U.S. SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

FORM 10-Q

(MARK ONE)

[X] QUARTERLY REPORT UNDER SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
FOR THE QUARTERLY PERIOD ENDED: JUNE 30, 1998

OR

[ ] TRANSITION REPORT UNDER SECTION 13 OR 15(d) OF THE EXCHANGE ACT
FOR THE TRANSITION PERIOD FROM TO

COMMISSION FILE NUMBER: 0-26520

NEOPROBE CORPORATION
(Exact Name of Registrant as Specified in Its Charter)

DELAWARE	31-1080091
(State or Other Jurisdiction of Incorporation or Organization)	(I.R.S. Employer Identification No.)

425 METRO PLACE NORTH, SUITE 300, DUBLIN, OHIO 43017
(Address of Principal Executive Offices)

REGISTRANT'S TELEPHONE NUMBER, INCLUDING AREA CODE: 614-793-7500

Indicate by check whether the registrant: (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

22,885,017 SHARES OF COMMON STOCK, PAR VALUE $.001 PER SHARE
(Number of shares of issuer's common equity outstanding as of the close of business on August 7,1998)

PART I - FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

NEOPROBE CORPORATION AND SUBSIDIARIES
(A DEVELOPMENT STAGE COMPANY)
CONSOLIDATED BALANCE SHEETS

<TABLE>
<CAPTION>

	DECEMBER 31, 1997	JUNE 30, 1998
ASSETS		

Current assets:

Cash and cash equivalents	$ 9,921,025	$ 6,018,878
Available-for-sale securities	14,672,496	5,019,968
Accounts receivable	793,376	971,332
Inventory	413,024	1,007,426
Note receivable	1,500,000	0
Prepaid expenses and other current assets	2,001,378	1,530,961
Total current assets	29,301,299	14,548,565
Property and equipment at cost:		
Equipment, net of accumulated depreciation	6,667,763	7,378,558
Construction in progress	3,757,133	4,228,423
	10,424,896	11,606,981
Intangible assets, net of accumulated amortization	1,715,834	2,019,936
Other assets	131,375	1,624,358
Total assets	$41,573,404	$29,799,840

</TABLE>

The accompanying notes are an integral part of the consolidated financial statements.

NEOPROBE CORPORATION AND SUBSIDIARIES
(A DEVELOPMENT STAGE COMPANY)
CONSOLIDATED BALANCE SHEETS

<TABLE>
<CAPTION>

	DECEMBER 31, 1997	JUNE 30, 1998
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 3,848,172	$ 1,906,817
Accrued expenses	2,743,293	2,296,644
Notes payable	202,615	492,813
Capital lease obligation, current	156,140	124,733
Total current liabilities	6,950,220	4,821,007
Long term debt	1,813,437	4,345,449
Capital lease obligation	255,355	205,952
Total liabilities	9,019,012	9,372,408
Commitments and contingencies		
Stockholders' equity:		
Preferred stock; $.001 par value; 5,000,000 shares authorized at December 31, 1997 and June 30, 1998; none outstanding (500,000 shares designated as		

Series A, $.001 par value, at June 30, 1998; none outstanding)	0	0
Common stock; $.001 par value; 50,000,000 shares authorized; 22,763,430 shares issued and outstanding at December 31, 1997; 22,840,017 shares issued and outstanding at June 30, 1998	22,763	22,840
Additional paid in capital	120,034,876	120,231,097
Deficit accumulated during the development stage	(87,362,531)	(99,687,199)
Unrealized (loss) gain on available-for-sale securities	(9,290)	2,142
Cumulative foreign currency translation adjustment	(131,426)	(141,448)
Total stockholders' equity	32,554,392	20,427,432
Total liabilities and stockholders' equity	$ 41,573,404	$ 29,799,840

</TABLE>

The accompanying notes are an integral part of the consolidated financial statements.

NEOPROBE CORPORATION AND SUBSIDIARIES
(A DEVELOPMENT STAGE COMPANY)
CONSOLIDATED STATEMENTS OF OPERATIONS

<TABLE>
<CAPTION>

	THREE MONTHS ENDED JUNE 30,		SIX MONTHS ENDED JUNE 30,		NOVEMBER 16, 1983 (INCEPTION) TO JUNE 30,
	1997	1998	1997	1998	1998
<S>	<C>	<C>	<C>	<C>	<C>
Net sales	$ 1,051,871	$ 1,255,033	$ 2,176,845	$ 2,118,924	$ 11,305,838
Cost of goods sold	199,968	340,584	692,909	565,057	4,269,053
Gross profit	851,903	914,449	1,483,936	1,553,867	7,036,785
Operating expenses:					
Research and development	5,734,054	3,615,469	9,184,988	8,842,165	73,398,303
Marketing and selling	955,442	1,122,537	1,812,347	2,218,514	8,056,820
General and administrative	1,992,687	1,561,934	3,626,969	3,166,536	34,246,151
Total operating expenses	8,682,183	6,299,940	14,624,304	14,227,215	115,701,274
Loss from operations	(7,830,280)	(5,385,491)	(13,140,368)	(12,673,348)	(108,664,489)
Other income (expenses):					
Interest income	623,062	195,365	1,207,665	449,456	6,371,636
Interest expense	(3,696)	(41,473)	(9,848)	(52,096)	(619,581)
Other	(24,291)	(29,457)	(18,582)	(48,680)	3,225,235
Total other income	595,075	124,435	1,179,235	348,680	8,977,290

Net loss	$ (7,235,205)	$ (5,261,056)	$(11,961,133)	$(12,324,668)	$ (99,687,199)
Net loss per common share (basic and diluted)	$ (0.32)	$ (0.23)	$ (0.53)	$ (0.54)	
Weighted average shares outstanding during the period	22,749,713	22,824,342	22,701,093	22,793,243	

</TABLE>

NEOPROBE CORPORATION AND SUBSIDIARIES

(A DEVELOPMENT STAGE COMPANY)

CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS

<TABLE>
<CAPTION>

	THREE MONTHS ENDED JUNE 30,		SIX MONTHS ENDED JUNE 30,		NOVEMBER 16, 1983 (INCEPTION) TO JUNE 30,
	1997	1998	1997	1998	1998
<S>	<C>	<C>	<C>	<C>	<C>
Net loss	$(7,235,205)	$(5,261,056)	$(11,961,133)	$(12,324,668)	$(99,687,199)
Other comprehensive (losses) gains	(27,306)	10,599	(216,798)	1,410	(139,306)
Comprehensive loss	$(7,262,511)	$(5,250,457)	$(12,177,931)	$(12,323,258)	$(99,826,505)

</TABLE>

The accompanying notes are an integral par
of the consolidated financial statements.

NEOPROBE CORPORATION AND SUBSIDIARIES
(A DEVELOPMENT STAGE COMPANY)
CONSOLIDATED STATEMENTS OF CASH FLOWS

<TABLE>
<CAPTION>

	SIX MONTHS ENDED JUNE 30,		NOVEMBER 16, 1983 (INCEPTION) TO JUNE 30,
	1997	1998	1998
<S>	<C>	<C>	<C>
Net cash used in operating activities	$(11,815,631)	$(14,559,929)	$ (90,923,523)
Cash flows from investing activities:			
Purchases of available-for-sale securities	(5,986,812)	(1,738,512)	(109,901,702)
Proceeds from sales of available-for-sale securities	1,793,963	2,121,775	49,996,037
Maturities of available-for-sale securities	7,739,201	9,300,000	55,003,943
Purchases of property and equipment	(2,566,638)	(1,641,658)	(12,850,256)

Other	(69,211)	(314,102)	(1,351,134)
Net cash provided by (used in) investing activities	910,503	7,727,503	(19,103,112)
Cash flows from financing activities:			
Proceeds from issuance of common stock, net	705,571	196,298	102,731,988
Proceeds from bank loans	0	2,807,762	4,621,199
Repayments of bank loans	0	(275,750)	(275,750)
Other	497,567	209,361	9,006,086
Net cash provided by (used in) financing activities	1,203,138	2,937,671	116,083,523
Effect of exchange rate changes on cash	(9,606)	(7,392)	(38,010)
Net increase (decrease) in cash and cash equivalents	(9,711,596)	(3,902,147)	6,018,878
Cash and cash equivalents at beginning of period	30,168,412	9,921,025	0
Cash and cash equivalents at end of period	$ 20,456,816	$ 6,018,878	$ 6,018,878

</TABLE>

The accompanying notes are an integral part of the consolidated financial statements.

NEOPROBE CORPORATION AND SUBSIDIARIES
(A DEVELOPMENT STAGE COMPANY)

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

1. BASIS OF PRESENTATION

The information presented for June 30, 1997 and 1998, and for the periods then ended is unaudited, but includes all adjustments (which consist only of normal recurring adjustments) which the management of Neoprobe Corporation (the "Company") believes to be necessary for the fair presentation of results for the periods presented. Certain information and footnote disclosures normally included in financial statements prepared in accordance with generally accepted accounting principles have been condensed or omitted pursuant to the rules and regulations of the Securities and Exchange Commission. The results for the interim period are not necessarily indicative of results to be expected for the year. The financial statements should be read in conjunction with the Company's audited financial statements for the year ended December 31, 1997, which were included as part of the Company's Annual Report on Form 10-K. Certain 1997 amounts have been reclassified to conform with the 1998 presentation.

Included in other assets at June 30, 1998 is an investment in XTL Biopharmaceuticals Ltd. ("XTL"). The investment resulted from the conversion of a note receivable from XTL which was held by the Company related to an Investment Research and Development Agreement. The debenture was due on February 13, 1998 and bore interest at 5% payable annually. On January 30, 1998, the Company exercised its option to convert the debentures into 443,690 shares of Class A Common stock of XTL.

In June 1997, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No.130 ("FAS 130") "Reporting

Comprehensive Income." This Statement establishes standards for reporting and display of comprehensive income in a full set of general purpose financial statements. The Company adopted FAS 130 as of January 1, 1998. Other comprehensive losses of the Company include the effects of translation gain or loss related to the Company's foreign operations and unrealized gains and losses on available-for-sale securities.

The Company is a development stage enterprise engaged in the development and commercialization of technologies for the diagnosis and treatment of cancers. There can be no assurance that the Company will be able to commercialize its proposed products. There can also be no assurance that adequate financing will be available when needed or on terms attractive to the Company.

2. INVENTORY

The components of inventory are as follows:

	DECEMBER 31, 1997	JUNE 30, 1998
Materials and component parts	$ 36,890	$ 39,781
Work-in-process	145,234	295,525
Finished goods	230,900	672,120
	$ 413,024	$1,007,426

3. LONG-TERM DEBT

Neoprobe (Israel) Ltd. ("Neoprobe (Israel)"), a 95%-owned subsidiary of the Company, is completing construction of a radiolabeling facility near Dimona, Israel, for use in future operations of the Company. Construction of the facility is being partially financed under a $9.9 million investment program approved by the state of Israel's Finance Committee (the "Committee"). Under the approved program, Neoprobe (Israel) is entitled to government grants and government loan guarantees equal to a percentage of the total loan taken for the construction and operation of the facility. Amounts received under the agreement are collateralized by certain property obtained through the use of proceeds received. The investment program is scheduled to expire in September 1998; however, the Company is negotiating to extend the grant portion of the program for an additional year. As of June 30, 1998, Neoprobe (Israel) has received $4.4 million and $1.2 million in the form of loans and grants, respectively.

In April 1998, the Company executed a $3 million revolving line of credit arrangement with a bank. Available borrowings under the line of credit are based on a formula of eligible accounts receivable and inventory. Interest on the line of credit is based on the prime rate or LIBOR, as elected by the Company. As of June 30, 1998, approximately $400,000 was outstanding under the line of credit. The line of credit has restrictive covenants or limitations regarding permitted indebtedness of the Company, the sale of assets, tangible net worth, available cash and investment balances and other financial ratios. The Company was in compliance with all covenants of the line of credit as of June 30, 1998. As of July 31, 1998 the Company was in violation of one of the covenants; however, the Company has obtained a waiver of the covenant from the bank.

4. STOCK OPTIONS

During the first half of 1998, the Board granted options to employees

and certain directors of the Company under the 1996 Stock Incentive Plan (the "Plan") for 399,000 shares of common stock, exercisable at $5.63 per share, vesting over three to four years. The Company has 2.0 million options outstanding under two stock option plans. Of the outstanding options, 1.1 million options have vested as of June 30, 1998, at an average exercise price of $6.97 per share.

5. AGREEMENTS

In April 1998, the Company executed an agreement with Ethicon Endo-Surgery, Inc. ("EES"), a Johnson & Johnson company to market and promote the Neoprobe(R) 1500 Portable Radioisotope Detector and its 14mm and 19mm reusable probes for gamma guided lymphatic mapping and minimally invasive surgery. During the initial one-year term of the agreement, EES will promote and sell the aforementioned products and train physicians in the use of Neoprobe's devices. EES will immediately begin marketing activities in the United States while the companies discuss expanding the agreement to cover other geographic areas. In exchange for promoting and selling the device products, EES will receive sales commissions based on sales of the aforementioned products.

The Company and Cira Technologies, Inc. ("Cira") entered into a License and Option Agreement (the "Agreement") dated April 1, 1998 which replaced the Technology Option Agreement between the Company and Cira dated March 1996. The Company's chairman is a director and shareholder of Cira. Under the terms of the Agreement, Cira granted the Company an exclusive, royalty bearing license to make, have made, use and sell products ("Licensed Products") containing activated lymph node derived cells for the treatment of human immunodeficiency virus ("HIV") infected human patients including HIV-infected human patients co-infected with other viruses. In exchange for the license, the Company agreed to continue funding of an ongoing pilot study on HIV, to pay Cira up to $50,000 to fund research activities at Cira as incurred, to pay royalties at variable rates based on sales of Licensed Product, and to prepare a research plan outlining the research to be conducted to support a Biologic License Application ("BLA") or a New Drug Application ("NDA") to be filed with the United States Food and Drug Administration ("FDA"). No royalties are due to Cira until the Company recovers out-of-pocket expenditures for research and development through net sales of Licensed Product, up to a maximum of $2 million.

6. CONTINGENCIES

The Company is subject to legal proceedings and claims which arise in the ordinary course of its business. In the opinion of management, the amount of ultimate liability with respect to these actions will not materially affect the financial position of the Company.

Due to anticipated changes in the production of RIGScan CR49, it was determined that Neoprobe Europe AB ("Neoprobe Europe"), the Company's biologics manufacturing and purification facility located in Lund, Sweden, was no longer critical to the manufacturing process, and that research and development activities being carried on at the facility could be performed more efficiently elsewhere. As a result, the Company took action in the second quarter to initiate the sale of Neoprobe Europe. As of June 30, 1998, activities regarding the potential sale are still in the preliminary stages, and management is unable to estimate the effect on the Company's financial position. However, management does not believe the $2.5 million book value of the net assets of Neoprobe Europe to be impaired at this time.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

This Management Discussion and Analysis of Financial Condition and Results of Operations and other parts of this Report contain forward-looking statements that involve risks and uncertainties. The Company's actual results in 1998 and

future periods may differ significantly from the prospects discussed in the forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, government regulations, absence of government approval for marketing the Company's products, limited revenues, continuing net losses, accumulated deficit, uncertainty of capital funding for future capital needs, dependence on patents, proprietary technology and trade secrets, limited marketing experience, limited manufacturing capacity and experience, dependence on principal product line, uncertainty of market acceptance, no assurance of continued rights to targeting agents, royalty payments, competition, limited third party reimbursement, risk of technological obsolescence, possible volatility of stock price, anti-takeover provisions, product liability, dependence on key personnel, ability to attract new personnel, and ability to manage a changing business.

LIQUIDITY AND CAPITAL RESOURCES

Since inception, the Company has financed its operations primarily through private and public offerings of its equity securities, from which it has raised gross proceeds of approximately $120 million. As of June 30, 1998, the Company had cash, cash equivalents, and available-for-sale securities of $11 million. To date, the Company has devoted substantially all of its efforts and resources to research and clinical development of innovative systems for the intraoperative diagnosis and treatment of cancers. During the first quarter of 1998, the Company implemented a business plan to reduce operating expenses and focus on three main business activities: commercializing the Company's first RIGS(R) system (radioimmunoguided surgery) product, called RIGScan(R) CR49 (125)I - CC49 monoclonal antibody) for the surgical detection of metastatic colorectal cancer, increasing the Company's market position in gamma guided surgery applications, and developing activated cellular therapy products for cancer and viral diseases. During the first half of 1998, the Company reduced its domestic staff which decreased its projected annual compensation expense by approximately $1.5 million compared to prior year levels and postponed certain research projects which were originally planned to be carried out in 1998.

The RIGS system integrates radiolabeled targeting agents and radiation detection instruments. The Company is developing both the radiolabeled targeting agents and radiation-detection instrument components of the RIGS technology. Prior to 1996, the Company completed testing in a Phase III clinical trial for the detection of metastatic colorectal cancer. In addition, the Company has completed testing in a separate Phase III clinical trial for the detection of primary colorectal cancer. The Company must obtain regulatory approval to market its products before commercial revenue can be generated. During 1996, the Company submitted applications to the European regulatory agencies and to the FDA to request permits to begin marketing and selling the Company's RIGS products for the detection of metastatic colorectal cancer. In November 1997, the Company withdrew its application from the

European Agency for the Evaluation of Medicinal Products ("EMEA") as a result of additional requests for information from the European Committee for Proprietary Medicinal Products ("CPMP"). In addition, in December 1997, the FDA's Center for Biologics Evaluation and Research ("CBER") completed its review of data submitted by the Company for its product and informed the Company in a non-approvable response letter that additional information must be provided before the FDA can further consider the approval of the Company's product. Both agencies requested additional information to demonstrate the prospective clinical benefit of RIGScan CR49 in addition to the diagnostic findings, which led the Company to withdraw its European application.

During the first half of 1998, the Company has been in discussions with the FDA to address the clinical and manufacturing questions outlined in their December 1997 response letter. The Company is completing preparation of action plans which have been preliminarily reviewed and agreed to by the FDA. These action plans involve a proposed clinical trial design which would involve both RIGS and control group patients and involve interim analysis of clinical results. The Company intends to submit amendments to its existing Biologic License Application (BLA) in approximately 24 months following commencement of planned

clinical testing and manufacturing validation activity. However, the Company does not currently intend to initiate activity under such action plans until a development partner for the RIGS system has been engaged. The Company has engaged the services of Lehman Brothers to assist in securing development partners and in the strategic assessment of the Company's business. There can be no assurance that the Company will be able to engage a development partner on a timely basis, on favorable terms, or at all. The FDA has advised the Company that the BLA will be reviewed within 90 days of the final amended submission. The Company intends to submit a new European application for RIGScan CR49 concurrent with its final BLA amendment.

In October 1997, the Company launched the Neoprobe(R) 1500 Portable Radioisotope Detector in response to an emerging new surgical technique called lymphatic mapping for treating patients with melanoma, a potentially deadly form of skin cancer. Lymphatic mapping represents a less invasive surgical technique than existing techniques for staging cancer or determining whether the cancer has spread to the lymph nodes. Surgeons are using the lymphatic mapping technique for treating patients with melanoma and investigating its use in patients with breast cancer as well. The Company is currently selling the Neoprobe 1500 Portable Radioisotope Detector for the lymphatic mapping application and expanding its line of instruments to provide a variety of gamma-detecting probes for specialized uses. In March 1998, the Company introduced a smaller (14mm diameter) detection probe whose performance has been optimized for use in lymphatic mapping procedures. The Company recorded revenue of $1.25 million and $2.1 million during the second quarter and the first half of 1998, respectively, predominantly related to sales of instruments used in application of the lymphatic mapping technique.

As a result of its RIGScan CR49 research, the Company is studying the safety and efficacy of a RIGS based autologous Activated Cellular Therapy (RIGS/ACT(TM)) for cancer, which boosts the patient's own immune system by removing lymph nodes targeted by RIGScan CR49 during surgery and then, in a cell processing facility, activating and expanding "helper" T-cells found in the nodes. Within 10 to 14 days, the patient's own immune cells, now activated and numbering more than 20 billion, are infused into the patient to trigger an effective immune response to the cancer. An in vitro program has shown significant chemotherapy enhancement in a number of tumor cell lines for a variety of chemotherapeutic agents. The in vitro assessment correlates with an observation of potential chemotherapy enhancement in an earlier Phase I clinical study of unresectable colorectal patients. The Company recently opened its first Investigational New Drug (IND) application for Phase I/II and Phase II multicenter trials with RIGS/ACT for resectable and unresectable colorectal cancer patients.

In addition, the Company has begun to evaluate the application of a non-RIGS based ACT therapy for the treatment of chronic viral diseases. Non-RIGS/ACT uses peripheral lymph nodes, obtained in an outpatient setting, as its initial culture material. After using the Company's activation and expansion procedures, the cells are infused in 10-14 days. A Phase I study has been completed with HIV/AIDS patients with encouraging results. Also, the Company recently opened a new Phase I trial in additional viral diseases, extending the use of activated cellular therapy in patients co-infected with HIV/AIDS and chronic active hepatitis B or C. In addition, the Company has been working with researchers to isolate and characterize a soluble factor which appears to be present in the lymph nodes of both cancer and viral disease patients.

The Company and Cira entered into a License and Option Agreement (the "Agreement") dated April 1, 1998 which replaced the Technology Option Agreement between the Company and Cira dated March 1996. The Company's chairman is a director and shareholder of Cira. Under the terms of the Agreement, Cira granted the Company an exclusive, royalty bearing license to make, have made, use, and sell products ("Licensed Products") containing activated lymph node derived cells for the treatment of HIV infected human patients including HIV-infected human patients co-infected with other viruses. In exchange for the license, the Company agreed to continue funding of an ongoing study on HIV, pay Cira up to $50,000 to fund research activities at Cira as incurred, to pay royalties at variable rates based on sales of Licensed Product, and to prepare a research

plan outlining the research to be conducted to support a BLA or an NDA to be filed with the FDA. No royalties are due to Cira until the Company recovers out-of-pocket expenditures for research and development through net sales of Licensed Product, up to a maximum of $2 million.

For the period from inception to June 30, 1998, the Company has incurred cumulative net losses of approximately $99.7 million. The Company does not currently have a RIGS product approved for commercial sale in any major market and does not anticipate commercial sales of sufficient volume to generate positive cash flow from operations until 2001, at the earliest. The Company has incurred, and will continue to incur, substantial expenditures for research and development activities related to bringing its products to the commercial market. The Company intends to devote significant additional funds to clinical testing, manufacturing validation, and other activities required for regulatory review and commercialization of its products. The amount of funds and length of time required to complete such testing will depend upon the outcome of regulatory reviews. The regulatory bodies may require more testing than is anticipated by the Company. There can be no assurance that the Company's RIGS products will be approved for marketing by the FDA or any foreign government agency, or that any such products will be successfully introduced or achieve market acceptance.

As of June 30, 1998, the Company had cash and cash equivalents and available-for-sale securities of $11 million. The Company currently anticipates that approximately $3.5 million in cash will be used to finance operating activities during the second half 1998 and that the Company will end the year with a cash balance of approximately $7.5 million. The Company is actively pursuing sources of improving its projected liquidity position as of December 31, 1998. In April 1998, the Company executed a $3 million revolving line of credit arrangement with a bank. As of June 30, 1998, $424,000 was outstanding under the line of credit. The line of credit has restrictive covenants or limitations regarding permitted indebtedness of the Company, the sale of assets, tangible net worth, available cash and investment balances and other financial ratios. The Company was in compliance with all covenants of the line of credit as of June 30, 1998. As of July 31, 1998 the Company was in violation of one of the covenants; however, the Company has obtained a waiver of the covenant from the bank.

The Company anticipates an approximately 70% increase in sales during the second half of 1998 compared to the same period in 1997 due to increased sales volumes to be developed in conjunction with EES, the Company's marketing partner for ILM, at prices and margins similar to what has been achieved during the first half of 1998. However, there can be no assurance that the increase in sales volumes and revenue will occur or that the prices and margins achieved on instrument sales in the first half of 1998 will be able to be maintained. The Company also expects to receive approximately $3 million in milestone payments and/or gain on the sale of long-term investments and other non-strategic assets such as the Neoprobe Europe facility. However, there can be no assurance that these milestones will be received or that the gains on the sale of long-term investments or non-strategic assets will be realized. The Company also expects to experience cost savings during the second half of 1998 as a result of the delayed in initiation of activity related to its RIGS action plans until a development partner for the RIGS system has been engaged. The Company has engaged the services of Lehman Brothers to assist in securing development partners and in the strategic assessment of the Company's business. There can be no assurance that the Company will be able to engage a development partner or partners on a timely basis, on favorable terms, or at all. If the Company does not receive this anticipated cash, it will need to obtain additional financing in 1999 in order to continue its present business plan or it will have to modify its business plan. Such financing may require sales of equity securities that could be dilutive to current holders of common stock, debt financing which may be on unfavorable terms or asset dispositions that could force the Company to change its business plan.

At December 31, 1997, the Company had U.S. net operating tax loss carryforwards of approximately $75.8 million to offset future taxable income through 2012. Additionally, the Company has U.S. tax credit carryforwards of approximately $2.2 million available to reduce future income tax liability through 2012. Under Section 382 of the Internal Revenue Code of 1986, as amended, use of prior tax loss carryforwards is limited after an ownership change. As a result of ownership changes which occurred in March 1989 and in September 1994, the Company's tax loss carryforwards and tax credit carryforwards are subject to the limitations described by Section 382. The

Company's international subsidiaries also have net operating tax loss carryforwards in their respective foreign jurisdictions.

The Company cannot assure if marketing approvals will be received without additional substantial expenses or delays, or at all. However, if and when the Company receives permission from the regulatory authorities to begin marketing its products, additional costs for marketing and distribution will be incurred. The Company has executed various agreements with third parties that supplement the technical and business capabilities of the Company. The Company is generally obligated to such parties to pay royalties or commissions upon commercial sale of the related product. The Company's estimate of its allocation of cash resources is based on the current state of its business operations, its current business plan, and current industry and economic conditions, and is subject to revisions due to a variety of factors including without limitation, additional expenses related to marketing and distribution, regulatory licensing and research and development, and to reallocation among categories and to new categories. The Company may need to supplement its funding sources from time to time.

Neoprobe Europe AB, formerly called (New)MonoCarb AB, is a wholly-owned subsidiary of the Company, located in Lund, Sweden, where it operates a biologics manufacturing and purification facility. The Company uses the facility to perform research and development activities and prepare the CC49 monoclonal antibody produced by Bio-Intermediair BV for final radiolabeling. Due to anticipated changes in the production of RIGScan CR49, it was determined that the facility was no longer critical to the manufacturing process, and that research and development activities being carried on at the facility could be performed more efficiently elsewhere. As a result, the Company took action in the second quarter to initiate the sale of Neoprobe Europe. As of June 30, 1998, activities regarding the potential sale are in the preliminary stages and management is unable to estimate the effect on the Company's financial position. However, management does not believe the $2.5 million book value of the net assets of Neoprobe Europe to be impaired at this time. The Company advanced funds to Neoprobe Europe during the first half of 1998 to cover operating and capital expenditures of approximately $773,000. The Company anticipates advancing an additional $650,000 during the remainder of 1998 to cover operating and capital expenditures.

In 1994, the Company formed Neoprobe (Israel) to construct and operate a radiolabeling facility near Dimona, Israel, for radiolabeling of the Company's targeting agents. The Company owns 95 percent of Neoprobe (Israel), with Rotem Industries Ltd. ("Rotem"), the private arm of the Israeli atomic energy authority, owning the balance and managing the facility. Construction of the facility is being financed through a financial program approved by the state of Israel's Finance Committee (the "Committee"). The total amount of the approved program is $9.9 million. Neoprobe (Israel) is entitled to receive grants based on a percentage of its investment and a government guarantee of 75% to 85% of the principal balance of bank loans taken to build and operate the facility. The investment program is scheduled to expire in September 1998; however, the Company is negotiating to extend the grant portion of the program for an additional year. During the first half of 1998, the Company received loan proceeds of approximately $2.6 million under the government sponsored program. The Company expects to receive an additional $800,000 in loan and grant proceeds under the approved program during 1998. The Company does not anticipate advancing any significant amount of funds to Neoprobe (Israel) during 1998.

The Company has performed a preliminary assessment of the year 2000 issue as it relates to the Company's information systems and vendor supplied application software. Based on these assessments, management does not anticipate any significant impact on the Company as a result of implications associated with that issue.

RESULTS OF OPERATIONS

Since inception, the Company has dedicated substantially all of its resources to research and development of its RIGS system for the intraoperative diagnosis and treatment of cancer. Until the appropriate regulatory approvals are received,

the Company is limited in its ability to generate revenue. During the second quarter and first half of 1998, the Company generated sales of Neoprobe 1500 systems of $864,000 and $1.25 million, respectively. Results of operations for the second quarter and first half of 1998 include approximately $800,000 in reorganization costs associated with the adoption of the Company's new business plan.

Research and development expenses during the first half of 1998 were $8.8 million, or 62% of operating expenses for the period. Marketing and selling expenses were $2.2 million, or 16% of operating expenses during the period and general and administrative expenses were $3.2 million, or 22% of operating expenses for the period. The Company anticipates that 1998 total operating expenses will decrease over 1997 in relation to expected increases in sales. The Company expects research and development and general and administrative expenses to decrease from 1997 levels as a result of the refocused business plan adopted in February. However, the Company also expects marketing and selling expenses to increase from 1997 levels.

Three Months ended June 30, 1998, and 1997.

Revenue and Other Income

The Company had net sales of approximately $1.25 million during the second quarter of 1998, compared to $1.1 million during the same period in 1997. Net sales in 1998 and 1997 were composed almost entirely of instrument sales. Instrument sales in 1997 reflect contributions from the Company's marketing arrangement with the United States Surgical Corporation which was terminated in October 1997. Instrument sales during the second quarter of 1998 were based on leads generated primarily by the Company's clinical specialists' sales force. Other income during the second quarter of 1998 and 1997 was $124,000 and $595,000, respectively, and represented primarily interest income earned during both periods.

Research and Development Expenses

Research and development expenses decreased during the second quarter of 1998 to $3.6 million from $5.7 million for the same period in 1997. The decrease in research and development expenses reflects decreased activity in all phases of the Company's development programs consistent with the implementation of the Company's refocused business plan announced in February 1998. Expenses related to RIGScan CR49 continued to decrease as clinical and manufacturing validation activity declined pending identification of a development partner. Instrument-related expenses decreased due to the wind-down of the design phase of certain next-generation products. Pipeline projects decreased related to the refocused business plan. Clinical trial activity related to the Company's therapeutic projects remained constant over the two periods.

Marketing and Selling Expenses

During the second quarter of 1998, marketing and selling expenses increased by $167,000 over the same period in 1997. The increase in marketing expenses during the second quarter of 1998, as compared to the same period in 1997, relates to increased internal marketing efforts to meet competitive pressure and further penetrate the lymphatic mapping market. The increased expenses were the result of a greater number of sales and marketing personnel in 1998, coupled with relative increases in travel and entertainment as well as promotional costs associated with the launch of new products. The increases in internal costs offset decreases in commissions paid to marketing partners in 1998 versus 1997.

General and Administrative Expenses

General and administrative expenses were $1.6 million for the second quarter of 1998 compared to $2.0 million for the same period in 1997. The decrease is due primarily to lower average headcount during the second quarter of 1998 compared to the same period in 1997.

Six Months ended June 30, 1998 and 1997

Revenue and Other Income

The Company had net sales of approximately $2.1 million during the first six months of 1998, compared to $2.2 million during the same period in 1997. Net sales in 1998 were composed almost entirely of instrument sales. In 1997, net sales included instrument sales of $2.1 million and blood serology products of $100,000. Instrument sales in 1997 reflect contributions from the Company's marketing arrangement with the United States Surgical Corporation which was terminated in October 1997. Instrument sales during the first six months of 1998 were based on leads generated primarily by the Company's clinical specialists' sales force. Other income during the first

six months of 1998 and 1997 was $349,000 and $1.2 million, respectively, and represented primarily interest income earned during both periods.

Research and Development Expenses

Research and development expenses decreased during the second quarter of 1998 to $8.8 million from $9.2 million for the same period in 1997. The decrease reflects the Company's efforts to reduce costs consistent with the refocused business plan announced in February 1998. Year-to-date costs in 1998 include costs related to severance and other separation-related costs, but such costs were offset by decreases in expenses related to RIGScan CR49 pending identification of a development partner. Instrument-related expenses decreased due to the wind-down of the design phase of next-generation products. Pipeline projects decreased related to the refocused business plan. Clinical trial activity related to the Company's therapeutic projects remained constant over the two periods.

Marketing and Selling Expenses

During the first six months of 1998, marketing and selling expenses increased by $406,000 over the same period in 1997. The increase in marketing expenses during the first half of 1998, as compared to the same period in 1997, relates to an increased marketing effort to meet competitive pressure and further penetrate the lymphatic mapping market. The increased expenses were the result of a greater number of sales and marketing personnel in 1998, coupled with relative increases in travel and entertainment as well as promotional costs associated with the launch of new products.

General and Administrative Expenses

General and administrative expenses were $3.2 million for the first six months of 1998 compared to $3.6 million for the same period in 1997. Additional costs related to the February reorganization were offset by an overall lower headcount during the first half of 1998 than the same period in 1997.

PART II - OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS.

None.

ITEM 2. CHANGES IN SECURITIES AND USE OF PROCEEDS.

None.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES.

None.

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

An annual meeting of the stockholders of the Registrant was held on May 21, 1998. The matters voted upon at the annual meeting and the results of the votes are set forth below.

(i) David C. Bupp was elected a director to serve for a term of three years; 20,157,146 shares were voted for his election and 358,603 shares withheld authority.

(ii) Julius R. Krevans, M.D. was elected a director to serve for a term of three years; 20,235,654 shares were voted for his election and 280,095 shares withheld authority.

(iii) James F. Zid was elected a director to serve for a term of three years; 20,223,382 shares were voted for his election and 292,367 shares withheld authority.

ITEM 5. OTHER INFORMATION.

None.

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

(a) LIST OF EXHIBITS

3. ARTICLES OF INCORPORATION AND BY-LAWS

Exhibit 3.1

Complete Restated Certificate of Incorporation of Neoprobe Corporation, as corrected February 18, 1994 and as amended June 27, 1994, July 25, 1995 and June 3, 1996 (incorporated by reference to Exhibit 99.2 to the Registrant's Current Report on Form 8-K dated June 20, 1996; Commission File No. 0-26520).

` Exhibit 3.2

Amended and Restated By-Laws dated July 21, 1993 as amended July 18, 1995 and May 30, 1996 (incorporated by reference to Exhibit 99.4 to the Registrant's Current Report on Form 8- K dated June 20, 1996; Commission File No. 0-26520).

4. INSTRUMENTS DEFINING THE RIGHTS OF SECURITY HOLDERS, INCLUDING INDENTURES

Exhibit 4.1

See Articles FOUR, FIVE, SIX and SEVEN of the Restated Certificate of Incorporation of the Registrant (see Exhibit 3.1).

Exhibit 4.2

See Articles II and VI and Section 2 of Article III and Section 4 of Article VII of the Amended and Restated By-Laws of the Registrant (see Exhibit 3.2).

Exhibit 4.3

Rights Agreement dated as of July 18, 1995 between the Registrant and Continental Stock Transfer & Trust Company (incorporated by reference to Exhibit 1 of the registration statement on Form 8-A; Commission File No. 0-26520).

10. MATERIAL CONTRACTS

Exhibit 10.2.44

Employment Agreement between David C. Bupp and the Registrant dated January 1, 1998.

Exhibit 10.2.45

Restricted Stock Purchase Agreement dated May 20, 1998 between the Registrant and David C. Bupp.

Exhibit 10.3.47

License and Option Agreement between Cira Technologies Inc., and Neoprobe Corporation dated April 1, 1998.

Exhibit 10.3.48

Restated Subscription and Option Agreement between the Registrant, Cira Technologies, Inc., Rigahrd G. Olsen, John L. Ridihalgh, Richard McMorrow, James R. Blakeslee, Mueller & Smith, Ltd., Pierre L. Triozzi and Gregory Noll, dated April 17, 1998.

Exhibit 10.3.49

Restated Stockholders Agreement between the Registrant, Cira Technologies, Inc., Rigahrd G. Olsen, John L. Ridihalgh, Richard McMorrow, James R. Blakeslee, Mueller & Smith, Ltd., Pierre L. Triozzi and Gregory Noll, dated April 17, 1998.

Exhibit 10.4.22.

Sales and Marketing Agreement dated April 21, 1998 between the Registrant and Ethicon Endo-Surgery, Inc., an Ohio corporation (filed pursuant to Rule 24b-2 under which the Registrant has requested confidential treatment of certain portions of this Exhibit).

Exhibit 10.4.23

Loan Agreement between the Registrant and Bank One, NA, dated April 16, 1998.

Exhibit 10.4.24

Variable Rate Cognovit Promissory Note, dated April 16, 1998, issued by Registrant to Bank One, NA.

Exhibit 10.4.25

Security Agreement between Registrant and Bank One, NA, dated April 16, 1998.

11. STATEMENT REGARDING COMPUTATION OF PER SHARE EARNINGS

Exhibit 11.1

Computation of Net Loss Per Share.

27. FINANCIAL DATA SCHEDULE

Exhibit 27.1

Financial Data Schedule (submitted electronically for SEC information only).

(b) REPORTS ON FORM 8-K.

No current report on Form 8-K was filed by the Registrant during the second quarter of fiscal 1998.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

NEOPROBE CORPORATION
(the "Registrant"
Dated: August 14, 1998

By: /s/ DAVID C. BUPP

David C. Bupp,
President and Chief Executive Officer
(principal executive officer)

By: /s/ BRENT LARSON

Brent Larson
Vice President, Finance
(principal financial and accounting officer)

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SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, DC 20549

NEOPROBE CORPORATION

FORM 10-Q QUARTERLY REPORT

FOR THE FISCAL QUARTER ENDED:

JUNE 30, 1998

EXHIBITS

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INDEX

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See Articles FOUR, FIVE, SIX and SEVEN of the Restated Certificate of Incorporation of the Registrant (see Exhibit 3.1).

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Exhibit 4.3

Rights Agreement dated as of July 18, 1995 between the Registrant and Continental Stock Transfer & Trust Company (incorporated by reference to Exhibit 1 of the registration statement on Form 8-A; Commission File No. 0-26520).

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Page 21 in the manually signed original.

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Page 31 in the manually signed original.

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Page 106 in the manually signed original.

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Page 116 in the manually signed original.

Exhibit 11.1

Computation of Net Loss Per Share.

Page 117 in the manually signed original.

Exhibit 27.1

Financial Data Schedule (submitted electronically for SEC information only).

EXHIBIT 10.2.44

EMPLOYMENT AGREEMENT

This Employment Agreement is made and entered into effective as of January 1, 1998 ("Effective Date"), by and between NEOPROBE CORPORATION, a Delaware Corporation with a place of business at 425 Metro Place North, Suite 400, Dublin, Ohio 43017-1367 (the "Company") and DAVID C. BUPP of Dublin, Ohio (the "Employee").

WHEREAS, the Company and the Employee entered into an Employment Agreement dated as of January 1, 1996 (the "1996 Employment Agreement"); and

WHEREAS, the Company and the Employee wish to establish new terms, covenants, and conditions for the Employee's continued employment with the Company through this agreement ("Employment Agreement").

NOW, THEREFORE, in consideration of the mutual agreements herein set forth, the parties hereto agree as follows:

1. DUTIES. From and after the Effective Date, and based upon the terms and conditions set forth herein, the Company agrees to employ the Employee and the Employee agrees to be employed by the Company, as President and Chief Executive Officer of the Company and in such equivalent, additional or higher executive level position or positions as shall be assigned to him by the Board of Directors. While serving in such executive level position or positions, the Employee shall report to, be responsible to, and shall take direction from the Board of Directors of the Company. During the Term of this Employment Agreement (as defined in Section 2 below), the Employee agrees to devote substantially all of his working time to the position he holds with the Company and to faithfully, industriously, and to the best of his ability, experience and talent, perform the duties which are assigned to him. The Employee shall observe and abide by the reasonable corporate policies and decisions of the Company in all business matters.

   The Employee represents and warrants to the Company that Exhibit A attached hereto sets forth a true and complete list of (a) all offices, directorships and other positions held by the Employee in corporations and firms other than the Company and its subsidiaries and (b) any investment or ownership interest in any corporation or firm other than the Company beneficially owned by the Employee (excluding investments in life insurance policies, bank deposits, publicly traded securities that are less than five percent (5%) of their class and real estate). The Employee will promptly notify the Board of Directors of the Company of any additional positions undertaken or investments made by the Employee during the Term of this Employment Agreement if they are of a type which, if they had existed on the date hereof, should have been listed on Exhibit A hereto. As long as the Employee's other positions or investments in other firms do not create a conflict of interest, violate the Employee's obligations under Section 7 below or cause the Employee to neglect his duties hereunder, such activities and positions shall not be deemed to be a breach of this Employment Agreement.

2. TERM. Subject to Sections 4 and 5 hereof, the Term of this Employment Agreement shall be for a period of two (2) years, commencing January 1, 1998 and terminating December 31, 1999.

3. COMPENSATION. During the Term of this Employment Agreement, the Company shall pay, and the Employee agrees to accept as full consideration for the services to be rendered by the Employee hereunder, compensation consisting of the following:

   A. SALARY. Beginning on the first day of the Term and throughout the first year of this Employment Agreement, the Company shall pay the Employee a salary of $275,500 per year, payable in semi-monthly or monthly installments. Promptly after both parties have signed counterparts of this Agreement, the Company will pay to the Employee an amount equal to the amount by which the salary

provided in the previous sentence exceeds the base salary actually paid to the Employee during the period from the begining of the Term through the date of payment. During the second year of the Employment Agreement, the Company shall pay the Employee a salary of at least $290,000 per year, payable in semi-monthly or monthly installments.

B. BONUS. The Compensation Committee of the Board of Directors will, on an annual basis, review the performance of the Company and of the Employee and will pay such bonus as it deems appropriate, in its discretion, to the Employee based upon such review. Such review and bonus shall be consistent with any bonus plan adopted by the Compensation Committee which covers the executive officers of the Company generally.

C. BENEFITS. During the Term of this Employment Agreement, the Employee will receive such employee benefits as are generally available to all employees of the Company.

D. STOCK OPTIONS. The Compensation Committee of the Board of Directors may, from time to time, grant stock options, restricted stock purchase opportunities and such other forms of stock based incentive compensation as it deems appropriate, in its discretion, to the Employee under the Company's Stock Option and Restricted Stock Purchase Plan and the 1996 Stock Incentive Plan (the "Stock Plans"). The terms of the relevant award agreements shall govern the rights of the Employee and the Company thereunder in the event of any conflict between such agreement and this Employment Agreement.

E. RESTRICTED STOCK. Simultaneously with the execution of this Employment Agreement, the Employee will enter into a Restricted Stock Purchase Agreement under the 1996 Stock Incentive Plan in the form attached hereto as Exhibit B. The terms of such agreement shall govern the rights of the Employee and the Company thereunder in the event of any conflict between such agreement and this Employment Agreement.

F. CONTINUATION. Employee's salary and benefits shall be paid by the Company for the full Term if the Employee is terminated without cause and if such termination without cause occurs during 1999, the Company shall continue to pay the Employee his salary and benefits until the first anniversary of such termination. The salary and

benefits shall cease if the Employee is terminated for cause or if the Employee resigns (see Section 4).

G. VACATION. The Employee shall be entitled to twenty (20) days of vacation during each calendar year during the Term of this Employment Agreement.

H. CHANGE OF CONTROL SEVERANCE. In addition to the rights of the Employee under the Company's employee benefit plans (paragraphs C and F above) or otherwise but in lieu of any payment of base salary under paragraph F above, if there is a Change in Control of the Company (as defined below) and the employment of the Employee is concurrently or subsequently terminated (a) by the Company without cause, (b) by the expiration of the Term of this Employment Agreement, or (c) by the resignation of the Employee because he has reasonably determined in good faith that his titles, authorities, responsibilities, salary, bonus opportunities or benefits have been materially diminished, that a material adverse change in his working conditions has occurred or the Company has breached this Employment Agreement, the Employee shall be paid a severance payment equal to twice the annual base salary of Employee as in effect immediately before such termination less the amount of any payments of salary due to Employee under paragraph F above.

For the purpose of this Employment Agreement, a Change in Control of the Company has occurred when: (a) any person (defined for the

purposes of this paragraph H to mean any person within the meaning of Section 13(d) of the Securities Exchange Act of 1934 (the "Exchange Act")), other than Neoprobe or an employee benefit plan created by its Board of Directors for the benefit of its employees, either directly or indirectly, acquires beneficial ownership (determined under Rule 13d-3 of the Regulations promulgated by the Securities and Exchange Commission under Section 13(d) of the Exchange Act) of securities issued by Neoprobe having fifteen percent (15%) or more of the voting power of all the voting securities issued by Neoprobe in the election of Directors at the next meeting of the holders of voting securities to be held for such purpose; (b) a majority of the Directors elected at any meeting of the holders of voting securities of Neoprobe are persons who were not nominated for such election by the Board of Directors or a duly constituted committee of the Board of Directors having authority in such matters; (c) the stockholders of Neoprobe approve a merger or consolidation of Neoprobe with another person, other than a merger or consolidation in which the holders of Neoprobe's voting securities issued and outstanding immediately before such merger or consolidation continue to hold voting securities in the surviving or resulting corporation (in the same relative proportions to each other as existed before such event) comprising eighty percent (80%) or more of the voting power for all purposes of the surviving or resulting corporation; or (d) the stockholders of Neoprobe approve a transfer of substantially all of the assets of Neoprobe to another person other than a transfer to a transferee, eighty percent (80%) or more of the voting power of which is owned or controlled by Neoprobe or by the holders of Neoprobe's voting securities issued and outstanding immediately before such transfer in the same relative proportions to each other as existed before such event. The parties hereto agree that for the purpose of determining the time when a Change of Control has occurred that if any transaction results from a definite proposal that was made before the end of the Term and

which was the subject of negotiations that began during the Term but which continued until after the end of the Term and such transaction is consumated after the end of the Term, such transaction shall be deemed to have occurred when the definite proposal was made for the purposes of the first sentence of this paragraph H of this Section 3.

4. TERMINATION. The Company may terminate the employment of the Employee prior to the end of the Term of this Employment Agreement or "for cause."

A. Termination "for cause" shall be defined as a termination by the Company of the employment of the Employee occasioned by a willful breach of a material duty by the Employee in the course of his employment or willful and continued neglect of his duty as an employee hereunder.

B. In the event of termination by the Company "for cause", all salary, benefits and other payments shall cease at the time of termination, and the Company shall have no further obligations to the Employee. In the event that a benefit plan or Stock Plan which covers the Employee has specific provisions concerning termination of employment, then such benefit plan or Stock Plan shall control the disposition of the benefits or stock options.

C. The parties agree that the employment relationship described herein shall end at the end of the Term, unless the parties agree, in writing, to extend the Term. At least six (6) months prior to the expiration of the Term, the Company shall provide Employee with written notice that it intends to extend the Term hereof, and Employee and Company then shall negotiate any changes to this Employment Agreement for the extension of the Term that they deem advisable. If the Company does not give such notice to Employee before July 1, 1999 or if it notifies him at that time that it does not intend to extend the Term, the Company shall continue to pay the Employee his salary and benefits through June 30, 2000,

subject to paragraph B of this Section 4 and paragraph F of Section 3 above, but regardless of whether his employment is terminated at any time after June 30, 1999 by the end of the Term or by the Employee's resignation. If the Employee continues to render services in the Company's employ after the end of the Term in the absence of such written extension, it is understood that such continued employment will be "at will," terminable at any time by either party, but such services shall not constitute a waiver of the provisions of this paragraph C.

D. Should the Company relocate to another city and Employee decide not to relocate also, cessation of employment shall be without cause hereunder. A termination without cause is a termination of employment before the end of the Term of this Employment Agreement that is not for cause and not occasioned by the resignation, death or disability of the Employee.

E. The Company may terminate the employment of the Employee prior to the end of the Term of this Employment Agreement if the Employee has been unable to perform his duties hereunder for a continuous period of six (6) months due to a physical or mental condition that, in the opinion of a licensed physician, will be of in-

definite duration or is without a reasonable probability of recovery. The Employee agrees to submit to an examination by a licensed physician of his choice in order to obtain such opinion at the request of the Company, made after the Employee has been absent from his place of employment for at least six (6) months. Such examination shall be paid for by the Company. However, this provision does not abrogate either the Company's or the Employee's rights and obligations pursuant to the Family and Medical Leave Act of 1993, and a termination of employment under this paragraph E shall not be deemed to be a termination for cause.

5. RESIGNATION, DEATH OR DISABILITY.

A. If, during the Term of this Employment Agreement, the Employee resigns for any reason, all salary, benefits and other payments (except as otherwise provided in paragraph H of Section 3 above and paragraph C of Section 4 above) shall cease at the time such resignation becomes effective. In the event that a benefit plan or Stock Plan which covers the Employee has specific provisions relative to resignation by an employee, then such benefit plan or Stock Plan shall control the disposition of the benefits or stock options.

B. If during the Term of this Employment Agreement, the Employee dies or his employment is terminated because of his disability (see Section 4.E. above), all salary, benefits and other payments shall cease at the time of death or disability, provided, however, that the Company shall provide such health, dental and similar insurance or benefits as were provided to Employee immediately before his termination by reason of death or disability, to Employee or his family for six (6) months after such termination on the same terms and conditions (including cost) as were applicable before such termination. In addition, for the first six (6) months of disability, the Company shall pay to the Employee the difference, if any, between any cash benefits received by the Employee from a Company-sponsored disability insurance policy and the Employee's salary hereunder. In the event that such a benefit plan or a Stock Plan which covers the Employee has specific provisions concerning the death or disability of an employee (e.g., life insurance or disability insurance), then such benefit plan or Stock Plan shall control the disposition of such benefits or stock options.

C. The language set forth in this Section 5 shall not limit the Company's right to seek other remedies for damages incurred in the event Employee fails to comply with the terms of this Employment Agreement.

6. PROPRIETARY INFORMATION AGREEMENT. Employee has executed a Proprietary Information Agreement as a condition of employment with the Company. The Proprietary Information Agreement shall not be limited by this Employment Agreement in any manner, and the Employee shall act in accordance with the provisions of the Proprietary Information Agreement at all times during the Term of this Employment Agreement.

7. NON-COMPETITION. Employee agrees that for so long as he is employed by the Company under this Employment Agreement and for two (2) years thereafter, the Employee will not

A. enter into the employ of or render any services to any person, firm, or corporation, which is engaged, in any part, in a Competitive Business (as defined below);

B. engage in any Competitive Business for his own account;

C. become associated with or interested in through retention or by employment any Competitive Business as an individual, partner, shareholder, creditor, director, officer, principal, agent, employee, trustee, consultant, advisor, or in any other relationship or capacity; or

D. solicit, interfere with, or endeavor to entice away from the Company, any of its customers, strategic partners, or sources of supply.

Nothing in this Employment Agreement shall preclude Employee from taking employment in the banking or related financial services industries nor from investing his personal assets in the securities of any Competitive Business if such securities are traded on a national stock exchange or in the over-the-counter market and if such investment does not result in his beneficially owning, at any time, more than one percent (1%) of the publicly-traded equity securities of such Competitive Business. "Competitive Business" for purposes of this Employment Agreement shall mean any business or enterprise which:

a. is engaged in the development and/or commercialization of products and/or systems for use in (1) the intraoperative detection of cancer and/or (2) Activated Cellular Therapy for cancer, or

b. reasonably understood to be competitive in the relevant market with products and/or systems described in clause a above, or

c. the Company engages in during the Term of this Employment Agreement pursuant to a determination of the Board of Directors and from which the Company derives a material amount of revenue or in which the Company has made a material capital investment.

The covenant set forth in this Section 7 shall terminate immediately upon the termination of the employment of the Employee by the Company without cause or at the end of the Term of this Employment Agreement.

8. ARBITRATION. Any dispute or controversy arising under or in connection with this Employment Agreement shall be settled exclusively by arbitration in Columbus, Ohio, in accordance with the nonunion employment arbitration rules of the American Arbitration Association ("AAA") then in effect. If specific nonunion employment dispute rules are not in effect, then AAA commercial arbitration rules shall govern the dispute. If the amount claimed exceeds $100,000, the arbitration shall be before a panel of three arbitrators. Judgment may be entered on the arbitrator's award in any court having jurisdiction. The Company shall indemnify the Employee against, and hold him harmless from, any attorney's fees, court costs and other expenses incurred by the Employee in connection with the preparation, commencement, prosecution, defense or enforcement of any

arbitration, award, confirmation or judgment in order to assert or defend any right or obtain any payment under paragraph H of Section 3 above or under this sentence; without regard to the success of the Employee or his attorney in any such arbitration or proceeding.

9. GOVERNING LAW. The Employment Agreement shall be governed by and construed in accordance with the laws of the State of Ohio.

10. VALIDITY. The invalidity or unenforceability of any provision or provisions of this Employment Agreement shall not affect the validity or enforceability of any other provision of the Employment Agreement, which shall remain in full force and effect.

11. ENTIRE AGREEMENT.

A. The 1996 Employment Agreement is terminated as of the effective date of this Employment Agreement, except that the Stock Options granted to the Employee in the 1996 Employment Agreement or in any previous employment agreement or by the Compensation Committee remain in full force and effect, and survive the termination of the 1996 Employment Agreement and except that the bonus opportunities granted to the Employee in paragraph 3 of the letter agreement dated February 16, 1995 remain in full force and effect, and survive the termination of the 1996 Employment Agreement.

B. This Employment Agreement constitutes the entire understanding between the parties with respect to the subject matter hereof, superseding all negotiations, prior discussions, and preliminary agreements. This Employment Agreement may not be amended except in writing executed by the parties hereto.

12. EFFECT ON SUCCESSORS OF INTEREST. This Employment Agreement shall inure to the benefit of and be binding upon heirs, administrators, executors, successors and assigns of each of the parties hereto. Notwithstanding the above, the Employee recognizes and agrees that his obligation under this Employment Agreement may not be assigned without the consent of the Company.

IN WITNESS WHEREOF, the parties hereto have executed and delivered this Employment Agreement as of the date first written above.

NEOPROBE CORPORATION EMPLOYEE

By: /s/ John L. Ridihalgh /s/ David C. Bupp
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John L. Ridihalgh, Chairman of the Board David C. Bupp

Exhibit 10.2.45

NEOPROBE CORPORATION
SUITE 400
425 METRO PLACE NORTH
DUBLIN, OHIO 43017-1367

May 20, 1998

David C. Bupp
5747 Rushwood Drive
Dublin, Ohio 43017

Congratulations. You have been granted a right to purchase Restricted Stock under Neoprobe's 1996 Stock Incentive Plan (the "Plan") on the following terms:

1. PURCHASE AND SALE. On the terms and subject to the conditions set forth in this Agreement, you hereby subscribe for and agree to purchase 45,000 shares of Common Stock (the "Restricted Stock") for and in consideration of a payment by you to Neoprobe of $0.001 per share.

2. TRANSFER RESTRICTIONS. The fair market value of Common Stock is demonstrated by the closing price on the Nadaq National Market of such

securities on the business day before the date first set forth above which was $5.25 per share. In consideration of the difference between the purchase price of the Restricted Stock set forth in paragraph 1 above and its fair market value without the restrictions and risk of forfeiture set forth herein, you agree that, unless and until any of the Restricted Stock vests and becomes transferable as provided in paragraph 4 below, you will neither transfer, sell, assign nor pledge any of the Restricted Stock. Any certificate representing any Restricted Stock issued hereunder shall bear the following legend in larger or other contrasting type or color: "The transfer of these securities is restricted by, and such securities are subject to a risk of forfeiture, under a Restricted Stock Purchase Agreement between the registered owner hereof and the Issuer dated May 20, 1998."

3. FORFEITURE. You will forfeit any portion of the Restricted Stock purchased under this Agreement that has not vested and become transferable on the earliest of: (a) the expiration of 10 years from the date of this Agreement, or (b) (except as otherwise provided in the last sentence of this paragrah 3) immediately upon the termination of your employment by your Employer under the Employment Agreement, whether for cause or without cause or because of your death or disability or by your resignation. If such a forfeiture occurs, all of your right, title and interest in and to any shares of Restricted Stock which have not previously vested and became transferable will be terminated, the certificates representing the forfeited shares will be canceled or transferred free and clear of all restrictions to Neoprobe's treasury and we will pay you $0.001 per share for each share of Restricted Stock so forfeited. Notwithstanding clause (b) of this paragraph 3 no forfeiture shall occur upon the termination of your employment by your Employer under the Employment Agreement without cause or because of your death or disability if at the time of such termination Neoprobe is engaged in active negotiations that could reasonably be expected to result in a change in control.

4. VESTING PROVISIONS. Any Restricted Stock that has not previously been forfeited under Section 3 above will vest and become transferable if and when a change in control of the Company occurs or upon the termination of your employment by your Employer under the Employment Agreement without cause or because of your death or disability if at the time of such termination Neoprobe is engaged in active negotiations that could reasonably be expected to result in a change in control; provided the Committee certifies such occurrence in its minutes or another writing promptly thereafter. Notwithstanding any provision of this Agreement or any provision of the Plan, including, but not limited to, the last sentence of Section 7.1 thereof and Section 8.3 thereof, the provisions of which are hereby waived by you, the Committee may, if it determines in its sole discretion that your actions in connection with any change in control which results in the vesting of any shares of Restricted Stock hereunder were not in accordance with your duties to the Company and its stockholders as a director, officer or employee of the Company or your actions did not fully support the determinations of the Board of Directors of the Company in connection therewith, reduce the number of shares of Restricted Stock which vest under this Agreement or eliminate such vesting entirely. When any portion of the Restricted Stock vests and becomes transferable, the Company shall, subject to the provision of Section 6 below, promptly deliver a certificate (free of all adverse claims and transfer) representing the number of shares constituting the vested and transferable portion of the Restricted Stock to you at your address given above and such shares shall no longer be deemed to be Restricted Stock subject to the terms and conditions of this Agreement.

5. RIGHTS; STOCK DIVIDENDS. Except for the restrictions on transfer set forth in Section 2 and the possibility of forfeiture set forth in Section 3, upon the issuance of a certificate representing shares of Restricted Stock, you will have all other rights in such shares, including the right to vote such shares and receive dividends other than dividends on or distributions of shares of any class of stock issued by the Company which dividends or distributions shall be delivered to the Company under the same restrictions on transfer and possibility of forfeitures as the shares of Restricted Stock from which they derive.

6. TAXATION. Both you and we intend that the transactions provided for in this Agreement will be governed by the provisions of Section 83(a) of the Internal Revenue Code of 1986. You will have taxable income upon the vesting of Restricted Stock. At that time, you must pay to the Company an amount equal to the required federal, state, and local tax withholding less any withholding otherwise made from your salary or bonus. You must satisfy any relevant

withholding requirements before the Company issues certificates representing and vested shares of Restricted Stock to you.

7. EMPLOYMENT AGREEMENT. The terms of your employment by the Company are governed exclusively by the Employment Agreement. This Agreement is not an employment agreement and nothing contained herein gives you any right to continue to be employed by or provide services to the Company or affects the right of the Company to terminate your employment or other relationship with you.

8. PLAN CONTROLS. This Agreement is a Restricted Stock Purchase Agreement (as such term is defined in the Plan) under Article 7 of the Plan. The terms of this Agreement are subject to, and controlled by, the terms of the Plan, as it is now in effect or may be amended from time to time hereafter, which are incorporated herein as if they were set forth in full. Any words or phrases defined in the Plan have the same meanings in this Agreement. The Company will provide you

with a copy of the Plan promptly upon your written or oral request made to its principal financial officer.

9. ARBITRATION. Any dispute or controversy arising under or in connection with this Agreement shall be settled exclusively by arbitration in Columbus, Ohio, in accordance with the nonunion employment arbitration rules of the American Arbitration Association ("AAA") then in effect. If specific nonunion employment dispute rules are not in effect, then AAA commercial arbitration rules shall govern the dispute. If the amount claimed exceeds $100,000, the arbitration shall be before a panel of three arbitrators. Judgment may be entered on the arbitrator's award in any court having jurisdiction. The Company will indemnify you against, and hold you harmless from, any attorney's fees, court costs and other expenses incurred by you in connection with the preparation, commencement, prosecution, defense or enforcement of any arbitration, award, confirmation or judgment in order to assert or defend any right or obtain any payment hereunder after the occurrence of a change in control of the Company or under this sentence; without regard to the success of the Employee or his attorney in any such arbitration or proceeding.

10. MISCELLANEOUS. This Agreement sets forth the entire agreement of the parties with respect to the subject matter hereof and it supersedes and discharges all prior agreements (written or oral) and negotiations and all contemporaneous oral agreements concerning such subject matter. This Agreement may not be amended or terminated except by a writing signed by the party against whom any such amendment or termination is sought. If any one or more provisions of this Agreement shall be found to be illegal or unenforceable in any respect, the validity and enforceability of the remaining provisions hereof shall not in any way be affected or impaired thereby. This Agreement shall be governed by the laws of the State of Delaware.

Please acknowledge your acceptance of this Agreement by signing the enclosed copy in the space provided below and returning it promptly to the Company.

NEOPROBE CORPORATION

By: /s/ John L. Ridihalgh

John L. Ridihalgh, Chairman of the Board

Accepted and Agreed to as of
the date first set forth above:

/s/ David C. Bupp
- ---
David C. Bupp

EXHIBIT 10.3.47

LICENSE & OPTION AGREEMENT

- ----------

THIS AGREEMENT entered into this 1st day of April, 1998, between Neoprobe Corporation, a Delaware corporation with principal offices at 425 Metro Place North, Suite 300, Dublin, Ohio 43017-1367 (hereinafter "Neoprobe"), and Cira Technologies, Inc., (hereinafter "Cira") a Delaware corporation having its principal place of business at Mueller-Smith Building, 7700 Rivers Edge Drive, Columbus, Ohio 43235-1355.

WHEREAS, Neoprobe is a biopharmaceutical company engaged in the development and marketing of proprietary products and methods useful in the treatment of various diseases including cancer; and

WHEREAS, Neoprobe and Cira entered into a Technology Option Agreement dated March 14, 1996 (hereinafter the "Main Agreement") wherein Cira granted Neoprobe an option to acquire exclusive rights to certain Cira technology (copy attached as Exhibit A); and

WHEREAS, the Parties desire to substantially amend the terms of the Main Agreement and have decided for purposes of clarity to terminate the Main Agreement and to execute this Agreement;

NOW, THEREFORE, in consideration of the mutual covenants exchanged herein, the Parties agree as follows:

ARTICLE I. DEFINITIONS

1.01 Activated Lymph Node Derived Cells. As used herein, the term "Activated Lymph Node Derived Cells" shall mean cells derived from one or more lymph nodes excised from the same human patient, which cells are processed from such lymph nodes, i.e., are grown up and expanded, using the Technology; such term shall also include substances, such as soluble factors, secreted by such activated cells.

1.02 Affiliate. The term "Affiliate" as used herein shall mean with respect to any specified Person, any other Person that directly or indirectly through one or more intermediaries, controls, or is controlled by, or is under common control with, the Person specified. For purposes of this definition, "control" including, with correlative meanings, the terms "controlled by" and "under common control with" means ownership directly or indirectly of more

than forty percent (40%) of the equity capital having the right to vote for election of directors in the case of a corporation and more than forty percent (40%) of the beneficial interest in the case of a business entity other than a corporation.

1.03 BLA. The term "BLA" as used herein means a Biologic License Application filed with the FDA requesting marketing approval for a new biologic product.

1.04 Far East. As used herein, the term "Far East" shall mean those countries listed in Schedule 1.04.

1.05 Field. As used herein, the term "Field" shall mean the treatment of human immunodeficiency virus ("HIV") infected human patients including HIV-infected human patients co-infected with other viruses.

1.06 Effective Date. The "Effective Date" of this Agreement shall be the date first written herein above.

1.07 FDA and Act. The term "FDA" and the term "Act" as used herein shall mean the United States Food and Drug Administration or any successor agency having the administrative authority to regulate the approval for testing or marketing of human pharmaceutical or biological therapeutic products and medical devices in the United States; and the term "Act" as used herein refers to the Federal Food, Drug and Cosmetic Act, as amended, (21 U.S.C. '301 et seq.) and the regulations promulgated thereunder.

1.08 Protocol. As used herein, the term "Protocol" shall mean a detailed plan for the conduct of a clinical trial which has been reviewed and approved by the FDA; a description of the elements of a Protocol is set forth in 21 CFR Section 312(a)(6).

1.09 IND. The term "IND" means an investigational new drug application as defined in 21 CFR Section 312.23.

1.10 Joint Venture. As used herein the term "Joint Venture" shall mean an association of two (2) or more Persons for the purpose of conducting a business or commercial enterprise separate from the business of either of the Persons.

1.11 Licensed Product. As used herein, the term "Licensed Product" shall mean a pharmaceutical preparation approved for marketing by the FDA or other equivalent health regulatory authority containing "Activated Lymph Nodes Derived Cells" as an active therapeutic agent.

1.12 NDA. As used herein the term "NDA" shall mean a New Drug Application filed with the FDA seeking marketing approval for a new drug, the elements of an NDA are set forth in 21 CFR Section 314.50.

1.13 Net Sales. As used herein the term "Net Sales" shall mean the actual invoice price at which Licensed Product is sold by Neoprobe or its Affiliates in the Territory less the following: trade, cash and quantity discounts; returns, normal trade allowances, charge-backs, and MEDICAID or other federal or state rebates. Sale of Licensed Product by and between Neoprobe and its Affiliates for resale and not for use by the Affiliate shall not be deemed a sale for purposes of calculating "Net Sales" subject to earned royalty under this Agreement.

1.14 Patent Rights. The term "Patent Rights" as used herein, shall mean the issued United States and foreign patents and pending patent applications listed on Schedule 1.14 attached hereto, as such Schedule 1.14 shall be amended by Cira from time to time.

1.15 Person. As used herein the term "Person" shall mean any individual, corporation, partnership, business trust, business association, governmental entity, governmental authority or other legal entity.

1.16 Quarter. As used herein, the term "Quarter" shall mean a period of three (3) months, the first such Quarter beginning on January 1 and ending on March 31 of a Year.

1.17 Schedules. The Schedules to this Agreement are listed below and are an integral part of this Agreement and are incorporated herein.

SCHEDULE	DESCRIPTION
1.04	List of Countries comprising the Far East.
1.14	List of Patent Rights

1.18 Technology. The term "Technology" as used herein means proprietary information and know-how developed by Cira relating the mitogenic stimulation of cells derived from lymph nodes excised from chronically-infected and/or autoimmune disease afflicted patients and the use of such cells or products derived from such cells to treat human patients with chronic infections and/or autoimmune diseases, and includes but is not limited to the Patent Rights.

1.19 Territory. As used herein, the term "Territory" shall include all of the countries of the world.

1.20 Year. The term "Year" shall mean a consecutive twelve (12) month period beginning January 1 of a year and ending December 31 of such year.

ARTICLE II. LICENSE GRANT

2.01 License Grant. Cira hereby grants to Neoprobe and Neoprobe hereby accepts an exclusive, royalty-bearing license to make, have made, use and sell Licensed Product in the Territory for use in the Field.

2.02 Sublicense. The license granted pursuant to Section 2.01 shall include the right to sublicense to third parties; provided that the sublicensee and the sublicense terms are reasonably acceptable to Cira. The grant of a sublicense by Neoprobe to a third party shall not release Neoprobe of any of its obligations to Cira pursuant to this Agreement.

2.03 Term of License. The license granted pursuant to Section 2.01 shall remain in effect in a country of the Territory for a period of ten (10) years from date of "First Commercial Sale" of a Licensed Product in such country or until this Agreement is terminated pursuant to any of the applicable sections of Article IV. The term "First Commercial Sale" is used in accordance with its commonly understood meaning, i.e., an arms length sale of a Licensed Product to a third party for a stated price. In the event Neoprobe shall sell a Licensed Product covered by an Improvement Patent in a country of the Territory, the life of the license granted in Section 2.01 shall be for ten (10) years from the date of First Commercial Sale of a Licensed Product incorporating the improvement(s) covered by the Improvement Patent.

ARTICLE III. CONSIDERATION

3.01 Royalty. Subject to the provisions of Section 3.05 herein, in consideration of the license granted to Neoprobe pursuant to Section 2.01, Neoprobe agrees to pay and shall pay Cira a royalty of six percent (6%) of Net Sales of Licensed Product in each country of the Territory in which Patent Rights issue. In the event Neoprobe commercializes a Licensed Product through a Joint Venture with a third party, the royalty rate payable to Cira based on Net Sales of Licensed Product by the Joint Venture shall be separately negotiated with Cira within ninety (90) days after the formation of the Joint Venture; provided however, that the royalty rate shall not exceed ten percent (10%) of Net Sales of Licensed Product by the Joint Venture in each country of the Territory in which Patent Rights issue.

3.02 Royalty Rate If No Patent Rights. Subject to the provisions of Section 3.05 herein, in consideration of the license granted pursuant to Section 2.01, Neoprobe agrees to pay and shall pay Cira a royalty of three percent (3%) of net sales of Licensed Product in each country of the Territory in which Patent Rights do not exist or do not issue. In the event that Neoprobe commercializes a Licensed Product through a Joint Venture with a third party, the royalty rate negotiated pursuant to Section 3.01 herein shall be reduced by one-half for Net Sales of Licensed Product in each country of the Territory in which Patent Rights do not exist or do not issue.

3.03 Patent Rights Do Not Issue. If, in a country of the Territory, a particular Patent Right does not issue as a patent within five (5) years from date of filing of the patent application or if applicable, within five (5) years from the date on which examination of the application was requested, it will be presumed that no Patent Rights will issue and the royalty rate shall be reduced

as described in Section 3.02; provided however, that in the event a Patent Right subsequently issues the royalty rate shall be increased to the rate specified by Section 3.01.

3.04 Other Fees. Subject to the provisions of Section 3.05 herein, in the event Neoprobe shall sublicense any of its rights granted pursuant to Section 2.01 and shall receive any compensation from the sublicensee for the grant of such sublicense (hereinafter "Sublicensing Revenue"), Cira shall receive fifty percent (50%) of all such Sublicensing Revenue. The term "Sublicensing Revenue" shall mean all cash, sublicensing fees, royalties and all other payments and the cash equivalent thereof paid to Neoprobe by a sublicensee of Neoprobe of its rights hereunder, but shall not include the following: (i) research and development money paid to Neoprobe to conduct research in the Field and other than payments to Neoprobe for patent costs associated with maintaining Patent Rights, (ii) monies paid to Neoprobe by the sublicensee as reimbursement for research and development costs; and (iii) monies paid to Neoprobe to build or acquire research and/or manufacturing facilities.

3.05 No Royalties Due. No royalties shall be due to Cira pursuant to Section 3.01 or Section 3.02 on Net Sales of Licensed Product in the Territory or Sublicensing Revenue pursuant to Section 3.04, until total Net Sales of Licensed Product in the Territory exceed one (1) times the amount of Neoprobe's out-of-pocket research and development expenses for preclinical and clinical research conducted up to the time of filing of an NDA or BLA with the FDA, up to a total of $2 Million Dollars.

3.06 Reduction of Royalties. Royalties payable by Neoprobe to Cira under Section 3.01 and Section 3.02 shall be reduced as follows:

(a) If Neoprobe is required in a country within the Territory, by a final court order from which no appeal can be taken, to obtain and pay a royalty under a license to a third party under any patent in order to make, have made, use or sell a Licensed Product in that country, Neoprobe's obligations in the country to pay royalties to Cira shall be reduced by the amount of the cost to Neoprobe additional ROYALTY PAID TO SUCH THIRD PARTY; provided however, that in no event shall the royalty due Cira in that country be reduced by more than fifty percent (50%).

(b) If a third party obtains, by order, decree or grant from a competent governmental authority in any country in the Territory, a compulsory license under the Patent Rights authorizing such third party to make, have made, use or sell a product, in such country, substantially equivalent to a Licensed Product, Cira shall give prompt notice to Neoprobe. During the effective period of such compulsory license, Neoprobe's obligations to pay royalties with respect to Net Sales in such country under this Agreement shall be no more than the rate payable to Cira by said third party; provided that no action or inaction on the part of Neoprobe occasioned the grant of such compulsory license by Cira.

3.07 Right to Verify Research & Development Expenses. Neoprobe shall have the obligation to provide Cira with sufficient documentation to enable Cira to verify the following: (i) all monies received by Neoprobe from a sublicensee for research and development activities are actually expended by Neoprobe for R&D purposes; and (ii) the amount of past R&D expenses that are reimbursed by a sublicensee. In the event Cira questions the correctness or accuracy of any documentation provided to it by Neoprobe pursuant to this Section 3.07, Cira shall have the right to have an independent auditor inspect Neoprobe's records.

ARTICLE IV. PAYMENT OF ROYALTIES AND REPORTING

4.01 Payment of Royalties and Report. Royalties shall be paid Quarterly and shall be due within thirty (30) days after the end of each Quarter. A report shall accompany the royalty payment which shall contain sufficient detail to

enable Cira to ascertain the basis for the royalty calculation. The full amount of any royalties due to Cira for the preceding Quarter shall accompany the report. This report shall state Net Sales upon which such royalties are computed including as a minimum:

i) the quantity of Licensed Product sold;

ii) deductions permitted under this Agreement to arrive at Net Sales; and

iii) royalty computations.

4.02 Period for Retention of Records. Neoprobe shall keep, for a period of at least six (6) years after the date of entry, full, accurate and complete books and records consistent with sound business practices and in such form and in such detail as to enable Cira to determine amounts due it pursuant to Section 3.01, Section 3.02 and Section 3.03 herein.

4.03 Right to Inspect Records. Upon Cira's request, Neoprobe shall permit an independent certified accountant selected by Cira (except one to whom Neoprobe has some reasonable objection) to inspect, once each Year during ordinary business hours, such books and records of Cira covering a period not more than the prior six (6) Quarters as may be necessary to verify the correctness of the royalty payments made to Cira pursuant to Section 4.01.

4.04 Discrepancy in Royalty Payments. Unless otherwise agreed to by the parties, if as a result of the audit performed pursuant to Section 4.03, the independent auditor determines that Neoprobe has underpaid any payment due Cira, Neoprobe shall, no later than three (3) business days after receiving notice of such underpayment, remit to Cira the full amount of the underpayment. Unless otherwise agreed to by the parties, if such audit reveals an overpayment to Cira, such overpayment shall be refunded to Neoprobe within three (3) business days after Cira becomes aware of such overpayment.

4.05 Penalty for Underpayment. If as a result of an audit performed pursuant to Section 4.03, it is determined that Neoprobe has underpaid any payment due Cira by more than ten percent (10%) of the amount which was due, in addition to remitting the amount of the underpayment as described in Section 4.03, Neoprobe shall pay Cira interest on such amount at the rate per annum of "prime" (interest changing as and when the "prime" changes); such interest being payable on demand together with all costs incurred by Cira collect the amounts due hereunder, including, but not limited to, the cost of the audit performed pursuant to Section 4.03, reasonable attorneys fees and disbursements. As used herein, the term "prime" refers to the prime rate of interest per annum announced, from time to time, by major money center banks in the United States and as published daily in The Wall Street Journal; provided, however, that if The Wall Street Journal should ever cease, for any reason, to publish such rate on a daily basis, then the Prime Rate shall be at the rate of interest designated and in effect from time to time, by Citibank, N.A., in New York, New York as its Prime Rate.

4.06 Dispute Relating to Audit. In the event an audit conducted pursuant to Section 4.03 finds an underpayment by Neoprobe and if Neoprobe disagrees with the results of such audit and further in the event the parties can not resolve such disagreement, the parties shall mutually chose an independent accountant acceptable to both to conduct a second audit. The parties agree to be bound by the results of the second independent audit. The cost of an audit conducted pursuant to this Section 3.07 shall be borne by Cira if the independent accountant finds no underpayment and by Neoprobe if an underpayment is found.

ARTICLE V. TERM & TERMINATION

5.01 Term. The "Term" of this Agreement shall be for the life of the last to expire of the licenses granted to Neoprobe pursuant to Section 2.01 and Section 2.03 herein unless otherwise earlier terminated pursuant to any of the provisions of this Article V.

5.02 Termination by Neoprobe. Neoprobe shall have the right, at its sole discretion, at any time subsequent to twenty four (24) months after the Effective Date to terminate this Agreement upon one hundred and eighty (180) days prior notice to Cira. Unless otherwise agreed to by Cira, termination of this Agreement pursuant to this Section 5.02 shall terminate all sublicenses granted by Neoprobe. In the event the Agreement is terminated pursuant to this Section 5.02, Cira shall have the right to have all technical data or information, including any regulatory submission (hereinafter the Neoprobe Information") owned or controlled by Neoprobe relating the Technology, transferred to Cira at Cira's expense and Cira shall have the right to use such Neoprobe Information in its business. In the event Cira decides to transfer Neoprobe Information, by license or otherwise, to a third party, Cira and Neoprobe shall negotiate in good faith prior to such transfer the consideration to be paid to Neoprobe for such Neoprobe Information.

5.03 Termination for Material Breach. Either party may terminate this Agreement for a material breach or default if such material breach or default is not cured within sixty (60) days after the giving of written notice by the party specifying such breach or default. In the case the complained of breach is a failure by Neoprobe to pay to Cira any payments due hereunder, Neoprobe shall have fifteen (15) days to cure such breach upon receipt of written notice from Cira specifying such breach or default.

5.04 Termination for Insolvency. Cira shall have the right to immediately terminate this Agreement, upon ten (10) days prior notice to Neoprobe, if Cira ascertains that Neoprobe has become insolvent or bankrupt.

5.05 Termination Does Not Affect Accrued Rights. Termination or expiration of this Agreement, pursuant to any of the provisions of this Article V shall not affect any rights or obligations which may have accrued to either party prior to the effective date of such termination or expiration.

5.06 Obligations Surviving Termination. The obligations of confidentiality as provided in Article XI and of Indemnification as provided in Article XII shall survive the expiration or termination of this Agreement.

5.07 Termination by Either Party. In the event this Agreement is terminated by Neoprobe pursuant to Section 5.02 or Section 5.03, or by Cira pursuant to Section 5.03, Neoprobe shall have no further rights under the Patent Rights; except that, Neoprobe shall have the right for a period of four (4) months after such termination to: (i) sell off in the ordinary course of business, any existing inventory of Licensed Product;and (ii) finish any work in progress and to sell off Licensed Product resulting from such work in progress in the ordinary course of business. Neoprobe shall pay Cira royalties on any Licensed Product sold pursuant to this Section 5.07 in accordance with the provisions of Article IV.

ARTICLE VI. NEOPROBE RESEARCH OBLIGATIONS

6.01 Pilot Clinical Research. Neoprobe agrees that it will continue to fund the pilot clinical research begun in HIV patients at the University of South Florida under the direction of Dr. Nancy Klimas. Unless otherwise agreed to by the parties, such pilot clinical studies shall be completed by the end of Fourth Quarter 1998. Neoprobe shall provide Cira with a written report(s) detailing the results of the studies conducted by Dr. Klimas within thirty (30) days after receipt of a final written report(s) from Dr. Klimas.

6.02 Filing of IND. Unless otherwise agreed to by Cira, within one hundred twenty (120) days after receipt of the final written report from Dr.

Klimas described in Section 6.01, Neoprobe shall file information and data with the FDA sufficient to support an IND and a Protocol for the next appropriate clinical study. Unless otherwise agreed to by Cira, Neoprobe shall initiate the next study Protocol within one hundred twenty (120) days after approval of such study Protocol by the FDA.

6.03 Research Plan. Within thirty (30) days after filing of the information and data described in Section 6.02, Neoprobe shall provide Cira with a written Research Plan outlining the clinical and non-clinical research to be conducted by or on behalf of Neoprobe which Neoprobe proposes to use to support the filing of a BLA or NDA for a Licensed Product, including key milestone events to achieve filing of the BLA or NDA. Cira shall have the right to comment on such Research Plan and to suggest modifications to such Research Plan. Neoprobe agrees to carefully and in good faith consider Cira's comments; provided however, that the final content of the Research Plan shall be the sole responsibility of Neoprobe. The parties acknowledge that one of the purposes of the Research Plan is to set forth a concise plan for conducting research that will attract appropriate business partners for both Neoprobe and Cira. Accordingly, although Neoprobe shall be responsible for the final Research Plan, Neoprobe shall make reasonable efforts to incorporate Cira's comments into such plan where appropriate.

6.04 Due Diligence. On or before each January 1 of each Year of the term of this Agreement beginning in 2000 and until marketing approval for a Licensed Product is received from the FDA, Neoprobe shall provide Cira with an updated Research Plan summarizing results achieved against key milestones for the preceding year as well as outlining key milestones for the forthcoming year and detailing work remaining to be done under the Research Plan. In the event Neoprobe fails to provide Cira with the updated Research Plan as described in this Section 6.04, Cira may notify Neoprobe that it considers Neoprobe to be in default of this Section 6.04. Neoprobe shall have thirty (30) days to cure such default by providing Cira with the updated Research Plan. If Neoprobe does not cure the default within the specified time, Cira shall have the right to terminate this Agreement pursuant to Section 5.03 herein.

6.05 Marketing Approval. In the event the FDA issues a "non-approvable" letter for a Licensed Product within two (2) years after filing the BLA or NDA, and if Neoprobe can not overcome such non-approvable letter within twelve (12) months after its receipt from the FDA, Cira shall have the right to terminate this Agreement upon thirty (30) days prior written notice to Neoprobe.

6.06 Access to Data. Cira shall have the right to access all clinical and non-clinical data developed by Neoprobe as a result of its activities in carrying out the Research Plan. Such access shall include the right to use such data in patent applications and for patent prosecution if such use is allowed by applicable patent law.

6.07 Cell Growth Media. Neoprobe shall provide Cira with Cira's requirements for cell growth media manufactured by Life Technologies, Inc. having the specifications listed in the attached Schedule 6.07. Neoprobe shall supply such media to Cira at Neoprobe's acquisition cost plus ten percent (10%) markup. Neoprobe's obligation to supply media to Cira hereunder shall remain in effect until the earlier of the (i) termination of Neoprobe's supply arrangement with Life Technologies, Inc.; or (ii) the termination of this Agreement. Cira agrees to provide Neoprobe with a Quarterly forecast of its media needs on or before the 10th day of the first month of each Quarter.

ARTICLE VII. OPTION AND OTHER RIGHTS

7.01 Termination of Neoprobe's Option to Chronic Technology. In partial consideration of the rights granted to Neoprobe pursuant to Section 2.01 and

Section 7.02 herein, Neoprobe hereby specifically grants back to Cira the option to Chronic Technology granted to Neoprobe pursuant to Section 2.1(b) of the Main Agreement and, except as set forth in Section 7.02 below, shall have no further rights or obligations with respect to such Chronic Technology. As used in this Section 7.01, the term "Chronic Technology" shall have the same meaning as that set forth in the Main Agreement.

7.02 Option. Cira hereby grants to Neoprobe and Neoprobe hereby accepts the following:

(a) an option to acquire a worldwide, royalty-bearing, exclusive license with the right to sublicense to make, have made, use and sell a Licensed Product useful for the treatment of hepatitis in humans;

(b) an option to acquire a royalty-bearing, exclusive license with the right to sublicense in the Far East to make, have made, use and sell a Licensed Product covered by the Technology other than a Licensed Product used to treat a human patient infected with HIV or hepatitis which license is covered by Section 2.01 hereinabove.

7.03 Time to Exercise Option. The time period for exercising the option rights granted in Section 7.02 are as follows:

(a) the period for exercise of the option granted pursuant to Section 7.02(a) shall be ninety (90) days starting from the date Neoprobe provides Cira with a report as described in Section 6.01 hereinabove;

(b) the option granted to Neoprobe pursuant to Section 7.02(b) above must be exercised by Neoprobe on or before December 31, 1999.

As used in this Section 7.03 the term "Exercised" or "Exercise" shall mean the giving of written notice by Neoprobe to Cira as provided by Section 12.04 herein within the specified time period of Neoprobe's intent to exercise the option. Upon exercise of either of the options described in Section 7.02, the parties shall have ninety (90) days to negotiate in good faith the terms of a definitive license agreement.

7.04 Consideration. In partial consideration of the options granted in Section 7.02 herein, Neoprobe agrees to fund certain preclinical laboratory studies conducted by Cira up to the level of Fifty Thousand Dollars ($50,000). Cira has until December 31, 1999 to spend the $50,000 committed by Neoprobe in this Section 7.04. An initial payment in the amount of $10,000 shall be made upon notice by Cira to Neoprobe that Cira has begun such laboratory studies; thereafter, Cira shall invoice Neoprobe on a monthly basis as study expenses are incurred. Neoprobe shall pay such invoices within fifteen (15) days of receipt.

ARTICLE VIII. OWNERSHIP OF DATA

8.01 Ownership of Data and Regulatory Filing. Neoprobe has the responsibility for and shall bear the expense of conducting all pre-clinical and clinical studies needed, for purposes of preparing an NDA or BLA covering a Licensed Product. Neoprobe shall own all resulting data and all rights arising therefrom including, but not limited to, all data and rights arising out of any BLA or NDA submitted by Neoprobe or any FDA approval thereof. Neoprobe grants to Cira or its designees a right to reference such NDAs or BLAs and FDA approvals thereof for the purposes of registration and governmental filing in the Territory for products outside the scope of this Agreement.

8.02 Foreign Marketing Approvals. Neoprobe shall use reasonable commercial efforts to carry out, at its own expense, all product development, including, without limitation, regulatory and clinical work, testing or studies relating to Licensed Products reasonably required for obtaining all regulatory approvals needed to market, sell or use Licensed Products in countries of the Territory other than the United States and Europe.

8.03 Maintenance of Regulatory Filings. Neoprobe shall use its

reasonable efforts to prepare, file, prosecute and maintain, during the term of this Agreement, all necessary and appropriate applications, submissions and filings, to the appropriate governmental authorities, to obtain marketing approval for a Licensed Product in each country within the Territory.

8.04 Access to Regulatory Filings. In the event Neoprobe shall terminate the Agreement pursuant to Section 5.02 herein or Cira shall terminate this Agreement pursuant to Section 5.03, Section 5.04 or Section 6.05 herein, Cira shall have the right to acquire rights to all regulatory submissions, filing, data packages, e.g., INDs, NDAs, BLAs, European Dossiers owned by Neoprobe at the time of such termination. The parties agree to negotiate in good faith an agreement covering the nature of such rights and fee or cost to Cira for such rights.

ARTICLE IX. PATENTS

9.01 Filing and Maintenance of Patents. Cira shall have responsibility for the preparation, prosecution and maintenance of patent applications and patents covering the Technology. Neoprobe shall have the right to designate the countries in which foreign counterparts will be filed corresponding to a United States patent application. Neoprobe shall bear all costs associated with such foreign filing; provided however, that Cira shall be responsible for the prosecution of such foreign applications. In the event Cira should license the same foreign Patent Rights to a third party for use in a field outside the scope of this Agreement, Cira shall equitably apportion the foreign patent expenses among all of the licensees of foreign Patent Rights.

9.02 Patent Expenses. If Neoprobe decides at any time not to undertake or continue incurring patenting expenses for any particular patent(s) or application(s) included in the Patent Rights in or for any country other than the United States, it shall notify Cira in writing ninety (90) days before such patent(s) or patent application(s) will lapse or become abandoned or reasonably timely before the time for filing such application(s) will expire. In such event, Cira shall have the right to assume filing, prosecution, and maintenance of such application(s) or patent(s) at its own expense and to terminate Neoprobe's license with respect thereto.

9.03 Patent Term Extension. Neoprobe shall cooperate with Cira in connection with the filing of all applications and filings necessary to obtain the benefits under the Drug Price Competition and Patent Term Restoration Act of 1984 and any amendments thereto.

9.04 Response to Infringement of Patent Rights by Third Parties. If, during the term of this Agreement, either party becomes aware of any third party infringement or threatened infringement of any Patent Rights in the Territory, the following provisions shall apply:

(a) The party having such knowledge shall promptly give notice to the other party, with all available details.

(b) Cira shall have the right, but not the obligation, to bring suit in its name, or in the name of Neoprobe if necessary, at its own expense to restrain such infringement and to recover profits and damages. Neoprobe agrees to being joined as a party plaintiff and to cooperate in the prosecution thereof as is reasonably necessary, at Cira's expense. If Cira decides to undertake such suit, then Cira shall have sole right to control prosecution, and the right to settle and compromise such action with Neoprobe's prior written consent, which shall not be unreasonably withheld.

9.05 Neoprobe's Rights If Cira Does Not Pursue Infringer. If Cira fails to take action against an infringer pursuant to Section 9.04, within sixty (60) days after notice from Neoprobe, then Neoprobe, at any time prior to Cira thereafter filing an action, shall have the right but not the obligation to take such action in its own name or in the name of Cira as it deems necessary or appropriate. Cira shall cooperate with Neoprobe as is reasonably necessary in any such action brought by Neoprobe. If Neoprobe brings legal action, Neoprobe shall have the sole right to control prosecution, and the right to settle and compromise such action with Cira's prior written consent, which shall not be unreasonably withheld.

9.06 Application of Monies Recovered From Infringer. In the event any monetary recovery in connection with an infringement action brought pursuant to either of Section 9.04 or Section 9.05 is obtained, such recovery shall be applied in the following priority: first, to reimburse Cira and Neoprobe by the proportion and up to the extent of their out-of-pocket expenses (including reasonable attorneys' fees) in prosecuting such infringement; second, to be shared by the proportion and up to the extent of any damages established, including but not limited to Neoprobe's lost profits and Cira's lost royalties; third, the balance, if any, to be shared one-half by Cira and one-half by Neoprobe.

9.07 Improvement Patents. During the term of this Agreement, if Cira develops an improvement to any of the Technology licensed hereunder, such improvement shall be included and shall become part of the Technology licensed pursuant to the terms of this Agreement.

ARTICLE X. TERMINATION OF MAIN AGREEMENT

10.01 Termination. Effective immediately upon execution of this Agreement by the last of the parties to sign. Cira and Neoprobe hereby agree, that in consideration of the respective rights and obligations of the parties set forth in this Agreement, the Technology Option Agreement dated March 14, 1996 attached hereto as Exhibit A shall be terminated and shall have no further force and effect except that the obligation of confidentiality set forth in Section 5.8 shall survive such termination.

ARTICLE XI. CONFIDENTIALITY

11.01 Confidential Information. Except for the proper exercise of any rights granted or reserved under other provisions of this Agreement, each party agrees that it will take such precautions as it normally takes with its own confidential or proprietary information to keep confidential and not to publish or otherwise disclose to a third party except as permitted or anticipated herein, any information of a confidential or proprietary nature furnished by the other

party to it in connection with this Agreement, including, without limitation, technology, marketing strategy, specifications, product information, preclinical and clinical data, inventions, processes, know-how, sales force information, sales data, plans, trade secrets, call lists, business information, and adverse reaction reports (together called "Confidential Information") without the prior written consent of the other party, except to the extent that such Confidential Information is required to be disclosed for the purpose of complying with law or government regulations.

11.02 Period of Confidentiality. The obligation of confidentiality set forth in Section 11.01 shall remain in effect for five (5) years from the expiration or termination of this Agreement; provided that nothing in this Article XI shall prevent disclosure or use by the receiving party of any part of the Confidential Information of the other party which:

(a) was known or used by the receiving party prior to disclosure, as evidenced by its written records made prior to the time of disclosure hereunder;

(b) either before or after the time of disclosure becomes known to the public other than by an unauthorized act or omission of the receiving party;

(c) is lawfully disclosed to the receiving party by a third party having the right to disclose said Confidential Information; or

(d) is developed by the receiving party independently from the Confidential Information provided by the other party hereto as evidenced by the receiving party's written records.

11.03 Right to Use Confidential Information. Notwithstanding the restrictions set forth in this Article XI, each party shall be entitled at all times to use all Confidential Information provided by the other party in order to perform its obligations or exercise its rights under this Agreement.

11.04 Public Announcement. No press releases or other public announcements concerning Neoprobe's appointment hereunder or concerning this Agreement shall be made without the prior mutual consent of the parties.

11.05 Specific Terms Not To Be Disclosed. Neither Cira nor Neoprobe shall publicly disclose the specific terms of this Agreement other than what may be required by the Securities and Exchange Commission (SEC). Except as required by SEC filings, the transactions contemplated hereby or performance hereunder shall not be disclosed

without first obtaining the written consent of the other party unless there has been a prior public disclosure of the information being disclosed by the other party or with the other party's consent. Disclosure of the terms of this Agreement to a third party under a written Confidentiality Agreement the terms of which are equal in scope with the terms of this Article XI shall not be considered a "public" disclosure that is prohibited by the Section 11.05.

ARTICLE XII. INDEMNIFICATION AND INSURANCE

12.01 Neoprobe Indemnity. Neoprobe agrees to indemnify, protect, and defend Cira and hold Cira harmless from and against any claims, damages, liabilities, harm, loss, costs, penalties, lawsuits, threats of lawsuit, recalls or other governmental action, including reasonable attorneys' fees, which (i) arise out of Neoprobe's breach of this Agreement or of any warranty or representation made to Cira under this Agreement; or, (ii) which result from any claim made against Cira or its Affiliates in connection with Neoprobe's manufacture or sale of Licensed Product. Cira, upon the filing of any such legal claim or lawsuit against it, shall promptly notify Neoprobe, in writing of any such claim and Neoprobe shall, at its expense, with attorneys reasonably acceptable to Cira, handle, defend, and control such claim or lawsuit.

12.02 Cira Indemnity. Cira agrees to indemnify, protect, and defend Neoprobe and hold Neoprobe harmless from and against any claims, damages, liability, harm, loss, costs, penalties, lawsuits, threats of lawsuit, recalls or other governmental action, including reasonable attorneys' fees, which arise as the result of Cira's breach of this Agreement or of any warranty or representation made to Neoprobe under this Agreement. Neoprobe shall, upon the filing of any such legal claim or lawsuit against it, promptly notify Cira, in writing, of any such claim and Cira shall, at its expense, with attorneys reasonably acceptable to Neoprobe, handle, defend and control such claim or lawsuit.

12.03 Neoprobe Insurance. Neoprobe shall obtain and/or keep in force during the term of this Agreement, including any renewals thereof, policies of insurance covering the Licensed Product and general comprehensive liability covering the sale and distribution of Licensed Product, in the Territory. Such insurance shall include the name Cira as an additional insured and shall provide that it shall not be canceled by the insurer without thirty (30) days' prior written notice thereof to Cira. Neoprobe shall supply Cira with a certificate of

insurance evidencing that such insurance is in force.

ARTICLE XIII. REPRESENTATIONS & WARRANTIES

13.01 Cira Authorization. Cira hereby represents and warrants that it is a corporation duly organized, validly existing and in good standing under the laws of the State of Delaware, and that the execution, delivery and performance of this Agreement have been fully authorized by the Board of Directors of Cira.

13.02 Ownership of Patent Rights. Cira hereby represents and warrants that it holds full right and title to the Patent Rights listed in Schedule 1.14 attached hereto and that it has not entered into any other contract, or agreement which prohibits or would prohibit the execution and delivery of this Agreement or the granting of the license set forth herein.

13.03 Third Party Infringement. Cira hereby represents and warrants that as of the Effective Date, to the best of its knowledge and belief, there are no third party infringements of the Patent Rights of which it is aware.

13.04 Neoprobe Authorization. Neoprobe hereby represents and warrants that it is a corporation duly organized, validly existing and in good standing under the laws of the State of Delaware, and that the execution, delivery and performance of this Agreement have been fully authorized by the Board of Directors of Neoprobe.

13.05 Diligent Efforts. Neoprobe represents and warrants that it shall diligently exert good faith efforts to obtain health regulatory approvals to market Licensed Product in the countries of the Territory and to develop and promote the most extensive sales of Licensed Products under the license granted in Section 2.01 herein as are commercially practical and compatible with good business practice in the pharmaceutical industry.

ARTICLE XIV. MISCELLANEOUS

14.01 Force Majeure. Except as specifically set forth herein, neither Cira nor Neoprobe shall be in default under this Agreement nor liable for any failure to perform or for delay in performance resulting from any cause beyond its reasonable control or due to compliance with any regulations, orders, or act of any federal, provincial, state or municipal government, or any department or agency thereof, civil or military authority; acts of God, acts or omissions of the other party, fires, floods or weather; strikes or lockouts; factory shutdowns, embargoes, wares, hostilities or riots; delays or shortages in transportation; or inability to obtain labor, manufacturing facilities or material.

14.02 Taxes. Each of the parties shall bear all taxes imposed on it as a result of its performance or receipt of funds under this Agreement including, but not restricted to, any sales tax, any tax on or measured by any royalty or other payment required to be made by it hereunder, any registration tax, any tax imposed with respect to the granting of or transfer of licenses or other rights hereunder or the payment or receipt of royalties hereunder. The parties shall cooperate fully with each other in obtaining and filing all requisite certificates and documents with the appropriate authorities and shall take such further action as may reasonably be necessary to avoid the deduction of any withholding or similar taxes from any remittance of funds by Neoprobe to Cira hereunder.

14.03 Marking. The labeling and/or packaging of all Licensed Product made by or for Neoprobe and sold by or for Neoprobe in the United States shall contain the following legend: "Licensed Under U.S. Pat. _____."" or such other legend as shall be mutually agreed to by the parties and which shall be sufficient to provide notice of the existence of the Patent Rights to third

parties.

14.04 Notice. All notices, proposals, submissions, offers, approvals, agreements, elections, consents, acceptances, waivers, reports, plans, requests, instructions and other communications required or permitted to be made or given hereunder (all of the foregoing hereinafter collectively referred to as "Communications") shall be in writing, and shall be deemed to have been duly made or given when: a) delivered personally with receipt acknowledged; b) sent by registered or certified mail or equivalent, return receipt requested, or c) sent by facsimile or telex (which shall promptly be confirmed by a writing sent by registered or certified mail or equivalent, return receipt requested), or d) sent by recognized overnight courier for delivery within twenty-four (24) hours, in each case addressed or sent to the parties at the following addresses and facsimile numbers or to such other or additional address or facsimile as any party shall hereafter specify by Communication to the other parties:

TO NEOPROBE:

David C. Bupp
President and CEO
Neoprobe Corporation
425 Metro Place North, Suite 300
Dublin, Ohio 43017

Fax No.: 614-793-7520

TO CIRA TECHNOLOGIES, INC.:

President
Cira Technologies, Inc.
Mueller-Smith Building
7700 Rivers Edge Drive
Columbus, Ohio 43235-1355

Fax No.: 614-436-0057

Copy to: P.A. Coburn
Vice President and General Counsel

Communications shall be deemed to have been given, received and dated on the Notice of change of address shall be deemed given when actually received, all other earlier of: (i) when actually received, or on the date when delivered personally; (ii) one (1) day after being sent by facsimile, cable, telex (each promptly confirmed by a writing as aforesaid) or overnight courier; or four (4) business days after mailing.

14.05 Agreement Subject to Applicable Law. Cira agrees that its rights under this Agreement shall be subject to any limitations or restrictions imposed on Neoprobe by the laws or regulations of the U.S. or any respective agency thereof, and Cira agrees to take no action which would cause Neoprobe to be in violation of any such laws or regulations.

14.06 Governing Law. This Agreement shall be construed and governed by the laws of the State of Ohio and adjudicated within the exclusive jurisdiction of the courts of the State of Ohio, Franklin County. If any provision of this Agreement including, but not limited to, the waiver of claims under any particular statute, should be deemed unenforceable, the remaining provisions shall, to the extent possible, be carried into effect, taking into account the general purpose and spirit of this Agreement.

14.07 Other Instruments. The parties hereto covenant and agree that they will execute such other and further instruments and documents as are or may become reasonably necessary or convenient to effectuate and carry out the provisions of this Agreement or may be reasonably requested by the other party.

14.08 Legal Construction. In case any one or more of the provisions contained in this Agreement shall be invalid or unenforceable in any respect, the validity and enforceability of the remaining provisions contained herein shall not in any way be affected or impaired thereby and the parties will attempt to agree upon a valid and enforceable provision which shall be a reasonable substitute for such invalid and unenforceable provision in light of the tenor of this Agreement, and, upon so agreeing, shall incorporate such substitute provision in this Agreement.

14.09 Entire Agreement, Modification, Consents and Waivers. This

Agreement supersedes all prior agreements, written or oral, between the parties whether with respect to the subject matter herein, and contains the entire agreement of the parties with respect to the subject matter hereof and, except as provided herein, no interpretation, change, termination or waiver of or extension of time for performance under any provision of this Agreement shall be binding upon any party unless in writing and signed by the party intended to be bound thereby. Receipt by any party of money or other consideration due under this Agreement, with or without knowledge of breach, shall not constitute a waiver of such breach or any provision of this Agreement. Except as otherwise provided in this Agreement, no waiver of or other failure to exercise any right under, or default or extension of time for performance under, any provision of this Agreement shall affect the right of any party to exercise any subsequent right under or otherwise enforce said provision or any other provision hereof or to exercise any right or remedy in the event of any other default, whether or not similar.

14.10 Relationship. Nothing contained in this Agreement shall be deemed to create a partnership or joint venture between the parties, and each of the parties shall in all matters connected herewith be independent contractors. Neither of the parties hereto shall hold itself out as the agent of the other, nor shall either of the parties incur any indebtedness or obligation in the name of, or which shall be binding on the other, without the prior written consent of

the other. No employees, agents, or sales representatives of either party shall be deemed employees, agents or sales representatives of the other party.

14.11 Section Headings; Construction. The section headings and titles contained herein are each for reference only and shall not be deemed to affect the meaning or interpretation of this Agreement. The words "hereby", "herein", "hereinabove", "hereinafter", "hereof" and "hereunder, when used anywhere in this Agreement, refer to this Agreement as a whole and not merely to a subdivision in which such words appear, unless the context otherwise requires. The singular shall include the plural, the conjunctive shall include the disjunctive and the masculine gender shall include the feminine and neuter, and vice versa, unless the context otherwise requires.

14.12 Execution Counterparts. This Agreement may be executed in any number of counterparts and each duplicate counterpart shall constitute an original, any one of which may be introduced in evidence or used for any other purpose without the production of its duplicate counterpart. Moreover, notwithstanding that any of the parties did not execute the same counterpart, each counterpart shall be deemed for all purposes to be an original, and all such counterparts shall constitute one and the same instrument, binding on all of the parties hereto. 14.13 Consents and Approval. Unless otherwise expressly provided herein, whenever in this Agreement a consent or approval is to be given by any party hereto, such consent or approval may be given or withheld, as the case may be, in the sole and absolute discretion of such party.

ARTICLE XV. BINDING EFFECT, ASSIGNMENT

15.01 Binding Effect, Assignment. This Agreement shall inure to the benefit and be binding upon each of the parties hereto and their respective successors and assigns. Neither this Agreement, nor any of the rights and obligations under this Agreement, may be assigned, transferred or otherwise disposed of by either party without the prior consent of the other party, such consent not to be unreasonably withheld.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their respective officer hereunto duly authorized as of the date first written hereinabove.

NEOPROBE CORPORATION	CIRA TECHNOLOGIES, INC.
By: /s/ DAVID BUPP	By: /s/ RICHARD G. OLSEN
David Bupp	

Title: President and Chief Executive Officer

Title: President

EXHIBIT A

(Copy of Technology Option Agreement Dated March 14, 1996)

SCHEDULE 1.03

List of Countries Making Up the Far East

Australia	Phillippines
China	Singapore
Indonesia	South Korea
Japan	Taiwan
Hong Kong	Thailand
Malaysia	New Zealand

SCHEDULE 1.14

Patent Rights

<TABLE>
<S> <C> <C>
CELLULAR IMMUNOTHERAPY
Docket #: CIR001-4 Serial #: 943993 Filing Date: 03 - OC - 1997
Country: United States Patent #: Patent Date: None
Atty.: J. K. Mueller, Jr. Assignee: CIRA TECH, INC. Exp. Date: None

EXPANSION OF CYTOKINE-PRODUCING CELLS FROM LYMPH NODES INFECTED WITH HIV

Docket #: CIR001PC Serial #: US97/02309 Filing Date: 20 - FE - 1997
Country: Patent Coop Treaty Patent #: Patent Date: None
Atty: J. K. Mueller, Jr. Assignee: Cira Tech, Inc. Exp. Date: None
</TABLE>

EXHIBIT 10.3.48

RESTATED SUBSCRIPTION AND OPTION AGREEMENT

April 17, 1998

NEOPROBE CORPORATION, a Delaware corporation ("Neoprobe").

CIRA TECHNOLOGIES, INC., a Delaware corporation ("Cira") and

Each of the individual stockholders of Cira who has signed this Agreement (the "Stockholders")

hereby agree as follows:

P R E A M B L E :

1. Cira has developed data, discoveries, inventions, and other new technology for the treatment of chronic infectious and/or autoimmune disease in humans which involves the mitogenic stimulation of cytokine-secreting cells derived from lymph nodes excised from chronically-infected and/or autoimmune disease-affected human patients and the preparation of a therapeutic agent which then is administered to the infected patients, and data, know-how, processes, and procedures connected therewith (the "Technology").

2. On March 14, 1996, Neoprobe and Cira entered into a Technology Option Agreement (the "Technology Agreement") under which Neoprobe agreed to provide financial, clinical and technical support to Cira and The Ohio State University Research Foundation to allow them to conduct a Phase I clinical evaluation of the Technology.

3. On March 14, 1996, Neoprobe, Cira and the Stockholders entered into the Subscription and Option Agreement (the "Original Agreement") whereby Neoprobe agreed to purchase 78 shares of Cira common stock, Neoprobe received an option ("Option") to purchase additional shares of Cira common stock and Neoprobe received a right of first refusal with regard to any newly issued shares of Cira common stock. On September 5, 1997, the board of directors of Cira declared a stock dividend at the rate of 2,999 shares of Cira common stock for each share held on September 5, 1997. As a result of this dividend, Neoprobe received 233,922 additional shares of Cira common stock for a total ownership of 234,000 shares (the "Original Shares").

4. Neoprobe, Cira and the Shareholders wish to terminate the Original Agreement, agree that Neoprobe shall purchase 116,400 additional shares of Cira common stock, terminate the Option, agree that Neoprobe and Cira enter into a License and Option Agreement to govern their respective rights and obligations with regard to the Technology and bind Neoprobe to the Stockholders Agreement ("Stockholders Agreement") as amended and restated on the date hereof by executing this Restated Subscription and Option Agreement ("Restated Agreement"). Once Neoprobe purchases the 116,400 additional shares, Neoprobe will own a total of 350,400 shares of Cira common stock which will represent 15% of the total issued and outstanding shares of Cira common stock.

T E R M S :

ARTICLE 1. EXECUTION OF AGREEMENTS.

SECTION 1.1. LICENSE AGREEMENT. Simultaneously with execution of this Restated Agreement, Neoprobe and Cira have executed a license and option agreement ("License Agreement").

SECTION 1.2. STOCKHOLDER AGREEMENT. With regard to the Original Shares and those shares to be issued to Neoprobe pursuant to Article 2 of this Agreement, Neoprobe hereby agrees to be bound by and comply with the terms of the Stockholders Agreement. Cira and the Stockholders hereby consent to the inclusion of Neoprobe as a party to the Stockholders Agreement.

ARTICLE 2. STOCK ISSUANCE.

Neoprobe hereby subscribes for and agrees to purchase 116,400 shares of Cira common stock ("Additional Shares") for and in consideration of the termination of the Option, the execution of the License Agreement and $.001 per Additional Share and Cira hereby issues and sells such Additional Shares free and clear of all liens, encumbrances and adverse claims (other than restrictions on transfer under this Restated Agreement and applicable federal and state securities laws or those that are imposed by or through Neoprobe) and acknowledges the sufficiency of the consideration received therefor. Simultaneously with the execution and delivery of this Restated Agreement, Cira has delivered a valid and genuine stock certificate representing the Additional Shares to Neoprobe.

ARTICLE 3. REPRESENTATIONS AND WARRANTIES OF CIRA.

As of the date of the Original Agreement and the date of this Restated Agreement, the Original Agreement and the Restated Agreement are collectively referred to herein as the "Agreements"), Cira hereby represents and warrants to Neoprobe as follows:

SECTION 3.1. ORGANIZATION AND STANDING. Cira is a corporation that was duly organized, and is validly existing and in good standing under the laws of the State of Delaware. Cira has all requisite corporate power to own and operate its properties and assets, to carry on its business as presently conducted, to execute and deliver the Agreements, to sell and issue the Original Shares and the Additional Shares (the Original Shares and the Additional Shares are collectively referred to herein as the "Shares") and to carry out and perform its obligations under the terms of the Agreements.

SECTION 3.2. AUTHORIZATION. All corporate action on the part of Cira, its directors and stockholders necessary to authorize the execution and delivery of the Agreements, the performance of Cira's obligations under the Agreements and the sale and issuance of the Shares has been duly taken. The Agreements have been duly executed and delivered by Cira and are valid and legally binding obligations of Cira, which are enforceable against Cira in accordance with their terms. The execution and delivery of the Agreements by Cira, the performance of its obligations under the Agreements and the sale and issuance of the Shares did not and will not violate any law applicable to Cira or its Certificate of Incorporation or By-laws or breach or be a default under (with or without the giving of notice or the lapse of time) any material contract, agreement or instrument to which Cira is a party. The Shares have been duly authorized and, when issued and paid for in accordance with the terms of the Agreements, will be validly issued, fully paid and nonassessable and free and clear of all liens, encumbrances and adverse claims other than restrictions on transfer under the Agreements and applicable federal and state securities laws or those that are imposed by or through Neoprobe.

SECTION 3.3. NO REGISTRATION REQUIREMENT. Subject to the truth and accuracy of the representations of Neoprobe set forth in Article 4 of the Original Agreement, the offer, sale and issuance of the Shares as contemplated by the Agreements are exempt from the registration and prospectus delivery requirements of Section 5 of the Securities Act, and neither Cira nor

any person acting on its behalf will take any action hereafter that would cause the loss of such exemption.

SECTION 3.4. DISCLOSURE. No representation or warranty by Cira contained in the Agreements, nor any other statement or certificate furnished or to be furnished to Neoprobe pursuant hereto or in connection with the transactions contemplated hereby by Cira contains or will contain any untrue statement of a material fact or omits or will omit to state a material fact necessary to make the statements contained therein or herein not misleading in light of the circumstances under which they were made.

SECTION 3.5. INDEMNIFICATION. Cira shall indemnify Neoprobe, each of its directors and officers, each legal counsel and independent accountant of Cira and each person who controls Neoprobe (within the meaning of the Securities Act) against any and all claims, losses and liabilities (and actions and proceedings in respect thereof) arising out of or related to any breach of any warranty or agreement made by Cira in the Agreements or any misrepresentation of Cira contained in the Agreements and will reimburse Neoprobe, such directors, officers, persons or control persons for any legal or any other expense reasonably incurred in connection with investigating or defending any such claim, loss, liability, action or proceeding.

ARTICLE 4. REPRESENTATIONS AND WARRANTIES OF NEOPROBE. As of the date of the Agreements, Neoprobe hereby represents and warrants to Cira as follows:

SECTION 4.1. PRIVATE OFFERING. Neoprobe understands that the Shares have not been registered under the Securities Act on the ground that the sales provided for in the Agreements and the issuance of the Shares under the Agreements are exempt from registration under the Securities Act pursuant to Section 4(2) thereof, that Cira's reliance on such exemption is predicated on Neoprobe's representations set forth in the Agreements and that in order to obtain such exemption, the transfer of the Shares is restricted by Section 4.2 of this Restated Agreement and the legend required by Section 4.2 of this Restated Agreement.

SECTION 4.2. TRANSFER RESTRICTIONS. Neoprobe will not offer for sale, sell or otherwise transfer any of the Shares unless the Shares have been registered under the Securities Act and under applicable state securities laws or such Shares or their offer, sale or transfer are exempt from such registration and Cira has received an opinion of counsel, in form and substance reasonably satisfactory to Cira, to the effect that such Shares or their offer, sale or transfer are so exempt. Any certificate representing the Shares shall bear the following legend in larger or other contrasting type or color:

> These securities have not been registered under the Securities Act of 1933. These securities may not be offered for sale, sold or otherwise transferred unless they are registered under the Securities Act of 1933 or they or such offer, sale or transfer are exempt from such registration and the Issuer has received an opinion of counsel reasonably satisfactory to the Issuer in form and substance to that effect.
>
> The transfer of these shares is restricted by the terms of a Restated Subscription and Option Agreement among the Corporation and its Stockholders dated April 17, 1998. Except as provided in such Agreement, these Shares may not be given, sold, pledged or otherwise transferred. The Corporation will mail to the Stockholder a copy of such Agreement without charge within five days after receipt of written request therefor.

SECTION 4.3. INVESTMENT INTENT. Neoprobe purchased the Original Shares and is purchasing the Additional Shares for Neoprobe's own account and not for other persons and for investment and not with a view to the distribution of any of the Shares.

SECTION 4.4. INFORMATION. Neoprobe has had an opportunity to ask questions and receive answers from

Cira regarding the terms and conditions of the offerings of the Shares and the business, properties, financial condition, and prospects of Cira and to obtain additional information (to the extent Cira possessed such information or could acquire it without unreasonable effort or expense) necessary to verify the accuracy of any information furnished to Neoprobe.

SECTION 4.5. ADVERTISING. Neoprobe did not purchase the Original Shares and is not purchasing the Additional Shares as a result of or subsequent to (a) any advertisement, article, notice or other communication published in any newspaper, magazine or similar media or broadcast over television or radio or (b) any seminar or meeting whose attendees, including Neoprobe, had been invited by any general advertising or general solicitation.

SECTION 4.6. INVESTOR SOPHISTICATION; SUITABILITY. Neoprobe has such knowledge and experience in financial and business matters that Neoprobe is capable of evaluating the merits and risks of investment in the Shares. Neoprobe has determined that the Shares are a suitable investment for Neoprobe and that Neoprobe could bear the complete loss of Neoprobe's investment in the Shares.

SECTION 4.7. ACCREDITED INVESTOR. Neoprobe is an "accredited investor" within the meaning of Rule 501(a) of Regulation D as promulgated under the Securities Act.

SECTION 4.8. CAPACITY; ENFORCEABILITY. Neoprobe is a corporation that was duly organized, and is validly existing and in good standing under the laws of the State of Delaware. Neoprobe has all requisite corporate power to execute and deliver the Agreements, to purchase the Shares under the Agreements and to carry out and perform its obligations under the terms of the Agreements. All corporate action on the part of Neoprobe, its directors and stockholders necessary to authorize the execution and delivery of the Agreements and the performance of Neoprobe's obligations under the Agreements has been duly taken. The Agreements have been duly executed and delivered by Neoprobe and the Agreements are valid and legally binding obligations of Neoprobe, which are enforceable against Neoprobe in accordance with their terms.

SECTION 4.9. INDEMNIFICATION. Neoprobe shall indemnify Cira, each of its directors and officers, each legal counsel and independent accountant of Cira and each person who controls Cira (within the meaning of the Securities Act), against any and all claims, losses and liabilities (and actions and proceedings in respect thereof) arising out of or related to any breach of any warranty or agreement made by Neoprobe in this Article 4 or any misrepresentation of Neoprobe contained herein and will reimburse Cira, such directors, officers, persons or control persons for any legal or any other expense reasonably incurred in connection with investigating or defending any such claim, loss, liability, action or proceeding.

ARTICLE 5. CERTAIN RIGHTS OF NEOPROBE.

SECTION 5.1. NEW SECURITIES. The parties have agreed to delete this section and hereby release any rights thereunder.

SECTION 5.2 SIZE OF THE BOARD. The parties have agreed to delete this section and hereby release any rights thereunder.

SECTION 5.3. NOMINATIONS. The parties have agreed to delete this section and hereby release any rights thereunder.

SECTION 5.4. TERMINATION. The provisions of this Article 5 shall terminate when (a) the common stock of Cira has been registered and sold in a firm-commitment underwriting after the date hereof.

ARTICLE 6. REGISTRATION RIGHTS.

SECTION 6.1. CERTAIN DEFINITIONS.

(a) "Registrable Securities" means the Shares and any shares of Cira common stock issued in respect thereof in any recapitalization, provided, however, that Registrable Securities shall not include any shares of Cira common stock which have previously been

registered and sold or which have been sold to the public under Rule 144.

(b) "Registration" means a registration effected by preparing and filing a registration statement in compliance with the Securities Act and the ordering of the effectiveness of such registration statement.

SECTION 6.2. PIGGY-BACK REGISTRATION.

(a) If Cira determines to register any of its securities either for its own account or the account of security holders exercising their respective contractual registration rights, other than a registration relating solely to employee benefit plans, a Rule 145 transaction or an exchange offer, or a registration on any registration form that does not permit secondary sales, Cira shall promptly give written notice thereof to Neoprobe, and use its best efforts to include in such registration (and any related qualification under blue sky laws or other compliance), except as set forth in paragraph (b) of this Section 6.2, and in any underwriting involved therein, all the Registrable Securities specified in a written request, made by Neoprobe within twenty (20) days after the written notice from Cira is given. Such written request may specify all or a part of Neoprobe's Registrable Securities.

(b) If the registration of which Cira gives notice is for a registered public offering involving an underwriting, Cira shall so advise Neoprobe as a part of the written notice given pursuant to paragraph (a) of this Section 6.2. In such event, the right of Neoprobe to participate in such registration pursuant to this Section 6.2 shall be conditioned upon Neoprobe's participation in such underwriting and the inclusion of Neoprobe's Registrable Securities in the underwriting to the extent provided herein. Neoprobe shall (together with Cira and the other holders of securities of Cira with contractual registration rights to participate therein distributing their securities through such underwriting) enter into an underwriting agreement in customary form with the representative of the underwriters selected by Cira.

(c) Notwithstanding any other provision of this Section 6.2, if the representative of the underwriters advises Cira in writing that marketing factors require a limitation on the number of shares to be underwritten, the representative may (subject to the limitations set forth below) exclude all Registrable Securities from, or limit the number of Registrable Securities to be included in, the registration and underwriting. Cira shall so advise all holders of securities requesting registration, and the number of shares or securities that are entitled to be included in the registration and underwriting shall be allocated first to Cira for securities being sold for its own account and thereafter among selling stockholders on a pro-rata basis according to their total holdings. If any person does not agree to the terms of any such underwriting, he shall be excluded therefrom by written notice from Cira or the underwriter. If shares are so withdrawn from the registration and if the number of shares of Registrable Securities to be included in such registration was previously reduced as a result of marketing factors, Cira shall then offer (subject to the availability of a reasonable amount of time to make such offer before the commencement of a distribution) to all persons who have retained the right to include securities in the registration the right to include additional securities in the registration in an aggregate amount equal to the number of shares so withdrawn, with such shares to be allocated among the persons requesting inclusion on a pro-rata basis according to their total holdings.

SECTION 6.3. REGISTRATION PROCEDURES. In the case of any registration by Cira under this Article 6 in which Neoprobe participates, Cira shall keep Neoprobe advised in writing as to the initiation of each such registration and the completion thereof; and Cira shall use its best efforts to:

(a) Keep such registration effective for a period of one hundred twenty (120) days or until Neoprobe has completed the distribution described in the registration statement relating thereto, whichever occurs sooner; provided, however, that (i) such one hundred twenty (120) day period shall be extended for a period of time equal to the period Neoprobe refrains

from selling any securities included in such registration at the request of an underwriter of common stock (or other securities) of Cira; and (ii) in the case of any registration of Registrable Securities on Form S-3 which are intended to be offered on a continuous or delayed basis, such one hundred twenty (120) day period shall be extended, if necessary, to keep the registration statement effective until all such Registrable Securities are sold;

(b) Prepare and file with the Commission 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 Securities Act with respect to the disposition of all securities under such registration statement;

(c) Furnish such number of prospectuses and other documents incident thereto, including any amendment of or supplement to the prospectus, as Neoprobe may reasonably request from time to time;

(d) Notify each seller of Registrable Securities covered by such registration statement at any time when a prospectus relating thereto is required to be delivered under the Securities act of the happening of any event as a result of which the prospectus included in such registration statement, as then in effect, includes any 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 or incomplete in the light of the circumstances then existing, and at the request of any such seller, prepare and furnish to such seller a reasonable number of copies of a supplement to or an amendment of such prospectus as may be necessary so that, as thereafter delivered to the purchasers of such shares, such prospectus shall not include an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading or incomplete in the light of the circumstances then existing; and

(e) Cause all such Registrable Securities registered pursuant thereunder to be listed on each securities exchange on which securities issued by Cira and of the same class are then listed;

(f) Provide a transfer agent and registrar for all Registrable Securities registered pursuant to such registration statement and a CUSIP number for all such Registrable Securities, in each case not later than the effective date of such registration;

(g) Comply with all applicable rules and regulations of the Commission, and make available to its security holders, as soon as reasonably practicable, an earnings statement covering the period of at least twelve (12) months, but not more than eighteen (18) months, beginning with the first month after the effective of the registration statement, which earnings statement shall satisfy the provisions of Section 11(a) of the Securities Act.

SECTION 6.4. INFORMATION BY NEOPROBE. If Registrable Securities are being registered pursuant to Section 6.2 above, Neoprobe shall furnish to Cira such information regarding Neoprobe and the distribution proposed by it as Cira may reasonably request in writing and as shall be reasonably required in connection with any registration, qualification, or compliance referred to in this Article 6.

SECTION 6.5. EXPENSES OF REGISTRATION. All expenses incurred by Cira in complying with this Article 6 hereof, including, without limitation, all registration and filing fees, printing expenses, fees and disbursements of counsel for Cira, blue sky fees and expenses, and the expense of any special audits incident to or required by any such registration shall be borne by Cira and all underwriting discounts and selling commissions applicable to the sale of the Registrable Securities shall be borne by Neoprobe.

SECTION 6.6. INDEMNIFICATION.

(a) Cira shall indemnify Neoprobe, each of its officers, directors, stockholders and legal counsel, and each person who controls (within the meaning of the Securities Act) Neoprobe against any and all claims, losses and liabilities (and actions and proceedings in

respect thereof) arising out of or based on (i) any untrue statement (or alleged untrue statement) of a material fact contained in any registration statement filed pursuant to Section 6.2, any prospectus issued thereunder, or any amendment thereof based on 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 in the light of the circumstances under which they were made, or (ii) any violation by Cira of any federal or state law, rule or regulation applicable to Cira in connection with any such registration, and will reimburse Neoprobe, each of its officers, directors, stockholders and legal counsel, and each person who controls Neoprobe, for any legal and any other expenses reasonably incurred in connection with investigating or defending any such claim, loss, liability, action or proceeding, as incurred, provided that Cira will not be liable in any such case to the extent that any such claim, loss, liability, action or proceeding arises out of or is based on any untrue statement or omission based upon information furnished to Cira by Neoprobe in writing pursuant to Section 6.4 above.

(b) If Shares held by Neoprobe are included in a registration statement filed pursuant to Section 6.2, Neoprobe shall indemnify Cira, each of its directors and officers, each legal counsel and independent accountant of Cira, each underwriter, if any, of Cira's securities covered by such a registration statement, each person who controls Cira or such underwriter (within the meaning of the Securities Act), against any and all claims, losses and liabilities (and actions and proceedings in respect thereof) arising out of or based on (i) any untrue statement (or alleged untrue statement) of a material fact contained in any such registration statement, any prospectus issued thereunder, or any amendment thereof, 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 in the light of the circumstances under which they were made, or (ii) breach of the covenant set forth in Section 6.8 below and will reimburse Cira, such directors, officers, counsel, accountants, underwriters or control persons for any legal or any other expense reasonably incurred in connection with investigating or defending any such claim, loss, liability, action or proceeding, as incurred, in each case to the extent, but only to the extent, that such untrue statement (or alleged untrue statement) or omission (or alleged omission) is made in such registration statement, prospectus or other document in reliance upon and in conformity with information furnished to Cira by Neoprobe in writing pursuant to Section 6.4 above.

(c) Each party entitled to indemnification under this Section 6.6 (the "Indemnified Party") shall give notice to the party required to provide indemnification (the "Indemnifying Party") promptly after such Indemnified Party has received written notice of any claim as to which indemnity may be sought, 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 approved by the Indemnified Party (whose approval shall not unreasonably be withheld). The Indemnified Party may participate in such defense at such party's expense; provided, however, that the Indemnifying Party shall bear the expense of such defense of the Indemnified Party if representation of both parties by the same counsel would be inappropriate due to actual or potential conflicts of interest. The failure of any Indemnified Party to give notice as provided herein shall relieve the Indemnifying Party of its obligations under this Section 6.6 only to the extent that such failure to give notice shall materially adversely prejudice 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 which does not include as an unconditional term thereof the giving by the claimant or plaintiff to such Indemnified Party of a release from all liability in respect to such claim or litigation.

(d) If the indemnification provided for in this Section 6.6 is held by a court of competent jurisdiction to be unavailable to an Indemnified Party with respect

to any loss, liability, claim, damage, or expense referred to therein, then the Indemnifying Party, in lieu of indemnifying such Indemnified Party hereunder, shall contribute to the amount paid or payable by such Indemnified Party as a result of such loss, liability, claim, damage, or expense in such proportion as is appropriate to reflect the relative fault of the Indemnifying Party on the one hand and of the Indemnified Party on the other in connection with the statements or omissions that resulted in such loss, liability, claim, damage, or expense as well as any other relevant equitable considerations. The relative fault of the Indemnifying Party and of the Indemnified Party shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission to state a material fact relates to information supplied by the Indemnifying Party or by the Indemnified Party and the parties' relative intent, knowledge, access to information, and opportunity to correct or prevent such statement or omission.

(e) Notwithstanding the foregoing, to the extent that the provisions on indemnification and contribution contained in the underwriting agreement entered into in connection with the underwritten public offering are in conflict with the foregoing provisions, the provisions in the underwriting agreement shall control.

SECTION 6.7. "LOCK-UP" AGREEMENT. If requested by an underwriter of Common Stock, Neoprobe will not sell or otherwise transfer or dispose of any shares of Cira common stock held by Neoprobe (other than those included in the registration) during a period of up to one hundred eighty (180) days following the effective date of a registration statement; provided that all persons having contractual registration rights and all officers and directors of Cira enter into similar agreements. The obligations described in this Section 6.7 shall not apply to a registration relating solely to employee benefit plans, Rule 145 transactions or exchange offers. Cira may impose stop-transfer instructions with respect to the securities subject to the foregoing restriction until the end of the applicable period.

SECTION 6.8. RULE 10B-6. Neoprobe hereby covenants and agrees with Cira that, for so long as any of the shares of Cira common stock held by Neoprobe are saleable under a registration statement filed pursuant to this Article 6, Neoprobe shall not purchase any Cira common stock in a transaction that would violate Commission Rule 10b-6.

SECTION 6.9. TERMINATION OF REGISTRATION RIGHTS. The right of Neoprobe to request inclusion in any registration pursuant to Section 6.2 above, shall terminate when, (a) all Registrable Securities held by Neoprobe may be sold by it under Rule 144(k), (b) the Common Stock (including all Registrable Securities) are listed on the New York or American Stock Exchange or the Nasdaq National Market and (c) all transfer restrictions on the Registrable Securities held by Neoprobe and any legends concerning such restrictions on certificates representing such stock have been removed.

ARTICLE 7. COVENANTS OF CIRA. From the date hereof until such time as the common stock of Cira has been registered and sold in a firm-commitment underwriting after the date hereof and unless Neoprobe otherwise consents, Cira will perform and observe the following covenants:

SECTION 7.1. BASIC FINANCIAL INFORMATION. Cira will furnish the following reports to Neoprobe:

(a) As soon as practicable after the end of each quarter and in any event within twenty (20) days thereafter a consolidated balance sheet of Cira and its subsidiaries, if any, as of the end of such quarter and consolidated statements of operations and cash flow of Cira and its subsidiaries, for each quarter and for the current fiscal year of Cira to date, all subject to normal year-end audit adjustments, prepared in accordance with generally accepted accounting principles consistently applied.

(b) As soon as practicable after transmission or occurrence and in any event within ten (10) days thereof, copies of any reports or communications delivered to any class of Cira's security holders or

broadly to the financial community, including any filings by Cira with any securities exchange, the Commission or the National Association of Securities Dealers.

SECTION 7.2. ADDITIONAL INFORMATION AND RIGHTS.

(a) Cira will permit a representative of Neoprobe to visit and inspect any of the properties of Cira, including its books of account and other records (and make copies thereof and take extracts therefrom), and to discuss its affairs, finances and accounts with Cira's officers and its independent public accountants, all upon reasonable notice at such reasonable times and as often as any such person may reasonably request. Cira shall provide to Neoprobe such other financial information and data with respect to Cira and its subsidiaries as Neoprobe may from time to time reasonably request.

(b) The provisions of this Section 7.2 shall not limit any rights which Neoprobe may have to inspect and copy the books and records of Cira and its subsidiaries, to inspect their properties or discuss their affairs and finances, under the laws of the jurisdictions in which they are incorporated.

(c) Neoprobe hereby agrees to hold in confidence and not use for its own benefit nor disclose any confidential information provided pursuant to this Section 7.2. Information that is provided to any news media or that is otherwise publicly available shall not be deemed to be confidential.

(d) Cira has no obligation to provide Neoprobe access to Cira's confidential technical information or data, and nothing in this Section 7.2 shall be construed otherwise.

SECTION 7.3. INDEPENDENT ACCOUNTANTS. The parties have agreed to delete this section and hereby release any rights thereunder.

SECTION 7.4. ACCOUNTS AND RECORDS. Cira shall make and keep books, records, and accounts, which, in reasonable detail, accurately and fairly reflect the transactions and dispositions of assets of Cira, its subsidiaries and their employee benefit plans; and shall devise and maintain a system of internal accounting controls sufficient to provide reasonable assurance that (a) transactions are executed in accordance with management's general or specific authorization; (b) transactions have been and are recorded as necessary (i) to permit preparation of financial statements in conformity with GAAP, and (ii) to maintain accountability for assets; (c) access to assets is permitted only in accordance with management's general or specific authorization; and (d) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action has been and is taken with respect to any differences.

SECTION 7.5. CORPORATE EXISTENCE. The parties have agreed to delete this section and hereby release any rights thereunder.

SECTION 7.6. MAINTENANCE OF PROPERTIES. The parties have agreed to delete this section and hereby release any rights thereunder.

SECTION 7.7. INSURANCE. The parties have agreed to delete this section and hereby release any rights thereunder.

SECTION 7.8. PAYMENT OF TAXES, ETC. The parties have agreed to delete this section and hereby release any rights thereunder.

SECTION 7.9. COMPLIANCE WITH LAWS. Cira shall and shall cause each of its subsidiaries to comply with all laws, orders of a tribunal or governmental permits relating to the conduct of their businesses or to their properties or assets.

SECTION 7.10. PERFORMANCE OF CONTRACTS. The parties have agreed to delete this section and hereby release any rights thereunder.

SECTION 7.11. NATURE OF THE BUSINESS. The parties have agreed to delete

this section and hereby release any rights thereunder.

SECTION 7.12. ISSUANCE OF STOCK. The parties have agreed to delete this section and hereby release any rights thereunder.

SECTION 7.13. DIVIDENDS ON OR REDEMPTION OF SECURITIES. The parties have agreed to delete this section and hereby release any rights thereunder.

SECTION 7.14. DEBT. The parties have agreed to delete this section and hereby release any rights thereunder.

SECTION 7.15. LOANS, ADVANCES AND INVESTMENTS. The parties have agreed to delete this section and hereby release any rights thereunder.

SECTION 7.16. CONSULTING AGREEMENT. The parties have agreed to delete this section and hereby release any rights thereunder.

SECTION 7.17. INDEMNITY BY CIRA. Cira agrees to indemnify and hold harmless Neoprobe from and against any and all liabilities, costs and expenses, including reasonable fees of counsel (including fees incurred in establishing the right to indemnity), resulting from the breach or default in the performance by Cira of any of the covenants or other obligations which it is to perform hereunder, including the failure by Cira or any of its subsidiaries to comply with any law, order of a tribunal or governmental permit relating to the environment or the ownership by Cira or any of its subsidiaries of property that does not comply with such laws, orders of a tribunal or governmental permits.

ARTICLE 8. STOCKHOLDERS' COVENANTS. Each of the Stockholders, individually, covenants to and agrees with Neoprobe that:

SECTION 8.1. VOTING OF STOCK. The parties have agreed to delete this section and hereby release any rights thereunder.

SECTION 8.2. NO CONTRARY ACTION. The parties have agreed to delete this section and hereby release any rights thereunder.

SECTION 8.3. TERMINATION OF COVENANTS. The parties have agreed to delete this section and hereby release any rights thereunder.

SECTION 8.4. TRANSFERS OF STOCKHOLDERS' STOCK. The parties have agreed to delete this section and hereby release any rights thereunder.

SECTION 8.5. LEGENDS. The parties have agreed to delete this section and hereby release any rights thereunder.

SECTION 8.6. RIGHT OF FIRST REFUSAL. The parties have agreed to delete this section and hereby release any rights thereunder.

SECTION 8.7. CERTAIN TRANSFERS. The parties have agreed to delete this section and hereby release any rights thereunder.

ARTICLE 9. DEFINITIONS.

SECTION 9.1. GENERAL. Certain words and phrases used in this Agreement shall have the meanings given to them below in this Section.

"Commission" means the Securities and Exchange Commission or any other federal agency at the time administering the Securities Act.

"Exchange Act" means the Securities Exchange Act of 1934, as amended, or any similar successor federal statute and the rules and regulations thereunder, all as the same shall be in effect from time to time.

"GAAP" means generally accepted accounting principles.

"Includes" means includes, but is not limited to.

"Or" is disjunctive but not exclusive.

"Recapitalization" means, with respect to any security, any issuance of securities with respect thereto as a dividend or any issuance, combination or other change in such security pursuant to any amendment of

the issuer's certificate or articles of incorporation or a merger, consolidation, purchase or sale of assets, dissolution, or plan of arrangement, compromise or reorganization of the issuer.

"Rule 144" means Rule 144 as promulgated by the Commission under the Securities Act, as such Rule may be amended from time to time, or any similar successor rule that may be promulgated by the Commission.

"Rule 145" means Rule 145 as promulgated by the Commission under the Securities Act, as such Rule may be amended from time to time, or any similar successor rule that may be promulgated by the Commission.

"Securities" means securities as such term is defined in the Securities Act whether or not the securities in question are exempt from any of the provisions of such act.

"Securities Act" means the Securities Act of 1933, as amended, or any similar successor federal statute and the rules and regulations thereunder, all as the same shall be in effect from time to time.

"Securities laws" means the Securities Act, the Exchange Act, all regulations and rules thereunder, and all applicable state securities or "blue sky" laws and the rules and regulations thereunder, each as they may be amended from time to time.

"Stockholders Agreement" means the Stockholders Agreement as amended among the Stockholders of Cira signatories thereto dated of even date herewith.

"Transfer" means every mode, direct or indirect, absolute or conditional, voluntary or involuntary, of disposing of or parting with an asset or property or of an interest therein, and includes payment of money, release, lease, abandonment and creation of a lien or other encumbrance.

SECTION 9.2. OTHER. The following defined terms shall have the definitions set forth in the sections indicated:

TERM	SECTION
Additional Shares	2.1
Agreements	3.1
Cira	Parties
Indemnified Party	6.6 (c)
Indemnifying Party	6.6 (c)
License Agreement	1.1
Neoprobe	Parties
Option	Preamble 4
Original Agreement	Preamble 3
Original Shares	Preamble 3
Registrable Securities	6.1 (a)
Registration	6.1 (b)
Restated Agreement	Preamble 4
Shares	3.1
Stockholders	Parties
Stockholders Agreement	Preamble 4
Technology	Preamble 1
Technology Agreement	Preamble 1

SECTION 9.3. ACCOUNTING TERMS. All accounting terms not specifically defined herein shall be construed in accordance with GAAP.

SECTION 9.4. EFFECT OF DEFINITIONS. The definitions set forth in Section 9.1 above or referenced in Section 9.2 above shall apply equally to the singular, plural, adjectival, adverbial and other forms of any of the words and phrases defined regardless of whether they are capitalized.

SECTION 9.5. THIS AGREEMENT. This Restated Agreement consists of the title, date, names of parties, and preamble set forth above, these terms, the signatures of the parties and the information set forth on the signature pages below, the exhibits attached hereto and the certificates, documents and other instruments required to be delivered hereunder and any reference to this Restated Agreement refers to all of such constituents. The date first set forth above shall

be deemed to be the date hereof for all purposes. The statements set forth in the preamble are made for the purpose of providing background information that will assist persons who read this Restated Agreement in interpreting it. Such statements do not constitute representations, warranties or covenants of the parties hereto and they may be contradicted by the parties.

SECTION 9.6. CASE AND GENDER. In this Restated Agreement words in the singular number include the plural, and in the plural include the singular; and words of the masculine gender include the feminine and the neuter, and when the sense so indicates words of the neuter gender may refer to any gender.

ARTICLE 10. MISCELLANEOUS.

SECTION 10.1. OPPORTUNITIES. Nothing contained in this Restated Agreement or Neoprobe's ownership of the Shares shall require Neoprobe to offer any business opportunity to Cira or provide any funds to Cira not specifically mentioned in this Restated Agreement.

SECTION 10.2. SURVIVAL. The representations, warranties, covenants and agreements made by the parties herein shall survive any investigation made by Neoprobe or Cira and shall survive the closing of the transactions contemplated hereby.

SECTION 10.3. EXPENSES. Cira and Neoprobe shall each bear its own expenses and legal fees incurred on its behalf with respect to this Restated Agreement and the transactions contemplated hereby.

SECTION 10.4. NOTICES. Any notice, request or other communication required or permitted to be given under this Restated Agreement shall be in writing and deemed to have been properly given: (a) when delivered, if delivered in person; (b) when sent, if sent by telecopy or other electronic means and confirmation of receipt is received; (c) the day designated as the delivery date, if sent by nationally recognized overnight courier service; or (d) two (2) days after being sent, if sent by certified or registered United States mail, return receipt requested, postage prepaid, addressed to the party at the address set forth next to such party's signature hereto and with such copies delivered, transmitted, couriered or mailed to such persons as are specified therein. Any party may change his address for notices in the manner set forth above.

SECTION 10.5. SUCCESSORS. The terms of this Restated Agreement shall be binding upon and inure to the benefit of the parties and their respective heirs, personal representatives or corporate successors.

SECTION 10.6. PRIOR AGREEMENTS AND NEGOTIATIONS. This Restated Agreement, the schedules and exhibits hereto and the agreements and instruments required to be executed and delivered hereunder set forth the entire agreement of the parties with respect to the subject matter hereof and supersede and discharge all prior agreements (written or oral) and negotiations and all contemporaneous oral agreements concerning such subject matter and negotiations. There are no oral conditions precedent to the effectiveness of this Agreement.

SECTION 10.7. NON-WAIVER. Neither the failure of nor any delay by any party to this Restated Agreement to enforce any right hereunder or to demand compliance with its terms is a waiver of any right hereunder. No action taken

pursuant to this Restated Agreement on one or more occasions is a waiver of any right hereunder or constitutes a course of dealing that modifies this Restated Agreement.

SECTION 10.8. WAIVERS. No waiver of any right or remedy under this Restated Agreement shall be binding on any party unless it is in writing and is signed by the party to be charged. No such waiver of any right or remedy under any term of this Restated Agreement shall in any event be deemed to apply to any subsequent default under the same or any other term contained herein.

SECTION 10.9. AMENDMENTS. No amendment, modification or termination of this Restated Agreement shall be binding on any party hereto unless it is in writing and is signed by the party to be charged.

SECTION 10.10. SEVERABILITY. The terms of this Restated Agreement are severable and the invalidity of all or any part of any term of this Restated Agreement shall not render invalid the remainder of this Restated Agreement or the remainder of such term. If any term of this Restated Agreement is so broad as to be unenforceable, such term shall be interpreted to be only so broad as is enforceable.

SECTION 10.11. THIRD PARTIES. Nothing herein expressed or implied is intended or shall be construed to give any person other than the parties hereto any rights or remedies under this Restated Agreement.

SECTION 10.12. JOINT PREPARATION. This Restated Agreement shall be deemed to have been prepared jointly by the parties hereto. Any ambiguity herein shall not be interpreted against any party hereto and shall be interpreted as if each of the parties hereto had prepared this Restated Agreement.

SECTION 10.13. SATURDAYS, SUNDAYS AND HOLIDAYS. Where this Restated Agreement authorizes or requires a payment or performance on a Saturday, Sunday or public holiday, such payment or performance shall be deemed to be timely if made on the next succeeding business day.

SECTION 10.14. COUNTERPARTS. This Restated Agreement may be executed in any number of counterparts, all of which shall constitute one and the same instrument, and any party hereto may execute this Restated Agreement by signing one or more counterparts.

SECTION 10.15. GOVERNING LAW. The validity, terms, performance and enforcement of this Restated Agreement shall be governed by laws of the State of Ohio that are applicable to agreements negotiated, executed, delivered and performed solely in the State of Ohio.

SECTION 10.16. ARBITRATION. Any disputes, controversies or claims arising out of or relating to the negotiation, execution, delivery, performance or breach of this Restated Agreement shall be settled by arbitration conducted in Franklin County, Ohio in accordance wit the Commercial Arbitration Rules of the American Arbitration Association and judgment upon the award rendered by the arbitrators may be entered in any Court having jurisdiction thereof. If the amount claimed or disputed in such arbitration is equal to or more than One Hundred Thousand Dollars ($100,000), it shall be conducted before a panel of three arbitrators. All proceedings before and papers submitted to any arbitrator hereunder shall be held in the strictest confidence by the parties, the arbitrators and any attorneys participating therein.

IN WITNESS WHEREOF, the parties hereto have caused this Restated Agreement

to be duly executed as of the date first above written.

ADDRESS: NEOPROBE CORPORATION

425 Metro Place North, Suite 400
Dublin, Ohio 43017-1367 By: /s/ David Bupp

David C. Bupp, President

CIRA TECHNOLOGIES, INC.
2232 Summit Street
Columbus, Ohio 43201 By: /s/ Richard G. Olsen

Richard G. Olsen, President

63225 Jordan Court
Montrose, Colorado 81401 /s/ Richard G. Olsen

RICHARD G. OLSEN

2112 Iuka Avenue
Columbus, Ohio 43212 /s/ John L. Ridihalgh

JOHN L. RIDIHALGH

2087 Tremont Road
Columbus, Ohio 43221 /s/ Richard McMorrow

RICHARD MCMORROW

2356 State Route 56 SW
London, Ohio 43140 /s/ James R. Blakeslee

JAMES R. BLAKESLEE

MUELLER & SMITH, LTD.
7700 Rivers Edge Drive
Columbus, Ohio 43235 By: /s/ J. K. Mueller, Jr.

Name: J. K. Mueller, Jr.

Title: Member

360 West Seventh Avenue
Columbus, Ohio 43201 /s/ Pierre L. Triozzi

PIERRE L. TRIOZZI

2731 Selma Pike
Springfield, Ohio 45505 /s/ Gregory Noll

GREGORY NOLL

EXHIBIT 10.3.49

R E S T A T E D S T O C K H O L D E R S A G R E E M E N T

April 17, 1998

CIRA TECHNOLOGIES, INC., a Delaware corporation (the "Company") and each of the stockholders (each, a "Stockholder" and collectively, the "Stockholders") of the Company who has signed this Agreement or who has subsequently become a party to this agreement hereby agree as follows:

P R E A M B L E:

The Stockholders and the Company desire to provide for the transfer of shares of common stock, par value $.001, of the Company ("Common Stock") and to restate the Stockholders Agreement entered into by the Company and the Stockholders on March 14, 1996.

TERMS:

ARTICLE 1. TRANSFER RESTRICTIONS.

SECTION 1.1. TRANSFERS OF STOCKHOLDERS' COMMON STOCK. Except as provided in Section 1.3, 1.4 and 1.5 below, no interest in Common Stock that is owned, directly or indirectly, by any Stockholder on the date such Stockholder became a party to this Agreement or is subject to an option, warrant or other right to purchase in favor of the Stockholders existing on the date such Stockholder became a party to this Agreement or any other securities of the Company issued in respect thereof in any recapitalization (all of which may be referred to herein as "Subject Shares") may be given, sold, pledged or otherwise transferred to or owned by any person, and the Company shall not register on its books any transfer in violation of this Section 1.1.

SECTION 1.2 LEGENDS. Any certificate representing any Subject Shares shall bear the following legends in larger or other contrasting type or color:

These securities have not been registered under the Securities Act of 1933. These securities may not be offered for sale, sold or otherwise transferred unless they are registered under the Securities Act of 1933 or they or such offer, sale or transfer are exempt from such registration and the Issuer has received an opinion of counsel reasonably satisfactory to the Issuer in form and substance, to that effect.

The transfer of these shares is restricted by the terms of a Restated Stockholders Agreement among the Corporation and certain of its Stockholders dated April 17, 1998. Except as provided in such Agreement, these shares may not be given, sold, pledged or otherwise transferred. The Corporation will mail to the Stockholder a copy of such Agreement without charge within five days after receipt of written request therefor.

SECTION 1.3. RIGHT OF FIRST REFUSAL.

(a) If a Stockholder is permitted to sell any of his Subject Shares pursuant to a bona fide offer to purchase Subject Shares owned by him (an

"Offer") (such Stockholder is referred to as a "Seller") such Seller shall not sell his Subject Shares until such Seller abides by the provisions of this Section 1.3 and shall send a copy of the Offer (a "Notice of Offer") to the Company within five (5) days after his receipt thereof.

(b) After the Company receives notice of Offer, the Company may notify the Seller within thirty (30) days of the date of the Offer (the "Response Period") that it desires to purchase the Subject Shares subject to the Offer pursuant to its right of first refusal under this Section 1.3 in which case the Seller shall not sell the Subject Shares subject to the Offer pursuant to the Offer and shall sell the Subject Shares subject to the Offer to the Company on the terms and subject to the conditions of the Offer. Such notice from the Company is referred to as a "Response" herein.

(c) If the Company sends a Response to the Seller during the Response Period stating that the Company desires to purchase the Seller's Subject Shares for the per share cash consideration to be paid to the Seller pursuant to the Offer, the Seller shall not sell his Subject Shares pursuant to the Offer and shall sell his Subject Shares to the Company.

(d) If the Company elects to purchase the Seller's shares as provided in Section 1.3(c), such election shall be binding upon the Seller and on the day after the end of the Response Period, the Seller shall notify the Company of a time and place during regular business hours on a regular business day within 60 days of the date of the Offer when the Seller and the Company shall meet for the purpose of completing the sale of the Seller's Subject Shares. At such meeting the Company shall deliver a certified or cashiers' check to the Seller in an amount equal to the per share price set forth in the Offer multiplied by the number of Subject Shares to be purchased by the Company. The Seller shall deliver the certificates representing such Subject Shares to the Company duly endorsed for transfer and free and clear of all adverse claims (other than restrictions on transfer under this Agreement and applicable federal and state securities laws or those that are imposed by or through the Company).

(e) If (i) the Seller delivers a copy of the Offer as provided in Section 1.3(a) and (ii) the Company fails to (a) deliver a Response within the Response Period or (b) having exercised any of its right of first refusal under this Section 1.3, fails to take up and pay for the Subject Shares as required herein, the Seller may sell his shares pursuant to the terms and conditions of the Offer within sixty (60) days of the date of the Offer. If the sale of Subject Shares, pursuant to the Offer is not completed within sixty (60) days of the date of the Offer, the Offer shall be invalid and the Seller may not sell any of his Subject Shares pursuant thereto. No such sale shall be consummated unless: (i) the purchaser agrees in writing to comply with each of the provisions of this Agreement that apply to the Stockholders and agrees that such purchaser shall, upon the acquisition of the Subject Shares, be deemed to be one of the Stockholders hereunder and shall be bound by the terms hereof; and (ii) the sale to the purchaser is in compliance with all applicable federal and state securities laws and the Company has received (at is sole option) an opinion of counsel, in form and substance reasonably satisfactory to Company, to the effect that such Subject Shares or their sale or transfer are so in compliance.

SECTION 1.4. PERMITTED TRANSFERS. The transfer restriction imposed by Section 1.1 above shall not apply to:

(a) any bona fide gift to a member of the immediate family of the donor or to a trust solely for the benefit of the donor or a member of his immediate family; provided, however, that (i) the Stockholder shall notify the Company of such gift or transfer before he makes it; (ii) the donee shall execute a written instrument in which such donee agrees to be bound by

and comply with the provisions of this Agreement; and (iii) if such gift is not in compliance with all applicable federal and state securities laws and the Company has not received (at its sole option) an opinion of counsel, in form and substance reasonably satisfactory to the Company, to the effect that such gift is so in compliance, no such gift shall be made; or

(b) any transfer under the terms of the will of a Stockholder or pursuant to the laws of descent and distribution applicable to a Stockholder, provided however, that the transferee shall execute a written instrument in which such transferee agrees to bound by and comply with the provisions of this Agreement.

Any Subject Shares transferred pursuant to the provisions of this Section 1.4 remain Subject Shares hereunder and the donee or transferee thereof shall be treated as a "Stockholder" for the purposes of this Agreement.

SECTION 1.5. OTHER TRANSFERS. If any Stockholder: (a) is required to transfer any or all of his Subject Shares pursuant to the final order of a domestic relations court, or (b) is the subject of an order for relief granted under Title 11 of the United States Code or any similar law, and his Subject Shares are to be transferred pursuant to the order of the applicable court, the Company shall have the right to purchase such Subject Shares for the Fair Market Value of Subject Shares as determined by the applicable court before such shares are transferred.

"Fair Market Value" means the price at which the Subject Shares would change hands between a willing buyer and willing seller, neither being under any compulsion to buy or to sell and both having knowledge of relevant facts. In determining the Fair Market Value of Subject Shares, consideration shall be given to the transfer restrictions imposed on the Subject Shares, the minority position of the applicable Stockholder and the lack of a resale market for the shares of Common Stock of the Company, but no consideration need be given to any information concerning plans for the Company to make a public offering of its Securities or to be acquired by or merged with or into another firm or entity.

SECTION 1.6. TERMINATION. The provisions of Article 1 shall terminate when the Common Stock of the Company has been registered and sold in a firm-commitment underwriting after the date hereof.

ARTICLE 2. MISCELLANEOUS.

SECTION 2.1. THIS AGREEMENT. This Agreement is an amendment and restatement of the Stockholders Agreement entered into by the Company and the Stockholders on March 14, 1996. This Agreement sets forth the entire agreement of the parties with respect to the subject matter hereof and supersede and discharge all prior agreements (written or oral) and negotiations and all contemporaneous oral agreements concerning such subject matter and negotiations. There are no oral conditions precedent to the effectiveness of this Agreement.

SECTION 2.2. OPTION STOCKHOLDERS. The parties to this Agreement hereby consent to the admittance of persons who become Stockholders, by receiving newly issued shares of Common Stock, a transfer in compliance with Article 1 of this Agreement or exercising an option for the purchase of Common Stock, as parties to this Agreement.

SECTION 2.3. SUCCESSORS AND ASSIGNMENT; TERMINATION OF RIGHTS. The provisions of this Agreement shall be binding upon and inure to the benefit of the parties hereto, and except as otherwise specifically provided in this Agreement, their respective heirs, legal representatives, and successors. Neither this Agreement, nor any rights herein granted may be assigned, transferred or encumbered by any party, unless otherwise specifically provided herein. Upon the transfer of all of a Stockholder's Subject Shares and the payment therefor as provided in this Agreement, such Stockholder shall no longer have any rights under this Agreement.

SECTION 2.4. SEVERABILITY. The terms of this Agreement are severable and the invalidity of all or any part of any term of this Agreement shall not render invalid the remainder of this Agreement or the remainder of such term. If any term of this Agreement is so broad as to be unenforceable, such term shall be interpreted to be only so broad as is enforceable.

SECTION 2.5. NOTICES. Any notice, request or other communication required or permitted to be given under this Agreement shall be in writing and

deemed to have been properly given: (a) when delivered, if delivered in person; (b) when sent, if sent by telecopy or other electronic means and confirmation of receipt is received; (c) the day designated as the delivery date, if sent by nationally recognized overnight courier service; or (d) two (2) days after being sent, if sent by certified or registered United States mail, return receipt requested, postage prepaid, addressed to the party at the address set forth next to such party's signature hereto and with such copies delivered, transmitted or couriered or mailed to such persons as are specified therein. Any party may change his address for notices in the manner set forth above.

SECTION 2.6. SATURDAYS, SUNDAYS AND HOLIDAYS. Where this Agreement authorizes or requires a payment or performance on a Saturday, Sunday or public holiday, such payment or performance shall be deemed to be timely if made on the next succeeding business day.

SECTION 2.7. THIRD PARTIES. Nothing herein expressed or implied is intended or shall be construed to give any person other than the parties hereto any rights or remedies under this Agreement.

SECTION 2.8. GOVERNING LAW. The validity, terms, performance and enforcement of this Agreement shall be governed by laws of the State of Ohio that are applicable to agreements negotiated, executed, delivered and performed solely in the State of Ohio.

SECTION 2.9. COUNTERPARTS. This Agreement may be executed in any number of counterparts, all of which shall constitute one and the same instrument, and any party hereto may execute this Agreement by signing one or more counterparts.

SECTION 2.10. CASE AND GENDER. In this Agreement words in the singular number include the plural, and in the plural include the singular; and words of the masculine gender include the feminine and the neuter, and when the sense so indicates words of the neuter gender may refer to any gender.

SECTION 2.11. ARBITRATION. Any disputes, controversies or claims arising out of or relating to the negotiation, execution, delivery, performance or breach of this Agreement shall be settled by arbitration conducted if Franklin County, Ohio in accordance with the Commercial Arbitration Rules of the American Arbitration Association and judgment upon the award rendered by the arbitrators may be entered in any Court having jurisdiction thereof. If the amount claimed or disputed in such arbitration is equal to or more than One Hundred Thousand Dollars ($100,000), it shall be conducted before a panel of three arbitrators. All proceedings before and papers submitted to any arbitrator hereunder shall be held in the strictest confidence by the parties, the arbitrators and any attorneys participating therein.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date first above written.

Address
- -------

the Company:

CIRA TECHNOLOGIES, INC.

2232 Summit Street
Columbus, Ohio 43201

By: /s/ Richard G. Olsen

Richard G. Olsen, President

the Stockholders:

NEOPROBE CORPORATION

425 Metro Place North, Suite 300
Dublin, Ohio 43017-1367

By: /s/ David Bupp

David C. Bupp, President

63225 Jordan Court
Montrose, Colorado 81401 /s/ Richard G. Olsen

RICHARD G. OLSEN

2112 Iuka Avenue
Columbus, Ohio 43212 /s/ John L. Ridihalgh

JOHN L. RIDIHALGH

2087 Tremont Road
Columbus, Ohio 43221 /s/ Richard McMorrow

RICHARD MCMORROW

2356 State Route 56 SW
London, Ohio 43140 /s/ James R. Blakeslee

JAMES R. BLAKESLEE

MUELLER & SMITH, LTD.
7700 Rivers Edge Drive
Columbus, Ohio 43235

By: /s/ J. K. Mueller, Jr.

Name: J. K. Mueller, Jr.
Title: Member

360 West Seventh Avenue
Columbus, Ohio 43201 /s/ Pierre L. Triozzi

PIERRE L. TRIOZZI

2731 Selma Pike
Springfield, Ohio 45505 /s/ Gregory Noll

GREGORY NOLL

Omitted portions of this Exhibit are subject to a Request for Confidential Treatment under Rule 24b-2

EXHIBIT 10.4.22

4/20/98

SALES AND MARKETING AGREEMENT

THE AGREEMENT, dated as of April 21, 1998, by and between Ethicon EndoSurgery, Inc., an Ohio corporation ("EES") and Neoprobe Corporation, a Delaware corporation ("Neoprobe").

WHEREAS, Neoprobe is in the business of gamma guided surgery which includes the manufacturing, selling and distributing of Gamma Detection Systems, in particular, the Neoprobe(R) System (as defined hereinafter); and

WHEREAS, EES is in the business of, among other things, manufacturing, selling and distributing diagnostic systems for breast disease; and

WHEREAS, Neoprobe and EES each wish to formalize a relationship between the parties and their respective products; and

WHEREAS, EES understands that Neoprobe is currently and will in the future continue to evaluate and pursue, subject to the provisions hereof, other business opportunities with third parties including future alliances, distribution arrangements or other business transactions or combinations and Neoprobe understands that EES is currently and will in the future continue to evaluate and pursue other business opportunities with third parties including future alliances, distribution arrangements or other business transactions or combinations or internal development programs in the Field (as defined hereinafter) that may directly compete with Neoprobe products, including the Neoprobe(R) System.

NOW, THEREFORE, in consideration of the premises and mutual covenants contained herein, the parties hereto agree as follows:

1. Grant of Rights. Upon the terms and subject to the conditions set forth herein, Neoprobe hereby grants to EES the rights to sell, promote, represent, advertise, provide training and take orders in the territories of the United States, Europe, Japan and Australia (collectively, the "Territories") for the purchase of the Neoprobe(R) Portable Radioisotope Detector System (including the Neoprobe model 1500 control unit, 14mm chrome probe, and related accessories) (collectively, the "Neoprobe(R) System") for application in gamma guided lymphatic mapping procedures and minimally invasive surgery (the "Field"). Neoprobe agrees to negotiate in good faith with EES to expand the Territories in the event both Neoprobe and EES desire to do so. Additionally, if Neoprobe releases any future products for application in the Field including but not limited to the model 2000 control unit, EES shall have the option of including them within the scope of this Agreement in which event the parties shall negotiate in good faith in order to determine the minimum revenues and other business terms which shall apply thereto.

2. Promotion of Neoprobe(R) System. (a) Promotion. EES shall promote the Neoprobe(R) System at conventions, trade shows and professional society meetings which may include EES having one or more Neoprobe(R) Systems in its exhibition booth, as appropriate and in its sole discretion; provided that EES shall provide Neoprobe with either (i) a calendar of such trade shows and professional society meetings within 30 days from the date hereof, or (ii) no less than thirty (30) days' prior written notice of each scheduling of demonstration products, at the sole option of EES. Neoprobe shall review and approve in a timely manner all promotional materials developed by EES in connection with such promotion prior to its release.

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information, has been replaced by "***" in this Exhibit.

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(b) Material. Neoprobe shall provide EES with approved Neoprobe promotional materials for the Neoprobe(R) Systems set forth on Annex A hereto. Neoprobe shall provide EES with 1,000 copies combined total of any pieces of promotional literature or brochures and 10 copies of selected video tapes ***. Neoprobe represents and warrants that (i) all such promotional materials are in compliance with all material applicable governmental and other regulations and (ii) it has obtained all requisite distribution rights with respect to such materials. In the event that EES requires additional copies of such promotional materials or videos, Neoprobe shall provide them ***.

(c) Professional Education. EES may offer professional education courses in connection with the use of the Neoprobe(R) System at Ethicon Endo-Surgery's Endo-Surgery Institute in Cincinnati ("ESI") at its sole discretion, but shall notify Neoprobe reasonably in advance of such sessions and Neoprobe shall provide a clinical specialist to attend such sessions at EES's request. Neoprobe shall have access to the ESI for training and education, with appropriate notification, approvals and facility availability, ***. EES and Neoprobe will support professional education at Centers of Excellence, including target hospitals and other key institutions, and Professional Society Training Courses, as mutually agreed upon by both parties; provided, however, that Neoprobe shall continue to have primary responsibility for conducting training courses at major conventions and courses with EES's support, as appropriate.

(d) Training and Promotional Units. Neoprobe shall provide to EES, ***: (i) a reasonable number of Neoprobe(R) Systems, as appropriate, for the purpose of promotion and training including, but not limited to, conventions, trade shows professional society meetings and professional education programs, (ii) up to *** additional units primarily for promotional and training purposes at ESI *** as necessary upon reasonable advance notice, (iii) *** inanimate training models with gamma sources for training purposes with the Neoprobe(R) Systems ***; provided that Neoprobe(R) shall provide ***, additional inanimate training models, as appropriate, and additional clinical and technical support to EES, as appropriate, and (iv) service and warranty to such units and Neoprobe shall replace such units with new units as necessary in order to maintain such units in good working order and condition, ordinary wear and tear excepted. EES agrees that all such training and promotional units provided *** by Neoprobe shall be returned to Neoprobe upon termination of this Agreement.

(e) Purchase of Training Units. EES shall purchase *** Neoprobe(R) Systems for training purposes in the ESI at a cost *** (unit defined as one (1) Model 1500 control unit with one (1) 14mm chrome probe) (not including tax), ***. Neoprobe shall service and warranty such purchased units in order to maintain such units in good working order and as-new condition, ***. EES shall purchase *** inanimate training models with gamma sources for training purposes at a cost ***. In the event EES desires to purchase additional Neoprobe(R) Systems or inanimate models, Neoprobe shall provide them to EES ***.

(f) Additional Support. (i) Neoprobe shall retain full responsibility for all existing and future Neoprobe(R) Systems the sale of which did not originate from EES including, without limitation, those systems sold directly by Neoprobe, authorized distributors or any other past distribution partners.

(ii) *** Neoprobe agrees to provide EES with up to *** of technical and clinical support to adequately train EES employees as shall be mutually agreed upon by EES and Neoprobe. In addition, Neoprobe agrees to provide additional field level training and support activities as appropriate through their clinical specialists.

(iii) Neoprobe shall provide EES with a master copy of all necessary training materials for the Neoprobe(R) Systems that exist or may exist in the future as reasonably requested by EES. Neoprobe agrees to support EES in constructing appropriate training programs and materials.

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Omitted portions of this Exhibit are subject to a Request for Confidential Treatment under Rule 24b-2.

3. Sales. (a) US Market. Within the United States market, EES shall be responsible for the entire sales process for leads it generates, including making sales presentations, demonstrating the Neoprobe(R) System, being present in surgery, as appropriate, providing quotations, and closing the sale; provided that Neoprobe agrees to use its best efforts to provide to EES *** clinical specialists to support such sales process ***; and, provided further, that in no event shall Neoprobe provide less than *** such specialists. Neoprobe's support shall include, without limitation, generating leads, making sales presentations, conducting product demonstrations and pre-sale surgical evaluations, closing the sale, installation, training and post-sales support. Upon the closing of such sales, EES shall provide a completed written purchase order to Neoprobe which shall include the terms set forth in ANNEX B hereto (the "Purchase Order").

(b) International Market. Outside the United States, responsibilities for the pre-sales and post-sales process shall be as mutually agreed upon by the parties.

(c) Post-Sales. Neoprobe shall be solely responsible for all post sales support including, but not limited to, invoicing the customer, assuming responsibility for collections, shipping, product, warrantees, service, repairs, returns, recalls, regulatory approvals and working with each nuclear medicine department as may be required in support of the sale. Neoprobe will have primary responsibility, with the support of EES, for conducting the initial site training and installation of the product for the *** units sold through its clinical specialists; provided that with respect to the subsequent sale of units, EES shall take the primary responsibility for initial site training and installation, with the continued support of Neoprobe clinical specialists. Neoprobe shall continue to be responsible for all legal and regulatory responsibilities associated with the Neoprobe(R) System including, but not limited to, obtaining any and all necessary regulatory approvals, maintaining product complaint files, medical device records, and all similar or related processes.

(d) Demonstration Units. EES shall purchase *** Neoprobe(R) Systems for sales demonstration purposes at a cost *** (unit defined as one (1) Model 1500 control unit with one (1) 14mm chrome probe) (not including tax), ***. Neoprobe shall service and warranty such purchased units *** in order to maintain such units in good working order and as-new condition. In the event EES shall require additional sales demonstration units, Neoprobe shall make them available ***. EES shall purchase *** inanimate training models with gamma sources for training purposes ***. In the event EES desires to purchase additional Neoprobe(R) Systems or inanimate models, Neoprobe shall provide them to EES ***.

(e) Title. Neoprobe hereby acknowledges that in no event shall EES take or be deemed to take title or ownership of any Neoprobe(R) System, except with respect to the Neoprobe(R) Systems purchased as set forth in Section 2(e) and, Section 3(d) above.

(f) Shipping. All Neoprobe(R) Systems will be shipped ***.

4. Fees; Information. (a) Neoprobe shall pay EES commissions as follows:

(i) Neoprobe shall pay EES a commission of *** of the invoice amount on all systems and accessories sold during the term of this agreement with respect to the first *** Neoprobe(R) Systems sold (the "Initial Sales"); provided that Neoprobe shall receive the minimum revenue per unit as set forth in Annex C.

(ii) Neoprobe shall pay EES a commission of *** of the invoice amount on all systems and accessories sold during the term of this agreement with respect to all Neoprobe(R) Systems sold in excess of the Initial Sales; provided that Neoprobe shall receive the minimum revenue per unit as set forth in Annex C.

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(iii) For all Neoprobe Systems that are bundled as a part of an EES bundled system (EES products and Neoprobe products sold together), Neoprobe shall receive the minimum revenue per unit bundled as set forth in Annex C.

(iv) The above provisions regarding commission payment(s) shall not apply to: (A) Neoprobe sales of accessories in connection with Existing Units (as defined hereinafter) purchased by Existing Customers (as defined hereinafter), and (B) Neoprobe sales of Existing Unit upgrades (upgrading existing model 1000 units to model 1500 control unit with 14mm probe *** to Existing Customers. Notwithstanding the above, in the event a new control unit is purchased by an Existing Customer, EES shall receive commissions as set forth in this Section 4 with respect to such sale and all subsequent sales (including accessories) to such Existing Customer. For purposes of this Agreement, the term (x) "Existing Customer" shall mean any Neoprobe customer who has consummated the purchase of a control unit prior to the date hereof, and (y) "Existing Unit" shall refer to any such control unit purchased by an Existing Customer prior to the date hereof.

(v) Payments shall be calculated and paid to EES on a quarterly basis (within thirty (30) days of the end of such quarter) and shall be based on those systems and accessories sold by EES and paid for by Neoprobe customers during such quarter. Quarters shall be defined as calendar quarters on the dates of March 31st, June 30th, September 30th and December 31st.

(vi) The obligation to pay all commissions due EES shall survive the term of this Agreement.

(b) On a quarterly basis Neoprobe shall deliver to EES written reports within fifteen (15) days of end of the previous quarter that shall include copies of invoices for Neoprobe(R) Systems pursuant to this Agreement. All information contained in such reports shall be treated as confidential information. Neoprobe shall permit EES to audit the Purchase Orders and other relevant information that supports these reports given adequate notice *** and during Neoprobe's normal business hours.

5. QSR's; Regulatory Compliance. (a) Neoprobe represents and warrants to EES that (i) all of the Neoprobe(R) Systems supplied in connection with this Agreement shall be of merchantable quality, free from defects in material and workmanship and shall be manufactured and provided in accordance and in compliance with this Agreement, and (ii) it has complied and shall continue to comply with all present and future statutes, laws, ordinances and regulations relating to the manufacture, assembly and supply of the Neoprobe(R) Systems, including, without limitation, those enforced by the United States Food and Drug Administration (the "FDA") (including compliance with Quality System Regulations), the Medical Device Directive and International Standards

Organization Rules 9,000 et seq., as applicable.

(b) Neoprobe shall notify EES as soon as practicable after receiving notice of any claim, action or inquiry by the FDA or other applicable U.S. or foreign regulatory body or government authority or court of law relating to non-compliance of products covered in this Agreement with this provision. Neoprobe shall provide access to an independent third party firm, chosen by EES to audit Neoprobe facilities and operations prior to and during the term of this Agreement for the purpose of verifying regulatory compliance upon reasonable advance notice.

(c) If EES desires to sell Neoprobe(R) Systems in markets with respect to which the requisite regulatory approval has not been obtained, then EES and Neoprobe agree to discuss each party's respective responsibilities and funding and shall use its reasonable efforts to work toward agreement for obtaining the necessary regulatory approval.

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6. Term. (a) The initial term of this Agreement (the "Initial Term") shall commence on the date hereof and continue until the first anniversary hereof, unless sooner terminated as expressly provided under the terms of this Agreement.

(b) This Agreement shall be automatically renewed for additional one-year terms (each, an "Additional Term") after the expiration of the Initial Term; provided, however that this Agreement may be terminated by either party hereto, with or without cause, at any time after the date which is six (6) months from the date hereof upon 30 days' prior written notice to the other party.

(c) If either party shall materially breach any covenant, agreement or obligation under this Agreement, then the other party may give notice to terminate this Agreement by giving such breaching party notice of such breach. The party receiving such notice shall have thirty (30) days from the date of receipt thereof to cure such breach. If such breach is not cured within such thirty (30) day period, then the non-breaching party shall have the right to terminate this Agreement effective as of the end of such period. In the event such breach is cured during such period, such notice shall be of no force or effect and this Agreement shall not be terminated.

(d) Notwithstanding the termination of this Agreement for any reason, each party hereto shall be entitled to recover any and all damages (other than consequential damages) that such party shall have sustained by reason of the breach by the other party hereto of any of the terms of this Agreement.

7. Publicity. Neither party shall originate any publicity, news release or public announcement, written or oral, whether to public press, stockholders or otherwise, relating to this Agreement or any arrangement between the parties without the consent of the other party.

8. Confidential Information. Each of the parties hereto agrees that it shall hold all terms and conditions of this Agreement and all other written information designated as confidential and exchanged between EES and Neoprobe during the term of this Agreement in a confidential manner. The provisions of this Paragraph 8 shall survive for three (3) years after the termination of this Agreement. Each of the parties hereto agrees that it shall not disclose to the other any confidential information, including, without limitation,. trade secrets and future development.

9. Representations and Warranties. (a) Neoprobe. Neoprobe represents and warrants that (a) it has the right to execute and deliver this Agreement and to perform the transactions contemplated hereby and that the performance of its obligations under this Agreement will not result in a violation or breach of, and will not conflict with or constitute a default under any agreement, contract, commitment or obligation to which Neoprobe or any of its affiliates is a party or by which it is bound and that it has not granted and will not grant during the term of this Agreement or any renewal thereof, any conflicting rights, license, consent or privilege with respect to the rights granted herein, (b) it has not received any notice with respect to and otherwise has no knowledge of any litigation or any order or judgment from any court of competent jurisdiction which may affect performance of this Agreement and (c) it carries appropriate liability insurance to cover those products covered in this Agreement.

(b) EES. EES represents and warrants that (a) it has the right to execute and deliver this Agreement and to perform the transactions contemplated hereby and that the performance of its obligations under this Agreement will not result in a violation or breach of, and will not conflict with or constitute a default under any agreement, contract, commitment or obligation to which EES or any of its affiliates is a party or by which it is bound and that it has not granted and will not grant during the term of this Agreement or any renewal thereof, any conflicting rights, license, consent or privilege with respect to the rights granted herein, and (b) it has not received any notice with respect to and otherwise has no knowledge of any litigation or any order or judgment from any court of competent jurisdiction which may affect performance of this Agreement. EES shall remain solely responsible for the direct payment of salaries or commissions

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of its employees, the maintaining of adequate workers' compensation insurance and the payment of any health benefits for its employees.

10. Indemnification. (a) Neoprobe shall be liable for and shall indemnify and hold EES harmless against any liability, damages or loss (other than loss of potential sales) and from any claims, suits, proceedings, demands, recoveries or expenses, including without limitation, expenses of total or partial device recalls, in connection with the Neoprobe(R) System arising out of, based on, or caused by (i) alleged defects in materials, workmanship or design of the Neoprobe(R) System, (ii) failure of the Neoprobe(R) System to fulfill claims relating to safety, efficacy or performance (excluding matters for which EES is responsible under Section 11(c) below), (iii) claims of patent infringement made with respect to the Neoprobe(R) System, or claims of trademark infringement made with respect to EES's use of Neoprobe's trademarks, tradenames or the like, and (iv) breach of any of the warranties and representations set forth herein.

(b) Neoprobe shall obtain and maintain in full force and effect valid and collectible product liability insurance in respect of the Neoprobe(R) System for death, illness, bodily injury and property damage in an amount not less than *** per occurrence. Such policy shall name EES as an insured or an additional insured thereunder and Neoprobe shall grant like coverage to EES under a standard broad form vendor's endorsement thereto. Neoprobe shall within ten (10) days of the date hereof provide EES with evidence of this coverage, provided that the existence of such coverage shall in no way limit Neoprobe's liability or obligations hereunder. Such insurance policy shall provide that in the event such insurance coverage should be materially adversely changed or terminated for any reason, the insurer thereunder will give Neoprobe and EES ten (10) days

prior notice of such change or termination.

(c) EES shall be liable for and shall indemnify and hold Neoprobe harmless against any liability, damages or loss (other than loss of potential sales) and from any claims, suits, proceedings, demands, recoveries or expenses in connection with the Neoprobe(R) System sold by EES arising out of, based on, or caused by claims, whether written or oral, made or alleged to be made, by EES in its promotion or sale of the Neoprobe(R) System and provided such claims were not substantially the same as those claims furnished by Neoprobe to EES.

(d) A party (hereinafter referred to as the "Indemnifying Party") indemnifying another party or parties (hereinafter referred to as the "Indemnified Party"), pursuant to this Agreement, shall indemnify and hold the Indemnified Party harmless against any and all actions, suits, proceedings, demands, claims, assessments, costs, judgments, legal and other expenses incidental to any of the foregoing (hereinafter referred to as a "Claim"). In the event a Claim is made upon the Indemnified Party, the Indemnified Party shall promptly give notice of such Claim to the Indemnifying Party, and shall promptly deliver to such Indemnifying party all information and written material available to the indemnified Party relating to such Claim. If such Claim is first made upon the Indemnifying Party, the Indemnifying Party shall promptly give notice of such Claim to the Indemnified Party.

(e) The Indemnified Party will, if notified of the Indemnifying Party's election to do so within fifteen (15) days of the date of notice of a Claim, permit the Indemnifying Party to defend in the name of the Indemnified Party any Claim in any appropriate administrative or judicial proceedings and take whatever actions may be reasonably requested of the Indemnified Party to permit the Indemnifying Party to make such defense and obtain an adjudication of such Claim on the merits, including the signing of pleadings and other documents, if necessary; provided that the Indemnifying Party shall defend the Claim with counsel reasonably satisfactory to the Indemnified Party and provide the Indemnified Party with evidence reasonably satisfactory to the Indemnified Party that the Indemnifying Party can satisfy the Claim if it is upheld. In addition to the liability for the ultimate settlement or judgment, if any, arising out of such Claim under this Agreement, the Indemnifying Party shall be solely responsible for all the expenses incurred in connection with such defense or proceedings, regardless of their outcome. However, the Indemnifying Party shall not be responsible for any

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expenses, including attorneys fees and costs, incurred by the Indemnified Party to monitor the defense of the Claim by the Indemnifying Party.

(f) In the event the Indemnifying Party does not accept the defense of such Claim under the terms hereof, the Indemnified Party shall be entitled to conduct such defense and settle or compromise such Claim, and the Indemnifying Party's indemnification obligation under this Agreement shall be absolute, regardless of the outcome of such Claim. The Indemnified Party, at its option, may elect not to permit the Indemnifying Party to control the defense against a Claim. If the Indemnified Party so elects, then the Indemnifying Party shall not be obligated to indemnify the Indemnified Party against any settlements, judgments or other costs or obligations arising thereunder which the Indemnified Party may make or incur relating to such Claim.

11. Miscellaneous.

(a) Point of Contact. EES shall appoint Mr. Bob Walker, Director of Marketing, as the point of contact responsible for managing this agreement. Neoprobe shall appoint Mr. Will Shain, as the point of contact responsible for managing this agreement.

(b) Arbitration. Any controversy or claim arising out of or relating to this Agreement or the validity, inducement, or breach thereof, shall be settled by arbitration before a single arbitrator in accordance with the Commercial Arbitration Rules of the American Arbitration Association ("AAA") then pertaining, except where those rules conflict with this provision, in which case this provision controls. The parties hereby consent to the jurisdiction of the Federal District Court for the Southern District of Ohio for the enforcement of these provisions and the entry of judgment on any award rendered hereunder. Should such court for any reason lack jurisdiction, any court with jurisdiction shall enforce this clause and enter judgment on any award. The arbitrator shall be an attorney specializing in business litigation who has at least 15 years of experience with a law firm of over 25 lawyers or was a judge of a court of general jurisdiction. The arbitration shall be held in Cincinnati, Ohio and the arbitrator shall apply the substantive law of Ohio, except that the interpretation and enforcement of this arbitration provision shall be governed by the Federal Arbitration Act. Within 30 days of initiation of arbitration, the parties shall reach agreement upon and thereafter follow procedures assuring that the arbitration will be concluded and the award rendered within no more than six months from selection of the arbitrator. Failing such agreement, the AAA will design and the parties will follow such procedures. Each party has the right before or during the arbitration to seek and obtain from the appropriate court provisional remedies such as attachment, preliminary injunction, replevin, etc., to avoid irreparable harm, maintain the status quo or preserve the subject matter of the arbitration. THE ARBITRATOR SHALL NOT AWARD ANY PARTY PUNITIVE, EXEMPLARY OR CONSEQUENTIAL DAMAGES, AND EACH PARTY HEREBY IRREVOCABLY WAIVES ANY RIGHT TO SEEK SUCH DAMAGES.

(c) Notices. All notices and other communications hereunder shall be in writing. All notices hereunder of default or breach hereunder, termination of the term hereof, or any other notice, shall be delivered personally, or sent by national overnight delivery service or postage pre-paid registered or certified U.S. mail, and shall be deemed given when delivered, if by personal delivery or overnight delivery service, or three (3) business days after deposit in the mail, if sent by U.S. mail, and shall be addressed as follows:

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(i) If to Neoprobe: Neoprobe Corporation
425 Metro Place North
Suite 300
Dublin, Ohio 43017-1367
Attention: David W. Bupp, President/CEO

with a copy to: Neoprobe Corporation
425 Metro Place North
Suite 300
Dublin, Ohio 43017-1367
Attention: Patricia Coburn, Vice President, General Council

(ii) If to EES: Ethicon Endo-Surgery, Inc.
4545 Creek Road
Cincinnati, OH 45242-2839

Attention: Nicholas Valeriani, President

with a copy to: Johnson & Johnson
One Johnson & Johnson Plaza
New Brunswick, NJ 08933
Attention: Office of General Counsel

or to such other place as either party may designate by written notice to the other in accordance with the terms hereof.

(d) Failure to Exercise. The failure of either party to enforce at any time for any period any provision hereof shall not be construed to be a waiver of such provision or of the right of such party thereafter to enforce each such provision without the prior written consent of the other party; provided, however, that EES shall have the right to assign any or all of its rights, interests or obligations under this Agreement to any direct or indirect wholly-owned subsidiary of Johnson & Johnson, a New Jersey corporation, or to any affiliate thereof, without such prior written consent. Any attempted assignment or transfer of such rights or obligations without such consent, except as provided herein, shall be void. Subject to the foregoing sentence, this Agreement shall bind and inure to the benefit of the parties hereto and their respective successors and assigns and no other person shall have any right, benefit or obligation under this Agreement as a third party beneficiary or otherwise.

(f) Severability. In the event that any one or more of the provisions (or any part thereof) contained in this Agreement or in any other instrument referred to herein, shall, for any reason, be held to be invalid, illegal or unenforceable in any respect, then to the maximum extent permitted by law, such invalidity, illegality or unenforceability shall not affect any other provision of this Agreement or any other such instrument. Any term or provision of this Agreement which is invalid, illegal or unenforceable in any jurisdiction shall, to the extent the economic benefits conferred by this Agreement to both parties remain substantially unimpaired, not affect the validity, legality or enforceability of any of the terms or provisions of this Agreement in any other jurisdiction.

(g) Relationship of the Parties. The relationship of Neoprobe and EES established by this Agreement is that of independent contractors, and nothing contained herein shall be construed to (i) give either party any right or authority

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to create or assume any obligation of any kind on behalf of the other or (ii) constitute the parties as partners, joint venturers, co-owners or otherwise as participants in a joint or common undertaking.

(h) Competing Products. (i) Neoprobe recognizes and acknowledges that EES (and its affiliates) has been, and will continue to be, actively involved in the design, development and marketing of instruments and accessories which may now or in the future compete with the Neoprobe(R) System or other products or services sold or offered by Neoprobe. Neoprobe understands and agrees that EES (and its affiliates) does or may design, develop, market, sell and distribute products which compete directly with the Neoprobe(R) System or such other products or services and may continue to market, sell and distribute these and other competing products throughout the term of this Agreement and thereafter and nothing contained in this Agreement shall be interpreted as creating an

exclusive relationship or otherwise restricting EES from entering into or otherwise engaging in any such transaction. EES agrees that during the term of this Agreement, it shall not actively promote, market or distribute any other product which competes with the Neoprobe(R) System within the Field unless such product is sold under the EES name or the name of an affiliate of EES. Nothing in this Agreement shall be deemed to give to EES any rights or licenses in any Neoprobe intellectual property including, without limitation, patents, copyrights, trademarks and trade secrets.

(ii) EES recognizes and acknowledges that Neoprobe has been, and will continue to be actively involved in the design, development and marketing of instruments and accessories which may now or in the future compete with products or services sold or offered by EES. EES understands and agrees that Neoprobe does or may design, develop, market, sell and distribute products or services which compete directly with products or services provided by EES or its affiliates and that Neoprobe may continue to market, sell and distribute these and other competing products throughout the term of this Agreement and thereafter and nothing contained in this Agreement shall be interpreted as creating an exclusive relationship or otherwise restricting Neoprobe from entering into or otherwise engaging in any such transaction.

(i) Entire Agreement. It is the desire and intent of the parties to provide certainty as to their future rights and remedies against each other by defining the extent of their undertakings herein. This Agreement constitutes and sets forth the entire agreement and understanding between the parties with respect to the subject matter hereof and is intended to define the full extent of the legally enforceable undertakings of the parties hereto, and no promise, agreement or representation, written or oral, which is not set forth explicitly in this Agreement is intended by either party to be legally binding. Each party acknowledges that in deciding to enter into this Agreement and to consummate the transactions contemplated hereby it has not relied upon any statements, promises or representations, written or oral, express or implied, other than those explicitly set forth in this Agreement. This Agreement supersedes all previous understandings, agreements and representations between the parties, written or oral, with respect to the subject matter hereof.

(j) Counterparts. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

(k) Expenses. Each party shall pay all of its own fees and expenses (including all legal, accounting or other advisory fees) incurred in connection with the negotiation and execution of this Agreement and the arrangements contemplated hereby.

(l) Modifications and Amendments. This Agreement shall not be modified or otherwise amended except pursuant to an instrument in writing executed and delivered by each of the parties hereto.

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(m) Construction. The parties have participated jointly in the negotiation and drafting of this Agreement. In the event an ambiguity or question of intent or interpretation arises, this Agreement shall be construed as if drafted jointly by the parties and no presumption or burden of proof shall arise favoring or disfavoring any party by virtue of the authorship of any of the provisions of this Agreement.

(n) Governing Law. This Agreement shall be governed by, and construed in accordance with, the laws of the State of Ohio, without giving effect to the choice of laws provisions thereof.

(o) Incorporation of Exhibits and Schedules. The Exhibits and Schedules identified in this Agreement are incorporated herein by reference and made a part hereof.

(p) Headings. The Section headings contained in this Agreement are for reference purposes only and shall not affect in any way the meaning and interpretation of this Agreement.

IN WITNESS WHEREOF, this Agreement has been executed as of the day and year first above written.

ETHICON ENDO-SURGERY, INC.

/s/ Robert Salerno

Name: R. Salerno Date: 4/20/98

Title: V.P. Business Development

NEOPROBE CORPORATION

/s/ David Bupp

Name: David Bupp Date: 4/21/98

Title: President, CEO

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ANNEX A

PROMOTIONAL MATERIAL

<TABLE>
<S> <C> <C>
SALES TOOLS
DOC0710 3/98 Breast brochure entitled "Lymphatic Mapping for Breast Cancer - A Guide to Developing Your Own Successful Program"

DOC0713 2/98 1500 brochure insert showing 14mm & 19mm reusable probes

1500 brochure

Surgical Technologies reprint entitled "Surgical Applications of Gamma-Detecting Probes" by Burak, et al.

Lymphaticv mapping slide presentation (14 slides per set) with script

VIDEOS

DOC0711 1/98 Neoprobe 1500 instructional video

DOC0712 1/98 Neoprobe 1500 intraoperative lymphatic mapping for breast cancer procedural video

ARTICLES

JAMA reprint entitled "Lymphatic mapping and sentinel node biopsy in the patient with breast cancer" by Albertini, et al.

Netherlands book entitled "Biopsy of the sentinel node in melanoma, penile circinoma and breast carcinoma" by Kapteijn

"Lymphoscintigraphy, the sentinel node concept, and the intraoperative gamma probe in melanoma, breast cancer, and other potential cancers" by Alazraki, et al.

"Intraoperative radiolymphoscintigraphy improves sentinel lymph node identification for patients with melanoma" by Albertini et al.

"The orderly progression of melanoma nodal metastases" by Reintgen et al.

79I019 "Localizing the sentinel node in cutaneous melanoma: gamma probe detection versus blue dye" by Kapteijn et al.

79I016 "Treating malignant melanoma" by Reintgen et al.

79I018 "Optimal selective sentinel lymph node dissection in primary malignant melanoma: by Leong et al.

7C012 "Lymphoscintigraphy and the interoperative gamma probe" by Alazraki

"Accurate nodal staging of malignant melanoma" by Reintgen

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ANNEX B

TERMS OF PURCHASE ORDER

A. Net *** days

B. Shipping: ***

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ANNEX C

NEOPROBE MINIMUM REVENUE

<TABLE>
<CAPTION>

Products	Model Number	List Price	0-200 units sold Minimum Revenue	201+ units sold Minimum Revenue
<S>	<C>	<C>	<C>	<C>
Neoprobe 1500 control unit system INCLUDING:		***	***	***
Model 1500 control unit	1500			
Battery charger transformer	1504			
Background shield	1007			
Carrying case	1514			
Operation manual	1508			
Detector probe cable	1003			
14mm reusable detector probe	1017			
14mm reusable detector probe	1017	***	***	***
19mm reusable detector probe	1002	***	***	***
19mm detector probe collimator	1015	***	***	***
19mm detector probe shield	1016	***	***	***
Battery charger transformer	1504	***	***	***

</TABLE>

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EXHIBIT 10.4.23

LOAN AGREEMENT

This agreement is made effective April 16, 1998, between Neoprobe Corporation, a Delaware corporation ("Borrower"), and Bank One, NA, a national banking association ("Lender").

Background Information

A. Borrower has applied to Lender for a $3,000,000 revolving line of credit (the "Revolving Loan").

B. Lender has approved Borrower's application for the Revolving Loan by the commitment letter dated April 2, 1998 (the "Loan Commitment"), and Lender is willing to make the Revolving Loan to Borrower but only on the terms and subject to the conditions set forth in the Loan Commitment, this agreement, and the Loan Documents (defined in Section 2, below).

C. Pursuant to the Loan Commitment, Lender is also providing two other credit facilities to Borrower in the form of a $100,000 unsecured foreign exchange line of credit (the "Unsecured FX Loan") and a $500,000 equipment financing line of credit (the "Equipment Loan").

Statement of Agreement

Borrower and Lender acknowledge the accuracy of the foregoing Background Information and hereby agree as follows:

Section 1. Loan; Use of Loan Proceeds. On the terms and subject to the conditions set forth in this agreement, the Loan Commitment, and the Loan Documents (as defined below), Lender shall lend to Borrower on a revolving basis, in one or more loans, advances of funds, or other extensions of credit, including without limitation the face amount of any outstanding letters of credit issued by Lender on Borrower's behalf (each, an "Advance"), from time to time during the period beginning on the date of this agreement and ending on February 28, 1999 (the "Availability Period"), an amount up to, but not in excess of, the amount then available under the Borrowing Base (as defined below); provided that the Bank shall not be obligated to make any Advance hereunder if immediately after giving effect to the requested Advance, the aggregate unpaid principal amount of all Advances outstanding would exceed the amount then available under the Borrowing Base. The aggregate unpaid principal amount of all Advances outstanding on February 28, 1999 (the "Termination Date") shall be due and payable on the Termination Date. After the Termination Date, the Borrower shall not be entitled to receive and the Lender shall not be obligated to make or otherwise fund any Advance. Borrower shall use the proceeds of the Revolving Loan to finance temporary working capital and capital expenditures needs.

For purposes of this agreement, the "Borrowing Base" as of any given date shall be the lesser of $3,000,000 or the sum of:

(a) 80% of the aggregate amount of Borrower's accounts receivable from United States-domiciled persons or entities, which accounts are not aged more than 120 days beyond their respective invoice dates; and

(b) the lesser of $1,000,000 or 35% of finished goods of the instrument inventory (the "Finished Instrument Inventory"). For purposes of calculating the Borrowing Base, the value of the Finished Instrument Inventory shall be the purchase price paid therefor by Borrower to the manufacturer of such Finished Instrument Inventory.

Within the limits of this agreement, the Borrower may borrow, repay, and reborrow under this section.

Section 2. Evidence of Indebtedness and Security for the Revolving Loan. The Revolving Loan shall be evidenced by a Revolving Variable Rate Cognovit Promissory Note (the "Revolving Note"), a copy of which is attached to this agreement as Exhibit A and incorporated into this agreement by reference.

The Revolving Note, including all extensions, renewals, amendments, modifications and replacements thereof, along with all of Borrower's obligations under this agreement and the other Loan Documents (defined below), shall be secured by:

(a) A first priority security interest in all inventory and accounts receivable of Borrower and all proceeds thereof (collectively the "Collateral");

(b) UCC-1 Financing Statements to perfect Lender's security interest in the Collateral (the "UCC Financing Statements") which shall be filed with the following:

(1) Ohio Secretary of State.
(2) Franklin County, Ohio Recorder, Personal Property Records.
(3) Colorado Secretary of State.

The security interest described in (a) shall be in the form of a Security Agreement between Borrower and Lender (the "Security Agreement"). The Loan Agreement, Revolving Note, Security Agreement, and UCC Financing Statements shall be referred to collectively as the "Loan Documents."

Section 3. Rate of Interest; Terms of Payments; Late Charges; Prepayment Charges; and Default. The rate of interest, terms of payment, late charges, prepayment charges, and default rates for the Revolving Loan shall be those set forth in the Revolving Note and this agreement.

Section 4. Term of Loans. The principal balance of the Revolving Note and accrued interest thereon shall be due and payable in accordance with the Revolving Note, and the entire unpaid principal balance of the Revolving Note and all accrued and unpaid interest thereon shall be due and payable on or before the "Maturity Date" as set forth in the Revolving Note.

Section 5. Fees. At the closing of the Revolving Loan (the "Closing"), Borrower shall pay to Lender a loan fee of $2,500 (the "Commitment Fee").

Section 6. Costs and Expenses. In addition to the payment of the Commitment Fee, Borrower shall pay or reimburse Lender, as applicable, for all of Lender's out-of-pocket costs and expenses relating to, or incidental with, the Revolving Note, including without limitation recording and filing fees, title examination and insurance costs, escrow fees, appraiser's fees, engineer's fees, environmental audit fees, inspection fees, surveyor's fees, costs and expenses relating to administration of the Revolving Note, and Lender's attorneys' fees (including costs and expenses) whether incurred before or after the Closing (collectively, "Lender's Costs"); provided that Borrower shall have no obligation to pay or reimburse Lender for Lender's attorneys' fees (including without limitation costs and expenses) in excess of $4,000.

Section 7. Depository Requirements. While any sums advanced under the Revolving Loan remain outstanding, Borrower shall maintain its primary depository/cash management relationship with Lender in form and content acceptable to Lender.

Section 8. Representations, Warranties, and Affirmative Covenants. Borrower represents, warrants, and covenants, as applicable, that all of the following statements are true and correct as of the date of this agreement and shall continue to be true and correct until such time as the Revolving Note is paid in full and all of Borrower's obligations under this agreement and the Loan Documents are satisfied in full:

(a) Borrower is a corporation duly organized, validly existing, and in good standing under the laws of the State of Delaware and is qualified to do business and is in good standing in all jurisdictions in which it is required to be so qualified, including without limitation in the

State of Ohio, and has the corporate power and authority to own its properties and assets and to transact the business in which it is engaged.

(b) There has been no material adverse change in Borrower's financial statements and other documents and materials submitted to Lender with Borrower's application for the Revolving Loan since the period covered by such statements, documents and materials.

(c) Borrower has not employed or engaged any broker, finder, or agent who may claim a commission or fee relating to the Revolving Loan, and Borrower shall indemnify and hold Lender harmless from any such claim, demand, or litigation resulting therefrom.

(d) Borrower has full power and authority to execute and deliver this agreement and the Loan Documents and to perform and observe its obligations under this agreement and the Loan Documents; and this agreement and the Loan Documents have been duly and validly executed and delivered by Borrower and are the legal, valid, and binding obligations of Borrower enforceable in accordance with their respective terms.

(e) Neither the execution or delivery of this agreement or the Loan Documents, nor the consummation of any of the transactions contemplated by this agreement or the Loan Documents, nor compliance with the terms and provisions of this agreement or the Loan Documents, will contravene or conflict with: (i) any provision of law, statute, or regulation to which Borrower or any of its properties is subject; (ii) any judgment, license, order, or permit applicable to Borrower or any of its properties; (iii) any indenture, mortgage, or other agreement or instrument to which Borrower is a party or by which Borrower or any of its properties is subject or bound; or (iv) Borrower's certificate of incorporation, bylaws, qualifications to do business in any state, or any actions or proceedings of Borrower. No consent, approval, authorization, or order of any court or governmental authority or third party is required in connection with the execution, delivery, and performance by Borrower of this agreement or the Loan Documents. Borrower shall promptly provide Lender with certified copies of the documents used to effectuate any amendments to its certificate of incorporation, bylaws, or other organizational documents, as the case may be.

(f) Borrower is not in default under any agreement, indenture, mortgage, deed of trust, security agreement, lease, franchise, or other obligation to which it is a party or by which it or any of its property is bound. Borrower is not in violation of any law, ordinance, governmental rule, or regulation to which it is subject, which violation might materially adversely affect the business, prospects, profits, properties, or financial condition of Borrower. No event has occurred and is continuing which constitutes an Event of Default (as defined in Section 12, below) or would, with the lapse of time or giving of notice or both, constitute such a default.

(g) Borrower shall comply with all applicable laws, rules, regulations, and all orders of any governmental authority, a breach of which could materially and adversely affect its business or credit.

(h) There are no claims, suits, or causes of action (whether legal, equitable, or administrative) pending or threatened against Borrower which will or may adversely affect the properties, business, prospects, profits, or financial condition of Borrower or the ability of Borrower to consummate or perform the transactions contemplated by this agreement or the Loan Documents.

(i) Borrower is not in default or delinquent in the payment of any type of tax or assessment with any governmental entity.

(j) Borrower is not a party to any contract or agreement which is not referred to herein, contemplated hereby, or previously disclosed in

writing to Lender, which materially adversely affects Borrower. There is no fact that Borrower has not disclosed in writing to Lender which could materially or adversely affect the properties, business, prospects, or conditions (financial or other) of Borrower. Borrower shall comply in all material respects with all material agreements, indentures, mortgages or documents binding on it or affecting its properties or business.

(k) Borrower shall use the proceeds of the Revolving Loan solely for those uses permitted under Section 1.

(l) Borrower shall furnish to Lender, promptly upon becoming aware of the existence of any condition or event constituting an Event of Default or which, with the giving of notice or lapse of time or both, would constitute an Event of Default under this agreement or any Loan Document, a written notice specifying the nature and period of existence thereof and what action Borrower is taking or proposes to take with respect thereto.

(m) Upon becoming aware thereof, Borrower shall promptly notify Lender in writing of (i) any material adverse change in its financial condition or business, (ii) any default under any material agreement, contract or other instrument to which Borrower is a party or by which any of its properties are bound, or any acceleration of the maturity of any indebtedness owing by Borrower, and (iii) any material adverse claim against or affecting Borrower.

(n) Borrower shall maintain proper books of account and records containing entries of all of the transactions entered into by Borrower in accordance with generally accepted accounting principles.

(o) Borrower shall preserve and maintain its corporate existence and all of its rights, privileges and franchises necessary or desirable in the normal conduct of its business, and conduct its business in an orderly and efficient manner consistent with good business practices and in accordance with all valid regulations and orders of any governmental authority.

(p) Upon reasonable advance notice (oral or written), Borrower shall provide Lender and Lender's employees and agents access to the Collateral to examine the existence and condition of such Collateral, which shall include but not be limited to reviewing (and making copies of) all of Borrower's books and records.

(q) All of the properties and operations of Borrower of a character usually insured by persons or entities of established reputation engaged in the same or similar business similarly situated are adequately insured, by financially sound and reputable insurers, against loss or damage of the kinds and in the amounts customarily insured against by such persons or entities; and Borrower carries, with one or more such insurers, in customary amounts, such other insurance, including public and product liability insurance, as is usually carried by persons or entities of established reputation engaged in the same or a similar business similarly situated. Borrower shall maintain workers' compensation insurance, liability insurance, casualty insurance and other insurance on its present and future properties, assets and business against such casualties, risks and contingencies, and in such types and amounts, as are prudent and customary in the industry and as Lender may from time to time reasonably request.

(r) Borrower shall pay when due all taxes, assessments, and other governmental charges imposed upon it or its assets, franchises, business, income, or profits before any penalty or interest accrues thereon, and all claims (including without limitation claims for labor, services, materials, and supplies) for sums which by law might be a lien or charge upon any of its assets; provided that (unless any material item or property would be lost, forfeited, or materially damaged as a result thereof) no such charge or claim need be paid if it is being diligently contested in good faith by Borrower, if Lender is

notified in advance of such contest, and if Lender receives adequate reserve or other appropriate security acceptable to Lender to protect the Lender against any loss therefrom.

(s) Borrower shall deliver, or cause to be delivered, to Lender: (i) all Forms 10-Q and 10-K filed with the Securities and Exchange Commission during the Availability Period within 30 days after such filing; (ii) monthly and annual covenant compliance certificates for Borrower certified as being true, accurate, and complete by an officer of Borrower, relating to those covenants described in Section 9, 10(a)(ii), 10(b), and 10(c), below, not later than 15 days after the expiration of each calendar month and each fiscal year, as applicable, of the Company; (iii) year-end financial statements prepared in accordance with generally accepted accounting principles for Borrower, audited by a firm of independent accountants, not later than 120 days after the expiration of each fiscal year of Borrower; (iv) not later than 15 days after the end of each calendar month during the Availability Period, a monthly Borrowing Base certificate, certified as being true, accurate, and

complete by the treasurer of Borrower, calculating, as of the end of such calendar month, the Borrowing Base as described in Section 1, above, and providing a summary of accounts receivable agings and Finished Instrument Inventory in such format as may be agreed upon by Borrower and Lender; and (v) all other reasonable information or documentation (financial or otherwise) relating to Borrower upon request of Lender from time to time.

(t) Borrower has good and marketable title to all of its properties and assets, including without limitation the Collateral. All such properties and assets are free from liens, encumbrances, or other adverse claims of any nature. Borrower shall not cause or permit any other liens or encumbrances to affect or attach to any such properties and assets, whether now owned or hereafter acquired, without the prior written consent of Lender.

(u) All representations and warranties made by Borrower herein shall survive the delivery of the Revolving Note and the making of the Revolving Loan, and any investigation at any time made by or on behalf of Lender shall not diminish Lender's rights to rely thereon. All statements contained in any certificate or other instrument delivered by or on behalf of Borrower by one of its officers under or pursuant to this agreement or the other Loan Documents or in connection with the transactions contemplated hereby or thereby shall constitute representations and warranties made by Borrower hereunder.

Section 9. Negative Covenants. In addition to the affirmative covenants set forth in Section 8, until such time as the Revolving Note is paid in full and all of Borrower's obligations under this agreement and the Loan Documents are satisfied in full, Borrower shall not (unless Lender consents in writing):

(a) Incur, create, assume, have outstanding, guarantee or otherwise be or become directly or indirectly liable in respect of any Indebtedness except Permitted Indebtedness.

For purposes of this Section 9(a), "Indebtedness" shall mean (i) all obligations of Borrower for borrowed money (including without limitation all notes payable and drafts accepted representing extensions of credit, all obligations evidenced by bonds, debentures, notes or other similar instruments and all obligations upon which interest charges are customarily paid); (ii) all obligations under conditional sale or other title retention agreements and all obligations issued or assumed as full or partial payment for property, whether or not any such obligations represent obligations for borrowed money; (iii) all indebtedness secured by any Lien (as defined in Section 9(b), below) existing on property owned or acquired by Borrower subject to any such Lien, whether or not the obligations secured

thereby shall have been assumed; (iv) all indebtedness guaranteed (other than by endorsement of negotiable instruments for collection in the ordinary course of business), directly or indirectly, in any manner, by Borrower, or in effect guaranteed, directly or indirectly, by Borrower through an agreement contingent or otherwise: (A) to purchase securities or indebtedness, (B) to purchase, sell or lease (as lessee or lessor) property or to purchase or sell services primarily for the purpose of enabling the debtor to make payment of the indebtedness or to assure the owner of the indebtedness against loss, (C) to supply funds to or in any other manner invest in the debtor, or (D) to repay amounts drawn down by beneficiaries of letters of credit (other than letters of credit arising out of the import of goods or issued in lieu of performance bond on behalf of Borrower), whether or not issued directly or indirectly for the account of Borrower; (v) all indebtedness for which Borrower has agreed, contingently or otherwise, to advance or supply funds; and (vi) indebtedness of any joint venture, partnership or other person or entity for which Borrower is liable. Indebtedness shall not include the long-term portion of deferred federal income taxes.

For purposes of this Section 9(a), "Permitted Indebtedness" shall mean (i) whenever consummated and without need for amendment of this agreement, Borrower's proposed obligation as guarantor of up to $4,000,000 under a proposed $12,000,000 credit facility among Borrower, Neoprobe (Israel), LTD., and Bank Hapoalim, B.M.; (ii) up to an aggregate of $500,000 in purchase money Indebtedness outstanding at any time, provided that such purchase money Indebtedness shall be secured by a purchase money security interest which attaches and is enforceable against Borrower under the laws of one or more of the states within the United States of America; and (iii) any other Indebtedness, provided that such Indebtedness (A) shall be subordinated to all Indebtedness of Borrower to Lender, the terms of which subordination shall be subject to review and

approval by Borrower and Lender; and (B) shall not cause Borrower to violate the financial covenant described in Section 10(d), below.

(b) Create or suffer to exist any Lien upon any of its property or assets (including without limitation the Collateral) now owned or hereafter acquired, except Permitted Liens.

For purposes of this Section 9(b), "Lien" shall mean any lien, mortgage, security interest, tax lien, pledge, encumbrance or conditional sale or title retention arrangement, or any other interest in property designed to secure the repayment of indebtedness, whether arising by agreement or under any statute or law or otherwise.

For purposes of this Section 9(b), "Permitted Liens" shall mean: (i) Liens securing Permitted Indebtedness of the type described in clauses (i), (ii), and (iii) of the above definition of Permitted Indebtedness; (ii) pledges or deposits made to secure payment of workers' compensation, or to participate in any fund in connection with workers' compensation, unemployment insurance, pensions, or other social security programs; (iii) landlords' Liens for rent not yet due and payable; (iv) Liens securing the payment of taxes due and payable or claims of mechanics, materialmen, warehousemen, carriers, and operators; and (v) Liens for taxes not yet due and payable; provided that Liens of the types described in items (ii) through (iv) of this definition shall be "Permitted Liens" only so long as: (A) the validity or amount of such claims is being contested in good faith by appropriate and lawful proceedings, and (B) levy and execution on such Liens have been stayed and continue to be stayed.

(c) Make or have outstanding any loans, advances of funds, or other extensions of credit to any person or entity.

(d) Except in the ordinary course of business, transfer, sell, assign,

convey, mortgage, encumber, hypothecate, lease, or otherwise dispose of any of Borrower's properties, rights, assets, or business, including without limitation the Collateral.

(e) Dissolve or liquidate, or merge or consolidate with or into any other person or entity.

Section 10. Financial Covenants. Borrower has met or shall meet the following financial conditions:

(a) Borrower's tangible net worth, determined under generally accepted accounting principles:

(i) Was not less than $22,000,000 as of March 31, 1998; and

(ii) Shall be not less than (A) $17,000,000 as of June 30, 1998, (B) $16,500,000 as of September 30, 1998, and (C) $15,000,000 as of December 31, 1998, and thereafter.

(b) Borrower has and shall maintain during the Availability Period a ratio of current assets to current liabilities of not less than 2.5:1.

(c) Borrower has and shall maintain during the Availability Period an aggregate balance of cash and investments of not less than $9,000,000, net of borrowings against the Revolving Loan.

(d) Borrower has and shall maintain during the Availability Period a ratio of total debt to tangible net worth of not more than 1:1.

Section 11. Closing Deliveries; Existence and Authority. At or prior to the Closing, Borrower shall have delivered or caused to be delivered to Lender, unless specifically waived by Lender in writing, the following items, each of which shall be in form and content satisfactory to Lender:

(a) Fully-executed originals of this agreement and all of the Loan Documents.

(b) All items, instruments, documents, insurance policies, certificates, and all other matters and documents required to be furnished by Borrower at or prior to the Closing under this agreement, the Loan Commitment, any of the Loan Documents or otherwise required by Lender.

(c) Payment of the Commitment Fee and payment or reimbursement of all of Lender's Costs.

(d) Confirmation satisfactory to Lender that no Event of Default exists and no condition exists which through notice or passage of time or both would cause or result in an Event of Default and that all representations and warranties contained in this agreement, the Loan Commitment, and all of the Loan Documents shall be true and complete in all material respects.

(e) Copies of all applicable governmental permits required to operate Borrower's business and evidence of, and compliance with, all governmental laws, regulations, ordinances, and other requirements pertaining thereto.

(f) Certificate of good standing for Borrower from the Secretary of State of Delaware and certificate of good standing or foreign qualification (or authorization to do business) for Borrower from the Secretary of State of Ohio.

(g) Copy of Borrower's certificate of incorporation, and all amendments thereto, as filed with the Delaware Secretary of State, certified by Borrower's secretary as being true, accurate, and complete.

(h) Copy of Borrower's bylaws certified by the Borrower's secretary as

being true, accurate, and complete.

(i) Resolutions of Borrower approving the execution, delivery and performance of this agreement, the Revolving Note, and all other Loan Documents and the transactions contemplated herein and therein, each duly adopted by the Board of Directors of Borrower, and accompanied by a certificate of the secretary or assistant secretary of Borrower stating that such resolutions are true and correct, have not been altered or repealed, do not violate or conflict with Borrower's certificate of incorporation, bylaws, other organizational documents, or actions by the shareholders of Borrower, and are in full force and effect.

(j) A certificate of the secretary of Borrower, which shall certify the names of the officers of Borrower authorized to sign each of the Loan Documents, together with the true signatures of such officers. Lender may conclusively rely on such certificate until it shall receive a further certificate of the secretary or assistant secretary of Borrower canceling or amending the prior certificate and submitting the signatures of the officers named in such further certificate.

(k) A comprehensive list of Borrower's places of business, certified by an appropriate officer of Borrower as being true, accurate, and complete.

(l) Any other documents, items, instruments, insurance policies, certificates, and all other matters that Lender reasonably requests, including without limitation a waiver, executed by RELA, Inc. (the "Manufacturer"), of any and all of Manufacturer's rights, title and interest in and to the Finished Instrument Inventory arising in connection with the Finished Instrument Inventory being warehoused by Borrower on the Manufacturer's premises after such Finished Instrument Inventory is finished and titled in Borrower.

Section 12. Events of Default. The occurrence of any of the following events shall be an Event of Default under this agreement and all of the Loan Documents:

(a) The determination by Lender that any representation or warranty made by Borrower in this agreement (including without limitation those representations and warranties set forth in Section 8) or any of the Loan Documents is untrue or was untrue in any material (as determined by Lender) respect when made.

(b) The failure by Borrower to pay the full amount of any installment of interest or principal and interest when due under the Revolving Note.

(c) The failure by Borrower to perform or observe any covenant, condition, or obligation contained in this agreement or any of the Loan Documents (excluding those monetary obligations covered under (b), above, and excluding the representations and warranties covered under (a), above) which failure continues uncured for 10 days after delivery by Lender to Borrower of notice of such failure.

(d) The occurrence of any default described in Section 13.

(e) The filing of a voluntary or involuntary petition in bankruptcy or insolvency or for reorganization, arrangement, adjustment, liquidation, dissolution or composition or for the appointment of a receiver, guardian, or trustee by or against Borrower.

(f) The making of an assignment for the benefit of creditors by Borrower or Borrower's failure generally to pay its debts as they become due.

(g) The appointment of a receiver or trustee for all or any portion of the Collateral.

(h) The dissolution, merger, reorganization, or other change in the corporate structure of Borrower, without the prior written consent of Lender.

(i) The transfer or attempted transfer by Borrower of any legal or equitable ownership interest in all or any portion of the Collateral without the prior written consent of Lender, which consent may be withheld in Lender's sole discretion.

(j) The entry of a judgment or lien against Borrower which judgment or lien is not satisfied, discharged or bonded-off within 30 days after the date of entry of such judgment or lien, or, with respect to any collection action relating to such judgment or lien, in the event such collection action is not stayed so as to prevent the issuance of a certificate of judgment against Borrower within 30 days after the date of entry of such judgment or lien.

(k) The concealment or removal by Borrower of any part of its property with intent to hinder, delay, or defraud its creditors or any of them, or the making or suffering of a transfer of any of its property which may be fraudulent under any bankruptcy, fraudulent conveyance, or similar law, or the making by Borrower of any transfer of its property to or for the benefit of a creditor at a time when other creditors similarly situated have not been paid, or any other action by Borrower which results in Borrower permitting any creditor to obtain a lien upon any of its property through legal proceedings which is not vacated within 10 days from the date thereof.

Upon the occurrence of any of the above-described events, Lender may declare the Revolving Note due and payable upon demand without presentment, protest, notice, or demand of any kind. Borrower shall not have the opportunity to cure any default if such failure is incapable of being cured, in Lender's reasonable discretion, or if the failure is described under any of (a), (b), (d), (e), (f), (g), (h), (i), and (j).

Section 13. Cross Default. Any default by Borrower of any obligation of Borrower to Lender or any of Lender's affiliates, whether or not relating to the Revolving Loan, including without limitation any default with respect to the Unsecured FX Loan or the Equipment Loan, shall constitute an Event of Default under this agreement and all of the Loan Documents.

Section 14. Procedure for Borrowing under Revolving Loan. Provided all conditions described in this Section 14 are satisfied, Borrower may borrow under the Revolving Loan on any Business Day (meaning a day other than a Saturday, Sunday or other day on which commercial banks in Columbus, Ohio, are authorized or required by law to close) provided that the Borrower gives the Lender telephonic or written notice (each, a "Notice of Borrowing") which must

be received by the Lender prior to 1:00 p.m., Columbus, Ohio, time, on the requested Borrowing Date (as defined below) for each Revolving Loan disbursement, specifying (i) the requested Borrowing Date of such borrowing, which shall be a Business Day and (ii) the aggregate amount of such requested borrowing. Each borrowing pursuant to the Revolving Loan shall be in an aggregate principal amount equal to $50,000 plus whole multiples of $5,000; provided that any borrowing with respect to which Borrower exercises its Interest Rate Conversion Option (as defined in the Revolving Note) shall be in an aggregate principal amount equal to $250,000 plus whole multiples of $5,000. Upon receipt of each such Notice of Borrowing from the Borrower, the Lender shall deposit such requested borrowing for the benefit of the Borrower on the requested Borrowing Date, subject to the satisfaction of the terms and conditions of this agreement, by crediting the loan account on the books of the Lender in the amount of such requested borrowing. Lender is hereby authorized, and may at its option, but shall have no obligation to, record the date and amount of each borrowing made in connection with the Revolving Loan, and the date and the amount of each payment or prepayment of principal thereof, on its separate written or electronic records maintained in the ordinary course of its business, and any such recordation shall constitute prima facie evidence of the accuracy of the information so recorded; however, the failure of the Lender to

make such recordations shall not effect the obligations of the Borrower to repay outstanding principal, interest or any other amounts due hereunder or under the Revolving Note in accordance with the terms hereof and thereof. The obligation of Lender to continue making disbursements pursuant to the Revolving Note until the Maturity Date as set forth in the Revolving Note and this agreement is subject to the full satisfaction, in the opinion of Lender, of each of the following conditions:

(a) The representations, warranties and covenants made by Borrower in this agreement or any other Loan Document, and any representations, warranties and covenants made by Borrower which are contained in any certificate, document or financial or other statement furnished at any time under or in connection herewith or therewith, shall be true and correct in all material respects as of the date the Lender makes a disbursement to Borrower pursuant to the Revolving Note (the "Borrowing Date").

(b) No Event of Default shall have occurred and be continuing on the Borrowing Date.

(c) There shall have been no material adverse change in the financial condition or business of either Borrower and its affiliates from the date of the most recent monthly financials furnished to Lender prior to the Borrowing Date.

(d) All resolutions, certificates, corporate and other proceedings and all other documents and legal matters in connection with the transactions contemplated by this agreement and the Loan Documents shall have been provided prior to the Borrowing Date in form and substance reasonably satisfactory to Lender.

Each time Lender makes an Advance to Borrower under the Revolving Note pursuant to a request by Borrower, it shall constitute a representation, warranty and covenant by Borrower that, as of the Borrowing Date, the conditions contained in paragraphs (a), (b), (c) and (d) of this Section 14 have been fully satisfied.

Section 15. Assignment. No rights under this agreement nor in or to the proceeds of the Revolving Loan may be assigned by Borrower without the prior written consent of Lender.

Section 16. Non-Waiver. No failure by either party to insist upon strict compliance with any term of this agreement or to exercise any option, enforce any right, or seek any remedy upon any default of the other party shall affect, or constitute a waiver of, the first party's right to insist upon that strict compliance, exercise that option, enforce that right, or seek that remedy with respect to that default or any prior, contemporaneous, or subsequent default. No custom or practice of the parties at variance with any provision of this agreement shall affect, or constitute a waiver of, either party's right to demand strict compliance with the provisions of this agreement.

Section 17. Notices. All notices and other communications under this agreement to be made to either Lender or Borrower shall be in writing and shall be deemed given when delivered personally, telecopied (which is confirmed electronically), or mailed by registered or certified mail (return receipt requested) or sent by Federal Express, UPS, or

other nationally recognized overnight delivery service for overnight delivery to that party at the address for that party (or at such other address for such party as such party shall have specified in notice to the other party):

(a) If to Lender:

Bank One, NA
100 East Broad Street, Seventh Floor
Columbus, Ohio 43271-0170
Attention: David T. Clark
Telecopy No. (614) 248-5518

With a copy to (which shall be sent by Lender):

Baker & Hostetler LLP
65 East State Street, Suite 2100
Columbus, Ohio 43215
Attention: William B. Shearer, Esq.
Telecopy No. (614) 462-2616

(b) If to Borrower:

Neoprobe Corporation
425 Metro Place South
Suite 400
Dublin, Ohio 43017-1367
Attention: John Schroepfer
Telecopy No. (614) 793-7520

Section 18. Governing Law. All questions concerning the validity or meaning of this agreement or relating to the rights and obligations of the parties with respect to performance under this agreement shall be construed and resolved under the laws of Ohio.

Section 19. Venue. The parties to this agreement hereby designate the Court of Common Pleas of Franklin County, Ohio, as a court of proper jurisdiction and exclusive venue for any actions or proceedings relating to this agreement; hereby irrevocably consent to such designation, jurisdiction, and venue; and hereby waive any objections or defenses relating to jurisdiction or venue with respect to any action or proceeding initiated in the Court of Common Pleas of Franklin County, Ohio.

Section 20. Severability. It is the intention of the parties to comply fully with all laws and public policies, and this agreement shall be construed consistently with such laws and public policies to the extent possible. If and to the extent that any court of competent jurisdiction is unable to so construe any provision of this agreement and holds that provision to be invalid, that invalidity shall not affect the remaining provisions of this agreement, which shall remain in full force and effect.

Section 21. Time is of the Essence. Time is of the essence relating to this agreement and with respect to all other obligations to be performed under this agreement, but delay in the exercise by Lender of its rights hereunder shall not be deemed a waiver of such right by Lender.

Section 22. Captions. The captions at the beginning of the sections and several subsections of this agreement are not part of the context of this agreement, but are only labels to assist in locating those sections and subsections, and shall be ignored in construing this agreement.

Section 23. Jury Trial Waiver. Borrower, after consulting or having the opportunity to consult with legal counsel, knowingly, voluntarily and intentionally waives any right it may have to a trial by jury in any action or proceeding based upon or arising out of this agreement or any of the Loan Documents or any course of conduct, dealings, statements, whether oral or written, or actions of either party. Borrower shall not seek to consolidate, by counterclaim or otherwise, any action in which a jury trial has been waived with any other action in which a jury trial cannot be or has not been waived.

Section 24. No Third Party Benefit. This agreement is intended for the exclusive benefit of the parties and their respective heirs, successors and assigns. Nothing contained in this agreement shall be construed as creating any rights or benefits in or to any third party.

Section 25. Complete Agreement. This document, along with the Loan Documents, contains the entire agreement among the parties and supersedes any prior discussions, negotiations, representations, or agreements among them respecting the subject matter. No additions or other changes to this agreement shall be made or be binding unless made in writing and signed by each party to this agreement.

NEOPROBE CORPORATION BANK ONE, NA

By: /s/ John Schroepfer By: /s/ David T. Clark
---------- ----------
David T. Clark, Vice President
Print Name: John Schroepfer

Its: Vice President Finance and Administration

EXHIBIT 10.4.24

VARIABLE RATE COGNOVIT PROMISSORY NOTE

$3,000,000.00 April 16, 1998

For value received, the undersigned, Neoprobe Corporation, a Delaware corporation, with offices at 425 Metro Place South, Suite 400, Dublin, Ohio 43017-1367 (hereinafter referred to as "Maker"), promises to pay to the order of Bank One, NA, a national banking association (hereinafter referred to as "Payee," which term shall include any holder hereof), at its principal place of business at 100 East Broad Street, 7th Floor, Columbus, Ohio 43271-0170, or at such other place as Payee may designate, the principal sum of Three Million Dollars ($3,000,000), or so much thereof as may be advanced by Payee to Maker from time to time, together with all charges herein provided and interest on the unrepaid advances of said principal sum from date of disbursement by Payee, payable in cash at the rates and in the manner hereinafter set forth.

ARTICLE I
DEFINITIONS

1.1 The following terms wherever used in this Note shall have the following meanings:

"Advance" shall mean any loan, advance of funds, or extension of credit under the Loan Agreement.

"Collateral" shall mean all accounts receivable and inventory owned by Maker, and all proceeds thereof, as more particularly described in the Security Agreement.

"Default Rate of Interest" shall mean the rate equal to two percent per annum plus the applicable rate of interest being charged hereunder.

"Designated LIBOR Rate" shall mean the applicable LIBOR Rate elected by Maker in the applicable Interest Rate Notice of Election.

"Designated LIBOR Rate Amount" shall mean the entire amount of an Advance with respect to which Maker exercises Maker's Interest Rate Conversion Option under Section 2.2, below.

"Interest Rate Conversion Option" shall mean the option of Maker to convert the interest rate being charged hereunder on a Designated LIBOR Rate Amount for a Permitted LIBOR Period from the Variable Rate to a LIBOR Rate.

"Interest Rate Conversion Date" shall mean the date on which Payee makes to Maker an Advance with respect to which Maker has exercised its Interest Rate Conversion Option.

"Interest Rate Notice of Election" shall mean the written statement of Maker to Payee informing Payee of Maker's election to exercise the Interest Rate Conversion Option and containing such additional information as is required to permit Payee to effectively convert the rate of interest, including without limitation, the applicable rate requested, the Designated LIBOR Rate Amount and the Permitted LIBOR Period (as applicable).

"LIBOR Business Days" shall mean business days in which dealings in dollars are carried out in the London Interbank Market.

"LIBOR Rate" shall mean the rate per annum equal to (i) 225 basis points, plus (ii) a rate determined pursuant to the following formula:

$$\frac{\text{London Interbank Rate}}{100\% - \text{LIBOR Reserve Percentage}}$$

"LIBOR Reserve Percentage" shall mean the reserve requirement including any supplemental and emergency reserves (expressed as a percentage) applicable to member banks of the Federal Reserve System in respect of "Eurocurrency Liabilities" under Regulation D of the Board of Governors of the Federal Reserve System, or any substituted or amended reserve requirement hereinafter applicable to member banks of the Federal Reserve System, which is in effect as of the applicable Interest Rate Conversion Date and taking into account any transitional requirements thereto becoming effective during the specified Permitted LIBOR Period.

"Loan Agreement" shall mean that certain Loan Agreement dated the same date as this Note pursuant to which the principal amount of this Note is to be disbursed, by which Payee agrees to loan funds to Maker pursuant to the terms and conditions stated therein.

"Loan Documents" shall collectively mean this Note, the Security Agreement, Loan Agreement and any other instrument, affidavit, certificate or document heretofore, now or hereafter given by Maker in connection with the closing of the loan evidenced by this Note.

"London Interbank Market" shall mean the buying and selling of dollar deposits payable outside the United States of America between Payee and other financial institutions in the ordinary course of Payee's business.

"London Interbank Rate" shall mean the per annum rate of interest (rounded upward to the nearest 1/8 of 1%) at which United States dollar deposits in immediately available and freely transferable funds, would be offered to Payee on the applicable Interest Rate Conversion Date as of 10:00 a.m. New York City time (or at such time on the next LIBOR Business Day closest to the Interest Rate Conversion Date), which deposits are in immediately available funds, for a period comparable to the specified Permitted LIBOR Period and in an amount comparable to the specified Designated LIBOR Rate Amount.

"Maturity Date" shall mean February 28, 1999.

"Note" shall mean this Variable Rate Cognovit Promissory Note.

"Permitted LIBOR Period" shall mean any period of time designated by Maker in an Interest Rate Notice of Election, equal in duration to 30, 60, 90 or 180 days, but in no event a period extending beyond the Maturity Date.

"Prime Rate" shall mean the interest rate established and announced from time to time by Payee as its prime rate, based upon its consideration of economic, money market, business and competitive factors, and it is not necessarily the most favorable rate of Payee. Each change in said Prime Rate shall, without notice, automatically and immediately change the rate of interest due hereon.

"Rate Quote" shall mean any rate quoted to Maker by Payee in response to a Rate Quote Request, which response may be made either verbally or in writing and shall include the duration of the quote. If the quote is verbal, Payee's internal rate sheet on the date of such quote shall be conclusive evidence of the rate quoted. Unless specified otherwise, a Rate Quote shall be deemed valid for 24 hours.

"Rate Quote Request" shall mean a request by Maker to Payee to quote any rate of interest available hereunder pursuant to Maker's Interest Rate Conversion Option, which request shall be made either verbally or in writing and shall contain all necessary information required by Payee in order to give a Rate Quote.

"Reconversion Date" shall mean the first day immediately following the last day of the applicable Permitted LIBOR Period.

"Security Agreement" shall mean a certain Security Agreement dated the same date as this Note pursuant to which Maker has granted to Payee a security interest in the Collateral to secure payment of this Note.

"Variable Rate" shall mean the rate equal to the Prime Rate.

ARTICLE II
PAYMENTS OF PRINCIPAL AND INTEREST

2.1 From and after the date of this Note, interest on the unrepaid advances of the principal sum from date of disbursement by Payee at the Variable Rate shall be due and payable monthly on the first day of each month commencing with the first day of the calendar month immediately following the date of this Note and continuing on the first day of each month thereafter through the Maturity Date. Notwithstanding the foregoing, Maker shall have the option to convert the interest rate charged on all or portions of the outstanding principal balance to a LIBOR Rate as set forth in Section 2.2 hereof. In the event Maker shall effectively convert the interest charged on all or portions of the outstanding principal balance pursuant to Section 2.2, interest on such portions shall accrue and be due and payable as set forth in Section 2.2.

2.2 Maker may, at the time Maker requests an Advance of $250,000 or more, exercise Maker's Interest Rate Conversion Option to convert the interest rate payable hereunder on the entire amount of such Advance from the Variable Rate to a LIBOR Rate for a Permitted LIBOR Period. Maker shall be entitled to request a Rate Quote from Payee by submitting a Rate Quote Request. In the event Maker desires to accept a Rate Quote, Maker shall deliver to Payee an Interest Rate Notice of Election. In the event Maker shall effectively elect a LIBOR Rate, commencing on the applicable Interest Rate Conversion Date, interest on the applicable Designated LIBOR Rate Amount shall accrue at the LIBOR Rate indicated in the applicable Rate Quote and interest payments shall be due and payable monthly at such LIBOR Rate for the applicable Permitted LIBOR Period, commencing on the first day of the first month immediately following the applicable Interest Rate Conversion Date and continuing thereafter on the first day of each month through the applicable Reconversion Date, at which time the interest rate payable hereunder on such Designated LIBOR Rate Amount shall automatically reconvert to the Variable Rate and monthly payments shall be due and payable in accordance with Section 2.1, above, thereafter throughout the balance of the term of this Note.

2.3 All interest payable in accordance with this Note shall be calculated on the basis of the actual number of calendar days elapsed but computed on a daily basis as if each year consisted of 360 days.

2.4 All principal and all accrued and unpaid interest shall be due and payable in full on the Maturity Date.

2.5 In the event that any applicable law, treaty, rule or regulation (whether domestic or foreign) now or hereafter in effect, or any interpretation or administration thereof by any governmental authority charged with the interpretation or administration thereof, or compliance by Payee with any request or directive of any such authority (whether or not having the force of law) (each of the foregoing being referred to as a "Regulatory Requirement"), shall (a) affect the basis of taxation or payments to Payee of any Designated LIBOR Rate Amount under this Note (other than taxes imposed on the overall net income of Payee by the jurisdiction, or by any political subdivision or taxing authority of any such jurisdiction, in which Payee has its principal office), or (b) impose, modify or deem applicable any reserve, special deposit or similar requirement against assets of, deposits with or for the account of, or credit extended by Payee, or (c) impose any other condition, requirement or charge with respect to this Note or the Loan Documents (including, without limitation, any capital adequacy requirement, any requirement which affects the manner in which Payee allocates capital resources to its commitments or any similar requirement), and the result of any of the foregoing change in external conditions is to increase the actual cost to Payee of making or maintaining the loan evidenced by this Note (the "Loan") or any advance hereunder, to reduce the actual amount of any sum receivable by Payee thereon, or to reduce the actual rate of return on the capital of Payee from the actual cost, sum receivable or rate of return applicable on the date of this Note, then Maker shall pay to Payee, from time to time, upon request of Payee, additional amounts sufficient

to compensate Payee for such increased cost, reduced sum receivable or reduced rate of return (collectively,

"Reduced Earnings") to the extent Payee is not compensated therefor in the computation of the interest rates applicable to the Loan. A detailed statement as to the amount of such increased cost, reduced sum receivable or reduced rate of return, prepared in good faith and submitted by Payee to Maker, shall be conclusive and binding for all purposes, absent manifest error in determination. Payee shall promptly notify Maker of any event occurring after the date of this Note that entitles Payee to additional compensation pursuant to this Section. This provision is for the benefit of Payee and is not intended to increase the yield to payee above the rates of interest provided for in this Note.

2.6 Notwithstanding any other provision of this Note to the contrary, if, upon receiving an Interest Rate Notice of Election (a) deposits in U.S. dollars for periods comparable to the Permitted LIBOR Period elected by Maker are not available to Payee in the London Interbank Market, or (b) the LIBOR Rate will not accurately cover the cost to Payee of making or maintaining the related Designated LIBOR Rate Amount, or (c) by reason of national or international financial, political or economic conditions or by reason of any applicable Regulatory Requirement, including without limitation exchange controls, it is unlawful, impossible or unduly burdensome for Payee (i) to advance the relevant Designated LIBOR Rate Amount or (ii) to continue any outstanding sum as a Designated LIBOR Rate Amount, then Maker shall not be entitled, so long as such circumstances continue, to request a Designated LIBOR Rate Amount or a continuation of the LIBOR Rate for any such outstanding sum from Payee. In the event that such circumstances no longer exist, Payee shall again consider requests for Designated LIBOR Rate Amounts.

2.7 In the event that any Regulatory Requirement, including without limitation exchange controls, shall make it unlawful or impossible for Payee to maintain any Designated LIBOR Rate Amount under this Note, the Maker shall, after receipt of notice thereof from Payee, repay in full the then-outstanding principal amount of all Designated LIBOR Rate Amounts together with all accrued interest thereon to the date of payment and all amounts due to the affected Payee under Section 2.8, (a) on the last day of the then-current Permitted LIBOR Period, if any, applicable to such Designated LIBOR Rate Amount, if Payee may lawfully continue to maintain such Designated LIBOR Rate Amount to such day, or (b) immediately if Payee may not continue to maintain such Designated LIBOR Rate Amount to such day. This provision is for the benefit of Payee and is not intended to increase the yield to Payee above the rates of interest provided for in this Note. This Section 2.7 shall apply only as long as such illegality exists. Payee shall use reasonable, lawful efforts to avoid the impact of such law, treaty, rule or regulation. As an alternative to the repayment obligation provided in this Section 2.7, Maker may, at its option, and at the time provided in this Section 2.7, convert any affected advance or a portion thereof to the Variable Rate or to any Designated LIBOR Rate Amount of a duration that remains unaffected by the foregoing external conditions, in each case accompanied by the payment of all accrued interest on the affected Advance to the date of conversion and all amounts due to Payee under Section 2.8.

2.8 If Maker makes any payment of principal with respect to any Designated LIBOR Amount on any other date than the last day of a Permitted LIBOR Period applicable thereto or if Maker fails to borrow any Designated LIBOR Amount after notice has been given to Payee in accordance with Section 2.2, or fails to make any payment of principal or interest in respect of a Designated LIBOR Amount when due or at the Maturity Date, then Maker shall reimburse Payee on demand for any resulting actual and direct loss or expense incurred by Payee, determined in Payee's reasonable opinion, including without limitation any loss incurred in obtaining, liquidating or employing deposits from third parties. A detailed statement as to the amount of such loss or expense, prepared in good faith and submitted by Payee to Maker, shall be conclusive and binding for all purposes absent manifest error in determination. This provision is for the benefit of Payee and is not intended to increase the yield to Payee above the rates of interest provided for in this Note.

2.9 The provisions of Sections 2.5 and 2.8 shall survive the termination and payment in full of this Note.

ARTICLE III
LATE CHARGES

3.1 If any of said payments of principal or interest or any combination thereof are not paid in full within five days after such payment is due, then in addition to the amount of said payment there shall be due, and Maker promises to pay, a late charge in respect of each said payment in the amount of 5% which Maker agrees is a fair and reasonable charge for costs incurred by Payee in processing such late payment and shall not be deemed a penalty.

ARTICLE IV
PREPAYMENT

4.1 This Note evidences a loan in the form of a revolving line of credit, and Maker may, subject to the applicable provisions under this Note and the Loan Agreement, borrow, repay, and re-borrow sums an unlimited number of times.

4.2 In the event the applicable rate of interest charged hereunder is the Variable Rate, the privilege is hereby reserved by Maker to prepay this Note in whole or in part at any time and from time to time without premium or penalty, provided that Payee shall receive written notice of Maker's intention to so prepay not less than three days prior to such prepayment and further provided that a payment of all accrued and unpaid interest applicable to the portion of the principal amount to be prepaid, to the date of such prepayment, is included with such prepayment.

4.3 In the event the applicable rate of interest charged hereunder is the LIBOR Rate, Maker may prepay this Note, provided that Payee shall receive written notice of Maker's intention to so prepay not less than three business days prior to such prepayment date ("LIBOR Prepayment Notice") and provided further that: (a) such prepayment shall be of one or more Designated LIBOR Rate Amount(s) in full (no partial prepayment of any Designated LIBOR Rate Amount is permitted); (b) Maker shall indicate on the LIBOR Prepayment Notice which Designated LIBOR Rate Amount(s) are to be prepaid ("Prepayment Amount"); and (c) concurrently with such prepayment Maker shall pay all accrued interest and any late charge or charges then due and owing on the Prepayment Amount. Maker may prepay this Note on the last day of a Permitted LIBOR Period in whole or in part without premium or penalty provided that Payee shall receive written notice of Maker's intention to so prepay not less than three days prior to such prepayment and further provided that a payment of all accrued and unpaid interest applicable to the portion of the principal amount to be prepaid, to the date of such prepayment, is included with such prepayment.

ARTICLE V
DEFAULT

5.1 The term "Event of Default" shall mean the occurrence of any one or more of the following:

(a) A failure by Maker to make any payment of principal or interest or any combination thereof under this Note when due.

(b) The material incorrectness of any representation or warranty made by Maker to Payee in any of the Loan Documents or any financial statement or other document delivered to Payee in connection with the Loan.

(c) The inability of Maker to satisfy any one or more of the conditions specified in the Loan Agreement as precedent to the obligation of Payee to make a loan disbursement after an application for a loan disbursement has been submitted by Maker to Payee.

(d) The failure of Maker to observe, perform or comply with any of the other terms, covenants or conditions of Maker set forth in the Loan Documents and to cure such failure within the time period, if any,

specified therein.

5.2 Upon the occurrence of any Event of Default, the entire unpaid balance of principal and interest evidenced by this Note, together with all sums of money advanced by Payee in accordance with the terms of any one or more of the Loan Documents, and all sums due and owing for any late charge or charges hereunder (the foregoing being hereinafter collectively referred to as the "Indebtedness") shall thereupon bear interest at the Default Rate of Interest, and at the option of Payee, all the Indebtedness together with interest at the Default Rate of Interest shall immediately become due and payable ("Acceleration") without demand made therefor and without notice to any person, notice of the exercise of said option being hereby expressly waived, and Payee shall have all remedies of a secured party under law and equity to enforce the payment of all of the Indebtedness, time being of the essence of this Note. The Default Rate of Interest shall be charged to Maker upon the occurrence of any Event of Default notwithstanding any

invoices or billing statements sent by Payee to Maker indicating an interest rate to the contrary. In addition, any waiver of Payee's right to charge the Default Rate of Interest or to accelerate the Indebtedness must be made in writing and cannot be waived by oral representation or the submission to Maker of monthly billing statements.

ARTICLE VI
MISCELLANEOUS

6.1 The failure of Payee to exercise any option herein provided upon the occurrence of any Event of Default shall not constitute a waiver of the right to exercise such option in the event of any continuing or subsequent Event of Default. Maker hereby agrees that the maturity of all or any part of the Loan may be postponed or extended and that any covenants and conditions contained in this Note or in any of the other Loan Documents may be waived or modified without prejudice to the liability of Maker on said Note or Loan Documents.

6.2 When this Note becomes due, by Acceleration or otherwise, Payee may, at its option, demand, sue for, collect or make any compromise or settlement it deems desirable with reference to property held as security herefor. Payee shall not be bound to take any steps necessary to preserve any rights in the property held as security herefor against prior parties, which Maker hereby assumes to do. Maker expressly authorizes Payee to deal in any manner with any collateral and the security of every kind and character given to secure the payment of Maker's obligations under this Note, and, without limiting the generality of the foregoing, Maker expressly authorizes Payee to waive any rights which Payee may have relative to requiring additional collateral or to surrendering or to releasing collateral held by Payee, or to substituting any Collateral held by Payee for other collateral of like kind, or of any kind, nor shall the obligations of Maker under this Note, nor the rights of Payee under the Loan Documents be diminished or in any manner affected by the failure of Payee to exercise its rights with reference to such collateral or in any manner failing to proceed against the collateral or security pledged or conveyed as security for the obligations of Maker under this Note. The provisions hereof shall apply and be controlling as to all property which may at any time be security herefor.

6.3 Maker hereby authorizes Payee, in its sole discretion, upon the occurrence of an Event of Default, to apply all or any portion of the balance of any account maintained by Maker with Payee to the payment or reduction, in whole or in part, of any and all principal and interest then due, whether by acceleration or otherwise, to Payee under this Note. Upon the occurrence of any Event of Default, Payee shall have the right to setoff against all obligations of Maker to Payee hereunder, whether matured or unmatured, all amounts owing to Maker by Payee, whether or not then due and payable, and all other funds or property of Maker on deposit with or otherwise held in the custody of Payee or any of its affiliates, all without notice to or demand on Maker, such notice and demand being hereby waived.

6.4 Presentment for payment, notice of dishonor, protest, notice of protest and diligence in bringing suit against any party hereto are hereby

waived by Maker.

6.5 Maker hereby waives all relief from any and all appraisement or exemption laws now in force or hereafter enacted.

6.6 The obligations evidenced or created by this Note, as well as all waivers of rights by Maker contained herein, shall effectively bind and be the obligations and waivers of any and all others who may at any time become liable for the payment of all or any part of this Note, including without limitation all endorsers and guarantors.

6.7 Nothing herein contained, nor in any of the other Loan Documents or other documents relating hereto, shall be construed or so operate as to require Maker, or any person liable for the payment of the Loan, to pay interest in an amount or at a rate greater than the highest rate permissible under applicable law. Should any interest or other charges paid by Maker, or any parties liable for the payment of the Loan, result in the computation or earning of interest in excess of the highest rate permissible under applicable law, then any and all such excess shall be and the same is hereby waived by Payee, and all such excess shall be automatically credited against and in reduction of the principal balance, and any portion of said excess which exceeds the principal balance shall be paid by Payee to Maker and any parties liable for the payment of the loan made pursuant to this Note, it being the intent of the parties hereto that under no circumstances shall Maker or any parties liable for the payment of the loan hereunder be required to pay interest in

excess of the highest rate permissible under applicable law. All interest paid or agreed to be paid to Payee shall, to the extent permitted under applicable law, be amortized, prorated, allocated and spread throughout the full period until payment in full of this Note, including the period of any renewal or extension thereof, so that interest thereon for such full period shall not exceed the maximum amount permitted by applicable law.

Notwithstanding anything to the contrary herein contained, in the event that the Variable Rate should ever exceed the highest rate permissible under applicable law, thereby causing the interest accruing on the Indebtedness to be limited to such highest rate permissible under applicable law, then any subsequent reduction in the Prime Rate shall not reduce the rate of interest charged hereunder below the highest rate permissible under applicable law until the total amount of interest accrued on the Indebtedness equals the amount of interest which would have accrued on such indebtedness if the Variable Rate had been in effect at all times in the period during which the rate charged thereon was limited to the highest rate permissible under applicable law.

6.8 Maker acknowledges and agrees that all property pledged or assigned by Maker to Payee as security for this Note has been pledged or assigned as security for the entirety of all Indebtedness.

6.9 If any provision (or any part of any provision) contained in this Note shall for any reason be held or deemed to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provision (or remaining part of the affected provision) of this Note, and this Note shall be construed as if such invalid, illegal or unenforceable provision (or part thereof) had never been contained herein and the remaining provisions of this Note shall remain in full force and effect.

6.10 Maker hereby authorizes any attorney-at-law to appear in any court of record in the State of Ohio or in any other state or territory of the United States at any time after this Note becomes due, whether by acceleration or otherwise, to waive the issuing and service of process, and to confess judgement against Maker in favor of Payee for the amount due together with interest, expenses, the costs of suit and reasonable counsel fees, and thereupon to release and waive all errors, rights of appeal and stays of execution. Such authority shall not be exhausted by one exercise, but judgment may be confessed from time to time as any sums and/or costs, expenses or reasonable counsel fees shall be due, by filing an original or a photostatic copy of this Note. Maker waives any right to move any court for an order having any attorney or firm representing Payee removed or disqualified as counsel for Payee as a result of

such attorney or firm confessing judgment against Maker in accordance with this Section 6.10. Maker hereby expressly waives any conflicts of interest that may now or hereafter exist as a result of any attorney representing Payee confessing judgment against Maker and expressly consents to any attorney representing Payee or to any other attorney to confess judgment against Maker in accordance with this Section 6.10. Maker hereby further consents and agrees that Payee may pay any attorney confessing judgment and that any fees so paid may be included in the amount of such judgment.

6.11 Maker hereby agrees to pay to Payee all costs of collecting and securing, and of attempting to collect and to secure this Note, including without limitation reasonable attorneys' fees, appraisers' fees, court costs, and notice charges, whether such attempt be made by suit, in bankruptcy, or otherwise, and said costs and any other sums due Payee by virtue of this Note may be included in any judgment or decree rendered.

This Note is delivered in the State of Ohio and is to be governed by and construed in accordance with the laws of the State of Ohio. In addition to any other appropriate jurisdiction determined by Payee, Maker hereby consents to and, by execution of this Note, submits to the personal jurisdiction of the Court of Common Pleas of Franklin County, Ohio and the United States District Court sitting in Columbus, Ohio for the purposes of any judicial proceedings which are instituted for the enforcement of this Note. Maker agrees that venue is proper in said jurisdiction.

WARNING -- BY SIGNING THIS PAPER YOU GIVE UP YOUR RIGHT TO NOTICE AND COURT TRIAL. IF YOU DO NOT PAY ON TIME A COURT JUDGMENT MAY BE TAKEN AGAINST YOU WITHOUT YOUR PRIOR KNOWLEDGE AND THE POWERS OF A COURT CAN BE USED TO COLLECT FROM YOU REGARDLESS OF ANY CLAIMS YOU MAY HAVE AGAINST THE CREDITOR WHETHER FOR RETURNED GOODS, FAULTY GOODS, FAILURE ON HIS PART TO COMPLY WITH THE AGREEMENT, OR ANY OTHER CAUSE.

NEOPROBE CORPORATION

By: /s/ John Schroepfer

Print Name: John Schroepfer

Its: Vice President Finance and Administration

EXHIBIT 10.4.25

SECURITY AGREEMENT

This agreement is made April 16, 1998, at Columbus, Ohio, between Neoprobe Corporation, a Delaware corporation ("Debtor"), whose address is 425 Metro Place South, Suite 400, Dublin, Ohio 43017-1367, and Bank One, NA, a national banking association ("Secured Party"), whose address is 100 East Broad Street, 7th Floor, Columbus, Ohio 43271-0170, who hereby agree as follows:

Section 1. Grant of Security Interest. Debtor grants to Secured Party a security interest in all of Debtor's inventory and accounts receivable whether now owned or hereafter acquired, and wherever located, including all payments thereon and proceeds thereof and including all rights to payments under any insurance or any warranty, guaranty, or indemnity payable with respect to any of the foregoing (collectively, the "Collateral").

Section 2. Obligations Secured. This agreement is being made in connection with the Loan Agreement dated this same date between Debtor and Secured Party (the "Loan Agreement") and shall secure all obligations of Debtor to Secured Party, including without limitation all obligations arising under: (a) the $3,000,000 Variable Rate Cognovit Promissory Note dated the same date as this agreement from Debtor to Secured Party (the "Note"); and (b) all of Debtor's obligations under the other Loan Documents (as defined in the Loan Agreement), whether or not any such obligations are now or hereafter evidenced by promissory notes or other documents and irrespective of any guarantees or other security now or hereafter given for any such obligations (collectively, the "Obligations").

Section 3. Insurance. Debtor shall carry fire and extended coverage insurance upon the Collateral, as applicable, covering its full replacement value and naming Secured Party as an insured party therein and, promptly upon request of Secured Party, shall furnish Secured Party with copies of the insurance policies and certificates evidencing such insurance in force with 30-day noncancellation or termination provisions. If Debtor fails to provide any such insurance or certificate or to pay any premiums on such insurance, Secured Party may obtain and maintain such insurance and pay the premiums thereon, and any amount paid by Secured Party shall be an additional obligation of Debtor secured under this agreement. Secured Party is hereby appointed attorney-in-fact to endorse any draft or check which may be payable to Debtor in order to collect any proceeds of such insurance, which amount shall be applied by Secured Party to any amount then owing by Debtor to Secured Party, and the balance, if any, shall be paid to Debtor.

Section 4. Warranties. Debtor warrants that: (a) Debtor owns all Collateral free and clear of all leases, security interests, liens, encumbrances, charges, liabilities, or claims of any nature, except (i) claims of RELA, Inc. (the "Manufacturer") related directly to Debtor's inventory which was manufactured by the Manufacturer and with respect to which the Debtor has an unsatisfied obligation of payment to the Manufacturer, and (ii) the security interest created by this agreement; (b) no financing statements covering all or any part of the Collateral are on file with the Secretary of State of either Ohio or Colorado, the recorder of any county in any such state, or any other recording office; and (c) this agreement creates a valid first-priority security interest in the Collateral, securing the payment of the Obligations, and all filings or other actions necessary or desirable to perfect and protect such security interest have been duly made or taken or shall be duly made or taken immediately upon execution of this agreement.

Section 5. Location of Office and Collateral. Debtor warrants that: (a) Debtor's principal office and principal place of business are located at the address specified at the beginning of this agreement (the "Office"); (b) the Collateral is and will be kept at any or all of the addresses set forth on the list of locations attached hereto as Exhibit A (the "Locations") and hereby incorporated herein by reference; and (c) neither the location of Debtor's principal office and place of business nor the location of the Collateral will be changed without written notice to Secured Party not less than 15 days prior to any such change.

Section 6. Use of Collateral. Except in connection with the sale of the

Finished Instrument Inventory (as defined in the Loan Agreement) by Debtor in the ordinary course of its business, Debtor shall not sell, assign, pledge, or otherwise transfer or encumber any Collateral and shall not change the location of any Collateral without the prior

written consent of Secured Party, which consent shall not be unreasonably withheld. No Collateral shall be attached to real estate by Debtor without the prior written consent of Secured Party.

Section 7. Financing Statements. Debtor hereby irrevocably authorizes Secured Party or Secured Party's designees to execute on behalf of Debtor such one or more financing statements, continuation statements, or amendments thereto, and such other instruments or notices as Secured Party may consider necessary or desirable to perfect, protect, or preserve the security interest granted or purported to be granted by this agreement.

Section 8. Execution of Documents. Debtor shall execute any documents and take any other actions requested by Secured Party from time to time to perfect or protect the security interest granted or purported to be granted by this agreement or to enable Secured Party to exercise or enforce its rights or remedies under this agreement.

Section 9. Default. If Debtor fails to make any payment when due to Secured Party under the Note, is in default under the Loan Agreement or any of the other Loan Documents, or fails fully to perform any other of the Obligations (any of the foregoing of which shall be deemed an "Event of Default"), then and in such an event: (a) all amounts owing to Secured Party by Debtor under the Note shall become immediately due and payable without notice; and (b) Secured Party may exercise, with respect to the Collateral, all rights and remedies of a secured party upon default under the Uniform Commercial Code as adopted and set forth in applicable state law and all other rights and remedies under this agreement or otherwise available to Secured Party. In any action or proceeding to enforce its rights or remedies under this agreement, Secured Party shall be entitled forthwith to immediate exclusive possession and control of the Collateral and to receive directly all payments due or otherwise being made on any of the Collateral, and, upon ex parte application by Secured Party to any court of competent jurisdiction without notice to Debtor, shall be entitled to an order giving such immediate exclusive possession and control to Secured Party or, if Secured Party so elects, to an order appointing a receiver for the Collateral and without any requirement of bond or other security and without any showing that immediate or irreparable injury, loss, or damage will result if such an order is not issued by that court. For purposes of this agreement, notice to Debtor prior to the date of public sale of any Collateral or five days prior to the date after which private sale or other disposition of any Collateral will be made shall constitute reasonable notice of any such sale.

Section 10. Notices. All notices and other communications under this agreement to be made to either Secured Party or Debtor shall be in writing and shall be deemed given when delivered personally, telecopied (which is confirmed electronically), or mailed by registered or certified mail (return receipt requested) or sent by Federal Express, UPS, or other nationally recognized overnight delivery service for overnight delivery to that party at the address for that party (or at such other address for such party as such party shall have specified in notice to the other party):

(a) If to Secured Party:

Bank One, NA
100 East Broad Street, Seventh Floor
Columbus, Ohio 43271-0170
Attention: David T. Clark
Telecopy No. (614) 248-5518

With a copy to (which shall be sent by Secured Party):

Baker & Hostetler LLP
65 East State Street, Suite 2100
Columbus, Ohio 43215
Attention: William B. Shearer, Esq.
Telecopy No. (614) 462-2616

(b) If to Debtor:

Neoprobe Corporation
425 Metro Place South
Suite 400
Dublin, Ohio 43017-1367
Attention: John Schroepfer
Telecopy No. (614) 793-7520

Section 11. Governing Law. All questions concerning the validity or meaning of this agreement or relating to the rights and obligations of the parties with respect to performance under this agreement shall be construed and resolved under the laws of Ohio.

Section 12. Severability. The intention of the parties to this agreement is to comply fully with all laws and public policies, and this agreement shall be construed consistently with all laws and public policies to the extent possible. If and to the extent that any court of competent jurisdiction determines it is impossible to construe any provision of this agreement consistently with any law or public policy and consequently holds that provision to be invalid, such holding shall in no way affect the validity of the other provisions of this agreement, which shall remain in full force and effect.

Section 13. Venue. The parties to this agreement hereby designate the Court of Common Pleas of Franklin County, Ohio, as a court of proper jurisdiction and exclusive venue for any actions or proceedings relating to this agreement; hereby irrevocably consent to such designation, jurisdiction, and venue; and hereby waive any objections or defenses relating to jurisdiction or venue with respect to any action or proceeding initiated in the Court of Common Pleas of Franklin County, Ohio.

Section 14. Nonwaiver. No failure by either party to insist upon compliance with any term of this agreement or to exercise any option, enforce any right, or seek any remedy upon any default of either party shall affect or constitute a waiver of the first party's right to insist upon such strict compliance, exercise that option, enforce that right, or seek that remedy with respect to that default or any prior, contemporaneous, or subsequent default; nor shall any custom or practice of the parties at variance with any provision of this agreement affect, or constitute a waiver of, either party's right to demand strict compliance with the provisions of this agreement.

Section 15. No Third Party Benefit. This agreement is intended for the exclusive benefit of the parties to this agreement and their respective successors and assigns, and nothing contained in this agreement shall be construed as creating any rights or benefits in or to any third party.

Section 16. Complete Agreement. This agreement (including any exhibits and any documents incorporated into this agreement by reference) contains the entire agreement among the parties and supersedes any prior agreements, negotiations, representations, or discussions among them with respect to the subject matter of this agreement. No additions or other changes to this agreement shall be binding upon either party unless made in writing and signed by both parties.

Section 17. Counterparts. This agreement may be executed in multiple counterparts, and all such executed counterparts shall constitute one original agreement, binding on all of the parties, whether or not both of the parties have executed the same counterparts and whether or not the signature pages from different counterparts have been combined, and the signature of any party to any counterpart shall be deemed to be that party's signature to any other counterpart and may be appended to any other counterpart.

Section 18. Captions. The captions of the various sections of this agreement are not part of the context of this agreement, but are only labels to assist in locating those sections, and shall be ignored in construing this agreement.

Section 19. Survival. All agreements, obligations, warranties, and representations under this agreement shall survive any modifications made by either party to this agreement.

Section 20. Genders and Numbers. When permitted by the context, each pronoun used in this agreement includes the same pronoun in other genders or numbers and each noun used in this agreement includes the same noun in other numbers.

Section 21. Successors. This agreement shall be binding upon, inure to the benefit of, and be enforceable by and against the respective successors and assigns of each party to this agreement.

Section 22. Cumulative Effect. This agreement is intended as additional security to Secured Party and does not supersede, waive, or otherwise affect any other security interests, guarantees, or other agreements between Secured Party and Debtor.

NEOPROBE CORPORATION BANK ONE, NA

By: /s/ John Schroepfer By: /s/ David T. Clark
---------- ----------
David T. Clark, Vice President

Print Name: John Schroepfer

Its: Vice President Finance and Administration

EXHIBIT A

List of Locations
----

1. Neoprobe Corporation (Headquarters)
   435 Metro Place North, Suite 300
   Dublin, Ohio 43017-1367

2. Warehouse owned by Longbow IV, Ltd.
   4710 Table Mesa Drive, Suite A
   Boulder, Colorado 80301

3. Warehouse owned by TC Longmont Warehouse Ltd.
   Tamarac Plaza Two
   7535 East Hampden Avenue, Suite 650
   Denver, Colorado 80231

Exhibit 11.1

NEOPROBE CORPORATION AND SUSIDIARIES
COMPUTATION OF NET LOSS PER SHARE

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	Three Months Ended June 30,		Six Months Ended June 30,	
	1997	1998	1997	1998
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Net Loss	($ 7,235,205)	($ 5,261,056)	($11,961,133)	($12,324,668)
Weighted average number of shares outstanding:				
Common shares outstanding beginning of period	22,652,473	22,807,055	22,586,527	22,763,430
Weighted average common shares issued during period	97,240	17,287	114,566	29,813
Weighted average number of shares outstanding used in computing basic net loss per share	22,749,713	22,824,342	22,701,093	22,793,243
Weighted average number of shares used in computing diluted net loss per share	22,749,713	22,824,342	22,701,093	22,793,243
Earnings (Net Loss) Per Share:				
Basic	($0.32)	($0.23)	($0.53)	($0.54)
Diluted	($0.32)	($0.23)	($0.53)	($0.54)

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