flows from financing activities: Proceeds from convertible notes payable 500,000 Repayment of note payable to GP Strategies (100,000) (100,000) Proceeds from exercise of common stock options 561 ---------- ---------- Net cash provided by (used for)

financing activities 400,000 (99,439) ---------- ---------- Net increase (decrease) in cash and cash equivalents (806,226) (2,473,916) Cash and cash equivalents at beginning of year 1,184,889 3,658,805 ---------- ---------- Cash and cash equivalents at end of year $ 378,663 $1,184,889 ========== ========== The accompanying notes are an integral part of these consolidated financial statements. F-77 INTERFERON SCIENCES, INC. AND SUBSIDIARY NOTES TO CONSOLIDATED FINANCIAL STATEMENTS Note 1. Organization and Business Interferon Sciences, Inc. (the "Company") is a biopharmaceutical company that operates in a single segment and is engaged in the study, manufacture, and sale of pharmaceutical products based on its highly purified, multispecies, natural source alpha interferon ("Natural Alpha Interferon"). The Company's ALFERON(R) N Injection (Interferon Alfa-n3) product has been approved by the United States Food and Drug Administration ("FDA") for the treatment of certain types of genital warts and the Company has studied its potential use in the treatment of HIV, hepatitis C, and other indications. Alferon N Injection is sold principally in the United States, however, a portion is sold in foreign countries. For the years ended December 31, 2002 and 2001, domestic sales totaled $1,926,466 and $1,488,897, respectively, and foreign sales totaled zero and $9,706, respectively. All identifiable assets are located in the United States. Subsequent to December 31, 2002, the Company sold its inventory and granted a license to its products to Hemispherx Biopharma, Inc. See Note 18. Integrated Commercialization Solutions, Inc. ("ICS"), a subsidiary of AmerisourceBergen Corporation, is the sole United States distributor of ALFERON N Injection. ICS distributes ALFERON N Injection to a limited number of wholesalers throughout the United States. Note 2. Summary of Significant Accounting Policies Principles of consolidation -- The consolidated financial statements include the operations of the Company and Interferon Sciences Development Corporation ("ISD"), its wholly owned subsidiary. All significant intercompany transactions and balances have been eliminated. The transactions and balances of Metacine, Inc. are being accounted for under the equity method (see Note 6). The losses of Metacine from April 9, 2001, the date of the Company's acquisition of an 82% equity interest in Metacine through December 31, 2001, have been reflected in the accompanying statement of operations as equity in loss of Metacine to the extent of the Company's carrying value of the investment in Metacine. At December 31, 2001, the carrying value was written down to $-0-. Cash and cash equivalents -- The Company considers all highly liquid instruments with maturities of three months or less from purchase date to be cash equivalents. Property, plant and equipment -- Property, plant and equipment are carried at cost. Major additions and improvements are capitalized while maintenance and repairs, which do not extend the lives of the assets, are expensed. Depreciation -- The Company provides for depreciation and amortization of plant and equipment following the straight-line method over the estimated useful lives of such assets as follows: Class of Assets Estimated Useful Lives ---------- ---------- Buildings and Improvements 15 to 30 years Equipment 5 to 10 years F-78 Depreciation expense for the years ended December 31, 2002 and 2001 was $396,922 and $478,082, respectively. Patent costs -- The Company capitalizes costs to obtain patents and licenses. Patent costs are amortized over 17 years on a straight-line basis. To the extent a patent is determined to be worthless, the related net capitalized cost is immediately expensed. Revenue recognition -- Title passes to the customer at the shipping point and revenue is therefore recognized when the product is shipped. The Company's product is also tested by its quality control department prior to shipment. The Company has no other obligation associated with its products once shipment has occurred. Research and Development Costs - Research and development are expensed when incurred. The types of costs included in research and development are: salaries, supplies, clinical costs, facility costs and depreciation. All of these expenditures were for Company sponsored research and development programs. Inventories -- Inventories, consisting of raw materials, work in process and finished goods, are stated at the lower of cost or market on a FIFO basis. Inventory in excess of the Company's estimated usage requirements is written down to its estimated net realizable value. Inherent in the estimates of net realizable value is management estimates related to the Company's future manufacturing schedules, customer demand, possible alternative uses and ultimate realization of potentially excess inventory. Long-Lived Assets -- The Company reviews long-lived assets and certain identifiable intangibles for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to future net cash flows expected to be generated by the assets. If such assets are considered to be impaired, the impairment to be recognized is measured by the amount by which the carrying amount of the assets exceeds the estimated fair value of the assets. Assets to be disposed of are reported at the lower of the carrying amount or estimated fair value less costs to sell. Stock option plan - The Company accounts for its stock-based compensation to employees and members of the Board of Directors in accordance with the provisions of Accounting Principles

Board ("APB") Opinion No. 25, "Accounting for Stock Issued to Employees," and related interpretations. As such, compensation is recorded on the date of issuance or grant as the excess of the current market value of the underlying stock over the purchase or exercise price. Any deferred compensation is amortized over the respective vesting periods of the equity instruments, if any. The Company has adopted the disclosure provisions of Statement of Financial Accounting Standards No. 123 ("SFAS No. 123"), "Accounting for Stock-Based Compensation," and Statement of Financial Accounting Standards No. 148, "Accounting for Stock-Based Compensation - Transition and Disclosure," which was released in December 2002 as an amendment of SFAS 123. The following table illustrates the effect on net loss and loss per share if the fair value based method had been applied to all awards. F-79 Year Ended December 31, 2002 2001 Reported net loss $(2,738,397) $(6,434,958) Stock-based employee compensation expense included in reported net loss, net of related tax effects -- -- Stock based employee compensation determined under the fair value based method, net of related tax effects (94,165) (730,284) Pro forma net loss (2,832,562) (7,165,242) Loss per share (basic and diluted) As reported $ (.13) $ (.33) Pro forma $ (.14) $ (.37) During 2002 and 2001, the Company did not grant any stock options. Loss per share -- Basic loss per share (EPS) are based upon the weighted average number of common shares outstanding during the period. Diluted EPS are based upon the weighted average number of common shares outstanding during the period assuming the issuance of common shares for all dilutive potential common shares outstanding. At December 31, 2002 and 2001, the Company's options and warrants outstanding are anti-dilutive and therefore basic and diluted EPS are the same. Use of Estimates in the Preparation of Financial Statements - The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, and disclosure of contingent assets and liabilities, at the date of the financial statements, and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from those estimates. Income taxes - Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and for operating loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in the results of operations in the period that includes the enactment date. At December 31, 2002 the Company has recorded a full valuation allowance for the net deferred tax asset. F-80 Recently Issued Accounting Standards In June 2001, the FASB issued SFAS No. 141, Business Combinations, ("SFAS No. 141") and SFAS No. 142, Goodwill and Other Intangible Assets ("SFAS No. 142"). SFAS No. 141 requires that the purchase method of accounting be used for all business combinations. SFAS No. 141 specifies criteria that intangible assets acquired in a business combination must meet to be recognized and reported separately from goodwill. SFAS No. 142 requires that goodwill and intangible assets with indefinite useful lives no longer be amortized, but instead tested for impairment at least annually in accordance with the provisions of SFAS No. 142. SFAS No. 142 also requires that intangible assets with estimable useful lives be amortized over their respective estimated useful lives to their estimated residual values, and reviewed for impairment in accordance with SFAS No. 121 and subsequently, SFAS No. 144 after its adoption. The Company adopted the provisions of SFAS No. 141 as of July 1, 2001, and SFAS No. 142 as of January 1, 2002. Upon adoption of SFAS No. 142, the Company was required to reassess the useful lives and residual values of all intangible assets acquired, and make any necessary amortization period adjustments by the end of the first interim period after adoption. If an intangible asset was identified as having an indefinite useful life, the Company would be required to test the intangible asset for impairment in accordance with the provisions of SFAS No. 142 within the first interim period. Impairment is measured as the excess of carrying value over the fair value of an intangible asset with an indefinite life. Any impairment loss would be measured as of the date of adoption and recognized as the cumulative effect of a change in accounting principle in the first interim period. As of the date of adoption of SFAS No. 142, the Company does not have any goodwill and has unamortized identifiable intangible assets of approximately $160,000, all of which is subject to the transition provisions of SFAS No. 142. In August 2001, the FASB issued SFAS No. 144, Accounting for the Impairment or Disposal of Long-Lived Assets ("SFAS No. 144"). SFAS No. 144 addresses financial accounting and reporting for the impairment or disposal of long-lived assets. This Statement requires that long-lived assets be reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the

carrying amount of an asset to future net cash flows expected to be generated by the asset. If the carrying amount of an asset exceeds its estimated future cash flows, an impairment charge is recognized by the amount by which the carrying amount of the asset exceeds the fair value of the asset. SFAS No. 144 requires companies to separately report discontinued operations and extends that reporting to a component of an entity that either has been disposed of (by sale, abandonment, or in a distribution to owners) or is classified as held for sale. Assets to be disposed of are reported at the lower of the carrying amount or fair value less costs to sell. The Company adopted SFAS No. 144 on January 1, 2002. In April 2002, the FASB issued SFAS No. 145, "Rescission of FAS Statements 4, 44 and 64, Amendment of FAS Statement 13 and Technical Corrections." SFAS No. 145 eliminates Statement 4 (and Statement 64, as it amends Statement 4), which required gains and losses from extinguishment of debt to be aggregated and, if material, classified as an extraordinary item, and thus, also the exception to applying Opinion 30 is eliminated as well. This statement is effective for fiscal years beginning after May 2002 for the provisions related to the rescission of Statements 4 and 64 and for all transactions entered into beginning May 2002 for the provision related to the amendment of Statement 13. The F-81 Company does not expect that the adoption of SFAS No. 145 will have a material impact on its results of operations or financial position. In June 2002, the FASB issued SFAS No. 146, "Accounting for Costs associated with Exit or Disposal Activities." SFAS No. 146 requires recording costs associated with exit or disposal activities at their fair values when a liability has been incurred. Under previous guidance, certain exit costs were accrued upon management's commitment to an exit plan. The Company is required to adopt SFAS No. 146 on January 1, 2003. The Company does not expect the adoption of SFAS No. 146 will have a material impact on its results of operations or financial position. In December 2002, the FASB issued SFAS No. 148, "Accounting for Stock-Based Compensation - Transition and Disclosure," an amendment to SFAS No. 123, "Accounting for Stock-Based Compensation." Provisions of this statement provide two additional alternative transition methods: modified prospective method and retroactive restatement method, for an entity that voluntary changes to the fair value based method of accounting for stock-based employee compensation. The statement eliminates the use of the original SFAS No. 123 prospective method of transition alternative for those entities that change to the fair value based method in fiscal years beginning after December 15, 2003. It also amends the disclosure provisions of SFAS No. 123 to require prominent annual disclosure about the effects on reported net income in the Summary of Significant Accounting Policies and also requires disclosure about these effects in interim financial statements. These provisions are effective for financial statements for fiscal years ending after December 15, 2002. Accordingly, the Company adopted the applicable disclosure requirements of this statement for year-end reporting. The transition provisions of this statement apply upon the adoption of the SFAS No. 123 fair value based method. The Company did not change its method of accounting for employee stock-based compensation from the intrinsic method to the fair value based alternative. Note 3. Operations The Company has experienced significant operating losses since its inception in 1980. As of December 31, 2002, the Company had an accumulated deficit of approximately $140 million. For the years ended December 31, 2002 and 2001, the Company had losses from operations of approximately $2.9 million and $7.3 million, respectively. Also, the Company has limited liquid resources. These factors raise substantial doubt about the Company's ability to continue as a going concern. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty. Although the Company received FDA approval in 1989 to market ALFERON N Injection in the United States for the treatment of certain genital warts, the Company has had limited success in generating revenue from the sale of ALFERON N Injection to date. During the year ended December 31, 2002, the Company generated $1,926,466 in revenue from the sale of ALFERON N Injection and received $528,276 from the sale of the Company's New Jersey net operating tax loss carryovers. In addition, the Company completed a private placement of $500,000 of convertible notes to accredited investors. At December 31, 2002, the Company had approximately $379,000 of cash and cash equivalents, with which to support future operating activities and to satisfy its financial obligations as they become payable. On March 11, 2003, the Company sold all its inventory related to its ALFERON N Injection product and granted a three-year license to sell the product to Hemispherx Biopharma, Inc. ("HEB"). In exchange for the inventory and license, the Company received HEB common stock with a guaranteed value of $675,000, an additional 62,500 shares of HEB common stock without a guaranteed value, and a royalty equal to 6% of the net sales of ALFERON N Injection. The HEB common stock will be subject F-82 to selling restrictions. In addition, HEB assumed approximately $400,000 of the Company's payables and various other commitments. The Company and HEB also entered into another agreement pursuant to which the Company will sell to HEB, subject to regulatory approval, the Company's real estate property, plant, equipment, furniture and fixtures, rights to ALFERON

N Injection and all of its patents, trademarks and other intellectual property related to its natural alpha interferon business. In exchange, the Company will receive $675,000 of HEB common stock with a guaranteed value, an additional 62,500 shares of HEB common stock without a guaranteed value and a royalty equal to 6% of the net sales of all products sold containing natural alpha interferon. HEB will assume approximately $2.3 million of the Company's indebtedness that currently encumbers its assets. In addition, HEB will fund the operating costs of the Company's facility pending the completion of this transaction. In the event the Company does not obtain regulatory approval prior to September 12, 2003, either the Company or HEB may terminate the agreement and not complete the transaction. Based on the Company's sale to HEB, estimates of revenue, expenses, and the timing of repayment of creditors, management believes that the Company has sufficient resources to enable the Company to continue operations until the third quarter of 2003. However, actual results, may differ materially from such estimate, and no assurance can be given that additional funding will not be required sooner than anticipated or that such additional funding, whether from financial markets or from other sources, will be available when needed or on terms acceptable to the Company. Insufficient funds will require the Company to terminate operations. Note 4. Agreements with Hoffmann-LaRoche F. Hoffmann-La Roche Ltd. and Hoffmann-LaRoche, Inc. (collectively, "Hoffmann") have been issued patents covering human alpha interferon in many countries throughout the world. In 1995, the Company obtained a non-exclusive perpetual license from Hoffmann (the "Hoffmann Agreement") that grants the Company the worldwide rights to make, use, and sell, without a potential patent infringement claim from Hoffmann, any formulation of Natural Alpha Interferon. The Hoffmann Agreement permits the Company to grant marketing rights with respect to Natural Alpha Interferon products to third parties, except that the Company cannot grant marketing rights with respect to injectable products in any country in which Hoffmann has patent rights covered by the Hoffmann Agreement (the "Hoffmann Territory") to any third party not listed on a schedule of approximately 50 potential marketing partners without the consent of Hoffmann, which consent cannot be unreasonably withheld. Under the terms of the Hoffmann Agreement, the Company is obligated to pay Hoffmann an aggregate royalty on net sales (as defined) of Natural Alpha Interferon products by the Company in an amount equal to (i) 8% of net sales in the Hoffmann Territory, and 2% of net sales outside the Hoffmann Territory of products manufactured in the Hoffmann Territory, up to $75,000,000 of net sales in any calendar year and (ii) 9.5% of net sales in the Hoffmann Territory, and 2% of net sales outside the Hoffmann Territory of products manufactured in the Hoffmann Territory, in excess of $75,000,000 of net sales in any calendar year, provided that the total royalty payable in any calendar year shall not exceed $8,000,000. For the years ended December 31, 2002 and 2001, the Company recorded approximately $31,000 and $60,000, in royalty expenses to Hoffmann, respectively. The Hoffmann Agreement can be terminated by the Company on 30 days notice with respect to the United States patent, any individual foreign patent, or all patents owned by Hoffmann. If the Hoffmann Agreement is terminated with respect to the patents owned by Hoffmann in a specified country, such country is no longer included in the Hoffmann Territory. Accordingly, the Company would not be permitted to market any formulation of alpha interferon in such country. F-83 Note 5. Research and Development Agreement with Interferon Sciences Research Partners, Ltd. In 1984, the Company organized ISD to act as the sole general partner of Interferon Sciences Research Partners, Ltd., a New Jersey limited partnership (the "Partnership"). The Company and the Partnership entered into a development contract whereby the Company received substantially all of the net proceeds ($4,414,475) of the Partnership's public offering of limited partnership interests. The Company used the proceeds to perform research, development and clinical testing on behalf of the Partnership for the development of ALFERON Gel containing recombinant interferon. In connection with the formation of the Partnership, ISD agreed to make additional cash contributions for purposes of continuing development of ALFERON Gel if the Partnership exhausted its funds prior to development of such product. ISD is wholly dependent upon the Company for capital to fund such commitment. The Partnership exhausted its funds during 1986, and the Company contributed a total of $1,997,000 during the period from 1986 to 1990, for the continued development of ALFERON Gel. In 1987, the Company filed a Product License Application with the FDA for approval to market ALFERON Gel. In February 1990, the FDA indicated that additional process development and clinical trials would be necessary prior to approval of ALFERON Gel. The Company believed, at that time, that the costs to complete the required process development and clinical trials would be substantial, and there could be no assurance that the clinical trials would be successful. As a result of the above events, in 1992, the Company withdrew its FDA Product License Application for ALFERON Gel containing recombinant interferon. In place of single species recombinant interferon, previously ALFERON Gel's active ingredient, the Company commenced, in 1992, further development of ALFERON Gel using

the Company's natural source multi-species alpha interferon ("ALFERON N Gel"). However, at the present time, the Company is not actively pursuing development of ALFERON N Gel and the Company does not have an obligation to provide additional funding to the Partnership. Assuming successful development and commercial exploitation of ALFERON N Gel, which to date has not occurred, the Company may be obligated to pay the Partnership royalties equal to 4% of the Company's net sales of ALFERON N Gel and 15% of revenues received from sublicensing ALFERON N Gel. Note 6. Agreement with Metacine, Inc. On July 28, 2000, the Company acquired for $100,000 an option to purchase certain securities of Metacine, Inc. ("Metacine"), a company engaged in research using dendritic cell technology, on the terms set forth below. On April 9, 2001, the Company exercised its option to acquire an 82% equity interest in Metacine. Pursuant to the agreement, as amended, the Company received 700,000 shares of Metacine common stock and a five-year warrant to purchase, at a price of $12.48 per share, 282,794 shares of Metacine common stock in exchange for $300,000 in cash, an obligation to pay Metacine $ 1,850,000 and $250,000 of services to be rendered by the Company by June 30, 2002. In addition, the Company issued Metacine 2,000,000 shares of the Company's common stock. The agreement contains certain restrictions on the ability of Metacine to sell the Company's shares and provides for the Company to make cash payments ("Deficiency Payments") to Metacine to the extent Metacine has not received from the sale of the Company's common stock, cumulative net proceeds of $1,850,000 by September 30, 2002 or $400,000 of net proceeds per quarter beginning with the period ending September 30, 2001 and $250,000 for the quarter ending September 30, 2002. On October 4, 2001, the Company made a Deficiency Payment to Metacine in the amount of $400,000 for the quarter ending September 30, 2001. The Company has not made the remainder of the Deficiency Payments in the aggregate amount of $1,450,000. If Metacine sells all of the 2,000,000 shares received and the cumulative proceeds from the sales and any Deficiency Payments are less than $1,850,000, the Company may issue to Metacine additional shares of common stock at F-84 the Company's full discretion. These additional shares would be treated in the same manner as the original 2,000,000 shares. In the event that cumulative net proceeds to Metacine from the sale of the Company's common stock exceed $1,850,000, any Deficiency Payments previously made by the Company ($400,000 through December 31, 2002) would be repaid to the Company to the extent these proceeds exceed $1,850,000. All additional proceeds beyond the $1,850,000 and repayment of Deficiency Payments, if any, would be for the benefit of Metacine. The Company was required to put in escrow 100,000 Metacine shares to secure its obligations to render $250,000 of services to Metacine and 462,500 Metacine shares to secure its potential obligations to make Deficiency Payments. Since the Company has not made $1,450,000 in Deficiency Payments and has not rendered $250,000 of services to Metcine, Metacine could request 462,500 Metacine shares currently held in escrow to satisfy the Company's past due obligations. Although the Company is the majority owner of Metacine, the Company must, on many matters, vote its shares of Metacine common stock in the same proportion as votes cast by the minority stockholders of Metacine, except for certain matters with respect for which the Company has protective rights. In accordance with EITF Issue No. 96-16, Investor's Accounting for an Investee When the Investor has a Majority of the Voting Interest but the Minority Shareholder or Shareholders have Certain Approval or Veto Rights, the minority holders have substantive participating rights which include controlling the selection, termination and setting of compensation for Metacine management who are responsible for implementing policies and procedures, making operating and capital decisions (including establishing budgets) for Metacine and most other ordinary operating matters, and therefore, the Company does not control Metacine. In addition, the Company only has one representative on a board of directors consisting of three directors. Accordingly, the acquisition is being accounted for under the equity method. Of the $2.5 million consideration paid for Metacine, $2,341,418 was recorded as a charge for the acquisition of in-process research and development ("IPR&D") in 2001. The charge was recorded as the acquisition of IPR&D as Metacine's primary asset is technology that has not reached technological feasibility and has no alternative uses. The in-process research and development expenses relate to a patent portfolio consisting of six issued patents, eight pending patents and four invention disclosures related to the use of dendritic cells for the treatment of various diseases. While the patent portfolio, when viewed as a whole, represented a new approach to the treatment of various diseases utilizing cell therapy, the six issued patents had no independent commercial value. While the Company did not engage the services of an independent appraiser to assess the fair value of the purchased in process research and development, it considered the following factors: (i) any product or process utilizing dendritic cells as a treatment for any disease would regulated by the FDA and therefore would require extensive clinical testing prior to the time any revenue would be generate from the sale of a product or process, (ii) the cost of such clinical trials would be in excess of $

50,000,000, (iii) it would take between seven to ten years to complete such clinical trials, (iv) there could be no assurance that even if Metacine could obtain the funding required to complete the clinical trials (which was well beyond Metacine's capability at the time Metacine acquired rights to the patent portfolio), that the clinical trials would have shown the product or process tested to be safe and effective. The Company's $1,850,000 obligation to Metacine, less the $400,000 Deficiency Payment made in October 2001, has been recorded as a current liability at December 31, 2002 and 2001. The $250,000 of services to be provided has also been recorded as a current liability. Services rendered to Metacine to date were immaterial and as such, the liability remained unchanged at December 31, 2002 and 2001. The investment has been further reduced to zero at December 31, 2001, by the Company's equity in the loss of Metacine of $158,582 for the period from April 9, 2001 through December 31, 2001. On April 1, 2003, the license granted by the University of Pittsburgh to Metacine covering Metacine's technology was terminated due to non-payment by Metacine. Accordingly, the Company's has not reflected its share of its equity in the losses in Metacine for the years ended December 31, 2002 and 2001 in the amounts of $274,846 and $290,994, respectively. The Company is currently in discussions with Metacine with respect to a full settlement of the Company's obligations to Metacine. F-85 Note 7. Inventories At December 31, 2002 inventories, consisting of material, labor and overhead, are classified as follows: Finished goods $ 322,518 Work in process 3,052,070 Raw materials 1,332,560 Less reserve for excess inventory (4,678,659) ---------- $ 28,489 ========== Finished goods inventory consists of vials of ALFERON N Injection, available for commercial and clinical use either immediately or upon final release by quality assurance. In light of the results of the Company's Phase 3 studies of ALFERON N Injection in HIV and HCV-infected patients, the Company has recorded a reserve against its inventory of ALFERON N Injection to reflect its estimated net realizable value. The reserve was a result of the Company's assessment of anticipated near-term projections of product to be sold or utilized in clinical trials, giving consideration to historical sales levels. As a result, inventories at December 31, 2002 reflect a reserve for excess inventory of $4,678,659. Note 8. Convertible Notes Payable In August 2002, the Company completed a private placement of $500,000 of convertible notes to accredited investors. Each note is convertible into the Company's common stock at a price of $.05 per share (subject to adjustment to 70% of the market price of the Company's common stock under certain circumstances) and bears interest at the rate of 10% per annum. $250,000 of the convertible notes is due January 31, 2003 and the other $250,000 of the convertible notes is due December 31, 2003. For each $100,000 principal amount of notes issued, the investors received warrants to purchase an additional 10.2 million shares of the Company's common stock exercisable at $.01 per share. The warrants were valued at $400,000 and are amortized as interest expense over the terms of the respective notes. The transaction is subject to approval by the shareholders of the Company. In the event that shareholder approval is not obtained, the convertible noteholders could exercise their rights and call a default making the convertible notes immediately due and payable. In addition, these notes are convertible into common stock at a beneficial rate. The beneficial conversion feature is valued at $100,000 and accounted for as debt discount and is being amortized over the term of the notes. Note 9. Income Taxes As a result of the loss allocation rules contained in the Federal income tax consolidated return regulations, approximately $5,900,000 of net federal operating loss carryforwards, which expire from 2003 to 2006, are available to the Company upon ceasing to be a member of GP Strategies's consolidated return group in 1991. In addition, the Company has net federal operating loss carryforwards for periods F-86 subsequent to May 31, 1991, and through December 31, 2002 of approximately $104,000,000 that expire from 2006 to 2022. In addition, the Company had state net operating loss carryforwards of approximately $32,000,000 that expire from 2005 to 2009. The Company believes that the events culminating with the closing of its Common Stock Private Offering on November 6, 2000 may result in an "ownership change" under Internal Revenue Code, Section 382, with respect to its stock. The Company believes that as a result of the ownership change, the future utility of its pre-change net operating losses may be significantly limited. Further, the issuance of 51,000,000 warrants in August 2002 could also result in an ownership change and further limit use of the net operating losses carried forward. The tax effects of temporary differences that give rise to deferred tax assets and liabilities consist of the following as of December 31, 2002: Deferred tax assets 2002 ---------- ---------- Net operating loss carry-forwards $ 39,530,000 Tax credit carry-forwards -- Inventory reserve 1,872,000 Property and equipment, principally due to differences in basis and depreciation 661,000 In-process technology costs -- ---------- Gross deferred tax asset 42,063,000 Valuation allowance (42,063,000) ---------- Net deferred taxes $ -- ========== A valuation allowance is provided when it is more likely than not that some portion of the deferred tax asset will not be realized. The Company has determined, based on the Company's history of annual net losses, that a full valuation

allowance is appropriate. The change in the valuation allowance for 2002 was $3,723,000. Based on the Company's net loss before income taxes in 2002 and 2001, the Company would have recorded a tax benefit. During each of these years, the Company recorded increases in the valuation allowance due to uncertainty regarding the realization of deferred taxes that reduced the Company's expected income tax benefit to zero in these years. The Company participates in the State of New Jersey's corporation business tax benefit certificate transfer program (the "Program"), which allows certain high technology and biotechnology companies to transfer unused New Jersey net operating loss carryovers to other New Jersey corporation business taxpayers. During 1999, the Company submitted an application to the New Jersey Economic Development Authority (the "EDA") to participate in the Program and the application was approved. The EDA then issued a certificate certifying the Company's eligibility to participate in the Program and the amount of New Jersey net operating loss carryovers the Company has available to transfer. Since New Jersey law provides that net operating losses can be carried over for up to seven years, the Company may be able to transfer its New Jersey net operating losses from the last seven years. The Program requires that a purchaser pay at least 75% of the amount of the surrendered tax benefit. F-87 During 2002 and 2001, the Company completed the sale of approximately $6.5 million and $12 million, of its New Jersey tax loss carryovers and received $0.53 million and $0.97 million, which were recorded as a tax benefit from gains on sale of state net operating loss carryovers on its Consolidated Statement of Operations in 2002 and 2001, respectively. Note 10. Common Stock, Stock Options, Warrants and Other Shares Reserved The Company has a stock option plan (the "Plan"), which authorizes a committee of the Board of Directors to grant options, to purchase shares of Common Stock, to officers, directors, employees and consultants of the Company. Pursuant to the terms of the Plan, no option may be exercised after 10 years from the date of grant. The Plan permits options to be granted at a price not less than 85% of the fair market value, however, the options granted to date have been at fair market value of the common stock at the date of the grant. Employee stock option activity for options under the Plan during the periods indicated is as follows: Number of Weighted-Average Shares Exercise Price ------ ---------- Balance at December 31, 2000 1,946,390 .28 Exercised (2,244) .25 Forfeited (13,525) .35 --------- Balance at December 31, 2001 1,930,621 .28 Forfeited (22,546) .41 --------- Balance at December 31, 2002 1,908,075 .27 At December 31, 2002, the exercise prices and weighted-average remaining contractual life of outstanding options were: Number of Options Life ------- ---- $ .25 - $1.00 1,854,475 1 year $1.01 - $1.25 53,600 1 year At December 31, 2002, the number of options exercisable was 1,908,075, and the weighted-average exercise price of those options was $.27. F-88 FASB Interpretation No. 44 provides guidance for applying APB Opinion No. 25, "Accounting for Stock Issued to Employees" ("FIN 44"). It applies prospectively to new awards, exchanges of awards in a business combination, modifications to outstanding awards, and changes in grantee status on or after July 1, 2000, except for provisions related to repricings and the definition of an employee that apply to awards issued after December 15, 1998. The Company has evaluated the financial impact of FIN 44 and has determined that the repricing of employee stock options on October 27, 1999 falls within the guidance of FIN 44. On October 27, 1999, the Company repriced 429,475 stock options to $.25 per share. On July 1, 2000, the implementation date of FIN 44, 352,823 shares of the 429,475 shares were fully vested (exercisable) and the closing price of the Company's common stock on such date was $1.63 per share. Beginning on and after July 1, 2000, the Company is required to record compensation expense on the repriced vested options only when the market price exceeds $1.63 per share and only on the amount in excess of $1.63 per share. For the repriced unvested stock options, the intrinsic value measured at the July 1, 2000 effective date that is attributable to the remaining vesting period will be recognized over that future period. The unvested stock options at July 1, 2000 (76,652) were fully vested on January 1, 2001. On December 31, 2002, the closing price of the Company's common stock was $.05 per share and accordingly, under FIN 44, no compensation expense was recorded on the repriced fully vested stock options of July 1, 2000 and on the repriced unvested stock options of July 1, 2000. Information regarding all Options and Warrants Changes in options and warrants outstanding during the years ended December 31, 2002, 2001 and 2000, and options and warrants exercisable and shares reserved for issuance at December 31, 2002 are as follows: The following table includes all options and warrants including employee options (which are discussed above). Price Range Number of Per Share Shares ---------- ---------- Outstanding at December 31, 2000 .25 -- 48.00 17,107,336 Exercised .25 (2,244) Terminated .25 -- 48.00 (77,938) ---------- ---------- Outstanding at December 31, .25 -- 36.00 17,027,154 Warrants Issued .01 -- .01 51,000,000 Terminated .25 -- 36.00 (49,510) ---------- ---------- Outstanding at December 31, 2002 .01 -- 1.50 67,977,644 ========== Exercisable: December 31, 2002 .25 -- 1.50 16,977,644 ========== Shares reserved for issuance: December 31, 2002 67,977,644

========== F-89 Options and warrants outstanding and exercisable, and shares reserved for issuance at December 31, 2002, include 500,000 shares under a warrant agreement with GP Strategies. The warrants are priced at $1.00 per share and expire on March 25, 2004. Options and warrants outstanding and exercisable, and shares reserved for issuance at December 31, 2002, include 11,635,451 shares under warrant agreements with the purchasers of a 2000 private offering. The warrants are priced at $1.50 per share and expire on April 17, 2005. Options and warrants outstanding and exercisable, and shares reserved for issuance at December 31, 2002, include 2,934,118 shares under a warrant agreement to purchase 1,467,059 units. Each unit consists of a share of common stock and a warrant to purchase an additional share of common stock at a price of $1.50 per share, exercisable at a price of $.66 per unit. The units were issued as compensation for services rendered to the Company in the 2000 private offering and expire on April 17, 2005. Options and warrants outstanding and shares reserved for issuance, at December 31, 2002, include 51,000,000 shares under warrant agreements (subject to shareholder approval) with the purchasers of the convertible notes. The warrants are exercisable at $.01 per share upon shareholder approval and expire in 2007. Note 11. Savings Plan The ISI Savings Plan (the "Savings Plan") permits pre-tax contributions to the Savings Plan by participants pursuant to Section 401(k) of the Internal Revenue Code of up to 15% of base compensation. The Company will match up to the 6% level of the participants' eligible contributions. The Savings Plan matches 40% in cash and 60% in the Company's common stock up to the 6% level. For 2002, the Company's contribution to the Savings Plan, which was fully vested, was $131,000, consisting of $52,657 in cash and $78,343 in stock. For 2001, the Company's contribution to the Savings Plan was $176,000, consisting of $66,666 in cash and $109,334 in stock. F-90 Note 12. Profit Sharing Plan The Company has a Profit Sharing Plan (the "Profit Sharing Plan") providing key employees and consultants with an opportunity to share in the profits of the Company. The Profit Sharing Plan is administered by the Company's Compensation Committee. Pursuant to the terms of the Profit Sharing Plan, the Compensation Committee, in its sole discretion, based upon the significance of the employee's contributions to the operations of the Company, selects certain key employees and consultants of the Company who are entitled to participate in the Profit Sharing Plan and determines the extent of their participation. The amount of the Company's profits available for distribution to the participants (the "Distribution Pool") is the lesser of (a) 10% of the Company's income before taxes and profit sharing expense and (b) an amount equal to 100% of the base salary for such year of all the participants in the Profit Sharing Plan. The Compensation Committee may require as a condition to participation that a participant remain in the employ of the Company until the end of the fiscal year for which payment is to be made. Payments required to be made under the Profit Sharing Plan must be made within 10 days of the filing of the Company's tax return. To date, there have been no contributions by the Company under the Profit Sharing Plan. Note 13. Supplemental Statement of Cash Flow Information The Company paid no income taxes or interest during the two-year period ended December 31, 2002. During the years ended December 31, 2002 and 2001 the following non-cash financing and investing activities occurred: 2002: None 2001: The Company issued 2,000,000 shares, with a guaranteed value of $1,850,000, of common stock and committed to provide $250,000 of services to be rendered by the Company to Metacine (see Note 7). The Company reduced capital in excess of par value and the corresponding liability by $21,463 for settlement shares sold. F-91 Note 14. Commitments The Company obtained human white blood cells used in the manufacture of ALFERON N Injection from several sources, including the Red Cross pursuant to a supply agreement dated April 1, 1997 (the "Supply Agreement"). The Company will not need to purchase more human white blood cells until such time as production of crude alpha interferon is resumed. Under the terms of the Supply Agreement, the Company was obligated to purchase a minimum amount of human white blood cells each month through March 1999 (the "Minimum Purchase Commitment"), with an aggregate Minimum Purchase Commitment during the period from April 1998 through March 1999 in excess of $3,000,000. As of November 23, 1998, the Company owed the Red Cross approximately $1.46 million plus interest at the rate of 6% per annum accruing from April 1, 1998 (the "Red Cross Liability") for white blood cells purchased pursuant to the Supply Agreement. Pursuant to an agreement dated November 23, 1998, the Company granted the Red Cross a security interest in certain assets to secure the Red Cross Liability, issued to the Red Cross 300,000 shares of common stock and agreed to issue additional shares at some future date as requested by the Red Cross to satisfy any remaining amount of the Red Cross Liability. The Red Cross agreed that any net proceeds received by it upon sale of such shares would be applied against the Red Cross Liability and that at such time as the Red Cross Liability was paid in full, the Minimum Purchase Commitment would be deleted effective April 1,1998 and any then existing breaches of the Minimum Purchase Commitment would be waived. In January 1999 the Company granted the Red Cross a security interest (the "Security Interest") in, among

other things, the Company's real estate, equipment inventory, receivables, and New Jersey net operating loss carryovers to secure repayment of the Red Cross Liability, and the Red Cross agreed to forbear from exercising its rights under the Supply Agreement, including with respect to collecting the Red Cross Liability until June 30, 1999 (which was subsequently extended until December 31, 1999). On December 29, 1999, the Company, the Red Cross and GP Strategies entered in an agreement pursuant to which the Red Cross agreed that until September 30, 2000 it would forbear from exercising its rights under (i) the Supply Agreement, including with respect to collecting the Red Cross Liability, and (ii) the Security Interest. In connection with the Asset Sale Transactions, the Company, HEB and the Red Cross entered into a similar agreement pursuant to which the Red Cross agreed to forbear from exercising its rights until May 31, 2003 and the Red Cross agreed to accept HEB common stock with a guaranteed value of $500,000 in full settlement of all of the Company's obligations to the Red Cross. Under the terms of such agreement, if HEB does not make such payment, the Red Cross has the right to sell the Company's real estate. During 1999, the Red Cross sold 27,000 of the Settlement Shares and sold the balance of such shares (273,000 shares) during the first quarter of 2000. As a result, the net proceeds from the sales of the Settlement Shares, $33,000 in 1999 and $368,000 in 2000, were applied against the liability to the Red Cross. The remaining liability to the Red Cross included in accounts payable on the consolidated balance sheet at December 31, 2002 was approximately $1,403,000. On October 30, 2000, the Company issued an additional 800,000 shares to the Red Cross. The net proceeds from the sale of such shares by the Red Cross will be applied against the remaining liability of $1,403,000 owed to the Red Cross. However, there can be no assurance that the net proceeds from the sale of such shares will be sufficient to extinguish the remaining liability owed the Red Cross. F-92 Pursuant to an agreement dated March 25, 1999, GP Strategies loaned the Company $500,000. In return, the Company granted GP Strategies (i) a first mortgage on the Company's real estate, (ii) a two-year option (which has expired) to purchase the Company's real estate, provided that the Company has terminated its operations and the Red Cross Liability has been repaid, and (iii) a two-year right of first refusal (which has expired) in the event the Company desires to sell its real estate. In addition, the Company issued GP Strategies 500,000 shares of Common Stock and a five-year warrant to purchase 500,000 shares of Common Stock at a price of $1 per share. The common stock and warrants issued to GP Strategies were valued at $500,000 and recorded as a financing cost and amortized over the original period of the GP Strategies Debt in 1999. Pursuant to the agreement, the Company has issued a note to GP Strategies representing the GP Strategies Debt, which note was originally due on September 30, 1999 (but extended to June 30, 2001) and bears interest, payable at maturity, at the rate of 6% per annum. In addition, at that time the Company negotiated a subordination agreement with the Red Cross pursuant to which the Red Cross agreed that its lien on the Company's real estate is subordinate to GP Strategies' lien. On March 27, 2000, the Company and GP Strategies entered into an agreement pursuant to which (i) the GP Strategies Debt was extended until June 30, 2001 and (ii) the Management Agreement between the Company and GP Strategies was terminated and all intercompany accounts between the Company and GP Strategies (other than the GP Strategies Debt) in the amount of approximately $130,000 were discharged which was recorded as a credit to capital in excess of par value. On August 23, 2001, the Company and GP Strategies entered into an agreement pursuant to which the GP Strategies Debt was extended to March 15, 2002. During 2001, the Company paid GP Strategies $100,000 to reduce the GP Strategies Debt. In addition, in January 2002, the Company paid GP Strategies $100,000 to further reduce the GP Strategies Debt. Interest expense accrued to GP Strategies was $18,000 and $27,937 for the years ended December 31, 2002 and 2001, respectively. In connection with the Asset Sale Transactions, the Company, HEB and GP Strategies entered into a similar agreement pursuant to which GP Strategies agreed to forbear from exercising its rights until May 31, 2003 and GP Strategies agreed to accept HEB common stock with a guaranteed value of $425,000 in full settlement of all the Company's obligations to GP Strategies. Under the terms of such agreement, if HEB does not make such payment, GP Strategies has the right to sell the Company's real estate. As consideration for the transfer to the Company of certain licenses, rights and assets upon the formation of the Company by GP Strategies, the Company agreed to pay GP Strategies royalties of $1,000,000, but such payments will be made only with respect to those years in which the Company has income before income taxes, and will be limited to 25% of such income. Through December 31, 2002, the Company has not generated income before taxes and therefore has not accrued or paid royalties to GP Strategies. See Notes 4 and 5 for information relating to royalties payable to Hoffmann and the Partnership, respectively. F-93 Note 15. Quarterly Financial Data (unaudited) The following summarizes the Company's unaudited quarterly results for 2002 and 2001. 2002 Quarters First Second Third Fourth ---------- ---------- ---------- ------- Thousands of dollars except per share data Revenues $ 784 $ 176 $ 687 $ 279 Gross

profit (loss)(1) 369 (149) 254 (30) Net loss (693) (949) (639) (457) Basic and diluted net loss per share (.03) (.05) (.03) (.02) 2001 Quarters First Second Third Fourth ---------- ---------- ---------- ------- Thousands of dollars except per share data Revenues $ 371 $ 344 $ 459 $ 325 Gross profit (loss)(1) (44) 22 98 (63) Net loss (1,272) (3,659) (1,060) (444) Basic and diluted net loss per share (.07) (.18) (.05) (.02) (1) Gross profit (loss) is calculated as revenue less cost of goods sold and excess/idle production costs. F-94 Note 16. Fair Value of Financial Instruments The carrying values of financial instruments, assuming the Company continues as a going concern, including cash and cash equivalents, accounts receivable, accounts payable, accrued expenses and note payable approximate fair values, because of the short term nature or interest rates that approximate current rates. Note 17. Agreement with Mayo In April 2001, the Company entered into a technology license agreement with Mayo Foundation for Medical Education and Research ("Mayo") under which the Company obtained certain technology rights. The Company has committed to fund approximately $400,000 of costs related to a clinical trial beginning in December 2001 and which is currently expected to take at least two years from the date hereof to complete. The Company paid Mayo $100,000 related to this clinical trial in 2001, incurred $101,565 in 2002 and will owe other amounts upon the completion of certain parts of the trial, with the last payment due upon receipt of the final written report on the trial. The Company can terminate this agreement up to 60 days after receipt of this report. After expiration of this ability to terminate, the Company must issue 25,000 shares of the Company's common stock to Mayo and must pay milestone payments upon certain regulatory or other events and royalties on future sales, if any. In addition, the Company paid $60,000 to Mayo related to the agreement in 2001. Under the terms of the Asset Sales F-95 Transactions, the Company's right to continue this agreement and the obligation owed to Mayo was transferred to HEB. The Company did not generate any revenues from this agreement for each of the three years ended December 31, 2002. Note 18. Subsequent Event On March 11, 2003, the Company sold all its inventory related to its ALFERON N Injection product and granted a license to sell the product to Hemispherx Biopharma, Inc. ("HEB"). In exchange for the inventory and license, the Company received HEB common stock with a guaranteed value of $675,000, an additional 62,500 shares of HEB common stock without a guaranteed value, and a royalty equal to 6% of the net sales of ALFERON N Injection. The HEB common stock will be subject to selling restrictions. In addition, HEB assumed approximately $400,000 of the Company's payables and various other commitments. The Company and HEB also entered into another agreement pursuant to which the Company will sell to HEB, subject to regulatory approval, the Company's real estate property, plant, equipment, furniture and fixtures, rights to ALFERON N Injection and all of its patents, trademarks and other intellectual property related to its natural alpha interferon business. In exchange, the Company will receive $675,000 of HEB common stock with a guaranteed value, an additional 62,500 shares of HEB common stock without a guaranteed value and a royalty equal to 6% of the net sales of all products sold containing natural alpha interferon. HEB will assume approximately $1.5 million of the Company's indebtedness that currently encumbers its assets. In addition, HEB will fund the operating costs of the Company's facility pending the completion of this transaction. In the event the Company does not obtain regulatory approval prior to September 12, 2003, either the Company or HEB may terminate the agreement and not complete the transaction. In March 2003, the Company sold 15,000,000 shares of its common stock in a private placement transaction to an investor for $150,000. In connection with this private placement, the Company also sold, for $1,000, 15,000,000 warrants exercisable at $.01 per share and expiring in March 2008. F-96 INTERFERON SCIENCES, INC. AND SUBSIDIARY SCHEDULE II - VALUATION AND QUALIFYING ACCOUNTS Additions Balance at Charged to Balance at Beginning Costs, Provisions End of Description Of Period and Expenses Deductions(a) Period ---------- ---------- ---------- ---------- Year ended December 31, 2002 Valuation and qualifying accounts deducted from assets to which they apply: Reserve for excess inventory $5,538,413 $ $ 859,754 $4,678,659 Year ended December 31, 2001 Valuation and qualifying accounts deducted from assets to which they apply: Reserve for excess inventory $6,123,311 $ $ 584,898 $5,538,413 Notes: Deductions are for the usage of a portion of the reserve for excess inventory. F-97 Unaudited Pro Forma Condensed Consolidated Statement of Operations On March 11, 2003 the Company executed two agreements with Interferon Sciences, Inc. ("ISI") to purchase certain of its assets. In the first agreement with ISI, the Company effectively acquired the operations of ISI including its inventory of Alferon N Injection(R), and a limited license for the production, manufacture use, marketing and sale of this product. This transaction was completed on March 11, 2003. For these assets, the Company: i) Issued 487,028 shares of its common stock, and ii) Agreed to pay ISI 6% of the net sales of the Product The Company also is required to pay ISI a service fee and pay certain of ISI's obligation related to the product. In the second agreement with ISI, effectively an asset acquisition, ISI agreed to sell to the

Company all of ISI's rights to the product and other assets related to the product including, but not limited to, real estate and machinery. This transaction was completed on March 17, 2004. For these assets, the Company: i) Issued on March 17, 2004 an additional 487,028 shares of its common stock; and will ii) Continue to pay ISI 6% of the net sales of the product The following unaudited pro forma consolidated statement of operations of the Company for the year ended December 31, 2003 presents the results of the Company assuming the above-mentioned two agreements between the Company and ISI had occurred on January 1, 2003. The unaudited pro forma consolidated statement of operations should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the consolidated financial statements of the Company, including the notes thereto. The pro forma data is for informational purposes only and may not necessarily reflect the Company's results of operations for the year ended December 31, 2003 had the Company consummated the two agreements on January 1, 2003. F-98 Hemispherx Biopharma, Inc. and Subsidiaries Unaudited Pro Forma Consolidated Statement of Operations Year Ended December 31, 2003 (in thousands, except per share data) (4) (3) Pro Forma Pro Forma Pro Forma Pro Forma Further As Further (1) (2) Adjustments as Adjusted Adjustment Adjusted Hemispherx Interferon For First For First For Second For Second Biopharma, Inc. Sciences, Inc. Asset Asset Asset Asset And Subsidiaries And Subsidiary Acquisition Acquisition Acquisition Acquisition ---------- ---------- ---------- ---------- ---------- ---------- 2003 2003 Revenues: Sales of $ 509 $ 242 $ $ 751 $ $ 751 product Clinical treatment programs 148 -- -- 148 -- 148 ------ ------ -------- -------- ------- ------ Total Revenues 657 242 -- 899 899 ------ ------ -------- -------- ------- ------ Costs and expenses: Production costs/Cost of Goods Sold 502 267 47 (a) 816 60 (d) 876 Research and development 3,150 176 (7)(a) 3,319 8 (d) 3,327 General and administrative 4,257 1,432 (1,144)(a) 4,545 8 (d) 4,553 Royalty Expense 45 (b) 45 45 ------ ------ -------- -------- ------- ------ Total cost and expenses 7,909 1,875 (1,059) 8,725 76 8,801 ------ ------ -------- -------- ------- ------ F-99 Interest and other income 80 27 (27)(a) 80 80 Interest Expense and (68)(c) Financing Costs (7,598) (307) 307 (a) (7,666) (7,666) Gain on sale of securities 444 (444)(a) -- -- Metacine Settlement 1,550 (1,550)(a) -- -- Gain on settlement of liability 229 (229)(a) -- -- Service fee income 560 (560)(a) -- -- Other income (a) 31 (31) -- -- Bulk sale of Alferon inventory 1,149 (1,149)(a) -- -- Gain on sale of NOL 279 (279)(a) -- -- -------- -------- --------- -------- ------- ------- Net loss $(14,770) $ 2,329 $ (2,971) $(15,412) $ (76) (15,488) -------- -------- --------- -------- ------- ------- Basic and diluted loss per share $ (.42) $ (.43) $ (.43) -------- -------- -------- Basic and diluted weighted Average common shares outstanding 35,235 35,327 36,056 -------- -------- ------- -------- See accompanying notes to consolidated statement of operations F-100 NOTES TO UNAUDITED PROFORMA CONSOLIDATED STATEMENT OF OPERATIONS The following notes describe the column headings in the unaudited pro forma consolidated statement of operations and the pro forma adjustments that have been made to this statement: (1) Reflects the unaudited consolidated historical statement of operations of Hemispherx Biopharma, Inc. and subsidiaries for the year ended December 31, 2003. (2) Reflects the unaudited consolidated historical statement of operations for ISI for the year ended December 31, 2003. (3) Reflects pro forma adjustments relating to the first acquisition on March 11, 2003 of certain assets of ISI and the related funding as follows: (a) Adjustments to reflect the following: Production cost related to sales of product by ISI are based on the Company's cost of inventory purchased from ISI in the First Asset Acquisition. A portion of the Company's total cost of the net assets was allocated to inventory in accordance with FASB 141. ISI debt was not assumed by the Company, interest on the debt has been eliminated. The ISI building was acquired in the Second Asset Acquisition. Depreciation expense related to the building has been included for the First Asset Acquisition adjustments. The depreciation of the building, based on the cost of the Second Asset Acquisition, is recorded in entry 4(e) below. Service fee income paid to ISI by the Company, the gain on the bulk sale of the Alferon inventory to the Company and the Metacine settlement have been eliminated. General and administrative expenses beyond March 11, 2003 have been eliminated because ISI's general and administrative expenses subsequent to that date are not related to the Alferon business. All expenses related to the Alferon business subsequent to March 11, 2003 have been included in the Company's historical results for the period from March 11, 2003 through December 31, 2003. Gains from sale of securities, settlement of liability and sale of NOL have been eliminated. F-101 Production Cost / Cost of Sold Goods R&D G&A Other Total
========== ========== ========== ========== ========== ========== Inventory $(109) $(109) ---------- ---------- ---------- ---------- ---------- ---------- Interest expense $307 307 ---------- ---------- ---------- ---------- ---------- ---------- Interest income (27) (27) ---------- ---------- ---------- ---------- ---------- ---------- Depreciation 62 $7 $7 76 ---------- ---------- ---------- ---------- ---------- ----------

---------- Service fee income (560) (560) ---------- ---------- ---------- ---------- ---------- ---------- Other income (31) (31) ---------- ---------- ---------- ---------- ---------- ---------- Bulk sale of Alferon inventory (1,149) (1,149) ---------- ---------- ---------- ---------- ---------- ---------- Gain on sale at securities (444) (444) ---------- ---------- ---------- ---------- ---------- ---------- Gain on settlement of liability (229) (229) ---------- ---------- ---------- ---------- ---------- ---------- Gain on sale of NOL (279) (279) ---------- ---------- ---------- ---------- ---------- ---------- G&A after March 11, 2003 1,137 1,137 ---------- ---------- ---------- ---------- ---------- ---------- Metacine Settlement -- -- -- (1,550) (1,550) ---------- ---------- ---------- ---------- ---------- ---------- Totals $(47) $7 $1,144 $(3,962) $(2,858) ========== ========== ========== ========== ==========-== ========== (b) Increase in general and administrative costs resulting from the recognition of 6% royalty charges on the net sales of the acquired ALFERON N injection product. (c) Increase in interest for period from January 1, 2003 through March 11, 2003 for issuance of 6% Senior Convertible Debentures on March 12, 2003. (4) Reflects pro forma adjustments relating to the second acquisition of certain assets of ISI as follows: (d) Adjustments reflect depreciation expense relating to the acquired building as result of the second acquisition of certain assets of ISI. F-102 ---------- No dealer, salesman or any other person is authorized to give any information or to represent anything not contained in this prospectus. You must not rely on any unauthorized information or representations. This prospectus is an offer to sell these securities and it is not a solicitation of an offer to buy these securities in any state where the offer or sale is not permitted. The information contained in this Prospectus is current only as of this date. TABLE OF CONTENTS Page Prospectus Summary ..... 2 Risk Factors ..... 6 Use of Proceeds ..... 15 Dividend Policy ..... 15 Price Range of Common Stock ..... 16 Selected Consolidated Financial Data ..... 16 Management's Discussion and Analysis of Financial Condition And Results of Operations ..... 19 Our Business ..... 39 Management ..... 55 Executive Compensation ..... 59 Principal Stockholders ..... 64 Certain Relationships and Related Transactions ..... 67 Selling Stockholders ..... 67 How the Shares May Be Distributed ..... 71 Description of Securities Being Registered ..... 73 Legal Matters ..... 74 Experts ..... 74 Where you can find More information ..... 75 Financial Statements ..... F-1 ========== ----------

---------- 10,741,090 SHARES OF COMMON STOCK HEMISPHERX BIOPHARMA, INC. ---------- PROSPECTUS ---------- July _, 2004 ========== PART II INFORMATION NOT REQUIRED IN PROSPECTUS ITEM 13. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION. SEC Filing Fees ..... $ 756.75 American Stock Exchange Listing Fee* ..... $22,500.00 Printing and Engraving Expenses* ..... $ 8,500.00 Accounting Fees and Expenses* ..... $15,000.00 Legal Fees and Expenses* ..... $15,000.00 Transfer Agent and Registrar Fees* ..... $ 1,500.00 Miscellaneous* ..... $ 3,743.25 Total Expenses* ..... $67,000.00 ---------- * Estimated. ITEM 14. INDEMNIFICATION OF DIRECTORS AND OFFICERS. The Registrant's Amended and Restated Certificate of Incorporation provides that the Registrant shall indemnify to the extent permitted by Delaware law any person whom it may indemnify thereunder, including directors, officers, employees and agents of the Registrant. Such indemnification (other than an order by a court) shall be made by the Registrant only upon a determination that indemnification is proper in the circumstances because the individual met the applicable standard of conduct. Advances for such indemnification may be made pending such determination. In addition, the Registrant's Amended and Restated Certificate of Incorporation eliminates, to the extent permitted by Delaware law, personal liability of directors to the Registrant and its stockholders for monetary damages for breach of fiduciary duty as directors. The Registrant's authority to indemnify its directors and officers is governed by the provisions of Section 145 of the

Delaware General Corporation Law, as follows: (a) A corporation shall have the power to indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than action by or in the right of the corporation) by reason of the fact that he is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with such action, suit or proceeding if he acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe his conduct was unlawful. The termination of any action, suit or proceeding by judgment, order, settlement, conviction, or upon a plea of nolo contendere or its II-1 equivalent, shall not, of itself, create a presumption that the person did not act in good faith and in a manner which he reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had reasonable cause to believe that the person's conduct was unlawful. (b) A corporation shall have the power to indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to procure a judgment in its favor by reason of the fact that he is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against expenses (including attorneys' fees) actually and reasonably incurred by the person in connection with the defense or settlement of such action or suit if he acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation and except that no indemnification shall be made in respect of any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or the court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper. (c) To the extent that a present or former director or officer of a corporation has been successful on the merits or otherwise in defense of any action, suit or proceeding referred to in subsections (a) and (b) of this section, or in defense of any claim, issue or matter therein, such person shall be indemnified against expenses (including attorneys' fees) actually and reasonably incurred by such person in connection therewith. (d) Any indemnification under subsections (a) and (b) of this section (unless ordered by a court) shall be made by the corporation only as authorized in the specific case upon a determination that indemnification of the present or former director, officer, employee or agent is proper in the circumstances because he has met the applicable standard of conduct set forth in subsections (a) and (b) of this section. Such determination shall be made, with respect to a person who is a director or officer at the time of such determination (1) by a majority vote of the directors who are not parties to such action, suit or proceeding, even though less than a quorum, or (2) by a committee of such directors designated by majority vote of such directors, even though less than a quorum, or (3) if there are no such directors, or if such directors so direct, by independent legal counsel in a written opinion, or (4) by the stockholders. (e) Expenses (including attorneys' fees) incurred by an officer or director in defending a civil or criminal action, suit or proceeding may be paid by the corporation in advance of the final disposition or such action, suit or proceeding upon receipt of an undertaking by or on behalf of such director or officer to repay such amount if it shall ultimately be determined that such person is not entitled to be indemnified by the corporation as authorized in this section. Such expenses incurred by former directors and officers and other employees and agents may be so paid upon such terms and conditions, if any, as the corporation deems appropriate. (f) The indemnification and advancement of expenses provided by, or granted pursuant to, the other subsections of this section shall not be deemed exclusive of any other rights to which those seeking indemnification or advancement of expenses may be entitled under any by, agreement, vote of stockholders or disinterested directors or otherwise, both as to action in such person's official capacity and as to action in another capacity while holding such office. (g) A corporation shall have power to purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against such person and incurred by such person in any such capacity, or arising out of his status as such, whether or not the corporation would have the power to indemnify such person against such liability under this

section. (h) For purposes of this section, references to the "corporation" shall include, in addition to the resulting corporation, any constituent corporation (including any constituent of a constituent) absorbed in a II-2 consolidation or merger which, if its separate existence had continued, would have had the power and authority to indemnify its directors, officers, and employees or agents, so that any person who is or was a director, officer, employee or agent of such constituent corporation, or is or was serving at the request of such constituent corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, shall stand in the same position under this section with respect to the resulting or surviving corporation as such person would have with respect to such constituent corporation if its separate existence had continued. (i) For purposes of this section, references to "other enterprises" shall include employee benefit plans, references to "fines" shall include any excise taxes assessed on a person with respect to any employee benefit plan, and references to "serving at the request of the corporation" shall include any service as a director, officer, employee, or agent with respect to any employee benefit plan, its participants or beneficiaries, and a person who acted in good faith and in a manner such person reasonably believed to be in the interest of the participants and beneficiaries of any employee benefit plan shall be deemed to have acted in a manner "not opposed to the best interests of the corporation" as referred to in this section. (j) The indemnification and advancement of expenses provided by, or granted pursuant to, this section shall, unless otherwise provided when authorized or ratified, continue as to a person who has ceased to be a director, officer, employee or agent and shall inure to the benefit of the heirs, executors and administrators of such a person. (k) The Court of Chancery is hereby vested with exclusive jurisdiction to hear and determine all actions for advancement of expenses or indemnification brought under this section, or under any bylaw, agreement, vote of stockholders or disinterested directors, or otherwise. The Court of Chancery may summarily determine a corporation's obligation to advance expenses (including attorneys' fees). ITEM 15. RECENT SALES OF UNREGISTERED SECURITIES. Since January 1, 2001, we have issued and sold the following securities: On February 23, 2001, we issued warrants to purchase an aggregate of 100,000 shares of our common stock of which 188,325 are exercisable at $6.00 per share and 188,325 are exercisable at $9.0 per share to William A. Carter. The warrants expire on February 22, 2006. On April 6, 2001, we issued warrants to purchase an aggregate of 400,000 shares of our common stock of which 100,000 are exercisable at $10.00 per share, 100,000 are exercisable at $12.00 per share and 100,000 are exercisable at $16.00 per share to Larry Zaslow, Marc Komorsky, Peter Adolph and Paul Michaels. The warrants expire on April 6, 2005. On April 30, 2001, we issued warrants to purchase an aggregate of 30,000 shares of our common stock at an exercise price of $5.00 per share to Robert Peterson. The warrants expire on April 30, 2006. On April 30, 2001, we issued warrants to purchase an aggregate of 25,000 shares of our common stock at an exercise price of $ 6.00 per share to Robert Lau. The warrants expire on April 30, 2005. On July 1, 2001, we issued warrants to purchase an aggregate of 25,000 shares of our common stock at an exercise price of $6.00 per share to Robert Lau. The warrants expire on June 30, 2005. On January 2, 2002, we issued warrants to purchase an aggregate of 25,000 shares of our common stock at an exercise price of $6.00 per share to Robert Lau. The warrants expire on April 30, 2005. On May 1, 2002, we issued warrants to purchase an aggregate of 12,000 shares of our common stock at an exercise price of $3.86 per share to Iraj Kiani. The warrants expire on April 30, 2005. II-3 On September 3, 2003, we issued warrants to purchase an aggregate of 150,000 shares of our common stock at an exercise price of $2.00 per share to Michael Burrows. The warrants expire on August 1, 2005. On September 3, 2002, we issued warrants to purchase an aggregate of 5,000 shares of our common stock at an exercise price of $2.00 per share to Cheri Kaufman. The warrants expire on August 13, 2007. On September 3, 2002, we issued warrants to purchase an aggregate of 50,000 shares of our common stock at an exercise price of $2.00 per share to David Strayer. The warrants expire on December 31, 2007. On September 3, 2002, we issued warrants to purchase an aggregate of 40,000 shares of our common stock at an exercise price of $2.00 per share to Josephine Dolhancryk. The warrants expire on August 13, 2007. On September 3, 2002, we issued warrants to purchase an aggregate of 200,000 shares of our common stock at an exercise price of $2.00 per share to Robert Peterson. The warrants expire on August 13, 2007. On September 3, 2002, we issued warrants to purchase an aggregate of 20,000 shares of our common stock at an exercise price of $2.00 per share to Carol Smith. The warrants expire on August 13, 2007. On September 3, 2002 we issued warrants to purchase an aggregate of 100,000 shares of our common stock at an exercise price of $2.00 per share to Ransom Etheridge. The warrants expire on August 13, 2007. On September 3, 2002, we issued warrants to purchase an aggregate of 100,000 shares of our common stock at an exercise price of $2.00 per share to William Mitchell. The warrants expire on August 13, 2007. On September 13, 2002, we issued warrants to purchase an aggregate of 100,000 shares of our common stock at an exercise price of

$2.00 per share to Richard Piani. The warrants expire on August 13, 2007. On September 3, 2002, we issued warrants to purchase an aggregate of 1,000,000 shares of our common stock at an exercise price of $2.00 per share to William A. Carter . The warrants expire on August 13, 2007. 250,000 warrants are exercisable immediately, 500,000 are exercisable after two years, 250,000 are exercisable after three years and all are exercisable after four years. The issuance of these securities was deemed to be exempt from registration under the Securities Act in reliance on Section 4(2) of the Securities Act as a transaction by an issuer not involving a public offering. On March 12, 2003, we issued an aggregate of $5,426,000 in principal amount of 6% Senior Convertible Debentures due March 2005 (the "March Debentures") and an aggregate of 743,288 warrants to two investors in a private placement for gross proceeds of $4,650,000. The March Debentures mature on January 31, 2005 and bear interest at 6% per annum, payable quarterly in cash or, subject to satisfaction of certain conditions, common stock. Any shares of common stock issued to the investors as payment of interest shall be valued at 95% of the average closing price of the common stock during the five consecutive business days ending on the third business day immediately preceding the applicable interest payment date. The March Debentures are convertible at the option of the investors at any time through January 31, 2005 into shares of our common stock. The conversion price under the March Debentures is fixed at $1.46 per share, subject to adjustment for anti-dilution protection for issuance of common stock or securities convertible or exchangeable into common stock at a price less than the conversion price then in effect. The above-mentioned Warrants issued to the debenture holders are to acquire at any time II-4 through March 12, 2008 an aggregate of 743,288 shares of common stock at a price of $1.68 per share. On March 12, 2004, the exercise price of the Warrants will reset to the lesser of the exercise price then in effect or a price equal to the average of the daily price of the common stock between March 13, 2003 and March 11, 2004 (but in no event less than $1.176 per share). The exercise price (and the reset price) under the Warrants also is subject to similar adjustments for anti-dilution protection. On July 10, 2003, we issued an aggregate of $5,426,000 in principal amount of 6% Senior Convertible Debentures due July 31, 2005 (the "July Debentures") and an aggregate of 507,102 Warrants (the "July 2008 Warrants") to the above investors in a private placement for aggregate gross proceeds of $4,650,000. The July Debentures mature on July 31, 2005 and bear interest at 6% per annum, payable quarterly in cash or, subject to satisfaction of certain conditions, common stock. Any shares of common stock issued to the investors as payment of interest shall be valued at 95% of the average closing price of the common stock during the five consecutive business days ending on the third business day immediately preceding the applicable interest payment date. The July Debentures are convertible at the option of the investors at any time through July 31, 2005 into shares of our common stock. The conversion price under the July Debentures was fixed at $2.14 per share, subject to adjustment for anti-dilution protection for issuance of common stock or securities convertible or exchangeable into common stock at a price less than the conversion price then in effect. However, as part of the debenture placement funded on October 29, 2003 (see below), the conversion price under the July Debentures was lowered to $1.89 per share. The July 2008 Warrants, as amended, received by the investors are to acquire at any time commencing on July 26, 2004 through January 31, 2009 an aggregate of 507,102 shares of common stock at a price of $2.46 per share. On July 10, 2004, the exercise price of these July 2008 Warrants will reset to the lesser of the exercise price then in effect or a price equal to the average of the daily price of the common stock between July 11, 2003 and July 9, 2004. The exercise price (and the reset price) under the July 2008 Warrants also is subject to similar adjustments for anti-dilution protection. Notwithstanding the foregoing, the exercise price as reset or adjusted for anti-dilution, will in no event be less than $2.14 per share. On June 25, 2003, we issued to each of the debenture holders a warrant (the "June 2008 Warrant"). Each June 2008 Warrants is exercisable at any time through December 25, 2008 to acquire an aggregate of 500,000 shares of common stock at a price of $2.40 per share. On June 25, 2004, the exercise price of these June 2008 Warrants will reset to the lesser of the exercise price then in effect or a price equal to the average of the daily price of the common stock between June 26, 2003 and June 24, 2004 (but in no event less than $1.68 per share). The exercise price (and the reset price) under the June 2008 Warrants also is subject to adjustments for anti-dilution protection similar to those in the July 2008 Warrants. On October 29, 2003, we issued an aggregate of $4,142,357 in principal amount of 6% Senior Convertible Debentures due October 31, 2005 (the "October Debentures") and an aggregate of 410,134 warrants to two investors in a private placement for aggregate gross proceeds of $3,550,000. The October Debentures mature on October 31, 2005 and bear interest at 6% per annum, payable quarterly in cash or, subject to satisfaction of certain conditions, common stock. Any shares of common stock issued to the investors as payment of interest shall be valued at 95% of the average closing price of the common stock during the five consecutive business days ending on the third business day

immediately preceding the applicable interest payment date. The October Debentures are convertible at the option of the investors at any time through October 31, 2005 into shares of our common stock. The conversion price under the October Debentures is fixed at $2.02 per share, subject to adjustment for anti-dilution protection for issuance of common stock or securities convertible or exchangeable into common stock at a price less than the conversion price then in effect. The above-mentioned Warrants issued to the debenture holders, as amended, are to acquire at any time commencing on July 26, 2004 through April 30, 2009 an aggregate of 410,134 shares of common stock at a price of $2.32 per share. On October 29, 2004, the exercise price of the Warrants will reset to the lesser of the exercise price then in effect or a price equal to the average of II-5 the daily price of the common stock between October 29, 2003 and October 27, 2004. The exercise price (and the reset price) under the Warrants also is subject to similar adjustments for anti-dilution protection. Notwithstanding the foregoing, the exercise price as reset or adjusted for anti-dilution, will in no event be less than $2.19 per share. On January 26, 2004, we issued an aggregate of $4,000,000 in principal amount of 6% Senior Convertible Debentures due January 31, 2006 (the "January 2004 Debentures"), additional investment rights to purchase an additional $2,000,000 principal amount of January 2004 Debentures, 158,103 shares of common stock and an aggregate of 790,514 warrants to two investors in a private placement for aggregate gross proceeds of $4,000,000. The January 2004 Debentures mature on January 31, 2006 and bear interest at 6% per annum, payable quarterly in cash or, subject to satisfaction of certain conditions, common stock. Any shares of common stock issued to the investors as payment of interest shall be valued at 95% of the average closing price of the common stock during the five consecutive business days ending on the third business day immediately preceding the applicable interest payment date. The January 2004 Debentures are convertible at the option of the investors at any time through January 31, 2006 into shares of our common stock. The conversion price under the January 2004 Debentures is fixed at $2.53 per share, subject to adjustment for anti-dilution protection for issuance of common stock or securities convertible or exchangeable into common stock at a price less than the conversion price then in effect. Commencing six months after issuance, we are required to start repaying the then outstanding principal amount under the Debentures in monthly installments amortized over 18 months in cash or, at our option, in shares of common stock. Any shares of common stock issued to the Investors as installment payments shall be valued at 95% of the arithmetic average Weighted Average Price (as defined in the Debentures) of the common stock during the 10-day trading period commencing on and including the eleventh trading day immediately preceding the date that the installment is due. There are two classes of warrants received by the Investors; class A and class B. The class A warrants are to acquire at any time from July 26, 2004 through July 26, 2009 an aggregate of up to 395,257 shares of common stock at a price of $3.29 per share. The class B warrants are to acquire at any time from July 26, 2004 through July 26, 2009 an aggregate of up to 395,257 shares of common stock at a price of $5.06 per share. On January 27, 2005, the exercise price of the class A and B warrants will reset to the lesser of the respective exercise price then in effect or a price equal to the average of the daily price of the common stock between January 27, 2004 and January 26, 2005. The exercise price (and the reset price) under the warrants also is subject to similar adjustments for anti-dilution protection. Notwithstanding the foregoing, the exercise prices as reset or adjusted for anti-dilution, will in no event be less than $2.58 per share with regard to the Class A warrants or $3.54 per share with regard to the Class B warrants. On May 14, 2004, in consideration for the Debenture holders' exercise of all of the June 2008 Warrants, we issued to the holders warrants (the "May 2009 Warrants") to purchase an aggregate of 1,300,000 shares of our common stock. We issued 1,000,000 shares and received gross proceeds of $2,400,000 from the exercise of the June 2008 Warrants. The May 2009 Warrants are to acquire at any time commencing on November 14, 2004 through April 30, 2009 an aggregate of 1,300,000 shares of common stock at a price of $4.50 per share. On May 14, 2005, the exercise price of these May 2009 Warrants will reset to the lesser of the exercise price then in effect or a price equal to the average of the daily price of the common stock between May 15, 2004 and May 13, 2005. The exercise price (and the reset price) under the May 2009 Warrants also is subject to adjustments for anti-dilution protection similar to those in the other Warrants. Notwithstanding the foregoing, the exercise price as reset or adjusted for anti-dilution, will in no event be less than $4.008 per share. II-6 The issuance of the foregoing debentures and the warrants was deemed to be exempt from registration under the Securities Act in reliance on Section 4(2) of the Securities Act as a transaction by an issuer not involving a public offering. By agreement with Cardinal Securities, LLC, for general financial advisory services and in conjunction with the private debenture placements in July and October 2003 and in January 2004, we paid Cardinal Securities, LLC an investment banking fee equal to 7% of the investments made by the two Debenture holders and issued to Cardinal the following common stock purchase warrants: (i) 112,500 exercisable at $2.57 per

share; (ii) 87,500 exercisable at $2.42 per share; and (iii) 100,000 exercisable at $3.04 per share. The $2.57 warrants expire on July 10, 2008, the $2.42 warrants expire on October 30, 2008 and the $3.04 warrants expire on January 5, 2009. With regard to the exercise of the June 2008 Warrants and issuance of the May 2009 Warrants, Cardinal received an investment banking fee of 7%, half in cash and half in shares. The issuance of the shares and warrants was deemed to be exempt from registration under the Securities Act in reliance on Section 4(2) of the Securities Act as a transaction by an issuer not involving a public offering. On March 11, 2003, we issued 427,028 shares of our common stock to Interferon Sciences, Inc. ("ISI") as partial consideration for the acquisition of certain assets of ISI. Pursuant to a second asset acquisition agreement with ISI to purchase additional assets of ISI, on May 30, 2003, we issued an aggregate of 581,761 shares to GP Strategies and the American National Red Cross, two creditors of ISI. On March 17, 2004, pursuant to the second asset acquisition agreement, we issued an additional 427,028 shares of our common stock to ISI as partial consideration for the acquisition of certain assets of ISI. The issuance of these shares was deemed to be exempt from registration under the Securities Act in reliance on Section 4(2) of the Securities Act as a transaction by an issuer not involving a public offering. In September 2003, in recognition of this action as well as Dr. Carter's prior and on-going efforts relating to product development securing critically needed financing and the aqcuisition of a new product line, the Compensation Committee determined that Dr. Carter be awarded bonus compensation in 2003 consisting of $196,636 and a grant of 1,450,000 stock warrants with an exercise price of $2.20 per share. This additional compensation was reviewed by an independent valuation firm and found to be fair and reasonable within the context of total compensation paid to chief executive officers of comparable biotechnology companies. The issuance of these securities was deemed to be exempt from registration under the Securities Act in reliance on Section 4(2) of the Securities Act as a transaction by an issuer not involving a public offering. In September, 2003, our Board of Directors approved a new compensation plan. Each non-employee director is to be compensated in 50% cash and 50% stock beginning on January 1, 2003. The stock compenstaion plan covers a ten year period not to exceed 1,000,000 shares. As of June 30, 2004, an aggregate of 77,551 shares has been issued to three non-employee directors pursuant to this plan. On November 4, 2003, the board of directors granted 200,000 options to Ransom Etheridge pursuant to the 1990 Stock Option Plan. These options are exercisable at $2.75 per share and expire on December 4, 2013. The issuance of these securities was deemed to be exempt from registration under the Securities Act in reliance on Section 4(2) of the Securities Act as a transaction by an issuer not involving a public offering. In the period of December, 2003 through June 30, 2004, we issued 67,764 shares for payment of fees due seven service providers. The issuance of these securities was deemed to be exempt from registration under the Securities Act in reliance on Section 4(2) of the Securities Act as a transaction by an issuer not involving a public offering. II-7 On June 23, 2004, the shareholders approved the Company's 2004 Equity Incentive Plan this plan authorizes the Board of Directors to grant non-qualified and incentive stock options, stock appreciation rights, restricited stock and other stock awards to officers, key employees, consultants and advisors of the Company. A maximum of 8,000,000 shares of stock is reserved for use under this plan. Unless sooner terminated, this equity plan will continue in effect for 10 years. On June 23, 2004 the Board of Directors authorized a grant of 50,000 options to the Copany's Chief Financial Officer pursuant to the terms of his employment agreement. ITEM 16. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES. (a) Exhibits. Exhibit No. Description ---------- ---------- 2.1 First Asset Purchase Agreement dated March 11, 2003, by and between the Registrant and ISI(4) 2.2 Second Asset Purchase Agreement dated March 11, 2003, by and between the Registrant and ISI.(4) 3.1 Amended and Restated Certificate of Incorporation of Registrant, as amended, along with Certificates of Designations, Rights and Preferences of Series A1, A2, B and C Preferred Stock, as amended (1) 3.2 By-laws of Registrant, as amended (1) 3.3 Certificate of Designations of Series D Preferred Stock (2) 3.4 Certificate of Correction to Certificate of Designations of Series D Preferred Stock (2) 3.5 Certificate of Designations of Series E Preferred Stock (3) 4.1 Specimen certificate representing our Common Stock (1) 4.2 Rights Agreement, dated as of November 19, 2002, between the Company and Continental Stock Transfer & Trust Company. The Right Agreement includes the Form of Certificate of Designation, Preferences and Rights of the Series A Junior Participating Preferred Stock, the Form of Rights Certificate and the Summary of the Right to Purchase Preferred Stock.(10) 4.3 Form of 6% Convertible Debenture of the Company issued in March 2003.(4) 4.4 Form of Warrant for Common Stock of the Company issued in March 2003.(4) 4.5 Form of Warrant for Common Stock of the Company issued in June 2003.(5) 4.6 Form of 6% Convertible Debenture of the Company issued in July 2003.(6) 4.7 Form of Warrant for Common Stock of the Company issued in July 2003.(6) 4.8 Form of 6% Convertible Debenture of the Company issued in October 2003.(8)

4.9 Form of Warrant for Common Stock of the Company issued in October 2003.(8) 4.10 Form of 6% Convertible Debenture of the Company issued in January 2004.(9) 4.11 Form of Warrant for Common Stock of the Company issued in January 2004.(9) 4.12 Form of Additional Investment Rights to acquire debentures issued in January 2004(9) 4.12 Form of Warrant for Common Stock of the Company issued in May 2004.(11) 5.1 Opinion of Silverman Sclar Shin & Byrne PLLC, legal counsel 10.1 1990 Stock Option Plan (1) II-8 10.2 1992 Stock Option Plan (1) 10.3 1993 Employee Stock Purchase Plan (1) 10.4 Form of Confidentiality, Invention and Non-Compete Agreement (1) 10.5 Form of Clinical Research Agreement (1) 10.6 Form of Collaboration Agreement (1) 10.7 Amended and Restated Employment Agreement by and between the Company and Dr. William A. Carter, dated as of December 3, 1998 (7) 10.8 Amended and Restatement Engagement Agreement by and between the Company and Robert E. Peterson dated April 1, 2001 (7) 10.9 License Agreement by and between the Company and The Johns Hopkins University, dated December 31, 1980 (1) 10.10 Technology Transfer, Patent License and Supply Agreement by and between the Company, Pharmacia LKB Biotechnology Inc., Pharmacia P-L Biochemicals Inc. and E.I. du Pont de Nemours and Company, dated November 24, 1987 (1) 10.11 Pharmaceutical Use Agreement, by and between the Company and Temple University, dated August 3, 1988 (1) 10.12 Assignment and Research Support Agreement by and between the Company, Hahnemann University and Dr. David Strayer, Dr. lsadore Brodsky and Dr. David Gillespie, dated June 30, 1989 (1) 10.13 Lease Agreement between the Company and Red Gate Limited Partnership, dated November 1, 1989, relating to the Company's Rockville, Maryland facility (1) 10.14 Agreement between the Company and Bioclones (Proprietary) Limited (1) 10.15 Amendment, dated August 3, 1995, to Agreement between the Company and Bioclones (Proprietary) Limited (contained in Exhibit (10.14) 10.16 Licensing Agreement with Core BioTech Corp.(1). 10.17 Licensing Agreement with BioPro Corp. (1) 10.18 Licensing Agreement with BioAegean Corp. (1) 10.19 Forbearance Agreement dated March 11, 2003, by and between ISI, the American National Red Cross and the Company.(1) 10.20 Forbearance Agreement dated March 11, 2003, by and between ISI, GP Strategies Corporation and the Company.(4) 10.21 Securities Purchase Agreement, dated March 12, 2003, by and among the Company and the Buyers named therein.(4) 10.22 Registration Rights Agreement, dated March 12, 2003, by and among the Company and the Buyers named therein.(4) 10.23 Agreement with Esteve. (1) 10.24 Agreement with Gentiva Health Services. (1) 10.25 Agreement with Biovail Corporation International. (1) 10.26 Securities Purchase Agreement, dated July 10, 2003, by and among the Company and the Buyers named therein.(6) 10.27 Registration Rights Agreement, dated July 10, 2003, by and among the Company and the Buyers named therein.(6) 10.28 Securities Purchase Agreement, dated October 29, 2003, by and among the Company and the Buyers named therein.(8) 10.29 Registration Rights Agreement, dated October 29, 2003, by and among the Company and the Buyers named therein.(8) 10.30 Securities Purchase Agreement, dated January 26, 2004, by and among the Company and the Buyers named therein.(9) 10.31 Registration Rights Agreement, dated January 26, 2004, by and among the Company and the Buyers named therein.(9) 10.32 Memorandum of Understanding with Fujisawa. II-9 10.33 Engagement Agreement by and between the company and Robert E. Peterson dated June 23, 2004. 10.34 Hemispherx 2004 Equity Incentive Plan.(12) 14.1 Material Foreign Patents(1) 21 Subsidiaries of the Registrant 23.1 Consent of BDO Seidman, LLP, independent registered public accountants. 23.2 Consent of Eisner, LLP, independent registered public accounting firm. 23.2 Consent of Silverman Sclar Shin & Byrne PLLC, legal counsel (included in Exhibit 5.1). 24.1 Powers of Attorney (included in Signature Pages to this Registration Statement on Form S-1). ---------- (1) Incorporated by reference from the Registrant's Registration Statement on Form S-1 (Registration No. 33-93314) declared effective by the Securities and Exchange Commission on November 2, 1995. (2) Incorporated by reference from the Registrant's Registration Statement on Form S-1 (Registration No. 333-8941) declared effective by the Securities and Exchange Commission on September 16, 1996. (3) Incorporated by reference from the Registrant's Registration Statement on Form S-1 (Registration No. 333-24983) declared effective by the Securities and Exchange Commission on April 18, 1997. (4) Incorporated by reference from the exhibits to the Registrant's Current Report on Form 8-K (No. 1-13441) filed on March 13, 2003. (5) Incorporated by reference from the exhibits to the Registrant's Current Report on Form 8-K (No. 1-13441) filed on June 27, 2003. (6) Incorporated by reference from the exhibits to the Registrant's Current Report on Form 8-K (No. 1-13441) filed on July 14, 2003. (7) Incorporated by reference from exhibits to the Registrant's Form 10-Q for the quarter ended September 30, 2001 (No. 1-13441) filed on November 14, 2001. (8) Incorporated by reference from the exhibits to the Registrant's Current Report on Form 8-K (No. 1-13441) filed on October 30, 2003. (9) Incorporated by reference from the exhibits to the Registrant's Current Report on Form 8-K (No. 1-13441) filed on January 27, 2004. (10) Incorporated by reference from the exhibits to the Registrant's Registration Statement on Form

8-A (No. 0-27072) filed on November 20, 2002. (11) Incorporated by reference from exhibits to the Registrant's Form 10-Q for the quarter ended March 31, 2004 (No. 1-13441) filed on May 14, 2004. (12) Incorporated by reference from Appendix A to the Registrant's Definitive Schedule 14A (proxy statement) for the 2004 Annual Meeting of Stockholders (No. 1-13441) filed on May 20, 2004. II-10 (b) Financial Statements Schedules. None. ITEM 17. UNDERTAKINGS (a) Insofar as indemnification for liabilities arising under the Securities Act of 1933, as amended (the "Securities Act") may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of an action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue. (b) The undersigned Registrant hereby undertakes: (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement to include any prospectus required by Section 10(a)(3) of the Securities Act; (2) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement to reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement. (3) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement to include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement; (4) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. (5) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering. (6) That, for purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this Registration Statement in reliance upon Rule 430A and II-11 contained in a form of prospectus filed by the Registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this Registration Statement as of the time it was declared effective. (c) The undersigned Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the Registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934, as amended, that is incorporated by reference in the Registration Statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. II-12 SIGNATURES Pursuant to the requirement of the Securities Act of 1933, this Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-1 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized in the City of Philadelphia, Commonwealth of Pennsylvania, on the 29th day of June, 2004. HEMISPHERX BIOPHARMA, INC. ---------- (Registrant) By: s/ William A. Carter ---------- William A. Carter, M.D., Chief Executive Officer Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities indicated on the dates indicated. KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints William A. Carter acting alone, his true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution, for such person in his name, place and stead, in any and all capacities, in connection with the Registrant's Registration Statement on Form S-1 under the Securities Act of 1933, including, without limiting the generality of the foregoing, to sign the Registration Statement

in the name and on behalf of the Registrant or on behalf of the undersigned as a director or officer of the Registrant, and any and all amendments or supplements to the Registration Statement, including any and all stickers and post-effective amendments to the Registration Statement, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission and any applicable securities exchange or securities self-regulatory body, granting unto said attorney-in-fact and agents, each acting alone, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or their substitutes or substitute, may lawfully do or cause to be done by virtue hereof. Signature Title Date --------- ----- ---- /s/ William A. Carter Chairman of the Board, Chief June 29, 2004 ---------- Executive Officer (Principal William A. Carter, M.D. Executive) and Director /s/ Richard C. Piani Director June 30, 2004 ---------- Richard C. Piani /s/ Robert E. Peterson Chief Financial Officer and June 29, 2004 ---------- Chief Accounting Officer Robert E. Peterson /s/ Ransom W. Etheridge Secretary, General Counsel June 30, 2004 ---------- And Director Ransom W. Etheridge /s/ William M. Mitchell Director June 30, 2004 ---------- William M. Mitchell, M.D., Ph.D. II-13 Hemispherx Biopharma, Inc. Form S-1 Index to Exhibits Exhibit No. Description ---------- ---------- 5.1 Opinion of Silverman Sclar Shin & Byrne PLLP, legal counsel. 10.33 Robert Peterson Engagement Agreement. 21 Subsidiaries of the Registrant. 23.1 Consent of BDO Seidman, LLP, independent registered public accountants. 23.2 Consent of Eisner LLP, independent registered public accounting firm.