

U.S. SECURITIES AND EXCHANGE COMMISSION  
 Washington D.C. 20549  
 FORM 10-Q

(Mark One)

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(D) OF THE SECURITIES EXCHANGE ACT OF 1934 FOR THE QUARTERLY PERIOD ENDED JUNE 30, 1996

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(D) OF THE SECURITIES EXCHANGE ACT OF 1934 FOR THE TRANSITION PERIOD FROM \_\_\_\_\_ TO \_\_\_\_\_.

Commission file number 0-26866

SONUS PHARMACEUTICALS, INC.  
 (Exact Name of Registrant as Specified in Its Charter)

<TABLE>	<S>	Delaware	<C>	95-4343413
		(State or Other Jurisdiction of Incorporation or Organization)		(I.R.S. Employer Identification Number)

</TABLE>

22026 20th Ave. S.E., Suite 102  
 Bothell, Washington 98021  
 (Address of Principal Executive Offices)

(206) 487-9500  
 (Registrant's Telephone Number, Including Area Code)

NOT APPLICABLE  
 (Former Name, Former Address and Former Fiscal Year, if Changed Since Last Report)

Indicate by check whether the issuer (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

YES    X    NO \_\_\_\_\_

State the number of shares outstanding of each of the issuer's classes of common equity as of the latest practicable date.

<TABLE>		
<CAPTION>		
	Class	Outstanding at August 1, 1996
	-----	-----
<S>	<C>	<C>
	Common Stock, \$.001 par value	8,475,901

</TABLE>

Page 1 of \_\_\_ Pages  
 Exhibit Index is on Page 11

SONUS PHARMACEUTICALS, INC.  
 INDEX TO FORM 10-Q

<TABLE>  
 <CAPTION>  
 PART I. FINANCIAL INFORMATION  
 Page Number

-----  
 <S>  
 <C>

Item 1. Financial Statements  
 Balance Sheets as of June 30, 1996 (unaudited) and December 31, 1995 . . . . .

3	Unaudited Statements of Operations for the three months and six months ended June 30, 1996 and June 30, 1995
4	Unaudited Statements of Cash Flow for the six months ended June 30, 1996 and June 30, 1995
5	Notes to Financial Statements
6	Item 2. Managements' Discussion and Analysis of Financial Condition and Results of Operations
7	
PART II. OTHER INFORMATION	
9	Item 4. Submission of Matters to a Vote of Security Holders
9	Item 6. Exhibits and Reports on Form 8-K
11	SIGNATURES

2  
SONUS PHARMACEUTICALS, INC.

BALANCE SHEETS

	JUNE 30, 1996 (UNAUDITED)	DECEMBER 1995
	-----	-----
<TABLE> <CAPTION>		
31,		
-----		
<S>	<C>	<C>
ASSETS		
Current assets:		
Cash and cash equivalents . . . . .	\$ 9,369,685	\$
5,656,620		
Marketable securities . . . . .	9,691,051	
12,564,513		
Prepaid expenses and other current assets . . . . .	141,366	
137,153		
---	-----	-----
Total current assets . . . . .	19,202,102	
18,358,286		
Equipment, furniture, and leasehold improvements net of accumulated depreciation of \$993,679 and \$794,364 . . . . .	1,192,381	
1,123,089		
Other assets . . . . .	64,878	
164,755		
---	-----	-----
Total assets . . . . .	\$ 20,459,361	\$
19,646,130		
=====	=====	
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Bank line of credit . . . . .	\$ 5,000,000	\$
5,000,000		
Accounts payable and accrued expenses . . . . .	1,086,302	
1,454,607		
Accrued clinical trials expenses . . . . .	2,477,403	
1,568,992		
Current portion of capitalized lease obligations . . . . .	184,593	
207,247		
---	-----	-----
Total current liabilities . . . . .	8,748,298	

8,230,846

Capitalized lease obligations, less current portion . . . . .	372,010	
467,989		
Commitments		
Stockholders' equity:		
Preferred stock, \$.001 par value: 5,000,000 authorized; no shares outstanding		
Common stock, \$.001 par value: 20,000,000 shares authorized; 8,474,820 and 8,448,082 shares outstanding in 1996 and 1995, respectively . . . . .	34,216,014	
30,106,638		
Accumulated deficit . . . . .	(22,809,611)	
(19,066,414)		
Deferred compensation . . . . .	(67,350)	
(92,929)		
----		
Total stockholders' equity . . . . .	11,339,053	
10,947,295		
---		
Total liabilities and stockholders' equity . . . . .	\$ 20,459,361	\$
19,646,130		
	=====	

=====  
</TABLE>

See accompanying notes.

3  
SONUS PHARMACEUTICALS, INC.

STATEMENTS OF OPERATIONS  
(UNAUDITED)

<TABLE>  
<CAPTION>

	Three Months Ended June 30,		Six Months Ended June 30,	
	1996	1995	1996	1995
<S>	<C>	<C>	<C>	<C>
Revenues:				
Collaborative agreements . . . . .	\$ 4,400,000	\$ 400,000	\$ 4,800,000	\$ 3,700,000
Operating Expenses:				
Research and development . . . . .	2,666,119	1,264,044	6,884,399	2,688,467
General and administrative . . . . .	809,233	534,162	1,735,745	1,127,078
	3,475,352	1,798,206	8,620,144	3,815,545
Operating income (loss) . . . . .	924,648	(1,398,206)	(3,820,144)	(115,545)
Other income (expense):				
Interest income . . . . .	169,486	31,882	302,057	53,368
Interest expense . . . . .	(73,212)	(217,787)	(128,695)	(378,006)
Income (loss before income taxes) . . . . .	1,020,922	(1,584,111)	(3,646,782)	(440,183)
Income tax expense . . . . .	40,000	40,000	80,000	450,800
Net income (loss) . . . . .	\$ 980,922	\$ (1,624,111)	\$ (3,726,782)	\$ (890,983)
Net income (loss) per share . . . . .	\$ 0.11	\$ (0.79)	\$ (0.44)	\$ (0.27)
Shares used in computation of net income (loss) per share . . . . .	9,090,945	2,050,032	8,455,550	3,330,301
Pro forma, assuming conversions into common stock:				
Net income (loss) per share . . . . .	\$ 0.11	\$ (0.30)	\$ (0.44)	\$ (0.14)
Shares used in computation of net income per share . . . . .	9,090,945	5,374,442	8,455,550	5,417,929

</TABLE>

See accompanying notes.

4  
SONUS PHARMACEUTICALS, INC.

STATEMENTS OF CASH FLOWS  
(UNAUDITED)

<TABLE>  
<CAPTION>

	SIX MONTHS ENDED JUNE 30,	
	1996	1995
<S> OPERATING ACTIVITIES	<C>	<C>
Net income (loss) . . . . .	\$ (3,726,782)	\$
(890,983)		
Adjustments to reconcile net income (loss) to net cash used in operating activities:		
Depreciation and amortization . . . . .	199,315	
164,941		
Amortization of premium (discount) on marketable securities . .	(36,186)	
13,131		
Amortization of deferred compensation . . . . .	25,579	
42,111		
Deferred taxes . . . . .	-	
200,000		
Changes in operating assets and liabilities:		
Prepaid expenses and other assets . . . . .	95,665	
(6,067)		
Accounts payable and accrued expenses . . . . .	(364,946)	
821,517		
Change in accrued clinical trials expenses . . . . .	908,412	
110,913		
Accrued relocation expenses . . . . .	(3,361)	
(338,680)		
Deferred revenue . . . . .	-	
(400,000)		
Net cash used in operating activities . . . . .	(2,902,304)	
(283,117)		
INVESTING ACTIVITIES		
Purchases of equipment, furniture, and leasehold improvements . . .	(268,608)	
(141,783)		
Purchases of marketable securities . . . . .	(34,462,353)	
(7,845,890)		
Proceeds from sale of marketable securities . . . . .	36,382,879	
7,860,041		
Proceeds from maturities of marketable securities . . . . .	972,707	
493,087		
Net cash provided by investing activities . . . . .	2,624,625	
365,455		
FINANCING ACTIVITIES		
Proceeds from line of credit . . . . .	11,400,000	
-		

Repayment of line of credit . . . . .	(11,400,000)	
-		
Proceeds from capitalized lease obligations . . . . .	-	
117,171		
Repayment of capitalized lease obligations . . . . .	(118,633)	
(132,363)		
Proceeds from issuance (repurchase) of common stock and warrants . . . . .	4,109,377	
(25,505)		
-----		-----
Net cash provided by (used in) financing activities . . . . .	3,990,744	
(40,697)		
Increase (decrease) in cash and cash equivalents for the period . . . . .	3,713,065	
41,641		
Cash and cash equivalents at beginning of period . . . . .	5,656,620	
34,719		-----
-----		-----
Cash and cash equivalents at end of period . . . . .	\$ 9,369,685	\$
76,360		
=====		=====
Supplemental cash flow information:		
Interest paid . . . . .	\$ 71,322	\$
53,454		
=====		=====
Income taxes paid . . . . .	\$ 40,000	\$
250,800		
=====		=====

</TABLE>

See accompanying notes.

SONUS PHARMACEUTICALS, INC.  
NOTES TO FINANCIAL STATEMENTS

JUNE 30, 1996 (UNAUDITED)

(1) BASIS OF PRESENTATION

The unaudited financial statements have been prepared in accordance with generally accepted accounting principles for interim financial information and with the instructions to Form 10-Q. Accordingly, they do not include all of the information and footnotes required to be presented for complete financial statements. The accompanying financial statements reflect all adjustments (consisting only of normal recurring accruals) which are, in the opinion of management, necessary for a fair presentation of the results for the interim periods presented.

The financial statements and related disclosures have been prepared with the assumption that users of the interim financial information have read or have access to the audited financial statements for the preceding fiscal year. Accordingly, these financial statements should be read in conjunction with the audited financial statements and the related notes thereto included in the 1995 Annual Report and incorporated by reference in Form 10-K for the year ended December 31, 1995.

(2) COLLABORATIVE AGREEMENTS

In May 1996, the Company formed a strategic alliance with Abbott Laboratories for the marketing and sale of EchoGen in the United States. SONUS has primary responsibility for clinical development, regulatory affairs, and medical and technical marketing support of EchoGen, and Abbott has primary responsibility for United States marketing and sales. SONUS has retained certain co-promotion rights to EchoGen in the United States. Under the agreement, Abbott paid \$4.0 million upon execution of the agreement and has agreed to pay an additional \$27.0 million consisting of \$7.0 million in the

form of quarterly payments over the next 7 quarters and \$20 million in the form of milestone payments conditioned on the achievement of certain regulatory and commercialization milestones. After the United States Food and Drug Administration ("FDA") has approved the marketing of EchoGen, for which there can be no assurance, SONUS will receive 47 percent of net EchoGen revenues in the United States -- a portion of which SONUS must use to fund its responsibilities under the agreement. The agreement spans the life of the patents relating to EchoGen. Abbott can acquire the rights to additional indications for EchoGen by making additional clinical support payments. In addition, Abbott purchased for \$4.0 million, five year warrants to acquire 500,000 shares of the Company's common stock at an exercise price of \$16.00 per share.

6

ITEM 2.

MANAGEMENT'S DISCUSSION AND ANALYSIS  
OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

OVERVIEW

Since its inception in October 1991, the Company has engaged in the research and development of proprietary contrast agents for use in ultrasound imaging. The Company has financed its research and development and clinical trials through payments received under agreements with its collaborative partners, private equity and debt financings, and an initial public offering completed in 1995. Clinical trials of the Company's principal product under development, EchoGen(R) Emulsion, began in January 1994 pursuant to an Investigational New Drug application ("IND") filed with the FDA in September 1993. The Company has completed various Phase 1, 2 and Phase 3 clinical trials of EchoGen since 1994 and expects to submit a new drug application ("NDA") with the FDA in the third quarter of 1996. As of June 30, 1996, the Company had accumulated net losses of approximately \$22.8 million since its inception and expects continuing net losses for the foreseeable future.

The Company will not be able to commence U.S. sales of EchoGen unless and until it receives FDA approval. To date, all of the Company's revenues have been derived from option and license payments that have been received under agreements with Abbott Laboratories, Inc. ("Abbott"), Daiichi Pharmaceutical Co. Ltd. ("Daiichi"), and Guerbet S.A. ("Guerbet") for the collaborative development of EchoGen within the United States and in certain foreign territories. In May 1996, the Company formed a strategic alliance with Abbott Laboratories for the marketing and sale of EchoGen in the United States. Under the agreement, Abbott has agreed to pay SONUS \$30.0 million in upfront, clinical support and milestone payments, of which \$4.0 million was paid upon execution. In addition, Abbott has purchased, for \$4.0 million, warrants to acquire 500,000 shares of SONUS common stock, equal to about six percent (6%) of the company's outstanding common stock. The warrants are exercisable over five years at \$16.00 per share. In April 1993, the Company granted Daiichi an option to acquire exclusive marketing and distribution rights to EchoGen in the Pacific Rim. In March 1995, Daiichi exercised the option and entered into a license agreement with the Company. Under the option and license agreements, Daiichi has paid the Company option and license fees totaling \$8.6 million and has agreed to pay an additional \$23.4 million, consisting of \$1.2 million in the form of quarterly payments over the next three quarters and \$22.2 million in the form of milestone payments conditioned on the achievement of certain clinical development, regulatory and commercialization milestones. In addition to the option and license agreements, Daiichi entered into a convertible subordinated debenture purchase agreement with the Company in November 1993 under which the Company issued a convertible subordinated debenture to Daiichi in the principal amount of \$3.0 million, which was converted into 462,857 shares of common stock concurrently with the closing of the Company's initial public offering. In October 1994, the Company granted Guerbet an option, which expires September 30, 1996, to acquire exclusive marketing and distribution rights to EchoGen in Europe. In exchange for such option, the Company received payments totaling approximately \$4.7 million, of which \$3.6 million, plus accrued interest (\$245,875 at the time of conversion), was converted into 549,410 shares of common stock of the Company concurrently with the closing of the Company's initial public offering. The remaining \$1.1 million was recognized as revenue in 1994.

The Company's results of operations have varied and will continue to vary significantly from quarter to quarter and depend on, among other factors, the timing of fees and milestone payments made by collaborative partners, the entering into product license agreements by the Company and the timing and costs of the clinical trials conducted by the Company. The Company's current collaborative partners can terminate their agreements on short notice, and there can be no assurance that the Company will receive any additional funding or milestone payments.

RESULTS OF OPERATIONS

Revenue from collaborative agreements increased to \$4.4 million for the three months ended June 30, 1996 as compared to \$400,000 for the three months ended June 30, 1995. The revenue in the current period represented the initial payment from Abbott as well as the regular quarterly payment from Daiichi. Revenue from collaborative agreements increased to \$4.8 million for the six months ended June 30, 1996 as compared to \$3.7 million for the six months ended June 30, 1995. The prior period revenue represented recognition of fees earned upon signing of the license agreement with Daiichi as well as a subsequent regular quarterly payment under the same agreement.

Research and development expenses increased to \$2.7 million for the three months ended June 30, 1996 from \$1.3 million for the three months ended June 30, 1995 and to \$6.9 million for the six months ended June 30, 1996 from \$2.7

7

million for the six months ended June 30, 1995. The increases in the current year periods were primarily due to expenses relating to two Phase 3 clinical trials of EchoGen as well as costs incurred in preparing a NDA.

General and administrative expenses increased to \$809,000 for the three months ended June 30, 1996 from \$534,000 for the three months ended June 30, 1995 and to \$1.7 million for the six months ended June 30, 1996 as compared to \$1.1 million for the six months ended June 30, 1995. The increases in the current year periods reflected increased costs of filing and prosecuting patent and trademark applications, the implementation of market research programs, legal fees related to corporate alliances, as well as investor related expenses resulting from being a public company.

Interest income increased to \$169,000 and \$302,000 for the three and six months ended June 30, 1996 as compared to \$32,000 and \$53,000 for the three and six months ended June 30, 1995, respectively, as a result of larger average invested cash balances resulting from the initial public offering and the Abbott strategic alliance. Interest expense decreased by \$145,000 and \$250,000 for the three and six months periods ended June 30, 1996, respectively, primarily due to the repayment of notes to stockholders and the conversion of debts into common stock upon completion of the initial public offering.

Income taxes of \$40,000 for the three months ended June 30, 1996 and 1995, and income taxes of \$80,000 and \$451,000 for the six months ended June 30, 1996 and 1995, respectively, were primarily attributable to withholding taxes paid to Japan relating to the collaborative payments received from Daiichi.

#### LIQUIDITY AND CAPITAL RESOURCES

Through June 30, 1996, the Company has financed its operations with payments from Abbott, Daiichi and Guerbet of \$20.3 million, proceeds of \$4.0 million for the issuance of warrants, proceeds from the issuance of convertible, redeemable preferred stock of \$4.0 million (which converted into common stock at the closing of the Company's initial public offering), proceeds from a line of credit of \$5.0 million and net proceeds of \$19.0 million from the initial public offering. At June 30, 1996, the Company had cash, cash equivalents and marketable securities of \$19.1 million, compared to \$18.2 million at December 31, 1995. Cash used in operations for the six months ended June 30, 1996 increased to \$2.9 million as compared to \$288,000 for the six months ended June 30, 1995.

In August 1995, the Company entered into a loan agreement with Silicon Valley Bank which provides for a \$5.0 million revolving line of credit facility, which is secured by the tangible assets of the Company. At June 30, 1996, there was \$5.0 million outstanding under the line of credit. The line of credit bears interest at the prime rate plus 1.5% per annum and the Company is required to maintain certain minimum balances of cash, cash equivalents and marketable securities. In August 1996, the Company received a commitment letter from Silicon Valley Bank to renew the line of credit through August 1997.

The Company's cash needs may increase in future periods due to its pending and planned research and clinical development programs. The Company estimates that existing cash, cash equivalents and marketable securities will be sufficient to meet the Company's capital requirements for at least the next 12 months. The Company's future capital requirements will, however, depend on many factors, including the progress of the Company's research and development programs, clinical trials, the time and costs required to gain regulatory approvals, the ability of the Company to obtain and retain continued funding from third parties under collaborative agreements, the costs of filing, prosecuting and enforcing patents, patent applications, patent claims and trademarks, the costs of marketing and distribution, the status of competing products and the market acceptance of the Company's products, if and when approved. The Company may have to raise substantial additional funds to complete development of any product or to commercialize any products if and

when approved by the FDA. There can be no assurance that additional financing will be available on acceptable terms, if at all.

#### FORWARD-LOOKING STATEMENTS

This 10-Q report contains certain forward-looking statements that involve risk and uncertainties. As discussed in the Company's 1995 annual report on Form 10-K, the Company's future operating results are uncertain and may be impacted by the following factors, among others: uncertainty of clinical trials for EchoGen, FDA and foreign regulatory requirements, lengthy regulatory approval process, future capital requirements and uncertainty of additional funding, dependence on third parties for funding, clinical development and distribution and uncertainty of market acceptance.

8

#### PART II. OTHER INFORMATION

##### ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS.

The Company's Annual Meeting of Stockholders was held on May 22, 1996. At the Annual Meeting there were four matters submitted to a vote of security holders. Proxies were solicited pursuant to Section 14(a) of the Securities and Exchange Commission adopted pursuant thereto. There was no solicitation in opposition to management's nominees as listed in the proxy statement. Each director nominated and proposal submitted to a vote passed and the voting outcome of each proposal is as follows:

1. Election of the following five (5) directors to serve until the next annual meeting of stockholders or until their successors are elected and have qualified (the following votes reflect cumulative voting):

<TABLE>

<CAPTION>

Nominee -----	For ---
<S>	<C>
Steven C. Quay, M.D., Ph.D.	8,160,511
Donald Milder	6,397,643
Andrew Senyei, M.D.	8,160,511
Harry Shoff	8,160,511
Dwight Winstead	8,160,511

</TABLE>

2. Approval of an amendment to the Company's 1995 Stock Option Plan for Directors to increase the annual grant to directors thereunder to 5,000 shares:  
For: 7,335,082 Against: 164,807 Abstain: 3,880  
Broker Non-votes: 312,869
3. Approval of an amendment to the Company's Incentive Stock Option, Nonqualified Stock Option and Restricted Stock Purchase Plan -- 1991 to increase the number of shares subject thereto to a total of 1,200,000 and restrict the grants to any individual in any one year to not more than 500,000 shares:  
For: 5,931,758 Against: 73,771 Abstain: 43,210  
Broker Non-votes: 1,767,899
4. Ratification of Ernst & Young LLP as independent auditors of the Company for the fiscal year ending December 31, 1996:  
For: 7,766,582 Against: 2,800 Abstain: 1,756  
Broker Non-votes: 45,500

##### ITEM 6. EXHIBITS AND REPORTS ON FORM 8-K

###### (A) EXHIBITS

<TABLE>

<CAPTION>

Number -----	Description -----
<S>	<C>
10.26	Third Amended and Restated Registration Rights Agreement dated as of May 15, 1996
10.27	Amendment to Letter Agreement dated June 28, 1996 by and between the Company and Guerbet S.A.
11.1	Computation of net income (loss) per share.
11.2	Computation of pro forma net income (loss) per share.
27	Financial Data Schedule

</TABLE>

###### (B) REPORTS ON FORM 8-K



The Company filed the following report on Form 8-K during the quarter ended June 30, 1996:

1. The Registrant filed a report on Form 8-K on June 18, 1996 in connection with the strategic alliance agreement with Abbott Laboratories, Inc. dated May 15, 1996.

9

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

SONUS PHARMACEUTICALS, INC.

Date: August \_\_, 1996

By: /s/ Gregory Sessler

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Gregory Sessler  
Chief Financial Officer and  
Assistant Secretary (Principal  
Financial Officer and Duly  
Authorized Officer)

10

EXHIBIT INDEX

<TABLE>

<CAPTION>

Exhibit  
Number Description

<S>	<C>
10.26	Third Amended and Restated Registration Rights Agreement dated as of May 15, 1996
10.27	Amendment to Letter Agreement dated June 28, 1996 by and between the Company and Guerbet S.A.
11.1	Computation of net income (loss) per share
11.2	Computation of pro forma net income (loss) per share
27	Financial Data Schedule

</TABLE>

11

## SONUS PHARMACEUTICALS, INC.

THIRD AMENDED AND RESTATED  
REGISTRATION RIGHTS AGREEMENT

This Third Amended and Restated Registration Rights Agreement is entered into as of May 15, 1996, by and among SONUS Pharmaceuticals, Inc., a Delaware corporation (the "Company"), Steven C. Quay, M.D., Ph.D. (the "Founder"), Daiichi Pharmaceutical Co., Ltd. ("Daiichi"), Mallinckrodt Medical, Inc., a Delaware corporation ("Mallinckrodt"), Abbott Laboratories, an Illinois corporation ("Abbott"), Guerbet, S.A. ("Guerbet"), certain holders of shares of Common Stock of the Company set forth on Exhibit 1 hereto (such persons, together with Guerbet, are herein collectively referred to as the "Common Holders"), and those Purchasers (the "Series A Purchasers") of the Company's Series A Preferred Stock pursuant to that certain Series A Preferred Stock Purchase Agreement dated as of November 1, 1991 (the "Series A Purchase Agreement"). The Founder, Daiichi, Mallinckrodt, Abbott and such Series A Purchasers shall be referred to collectively hereinafter as the "Holders" and each individually as a "Holder."

## R E C I T A L S :

A. The Company, the Founder and the Series A Purchasers entered into that certain Registration Rights Agreement dated as of November 1, 1991 (the "Registration Rights Agreement").

B. The Registration Rights Agreement was amended and restated pursuant to that certain Amended and Restated Registration Rights Agreement dated as of November 5, 1993 among the Series A Purchasers, the Founder and Daiichi (the "First Restated Registration Rights Agreement").

C. The First Restated Registration Rights Agreement was amended by an Amendment No. 1 dated February 11, 1994 (the "Amendment") to include the shares of Common Stock held by certain of the Common Holders as "Registrable Securities" for certain purposes of the First Restated Registration Rights Agreement.

D. The First Registration Rights Agreement was amended and restated pursuant to an Amended and Restated Registration Rights Agreement dated November 23, 1994 to include certain additional securities as "Registrable Securities" thereunder (the "Second Restated Registration Rights Agreement").

E. The Second Registration Rights Agreement was amended by Amendment No. 1 thereto dated February 11, 1994, an Amendment dated January 3, 1995, Amendment No. 2 dated March 20, 1995 and Amendment No. 3 dated October 17, 1995.

F. The Parties desire to amend and restate the Second Restated Registration Rights Agreement to (i) include Abbott as a "Holder" hereunder and up to 625,000 shares of Common Stock issuable upon exercise of Warrants issued or which may be issued to Abbott (the "Abbott Warrants") as "Registrable Securities" hereunder; (ii) include shares of Common Stock issuable upon exercise of Warrants to purchase an aggregate of 69,471 shares of Common Stock issued to the Series A Purchasers as of July 31, 1995 in connection with the extension of the repayment of certain

bridge financing loans issued in 1993 and 1994 as Registrable Securities hereunder; and (iii) reflect the current facts and circumstances following the completion of the Company's initial public offering completed on October 17, 1995.

G. NOW THEREFORE, in consideration of the mutual agreements, covenants and conditions and releases contained herein, the Company, the Common Holders and each of the Holders hereby agree as follows:

## SECTION 1.

## REGISTRATION RIGHTS

The Company hereby grants to each of the Holders and the Common Holders the registration rights set forth in this Section 1, with respect to the Registrable Securities and/or Piggyback Registrable Securities (as hereinafter defined) owned by the Holders or the Common Holders, as applicable. The Company, the Holders and the Common Holders agree that the registration

rights provided herein set forth the sole and entire agreement on the subject matter between the Company, the Holders and the Common Holders.

1.1 DEFINITIONS. As used in this Section 1:

(a) The terms "register", "registered", and "registration" refer to a registration effected by filing with the Securities and Exchange Commission (the "SEC") a registration statement (the "Registration Statement") in compliance with the Securities Act of 1933, as amended (the "1933 Act") and the declaration or ordering by the SEC of the effectiveness of such Registration Statement.

(b) The term "Registrable Securities" means (i) 1,410,295 shares of Common Stock held by the Founder, (ii) 2,375,854 shares of Common Stock held by Series A Purchasers in the respective amounts on the date hereof as set forth in Exhibit 2 attached hereto; (iii) 462,857 shares of Common Stock held by Daiichi issued upon conversion of the Debenture, (iv) 35,145 shares of Common Stock held by Mallinckrodt issued upon conversion of shares of Series C Preferred Stock; (v) Common Stock issued or issuable upon exercise of the Abbott Warrants initially exercisable into an aggregate of up to 625,000 shares of Common Stock; (vi) Common Stock issued or issuable upon exercise of those certain Warrants exercisable into an aggregate of 316,295 shares of Common Stock held by the Founder and certain of the Holders in the respective amounts set forth in Exhibit 3 attached hereto; and (vii) any Common Stock of the Company issued as (or issuable upon the conversion or exercise of any warrant, right, or other security that is issued as) a dividend or other distribution with respect to, or in exchange or in replacement of, such Registrable Securities (as defined in clauses (i), (ii), (iii), (iv), (v) and (vi)). In the event of any recapitalization by the Company, whether by stock split, reverse stock split, stock dividend or the like, the number of shares of Registrable Securities used throughout this Agreement for various purposes shall be proportionately increased or decreased.

(c) The term "Piggyback Registrable Securities" means (i) Registrable Securities; and (ii) 595,308 shares of Common Stock held by the Common Holders as set forth on Exhibit 1. In the event of any recapitalization by the Company, whether by stock split, reverse stock split, stock dividend or the like, the number of shares of Piggyback Registrable Securities used throughout this Agreement for various purposes shall be proportionately increased or decreased.

2

(d) The term "Initiating Holders" means any Holder or Holders of not less than fifty percent (50%) of the Registrable Securities held by all of the Holders then outstanding and not registered at the time of any request for registration pursuant to paragraph 1.2 of this Agreement.

(e) The term "Piggyback Holders" means the holders of Piggyback Registrable Securities.

1.2 DEMAND REGISTRATION.

(a) Demand for Registration. If the Company shall receive from Initiating Holders a written demand (a "Demand Registration") that the Company effect any registration under the 1933 Act of all or part of the Registrable Securities (other than a registration on Form S-3 or any related form of registration statement, such a request being provided for under paragraph 1.9 hereof) the Company will:

(i) promptly (but in any event within 10 days) give written notice of the proposed registration to all other Holders; and

(ii) use its best efforts to effect such registration as soon as practicable as may be so demanded and as will permit or facilitate the sale and distribution of all or such portion of such Initiating Holders' Registrable Securities as are specified in such demand, together with all or such portion of the Registrable Securities of any Holder or Holders joining in such demand as are specified in a written demand received by the Company within 30 days after such written notice is given, provided that the Company shall not be obligated to take any action to effect any such registration, pursuant to this paragraph 1.2:

(A) Within 120 days immediately following the effective date of any registration statement pertaining to an underwritten public offering of securities of the Company for its own account (other than a registration on Form S-4 relating solely to an SEC Rule 145 transaction, or a registration relating solely to employee benefit plans);

(B) After the Company has effected an aggregate of two such registrations pursuant to this paragraph 1.2 and

the sales of the shares of Common Stock under such registrations have closed;

(C) If the Company shall furnish to such Holders a certificate signed by the President of the Company, stating that in the good faith judgment of the board of directors of the Company it would be seriously detrimental to the Company and its shareholders for such Registration Statement to be filed at the date filing would be required, in which case the Company shall have an additional period of not more than 90 days within which to file such Registration Statement; provided, however, that the Company shall not use this right more than once in any twelve month period;

(D) If the Demand Registration covers less than 30 percent of Registrable Securities held by all of the Holders and the proposed aggregate offering price to the public of the Registrable Securities to be included in the registration by all Holders, is less than \$5,000,000; or

3

(E) Prior to October 17, 1996.

(b) Underwriting. If the Initiating Holders intend to distribute the Registrable Securities covered by their demand by means of an underwriting, they shall so advise the Company as part of their demand made pursuant to this paragraph 1.2; and the Company shall include such information in the written notice referred to in subparagraph 1.2(a)(i). In such event, the right of any Holder to registration pursuant to this paragraph 1.2 shall be conditioned upon such Holder's participation in such underwriting and the inclusion of such Holder's Registrable Securities in the underwriting (unless otherwise mutually agreed by a majority in interest of the Initiating Holders and such Holder) to the extent provided herein.

The Company shall, together with all Holders proposing to distribute their securities through such underwriting, enter into an underwriting agreement in customary form with the underwriter or underwriters selected by a majority in interest of the Initiating Holders and reasonably satisfactory to the Company. Notwithstanding any other provision of this paragraph 1.2, if the underwriter shall advise the Company in writing that marketing factors (including, without limitation, an adverse effect on the per share offering price) require a limitation of the number of shares to be underwritten, then the Company shall so advise all Holders of Registrable Securities that would otherwise be registered and underwritten pursuant hereto, and the number of shares of Registrable Securities that may be included in the registration and underwriting shall be allocated pro rata among such Holders thereof in proportion, as nearly as practicable, to the respective amounts of Registrable Securities held by such Holders at the time of filing the registration statement. For purposes of any underwriter cutback, all Registrable Securities held by any Holder which is a partnership or corporation shall also include any Registrable Securities held by the partners, retired partners, shareholders or affiliated entities of such Holder, or the estates and family members of any such partners and retired partners and any trusts for the benefit of any of the foregoing persons, and such Holder and other persons shall be deemed to be a single "selling Holder", and any pro rata reduction with respect to such "selling Holder" shall be based upon the aggregate amount of shares carrying registration rights owned by all entities and individuals included in such "selling Holder", as defined in this sentence. No Registrable Securities excluded from the underwriting by reason of the underwriter's marketing limitation shall be included in such registration.

If any Holder disapproves of the terms of the underwriting, such Holder may elect to withdraw therefrom by written notice to the Company, the underwriter, and the Initiating Holders. The Registrable Securities so withdrawn shall also be withdrawn from registration.

If the underwriter has not limited the number of Registrable Securities to be underwritten, the Company may include securities for its own account (or for the account of other shareholders) in such registration if the underwriter so agrees and if the number of Registrable Securities that would otherwise have been included in such registration and underwriting will not thereby be limited.

### 1.3 COMPANY REGISTRATION.

(a) If at any time or from time to time the Company shall determine to register any of its securities, either for its own account or the account of security holders, other than a registration relating solely to employee benefit plans, a registration on Form S-4 relating solely to an SEC Rule 145 transaction, or a registration pursuant to paragraph 1.2 hereof, the Company will:

(i) promptly give to the Piggyback Holders written notice thereof (which shall include a list of the jurisdictions in which the Company intends to attempt to qualify such securities under the applicable blue sky or other state securities laws); and

(ii) include in such registration (and any related qualification under blue sky laws or other compliance), and in any underwriting involved therein, all the Piggyback Registrable Securities specified in a written request or requests, made within 20 days after receipt of such written notice from the Company, by the Piggyback Holders, except as set forth in subparagraph 1.3(b) below.

(b) Underwriting. If the registration of which the Company gives notice is for a registered public offering involving an underwriting, the Company shall so advise the Piggyback Holders as a part of the written notice given pursuant to subparagraph 1.3(a)(i). In such event, the right of the Piggyback Holders to registration of his or its Piggyback Registrable Securities pursuant to this paragraph 1.3 shall be conditioned upon the Piggyback Holder's participation in such underwriting and the inclusion of the Piggyback Holder's Piggyback Registrable Securities in the underwriting to the extent provided herein. The Piggyback Holders proposing to distribute their securities through such underwriting shall, together with the Company and the other parties distributing their securities through such underwriting, enter into an underwriting agreement in customary form with the underwriter or underwriters selected for such underwriting by the Company. Notwithstanding any other provision of this paragraph 1.3, if the underwriter determines that marketing factors require a limitation of the number of shares to be underwritten, the underwriter may limit the number of Piggyback Registrable Securities to be included in the registration and underwriting, or may exclude Piggyback Registrable Securities entirely from such registration and underwriting subject to the terms of this paragraph; provided, however, for any registration, the limitation shall not reduce the number of Piggyback Registrable Securities to be included in the offering below thirty percent (30%) of the total number of shares to be included in the offering unless the holders of at least a majority of Piggyback Registrable Securities then outstanding otherwise consent to or approve the limitation of the number of shares to be underwritten. The Company shall so advise all holders of the Company's securities that would otherwise be registered and underwritten pursuant hereto, and the number of shares of such securities, including Piggyback Registrable Securities, that may be included in the registration and underwriting shall be allocated in the following manner: shares, other than Piggyback Registrable Securities, requested to be included in such registration by shareholders shall be excluded, and if a limitation on the number of shares is still required, the number of Piggyback Registrable Securities that may be included shall be allocated among the Piggyback Holders thereof in proportion, as nearly as practicable, to the respective amounts of Piggyback Registrable Securities held by the Piggyback Holders at the time of filing the Registration Statement. For purposes of any underwriter cutback, all Piggyback Registrable Securities held by any Piggyback Holder which is a partnership or corporation shall also include any Piggyback Registrable Securities held by the partners, retired partners, shareholders or affiliated entities of such Piggyback Holder or the estates and family members of any such partners and retired partners and any trusts for the benefit of any of the foregoing persons, and such Piggyback Holder and other persons shall be deemed to be a single "selling Holder", and any pro rata reduction with respect to such "selling Piggyback Holder" shall be based upon the aggregate amount of shares carrying registration rights owned by all entities and individuals included in such "selling Piggyback Holder," as defined in this sentence. No securities excluded from the underwriting by reason of the underwriter's marketing limitation shall be included in such registration. If any Piggyback Holder disapproves of the terms of the underwriting, it may

elect to withdraw therefrom by written notice to the Company and the underwriter. The Piggyback Registrable Securities so withdrawn shall also be withdrawn from registration.

(c) Termination of Registration Rights. No Piggyback Holder shall be entitled to exercise any right provided for in this Section 1.3 after October 17, 1998.

1.4 EXPENSES OF REGISTRATION. All expenses incurred in connection with the first two registrations effected pursuant to paragraph 1.2 and all registrations effected pursuant to paragraphs 1.3 and 1.9, including without limitation all registration, filing, and qualification fees (including blue sky fees and expenses), printing expenses, escrow fees, fees and disbursements of

counsel for the Company and of one special counsel for the participating Holders and the Common Holders, and expenses of any special audits incidental to or required by such registration, shall be borne by the Company; provided, however, that the Company shall not be required to pay stock transfer taxes or underwriters' discounts, or commissions relating to Registrable Securities or Piggyback Registrable Securities. Notwithstanding anything to the contrary above, the Company shall not be required to pay for any expenses of any registration proceeding under paragraph 1.2 if the registration request is subsequently withdrawn at the request of the Holders of a majority of the Registrable Securities to have been registered, unless such Holders agree to forfeit their right to a demand registration pursuant to paragraph 1.2 (in which event such right shall be forfeited by all Holders). In the absence of such an agreement to forfeit, the Holders of Registrable Securities to have been registered shall bear all such expenses pro rata on the basis of the Registrable Securities to have been registered. Notwithstanding the preceding sentence, however, if at the time of the withdrawal, the Holders have learned of a material adverse change in the condition, business, or prospects of the Company from that known to the Holders at the time of their request, of which the Company had knowledge at the time of the request, then the Holders shall not be required to pay any of said expenses and shall retain their rights pursuant to paragraph 1.2.

1.5 OBLIGATIONS OF THE COMPANY. Whenever required under this Section 1 to effect the registration of any Registrable Securities or Piggyback Registrable Securities the Company shall, as expeditiously as reasonably possible:

(a) Prepare and file with the SEC a registration statement with respect to such Registrable Securities or Piggyback Registrable Securities and use its diligent best efforts to cause such registration statement to become effective, and keep such registration statement effective for up to ninety (90) days or until the Holders and the Common Holders have completed the distribution relating thereto.

(b) Prepare and file with the SEC such amendments and supplements to such registration statement and the prospectus used in connection with such registration statement as may be necessary to comply with the provisions of the 1933 Act with respect to the disposition of all securities covered by such registration statement.

(c) Furnish to the Holders and the Common Holders such numbers of copies of a prospectus, including a preliminary prospectus, in conformity with the requirements of the 1933 Act, and such other documents as they may reasonably request in order to facilitate the disposition of Registrable Securities or Piggyback Registrable Securities owned by them.

6

(d) Use its best efforts to register and qualify the securities covered by such registration statement under such other securities or Blue Sky laws of such jurisdictions as shall be reasonably requested by the Holders and the Common Holders, provided that the Company shall not be required in connection therewith or as a condition thereto to qualify to do business or to file a general consent to service of process in any such states or jurisdictions.

(e) In the event of any underwritten public offering, enter into and perform its obligations under an underwriting agreement, in usual and customary form, with the managing underwriter of such offering. Each Holder and each Common Holder participating in such underwriting shall also enter into and perform its obligations under such an agreement.

(f) Notify each holder of Registrable Securities or Piggyback Registrable Securities covered by such registration statement at any time when a prospectus relating thereto is required to be delivered under the 1933 Act of the happening of any event as a result of which the prospectus included in such registration statement, as then in effect, includes an untrue statement of a material fact or omits to state a material fact required to be stated therein or necessary to make the statements therein not misleading in the light of the circumstances then existing.

(g) Furnish, at the request of the Holder or any Common Holder requesting registration of Registrable Securities or Piggyback Registrable Securities pursuant to this Section 1, on the date that such Registrable Securities or Piggyback Registrable Securities are delivered to the underwriters for sale in connection with a registration pursuant to this Section 1, if such securities are being sold through underwriters, on the date that the registration statement with respect to such securities becomes effective, (i) an opinion, dated such date, of the counsel representing the Company for the purposes of such registration, in form and substance as is customarily given to underwriters in an underwritten public offering, addressed to the underwriters, if any, and to the Holders and/or the Common Holders

requesting registration of Registrable Securities or Piggyback Registrable Securities, and (ii) a letter dated such date from the independent accountants of the Company, in form and substance as is customarily given by independent accountants to underwriters in an underwritten public offering, addressed to the underwriters, if any, and, if permissible, to the Holders and/or the Common Holders requesting registration of Registrable Securities or Piggyback Registrable Securities.

#### 1.6 INDEMNIFICATION.

(a) The Company will, and does hereby undertake to, indemnify and hold harmless each Holder of Registrable Securities and each Piggyback Holder of Piggyback Registrable Securities, each of such Holder's or such Piggyback Holder's, officers, directors, partners and agents, and each person controlling such Holder or such Piggyback Holders, with respect to any registration, qualification, or compliance effected pursuant to this Section 1, and each underwriter, if any, and each person who controls any underwriter, of the Registrable Securities held by or issuable to such Holder or such Piggyback Holder, against all claims, losses, damages, and liabilities (or actions in respect thereto) to which they may become subject under the 1933 Act, the Securities Exchange Act of 1934, as amended, (the "1934 Act"), or other federal or state law arising out of or based on (i) any untrue statement (or alleged untrue statement) of a material fact contained in any prospectus, offering circular, or other similar document (including any related Registration Statement, notification, or the like) incident to any such registration, qualification, or compliance, or based on any omission (or alleged omission) to state therein a material fact required to be stated

7

therein or necessary to make the statements therein not misleading, or (ii) any violation or alleged violation by the Company of any federal, state or common law rule or regulation applicable to the Company in connection with any such registration, qualification, or compliance, and will reimburse, as incurred, each such Holder, each such Piggyback Holder, each such underwriter, and each such director, officer, partner, agent and controlling person, for any legal and any other expenses reasonably incurred in connection with investigating or defending any such claim, loss, damage, liability, or action; provided that the Company will not be liable in any such case to the extent that any such claim, loss, damage, liability or expense, arises out of or is based on any untrue statement or omission based upon written information furnished to the Company by an instrument duly executed by such Holder or such Piggyback Holder or underwriter and stated to be specifically for use therein.

(b) Each Holder and each Piggyback Holder will, if Registrable Securities or Piggyback Registrable Securities held by or issuable to such Holder or such Piggyback Holder are included in such registration, qualification, or compliance, severally and not jointly, indemnify the Company, each of its directors, and each officer who signs a Registration Statement in connection therewith, and each person controlling the Company, each underwriter, if any, and, each person who controls any underwriter, of the Company's securities covered by such a Registration Statement, and each other Holder, each other Piggyback Holder, each of such other Holder's or Piggyback Holder's officers, partners, directors and agents and each person controlling such other Holder, or such other Piggyback Holder against all claims, losses, damages, and liabilities (or actions in respect thereof) arising out of or based on any untrue statement (or alleged untrue statement) of a material fact contained in any such Registration Statement, prospectus, offering circular, or other document, or any omission (or alleged omission) to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, and will reimburse, as incurred, the Company, each such underwriter, each such other Holder, each such other Piggyback Holder, and each such director, officer, partner, and controlling person, for any legal or any other expenses reasonably incurred in connection with investigating or defending any such claim, loss, damage, liability, or action, in each case to the extent, but only to the extent, that such untrue statement (or alleged untrue statement) or omission (or alleged omission) was made in such Registration Statement, prospectus, offering circular, or other document, in reliance upon and in conformity with written information furnished to the Company by an instrument duly executed by such Holder or such Piggyback Holder and stated to be specifically for use therein; provided, however, that the liability of each Holder or each Piggyback Holder hereunder shall be limited to the net proceeds received by such Holder or such Piggyback Holder from the sale of securities under such Registration Statement. In no event will any Holder or any Piggyback Holder be required to enter into any agreement or undertaking in connection with any registration under this Section 1 providing for any indemnification or contribution obligations on the part of such Holder or such Piggyback Holder greater than such Holder's or such Piggyback Holder's obligations under this paragraph 1.6.

(c) Each party entitled to indemnification under this paragraph 1.6 (the "Indemnified Party") shall give notice to the party required

to provide such indemnification (the "Indemnifying Party") of any claim as to which indemnification may be sought promptly after such Indemnified Party has actual knowledge thereof, and shall permit the Indemnifying Party to assume the defense of any such claim or any litigation resulting therefrom; provided that counsel for the Indemnifying Party, who shall conduct the defense of such claim or litigation, shall be subject to approval by the Indemnified Party (whose approval shall not be unreasonably withheld) and the Indemnified Party may participate in such defense with its separate counsel at the Indemnifying

8

Party's expense if representation of such Indemnified Party would be inappropriate due to actual or potential differing interests between such indemnified party and any other party represented by such counsel in such proceeding; and provided further that the failure of any Indemnified Party to give notice as provided herein shall not relieve the Indemnifying Party of its obligations under this Section 1, except to the extent that such failure to give notice shall materially adversely affect the Indemnifying Party in the defense of any such claim or any such litigation. No Indemnifying Party, in the defense of any such claim or litigation, shall, except with the consent of each Indemnified Party, consent to entry of any judgment or enter into any settlement that does not include as an unconditional term thereof the giving by the claimant or plaintiff therein, to such Indemnified Party, of a release from all liability in respect to such claim or litigation.

1.7 INFORMATION BY THE HOLDERS OR THE PIGGYBACK HOLDERS. If the Holder or any Piggyback Holder of Registrable Securities or Piggyback Registrable Securities include Registrable Securities or Piggyback Registrable Securities in any registration, such Holder or Piggyback Holder, shall furnish to the Company such information regarding such Holder or Piggyback Holder respectively, and the distribution proposed by such Holder or such Piggyback Holder, respectively, as the Company may reasonably request in writing and as shall be required in connection with any registration, qualification, or compliance referred to in this Section 1.

1.8 TRANSFER OF REGISTRATION RIGHTS. The rights of the Holders and the Piggyback Holders contained in paragraphs 1.2, 1.3 and 1.9 hereof, to cause the Company to register the Registrable Securities or Piggyback Registrable Securities, may be assigned or otherwise conveyed to a transferee or assignee of Registrable Securities or Piggyback Registrable Securities, who shall be considered a "Holder" or a "Piggyback Holder", as applicable, for purposes of this Section 1; provided that such transferee or assignee, (a) receives such securities as a partner in connection with partnership distributions of a Series A Purchaser or a Piggyback Holder, or (b) acquires at least 200,000 shares (as presently constituted), or 100% of the Registrable Securities or Piggyback Registrable Securities held by the transferring Holder or Piggyback Holder, whichever is less; and, provided further, that the Company is given written notice by such Holder or Piggyback Holder at the time of or within a reasonable time after said transfer stating the name and address of said transferee or assignee and identifying the securities with respect to which such registration rights are being assigned.

1.9 FORM S-3. The Company shall use its best efforts to qualify for registration on Form S-3 and to that end the Company shall register (whether or not required by law to do so) its Common Stock under the 1934 Act within twelve (12) months following the effective date of the first registration of any securities of the Company on Form S-1. After the Company has qualified for the use of Form S-3, the Holders of Registrable Securities shall have the right to request up to four (4) registrations on Form S-3 under this paragraph 1.9. The Company shall give notice to all Holders of Registrable Securities of the receipt of a request for registration pursuant to this paragraph 1.9 and shall provide a reasonable opportunity for other Holders to participate in the registration. Subject to the foregoing, the Company will use its best efforts to effect promptly the registration of all shares of Registrable Securities on Form S-3, as the case may be, to the extent requested by the Holder or Holders thereof for purposes of disposition; provided, however, that the Company shall not be obligated to effect any such registration (i) if the Holders, together with the holders of any other securities of the Company entitled to inclusion in such registration, propose to sell Registrable Securities and such other securities (if any) at an aggregate price to the public of less than \$1,000,000, or (ii) more than once during any twelve (12) month period; or (iii) in the event that

9

the conditions set forth in subparagraph 1.2(a)(ii)(C) obtain (but subject to the limitations set forth therein).

1.10 DELAY OF REGISTRATION. No Holder, nor any Piggyback Holder



shall have any right to obtain or seek an injunction restraining or otherwise delaying any such registration as the result of any controversy that might arise with respect to the interpretation or implementation of this Section 1.

1.11 LIMITATIONS ON SUBSEQUENT REGISTRATION RIGHTS. From and after the date of this Agreement, the Company shall not, without the prior written consent of the holders of more than a majority of the Piggyback Registrable Securities, enter into any agreement with any holder or prospective holder of any securities of the Company which would allow such holder or prospective holder to (a) require the Company to effect a registration or (b) include any securities in any registration filed under paragraph 1.2 or 1.3 hereof, unless, under the terms of such agreement, such holder or prospective holder may include such securities in any such registration only to the extent that the inclusion of such securities will not diminish the amount of Registrable Securities or Piggyback Registrable Securities which are included in such registration and includes the equivalent of Section 1.13 as a term.

1.12 RULE 144 REPORTING. With a view to making available to the Holders and the Piggyback Holders the benefits of certain rules and regulations of the SEC which may permit the sale of the Registrable Securities and the Piggyback Registrable Securities to the public without registration, the Company agrees to use its best efforts to:

(a) Make and keep public information available, as those terms are understood and defined in SEC Rule 144 or any similar or analogous rule promulgated under the 1933 Act, at all times commencing ninety (90) days after the effective date of the first registration filed by the Company for an offering of its securities to the general public;

(b) File with the SEC, in a timely manner, all reports and other documents required of the Company under the 1933 Act and 1934 Act;

(c) So long as any Holder or any Piggyback Holder owns any Registrable Securities or Piggyback Registrable Securities, furnish to such Holder or such Piggyback Holder forthwith upon request: a written statement by the Company as to its compliance with the reporting requirements of said Rule 144 of the 1933 Act, and of the 1934 Act (at any time after it has become subject to such reporting requirements); a copy of the most recent annual or quarterly report of the Company; and such other reports and documents as any Holder or any Piggyback Holder may reasonably request in availing itself of any rule or regulation of the SEC allowing it to sell any such securities without registration.

1.13 "MARKET STAND-OFF" AGREEMENT. Each Holder and each Piggyback Holder hereby agrees that during the 120-day period following the effective date of a registration statement of the Company filed under the 1933 Act, he or it shall not, to the extent requested by the Company and any underwriter, sell or otherwise transfer or dispose of (other than to donees who agree to be similarly bound) any Common Stock of the Company held by him or it at any time during such period except Common Stock included in such registration; provided, however, that:

10

(a) such agreement shall be applicable only to the first such registration statement of the Company which covers Common Stock (or other securities) to be sold on his or its behalf to the public in an underwritten offering; and

(b) all officers and directors of the Company and all other persons with registration rights (whether or not pursuant to this Agreement) enter into similar agreements.

In order to enforce the foregoing covenant, the Company may impose stop-transfer instructions with respect to the Registrable Securities and/or Piggyback Registrable Securities of each Holder and each Piggyback Holder (and the shares or securities of every other person subject to the foregoing restriction) until the end of such period.

1.14 AMENDMENT OF REGISTRATION RIGHTS. Any provision of this Section 1 may be amended and the observance thereof may be waived (either generally or in a particular instance and either retroactively or prospectively) only with the written consent of the Company and the holders of not less than a majority of the Piggyback Registrable Securities then outstanding. Any amendment or waiver effected in accordance with this paragraph shall be binding upon each Holder, each Piggyback Holder, each future holder of Registrable Securities or Piggyback Registrable Securities, and the Company.

## SECTION 2.

The Company hereby covenants and agrees as follows:

2.1 BASIC FINANCIAL INFORMATION.

(a) So long as any Holder or any subsidiary, affiliate or partner of such Holder shall own at least 200,000 Registrable Securities, to furnish the following reports:

(i) As soon as practicable after the end of each fiscal year, and in any event within 120 days thereafter, audited consolidated balance sheets of the Company and its subsidiaries, if any, as at the end of such fiscal year, and audited consolidated statements of income and cash flows of the Company and its subsidiaries, if any, for such fiscal year, prepared in accordance with generally accepted accounting principles and setting forth in each case in comparative form the figures for the previous fiscal year, all in reasonable detail and accompanied by a report and opinion thereon, by independent public accountants of national reputation selected by the Company's board of directors and by a copy of such accountants' management letter prepared in connection therewith.

(ii) As soon as practicable after the end of each of the first three (3) quarters of the fiscal year, but in any event within forty-five (45) days after the end of each such quarter, the Company's unaudited consolidated balance sheet as of the end of such quarter, and its unaudited consolidated statements of income and cash flows for such quarter, all in reasonable detail and prepared in accordance with generally accepted accounting principles and certified by the principal financial or accounting officer of the Company.

11

(b) The rights granted pursuant to this paragraph 2.1 may not be assigned or otherwise conveyed by any Holder or by any subsequent transferee of any such rights without the written consent of the Company, which consent shall not be unreasonably withheld; provided that the Company may refuse such written consent if the proposed transferee is a competitor of the Company; and provided further, that no such written consent shall be required if the transfer is in connection with the transfer of Common Stock to any partner or retired partner of any Holder that is a general or limited partnership or to any such partner's estate.

SECTION 3.

MISCELLANEOUS

3.1 GOVERNING LAW. This Agreement shall be governed by and construed under the laws of the State of Washington as applied to agreements among Washington residents made and to be performed entirely with the State of Washington.

3.2 ENTIRE AGREEMENT; AMENDMENT. This Agreement shall supersede and replace the Second Restated Registration Rights Agreement, as amended, which shall be terminated concurrently upon the effectiveness of this Agreement. This Agreement constitutes the full and entire understanding and agreement between the parties with respect to the subject matter hereof. Except as otherwise provided in paragraph 1.14 above, this Agreement may be amended, waived, discharged or terminated only by written consent of the Company and the holders of not less than a majority of the Piggyback Registrable Securities.

3.3 NOTICES. Any notice, request or other communication required or permitted hereunder shall be given in writing and shall be deemed to have been duly given if personally delivered or if telegraphed, or mailed by registered or certified mail, postage prepaid, if to the Company, SONUS Pharmaceuticals, Inc., 22026 20th Avenue, S.E., Suite 102, Bothell, Washington 98021, and if to the other parties, at the respective addresses of the parties as set forth on the Exhibits attached hereto and shall be deemed to have been received when delivered. Any party hereto may by notice so given change its address for future notices hereunder.

3.4 COUNTERPARTS. This Agreement may be executed in any number of counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

3.5 SEVERABILITY. In the event that any provision of this Agreement becomes or is declared by a court of competent jurisdiction to be illegal, unenforceable or void, this Agreement shall continue in full force and effect without said provision.

4.6 CAPTIONS. The captions and headings to Sections of this Agreement have been inserted for identification and reference purposes only and

shall not be used to construe the meaning or the interpretation of this Agreement.

12

IN WITNESS WHEREOF, this Agreement has been duly executed and delivered by the parties as of the date first above written.

SONUS PHARMACEUTICALS, INC.

By /s/ Steven C. Quay MD, Ph.D.  
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Steven C. Quay, M.D., Ph.D, President

HOLDERS:

/s/ Steven C. Quay MD, Ph.D.  
-----  
STEVEN C. QUAY, M.D., PH.D.

DAIICHI PHARMACEUTICAL CO., LTD.

By -----

ABBOTT LABORATORIES

BY -----

MALLINCKRODT MEDICAL, INC.

By -----

CROSSPOINT VENTURE PARTNERS, III

By /s/ Donald B. Milder  
-----  
Donald B. Milder, General Partner

ENTERPRISE PARTNERS II, L.P.

By /s/ Andrew E. Senyei  
-----  
Andrew E. Senyei, M.D., General Partner

13

IN WITNESS WHEREOF, this Agreement has been duly executed and delivered by the parties as of the date first above written.

SONUS PHARMACEUTICALS, INC.

By -----  
Steven C. Quay, M.D., Ph.D, President

HOLDERS:

-----  
STEVEN C. QUAY, M.D., PH.D.

DAIICHI PHARMACEUTICAL CO., LTD.

By /s/ Tadashi Suzuki  
-----

ABBOTT LABORATORIES

BY  
-----

MALLINCKRODT MEDICAL, INC.

By  
-----

CROSSPOINT VENTURE PARTNERS, III

By  
-----  
Donald B. Milder, General Partner

ENTERPRISE PARTNERS II, L.P.

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Andrew E. Senyei, M.D., General Partner

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SONUS PHARMACEUTICALS, INC.

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Steven C. Quay, M.D., Ph.D, President

HOLDERS:

-----  
STEVEN C. QUAY, M.D., PH.D.

DAIICHI PHARMACEUTICAL CO., LTD.

By  
-----

ABBOTT LABORATORIES

BY /s/ John G. Kringle  
-----

MALLINCKRODT MEDICAL, INC.

By  
-----

CROSSPOINT VENTURE PARTNERS, III

By  
-----

Donald B. Milder, General Partner

ENTERPRISE PARTNERS II, L.P.

By \_\_\_\_\_  
Andrew E. Senyei, M.D., General Partner

13

ENTERPRISE PARTNERS II ASSOCIATES, L.P.

By /s/ Andrew E. Senyei  
\_\_\_\_\_  
Andrew E. Senyei, M.D., General Partner

APERTURE ASSOCIATES, L.P.

By: Horsley Keogh Associates, Inc.,  
Its General Partner

By \_\_\_\_\_  
N. Dan Reeve, Managing Director

UTAH VENTURES

By: Utah Ventures Partners,  
Its General Partner

By \_\_\_\_\_  
James C. Dreyfous, General Partner

14

ENTERPRISE PARTNERS II ASSOCIATES, L.P.

By \_\_\_\_\_  
Andrew E. Senyei, M.D., General Partner

APERTURE ASSOCIATES, L.P.

By: Horsley Keogh Associates, Inc.,  
Its General Partner

By /s/ N. Dan Reeve  
\_\_\_\_\_  
N. Dan Reeve, Managing Director

UTAH VENTURES

By: Utah Ventures Partners,  
Its General Partner

By \_\_\_\_\_

ENTERPRISE PARTNERS II ASSOCIATES, L.P.

By \_\_\_\_\_  
Andrew E. Senyei, M.D., General Partner

APERTURE ASSOCIATES, L.P.

By: Horsley Keogh Associates, Inc.,  
Its General Partner

By \_\_\_\_\_  
N. Dan Reeve, Managing Director

UTAH VENTURES

By: Utah Ventures Partners,  
Its General Partner

By /s/ James C. Dreyfous  
\_\_\_\_\_  
James C. Dreyfous, General Partner

COMMON HOLDERS:

GUERBET, S.A.

By /s/ Guy Tilly  
\_\_\_\_\_  
Guy Tilly, Directeur General

ABS EMPLOYEES VENTURE FUND  
LIMITED PARTNERSHIP

By: Alex. Brown Investments Incorporated,  
General Partner

By \_\_\_\_\_  
Mayo A. Shattuck, III, President

STRADLING, YOCCA, CARLSON & RAUTH  
INVESTMENT PARTNERSHIP OF 1982

By \_\_\_\_\_  
C. Craig Carlson, Partner

STRADLING, YOCCA, CARLSON & RAUTH  
PROFIT SHARING PLAN

By: California Central Trust Bank, Trustee

By \_\_\_\_\_

COMMON HOLDERS:

GUERBET, S.A.

By \_\_\_\_\_

ABS EMPLOYEES VENTURE FUND  
LIMITED PARTNERSHIP

By: Alex. Brown Investments Incorporated,  
General Partner

By \_\_\_\_\_  
Mayo A. Shattuck, III, President

STRADLING, YOCCA, CARLSON & RAUTH  
INVESTMENT PARTNERSHIP OF 1982

By /s/ C. Craig Carlson  
\_\_\_\_\_  
C. Craig Carlson, Partner

STRADLING, YOCCA, CARLSON & RAUTH  
PROFIT SHARING PLAN

By: California Central Trust Bank, Trustee

By /s/ Victoria L. Brown  
\_\_\_\_\_  
Trust Officer, 5/30/96

EXHIBIT 1

COMMON HOLDERS

<TABLE> <CAPTION> Name and Address of Shareholder -----	No. of Shares of Common Stock -----
<S> Guerbet, S.A. Boite Postale 50400 95943 Roissy CDG Cedex - France With a Copy to: Olivier Lendowner - Manager, Legal Affairs	<C> 549,410
ABS Employees Venture Fund Limited Partnership 135 East Baltimore Street Baltimore, Maryland 21202	35,720
Stradling, Yocca, Carlson & Rauth Investment Partnership of 1982 660 Newport Center Drive, Suite 1600 Newport Beach, California 92660	2,595
Stradling, Yocca, Carlson & Rauth Profit Sharing Plan c/o California Central Trust Bank, Trustee 3080 South Bristol Street, 2nd Floor Costa Mesa, California 92626	7,583
TOTAL:	595,308 =====

</TABLE>

Exhibit 1-i

EXHIBIT 2

HOLDERS

Name and Address -----	No. of Shares of Common Stock -----
<S>	<C>
Abbott Laboratories Department 0322, AP6D 100 Abbott Park Road Abbott Park, Illinois 60064-3500 With a copy to: Thomas C. Freyman Vice President & Treasurer Dept. B 312/AP 6D & Jose M. de Lasa, Esq. Senior Vice President, Secretary & General Counsel Dept. 364/AP 6D	625,000 (Abbott currently holds a warrant exercisable into 500,000 shares of Common Stock. Pursuant to the terms of that certain Agreement dated May 14, 1996 between the Company and Abbott, Abbott may be issued an additional warrant to purchase 125,000 shares of Common Stock.)
Aperture Associates, L.P.* 505 Montgomery Street San Francisco, California 94111 With a copy to: Alfred J. Giuffrida, Partner Nixon, Hargrave, Devans & Doyle Clinton Square - P.O. Box 1051 Rochester, New York 14603	395,976
Crosspoint Venture Partners III* 18552 MacArthur Boulevard, Suite 400 Irvine, California 92715	841,448
Daichi Pharmaceutical Co., Ltd. 14-10, Nihonbashi 3-Chome Chuo-Ku, Tokyo 103 Japan	462,857
Enterprise Partners II, L.P.* 5000 Birch Street, Suite 6200 Newport Beach, California 92660	771,328
Enterprise Partners II Associates, L.P.* 5000 Birch Street, Suite 6200 Newport Beach, California 92660	70,120
Mallinckrodt Medical, Inc. 675 McDonnell Boulevard - P.O. Box 5840 St. Louis, Missouri 63134	35,145
Steven C. Quay, M.D., Ph.D. c/o SONUS Pharmaceuticals, Inc. 22026 20th Avenue, S.E., Suite 102 Bothell, Washington 98021	1,410,295

Exhibit 2-i

Name and Address -----	No. of Shares of Common Stock -----
<S>	<C>
Utah Ventures* 419 Wakara Way, Suite 206 Salt Lake City, Utah 84108 With a Copy to: Allan M. Wolfe, M.D. VOXEL 26081 Merit Circle, Suite 117 Laguna Hills, California 92653	296,982
TOTAL SHARES OF COMMON STOCK HELD BY SERIES A PURCHASERS	2,375,854 =====



TOTAL SHARES OF  
COMMON STOCK HELD  
BY ALL HOLDERS

4,909,151  
=====

</TABLE>

- -----  
\* Series A Purchasers

EXHIBIT 2-ii

EXHIBIT 3

WARRANT HOLDERS

<TABLE>  
<CAPTION>

Holder		No. of Warrants to Purchase Common Stock
-----		-----
<S>	<C>	<C>
Crosspoint Venture Partners III		111,266
Enterprise Partners II, L.P.		101,996
Enterprise Partners II Associates, L.P.		9,268
Aperture Associates, L.P.		52,358
Utah Ventures		26,114
Steven C. Quay, M.D., Ph.D.		15,293
		-----
	TOTAL:	316,295
		=====

</TABLE>

Exhibit 3-i

[SONUS LETTERHEAD]

Copy Via Facsimile 011 33 1 4591 5199  
Original Via U.S. Mail

June 28, 1996

Philippe Barthelet  
Directeur Administratif et Financier  
GUERBET S.A.  
Z.I. Paris Nord II  
Boile postale 50400  
95943 Roissy Charles de Gaulle  
Cedex - FRANCE

Dear Mr. Barthelet:

On June 14, 1996, SONUS Pharmaceuticals, Inc. ("SONUS") delivered to Guerbet S.A. ("Guerbet") a copy of the Phase II Cardiology Study, including myocardial perfusion. Accordingly, under the terms of the Letter Agreement dated October 27, 1994, as amended by those certain letters dated July 27, 1995, August 16, 1995 and August 17, 1995 (the "Letter Agreement"), the period during which Guerbet may determine to exercise its option to acquire rights to EchoGen(R) will expire on July 14, 1996. SONUS recognizes that it will be difficult for Guerbet to fully review and comprehend the data included with the Phase II Cardiology Study within such thirty (30) day period, in particular since this falls in the French vacation period. Accordingly, SONUS hereby agrees that the Option Period (as defined in the Letter Agreement) will be revised and extended to terminate upon the earlier to occur of the following: (i) thirty (30) days following written notice from SONUS to Guerbet specifying that the Option Period will expire thirty (30) days from the date of such written notice; or (ii) September 30, 1996.

If you are in agreement with the foregoing, please so indicate by executing a copy of this letter in the space provided below.

Sincerely,

SONUS Pharmaceuticals, Inc.

/s/ STEVEN C. QUAY, M.D., Ph.D.

Steven C. Quay, M.D., Ph.D.  
President and Chief Executive Officer

SCQ:jh

AGREED TO AND ACCEPTED: GUERBET S.A.

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

EXHIBIT 11.1

SONUS PHARMACEUTICALS, INC.

COMPUTATION OF NET INCOME (LOSS) PER SHARE

<TABLE>  
<CAPTION>

Ended 30,	Three Months Ended		Six Months	
	June 30,		June	
	1996	1995	1996	
1995				-
<S>	<C>	<C>	<C>	
Net income (loss) . . . . .	\$ 980,922	\$ (1,624,111)	\$ (3,726,782)	\$
(890,983)				
Weighted average shares outstanding . . . . .	8,461,220	2,050,032	8,455,550	
3,330,201				
Net effect of common stock equivalents calculated using the treasury stock method at the average quarterly price of \$18.64 per share, and treated as outstanding for all periods presented . . . .	629,725	-	-	
-				
Shares used in computation of net income (loss) per share. . . . .	9,090,945	2,050,032	8,455,550	
3,330,201				
Net income (loss) per share . . . . .	\$ 0.11	\$ (0.79)	\$ (0.44)	\$
(0.27)				

</TABLE>

EXHIBIT 11.2

SONUS PHARMACEUTICALS, INC.

COMPUTATION OF PRO FORMA NET INCOME (LOSS) PER SHARE

<TABLE>  
<CAPTION>

	Three Months Ended June 30, 1995	Six Months Ended June 30, 1995
	-----	-----
<S>	<C>	<C>
Net loss . . . . .	\$ (1,624,111)	\$ (890,983)
Add interest on deferred revenue . . . . .	35,963	128,502
	-----	-----
	\$ (1,588,148)	\$ (762,481)
	=====	=====
Weighted average shares outstanding . . . . .	1,952,836	1,969,332
Weighted average common shares giving effect to the conversion of preferred stock into common stock for all periods subsequent to issuance . . . . .	2,325,219	2,325,219
Net effect of stock options exercised and stock options and warrants granted during the 12 months prior to the Company's filing of its initial public offering, at less than offering price, calculated using the treasury stock method at the offering price of \$7 per share, and treated as outstanding for all periods presented . .	97,196	192,712
Weighted average common shares giving effect to the conversion of the convertible subordinated debenture into common stock using the initial public offering price of \$7 per share . . . . .	462,857	462,857
Weighted average common shares giving effect to the conversion of \$3.6 million of deferred revenue from the time of receipt, plus accrued interest at the initial public offering price of \$7 per share . . . . .	536,334	467,809
	-----	-----
Shares used in computation of pro forma net loss per share . . . . .	5,374,442	5,417,929
	=====	=====
Pro forma net loss per share . . . . .	\$ (0.30)	\$ (0.14)
	=====	=====

</TABLE>

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<PERIOD-END>	JUN-30-1996
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<INVENTORY>	0
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<PP&E>	2,186
<DEPRECIATION>	994
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<CURRENT-LIABILITIES>	8,748
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<PREFERRED-MANDATORY>	0
<PREFERRED>	0
<COMMON>	34,216
<OTHER-SE>	(22,877)
<TOTAL-LIABILITY-AND-EQUITY>	11,339
<SALES>	0
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<CGS>	0
<TOTAL-COSTS>	8,620
<OTHER-EXPENSES>	0
<LOSS-PROVISION>	0
<INTEREST-EXPENSE>	129
<INCOME-PRETAX>	(3,647)
<INCOME-TAX>	80
<INCOME-CONTINUING>	0
<DISCONTINUED>	0
<EXTRAORDINARY>	0
<CHANGES>	0
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<EPS-DILUTED>	(.44)

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