

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d)
OF THE SECURITIES EXCHANGE ACT OF 1934

FOR THE QUARTERLY PERIOD ENDED SEPTEMBER 30, 1999

Commission File Number 0-9314

ACCESS PHARMACEUTICALS, INC.

(Exact name of registrant as specified in its charter)

Delaware 83-0221517

(State of Incorporation) (I.R.S. Employer I.D. No.)

2600 Stemmons Frwy, Suite 176, Dallas, TX 75207

(Address of principal executive offices)

Telephone Number (214) 905-5100

Indicate by check mark 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 requirement for the past 90 days.

Yes No

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date.

Common stock outstanding as
of November 10, 1999 6,036,582 shares, \$0.01 par value

Total No. of Pages 15

PART I -- FINANCIAL INFORMATION

ITEM 1 FINANCIAL STATEMENTS

The response to this Item is submitted as a separate section of this report.

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

OVERVIEW

Access Pharmaceuticals, Inc. (together with its subsidiaries, "Access" or the "Company") is a Delaware corporation in the development stage. The Company is an emerging pharmaceutical company focused on developing both novel low development risk product candidates and technologies with longer-term major product opportunities. The Company has proprietary patents or rights to five technology platforms: synthetic polymers, bioerodible hydrogels, Residerm TM, carbohydrate targeting technology and prevention and treatment of viral disease, including HIV. In addition, Access' partner Block Drug Company ("Block") is marketing in the United States Aphthasol TM, the

first FDA approved product for the treatment of canker sores. New formulations and delivery forms are being developed to evaluate this product in additional clinical indications. Access has licensed from Block the rights to this product for additional indications including mucositis and oral diseases.

Except for the historical information contained herein, the following discussions and certain statements in this Form 10-Q are forward-looking statements that involve risks and uncertainties. In addition to the risks and uncertainties set forth in this Form 10-Q, other factors could cause actual results to differ materially, including but not limited to Access' research and development focus, uncertainties associated with research and development activities, uncertainty associated with preclinical and clinical testing, future capital requirements, anticipated option and licensing revenues, dependence on others, ability to raise capital, the year 2000 issue, and other risks detailed in the Company's reports filed under the Securities Exchange Act, including but not limited to the Company's Annual Report on Form 10-K for the year ended December 31, 1998.

Since its inception, Access has devoted its resources primarily to fund its research and development programs. The Company has been unprofitable since inception and to date has received limited revenues from the sale of products. No assurance can be given that the Company will be able to generate sufficient product revenues to attain profitability on a sustained basis or at all. The Company expects to incur losses for the next several years as it continues to invest in product research and development, preclinical studies, clinical trials and regulatory compliance. As of September 30, 1999, the Company's accumulated deficit was \$25,543,000 of which \$8,894,000 was the result of the write-off of purchased research.

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RECENT DEVELOPMENTS

The Company has engaged an investment bank to assist the Company in raising funds to support the Company's research and development activities, working capital requirements, acquisitions of complementary companies or technologies and general corporate purposes. On July 20, 1999, with the assistance of an investment bank, the Company completed the first closing of an offering of up to \$8 million of common stock at a per share price of \$2.00 (the offering), receiving gross proceeds of \$3.0 million in such first closing, less issuance costs of \$213,000, from the private placement of 1,501,000 shares of Common Stock. The placement agent for such offering received warrants to purchase 160,721 shares of Common Stock at \$2.00 per share, in accordance with the offering terms and elected to receive 106,217 shares of Common Stock in lieu of certain sales commissions and expenses. There can be no assurances that any additional closings of the private placement will take place.

On July 20, 1999, and simultaneously with the first closing of the offering, Access Holdings, Inc., a Delaware corporation and a wholly-owned subsidiary of the Company (the "Merger Sub") merged with and into Virologix Corporation, a Delaware corporation ("Virologix"), the separate existence of the Merger Sub ceased, and Virologix became a wholly-owned subsidiary of the Company and each outstanding share of Virologix' common stock was converted into 0.231047 shares of the Company's common stock, representing 999,963 shares of common stock of the Company. The transaction has been accounted for as a purchase.

If and when the Company satisfies all listing requirements, including minimum share price and net equity requirements, the Company intends to submit an application for listing on NASDAQ or an alternate exchange. There can be no assurances that the Company will be listed on NASDAQ or an alternate exchange.

Liquidity and Capital Resources

As of October 31, 1999 the Company's principal source of liquidity is \$1,449,000 of cash and cash equivalents. Working capital as of September 30, 1999 was \$1,130,000, representing an increase in working capital of \$121,000 as compared to the working capital as of December 31, 1998 of \$1,009,000. The increase in working capital at September 30, 1999 was due to first closing of the offering offset by losses from operations in the first three quarters of 1999.

Since its inception, the Company's expenses have significantly exceeded its

revenues, resulting in an accumulated deficit of \$25,543,000 at September 30, 1999. The Company has funded its operations primarily through private sales of its equity securities, contract research payments from corporate alliances and the 1996 merger of Access Pharmaceuticals, Inc., a private Texas corporation and Chemex Pharmaceuticals, Inc.

The Company has incurred negative cash flows from operations since its inception, and has expended, and expects to continue to expend in the future, substantial funds to complete its planned product development efforts. The Company expects that its existing capital resources will be adequate to fund the Company's operations through the first quarter of 2000. The Company is

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dependent on raising additional capital to fund the development of its technology and to implement its business plan. Such dependence will continue at least until the Company begins marketing products resulting from its technologies.

If prior to the end of January 2000, the Company is unsuccessful in raising additional capital on acceptable terms, the Company would be required to curtail research and development and general and administrative expenditures so that working capital would cover reduced operations into the second quarter of 2000. There can be no assurance, however that changes in the Company's operating expenses will not result in the expenditure of such resources before such time. If the Company is unable to raise additional capital in the near term, it may be forced to suspend operations.

The Company will require substantial funds to conduct research and development programs, preclinical studies and clinical trials of its potential products, including research and development with respect to the newly acquired technology resulting from the acquisition of Virologix. The Company's future capital requirements and adequacy of available funds will depend on many factors, including the successful commercialization of amlexanox; the ability to establish and maintain collaborative arrangements for research, development and commercialization of products with corporate partners; continued scientific progress in the Company's research and development programs; the magnitude, scope and results of preclinical testing and clinical trials; the costs involved in filing, prosecuting and enforcing patent claims; competing technological developments; the cost of manufacturing and scale-up; and the ability to establish and maintain effective commercialization activities and arrangements.

The Company intends to seek additional funding through research and development or licensing arrangements with potential corporate partners, public or private financing, including the sale of up to an additional \$5 million of common stock at a price of \$2 per share in the Company's current equity offering, or from other sources. The Company does not have any committed sources of additional financing and there can be no assurance that additional financing will be available on favorable terms, if at all or that any additional closings of its current equity offering will occur. In the event that adequate funding is not available, the Company may be required to delay, reduce or eliminate one or more of its research or development programs or obtain funds through arrangements with corporate collaborators or others that may require the Company to relinquish greater or all rights to product candidates at an earlier stage of development or on less favorable terms than the Company would otherwise seek. Insufficient financing may also require the Company to relinquish rights to certain of its technologies that the Company would otherwise develop or commercialize itself. If adequate funds are not available, the Company's business, financial condition and results of operations will be materially and adversely affected.

Third Quarter 1999
Compared to
Third Quarter 1998

Total research spending for the third quarter of 1999 was \$349,000, as compared to \$481,000 for the same period in 1998, a decrease of \$132,000. The decrease in expenses was the result of lower external contract research costs due to the completion of research contracts- \$103,000; lower

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external development costs- \$61,000; and lower salary and related costs- \$42,000; offset by higher scientific consulting costs- \$67,000; and higher

other net costs totaling- \$7,000. If the Company is successful in raising additional capital, research spending is expected to increase in future quarters as the Company intends to commence additional clinical trials, hire additional scientific management and staff and will accelerate activities to develop the Company's product candidates. If the Company is not successful in raising additional capital, research spending will be curtailed.

Total general and administrative expenses were \$293,000 for the second quarter of 1999, a decrease of \$26,000 as compared to the same period in 1998. The decrease in spending was primarily due to the following: lower salary and related costs- \$20,000; lower professional business expenses- \$20,000; and other net decreases totaling- \$20,000; offset by higher patent costs mainly due to the filing of a new patent- \$34,000. If the Company is not successful in raising additional capital, general and administrative spending will be curtailed.

Depreciation and amortization was \$84,000 for the second quarter 1999 as compared to \$39,000 for the same period in 1998 an increase of \$45,000. The increase in amortization is due to amortization of goodwill of \$41,000 recorded due to the purchase of Virologix Corporation.

Total operating expenses in the third quarter of 1999 were \$726,000 with interest income of 8,000, and interest expense of \$3,000 resulting in a loss for the quarter of \$771,000 or a \$0.13 basic and diluted loss per common share.

Nine Months ended September 30, 1999
Compared to
Nine Months ended September 30, 1998

Research spending for the nine months ended September 30, 1999 was \$1,042,000 as compared to \$1,417,000 for the same period in 1998, a decrease of \$375,000. The decrease in expenses was due to: lower external lab costs due to the completion of research contracts- \$412,000; lower external development costs- \$62,000; offset by higher scientific consulting costs- \$82,000; and other net increases totaling- \$17,000. If the Company is successful in raising additional capital, research spending is expected to increase in future quarters as the Company intends to commence additional clinical trials, hire additional scientific management and staff and will accelerate activities to develop the Company's product candidates. If the Company is not successful in raising additional capital, research spending will be curtailed.

General and administrative expenses were \$1,205,000 for the nine months ended September 30, 1999, an increase of \$136,000 as compared to the same period in 1998. The increase was primarily due to the following: increased business consulting expense primarily due to the issuance of warrants issued in connection with consulting agreements- \$249,000; and higher shareholder expenses- \$80,000; offset by lower salary and related expenses- \$82,000; lower patent expenses- \$64,000; lower travel and entertainment expenses- \$28,000; and other net decreases totaling- \$19,000.

Depreciation and amortization was \$177,000 for the nine months ended September 30, 1999 as compared to \$169,000 for the same period in 1998, an increase of \$8,000. The increase in amortization is due to amortization of goodwill of \$41,000 recorded due to the purchase of Virologix Corporation offset by lower depreciation reflecting that some major assets have been fully depreciated.

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Accordingly, this resulted in a loss for the nine months ended September 30, 1999 of \$2,398,000, or a \$0.58 basic and diluted loss per common share.

Year 2000 Issue

The Year 2000 ("Y2K") issue is the result of computer programs using two instead of four digits to represent the year. These computer programs may erroneously interpret dates beyond the year 1999, which could cause system failures or other computer errors, leading to disruptions in operations.

The Company has developed a three-phase program to limit or eliminate Y2K exposures. Phase I involved the identification of those systems, applications and third-party relationships from which the Company has exposure to Y2K disruptions in operations. Phase II is the development and implementation of

action plans to achieve Y2K compliance in all areas prior to the end of the third quarter of 1999. Also included in Phase II is the development of contingency plans which would be implemented should Y2K compliance not be achieved in order to minimize disruptions in operations. Phase III is the final testing or equivalent certification of testing of each major area of exposure to ensure compliance. The Company has completed its Y2K program with the exception of the implementation of one new computer program expected to be operational in December 1999.

The Company identified three major areas determined to be critical for successful Y2K compliance: Area 1 includes financial, research and development and administrative informational systems applications reliant on system software; Area 2 includes research, development and quality applications reliant on computer programs embedded in microprocessors; and Area 3 includes third-party relationships which may be affected by Area 1 and 2 exposures which exist in other companies.

With respect to Area 1, the Company completed an internal review and contacted all software suppliers to determine major areas of Y2K exposure. In research, development and quality applications (Area 2), the Company worked with equipment manufactures to identify our exposures. With respect to Area 3, the Company evaluated our reliance on third parties in order to determine whether their Y2K compliance will adequately assure our uninterrupted operations.

The Company has completed Phase I of our Y2K program with respect to all three of the major areas. The Company relies on PC-based systems and does not expect to incur material costs to transition to Y2K compliant systems in its internal operations. However, even if the internal systems of the Company are not materially affected by the Y2K Issue, the Company could be affected by third-party relationships which, if not Y2K compliant prior to the end of 1999, could have a material adverse impact on our operations. The Company has completed Phase II contingency planning and continues to monitor its third party relationships. Most if not all of the third parties have informed the Company that they will be in compliance by the end of the year. Contingency plans for the Company will be continually refined, as additional information becomes available.

As of September 30, 1999, we have identified costs related to replacement or remediation and

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testing of our Area 1 computer information systems. Having completed the Phase I and Phase II evaluation, total costs to date are \$6,000. We estimate the potential future cost of our internal Y2K compliance programs to be \$3,000. The funds for these costs will be part of our current working capital requirements. These costs will be expensed as incurred except for equipment related costs.

PART II -- OTHER INFORMATION

ITEM 1 LEGAL PROCEEDINGS

None

ITEM 2 CHANGES IN SECURITIES

On July 20, 1999 the Company sold to 20 individual accredited investors an aggregate of 1,501,000 shares of Common Stock at \$2.00 per share. The placement agent for such offering received warrants to purchase 160,721 shares of Common Stock at \$2.00 per share in accordance with the offering terms and elected to receive 106,217 shares of Common Stock in lieu of certain sales commissions and expenses. The Company raised an aggregate of \$3,002,000 in gross proceeds. The shares issued in the Private Placement have not been registered; however, a registration statement for the resale of such shares is planned to be filed 30 days after the final closing of the Private Placement. The Company relied on Section 4(2) and/or 3(b) of the 1933 Securities Act of 1933 and the provisions of Regulation D as exemptions from the registration thereunder. The proceeds of the offering will be used to fund

research and development, working capital, acquisitions of complementary companies or technologies and general corporate purposes.

Also on July 20, 1999 and simultaneously with the first closing of the private placement, Access Holdings, Inc., a Delaware corporation and a wholly-owned subsidiary of the Company (the "Merger Sub") merged with and into Virologix Corporation, a Delaware corporation ("Virologix"), the separate existence of the Merger Sub ceased, and Virologix became a wholly-owned subsidiary of the Company and each outstanding share of Virologix' common stock was converted into 0.231047 shares of the Company's common stock, representing 999,963 shares of common stock of the Company. Certain of the shareholders of Virologix signed a six month lockup agreement and others signed a one year lockup. The shares issued in conjunction with the merger have not been registered; however, a registration statement for the resale of such shares is required to be effective on or before January 20, 2000. The Company relied on Section 4(2) and/or 3(b) of the 1933 Securities Act of 1933 and the provisions of Regulation D as exemptions from the registration thereunder.

ITEM 3 DEFAULTS UPON SENIOR SECURITIES

None

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ITEM 4 SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS

None

ITEM 5 OTHER INFORMATION

None

ITEM 6 EXHIBITS AND REPORTS ON FORM 8-K

Exhibits:

2.2 Agreement of Merger and Plan of Reorganization, dated as of February 23, 1999 among the Company, Access Holdings, Inc. and Virologix Corporation (Incorporated by reference to Exhibit 2.2 of the Company's Form 8-K filed on August 3, 1999)

10.18 Sales Agency Agreement

10.19 Registration Rights Agreement

27.1 Financial Data Schedule

Reports on Form 8-K:

On October 4, 1999, the Company filed a Current Report on Form 8-K/A related to Acquisition or Disposition of Assets, amending the Form 8-K reporting such transaction filed August 3, 1999. On February 23, 1999, the Company entered into an Agreement of Merger and Plan of Reorganization, as amended (the "Agreement") with Virologix Corporation, a Delaware corporation ("Virologix"), and Access Holdings, Inc., a Delaware corporation and a wholly-owned subsidiary of the Company (the "Merger Sub"). Pursuant to the terms of the Agreement, on July 20, 1999 the Merger Sub merged with and into Virologix, the separate existence of the Merger Sub ceased, and Virologix became a wholly-owned subsidiary of the Company and each outstanding share of Virologix' common stock was converted into 0.231047 shares of the Company's common stock, representing 999,963 shares of common stock of the Company. The transaction has been accounted for as a purchase.

SIGNATURES

Pursuant to the requirements 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.

ACCESS PHARMACEUTICALS, INC.

Date: November 15, 1999 By: /s/ Kerry P. Gray

 Kerry P. Gray
 President and Chief Executive Officer
 (Principal Executive Officer)

Date: November 15, 1999 By: /s/ Stephen B. Thompson

 Stephen B. Thompson
 Chief Financial Officer
 (Principal Financial and Accounting
 Officer)

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Access Pharmaceuticals, Inc. and Subsidiaries
 (a development stage company)

Condensed Consolidated Balance Sheets

<TABLE>

<CAPTION>

| | September 30, 1999 | December 31, 1998 |
|---|--------------------|-------------------|
| | ----- | ----- |
| ASSETS | (unaudited) | |
| <S> | <C> | <C> |
| Current assets | | |
| Cash and cash equivalents | \$ 2,026,000 | \$ 1,487,000 |
| Accounts receivable | 3,000 | - |
| Prepaid expenses and other current assets | 31,000 | 54,000 |
| | ----- | ----- |
| Total current assets | 2,060,000 | 1,541,000 |
| | ----- | ----- |
| Property and equipment, at cost | 1,016,000 | 1,007,000 |
| Less accumulated depreciation and amortization | (880,000) | (780,000) |
| | ----- | ----- |
| | 136,000 | 227,000 |
| | ----- | ----- |
| Licenses, net | 590,000 | 425,000 |
| Investments | 150,000 | 150,000 |
| Goodwill | 2,423,000 | - |
| Other assets | 8,000 | 8,000 |
| | ----- | ----- |
| Total assets | \$ 5,367,000 | \$ 2,351,000 |
| | ===== | ===== |

LIABILITIES AND STOCKHOLDERS' EQUITY

Current liabilities

| | | |
|---------------------------------------|------------|------------|
| Accounts payable and accrued expenses | \$ 721,000 | \$ 395,000 |
| Accrued insurance premiums | 4,000 | 38,000 |
| Deferred revenues | 155,000 | - |

| | | |
|--|--------------|--------------|
| Current portion of obligations under capital leases | 50,000 | 99,000 |
| | ----- | ----- |
| Total current liabilities | 930,000 | 532,000 |
| | ----- | ----- |
| Obligations under capital leases, net of current portion | - | 24,000 |
| | ----- | ----- |
| Total liabilities | 930,000 | 556,000 |
| | ----- | ----- |
| Commitments and contingencies | - | - |
| Stockholders' equity | | |
| Preferred stock - \$.01 par value; authorized 2,000,000 shares; none issued or outstanding | - | - |
| Common stock - \$.01 par value; authorized 20,000,000 shares; issued and outstanding, 6,036,582 at September 30, 1999 and 3,429,402 at December 31, 1998 | 60,000 | 34,000 |
| Additional paid-in capital | 29,920,000 | 24,906,000 |
| Deficit accumulated during the development stage | (25,543,000) | (23,145,000) |
| | ----- | ----- |
| Total stockholders' equity | 4,437,000 | 1,795,000 |
| | ----- | ----- |
| Total liabilities and stockholders' equity | \$ 5,367,000 | \$ 2,351,000 |
| | ===== | ===== |

</TABLE>

The accompanying notes are an integral part of these statements.

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Access Pharmaceuticals, Inc. and Subsidiaries
(a development stage company)

Condensed Consolidated Statements of Operations
(unaudited)

<TABLE>

<CAPTION>

| | Three Months ended | | Nine Months ended | | |
|------------------------------------|--------------------|-----------|-------------------|-------------|---------------------------------|
| | September 30, | | September 30, | | February 24, 1988 |
| | 1999 | 1998 | 1999 | 1998 | (inception) to Sept 30, 1999 |
| | ----- | ----- | ----- | ----- | ----- |
| <S> | <C> | <C> | <C> | <C> | <C> |
| Revenues | | | | | |
| Research and development | \$ - | \$ - | \$ - | \$ - | \$ 2,711,000 |
| Option income | - | - | - | - | 2,149,000 |
| Licensing revenues | - | - | - | - | 325,000 |
| | ----- | ----- | ----- | ----- | ----- |
| Total revenues | - | - | - | - | 5,185,000 |
| | ----- | ----- | ----- | ----- | ----- |
| Expenses | | | | | |
| Research and development | 349,000 | 481,000 | 1,042,000 | 1,417,000 | 11,407,000 |
| General and administrative | 293,000 | 319,000 | 1,205,000 | 1,069,000 | 9,532,000 |
| Depreciation and amortization | 84,000 | 39,000 | 177,000 | 169,000 | 1,446,000 |
| Write-off of excess purchase price | - | - | - | - | 8,894,000 |
| | ----- | ----- | ----- | ----- | ----- |
| Total expenses | 726,000 | 839,000 | 2,424,000 | 2,655,000 | 31,279,000 |
| | ----- | ----- | ----- | ----- | ----- |
| Loss from operations | (726,000) | (839,000) | (2,424,000) | (2,655,000) | (26,094,000) |
| | ----- | ----- | ----- | ----- | ----- |

| | | | | | |
|--|--------------|--------------|----------------|----------------|-----------------|
| Other income (expense) | | | | | |
| Interest and miscellaneous income | 18,000 | 29,000 | 37,000 | 37,000 | 869,000 |
| Interest expense | (3,000) | (4,000) | (11,000) | (18,000) | (191,000) |
| | 15,000 | 25,000 | 26,000 | 19,000 | 678,000 |
| Loss before income taxes | (711,000) | (814,000) | (2,398,000) | (2,636,000) | (25,416,000) |
| Provision for income taxes | - | - | - | - | 127,000 |
| Net loss | \$ (711,000) | \$ (814,000) | \$ (2,398,000) | \$ (2,636,000) | \$ (25,543,000) |
| Basic and diluted loss per common share | \$ (0.13) | \$ (0.24) | \$ (0.58) | \$ (1.10) | |
| Weighted average basic and diluted common shares outstanding | 5,469,021 | 3,322,668 | 4,116,746 | 2,393,068 | |

</TABLE>

The accompanying notes are an integral part of these statements.

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Access Pharmaceuticals, Inc. and Subsidiaries
(a development stage company)

Condensed Consolidated Statements of Cash Flows
(unaudited)

<TABLE>
<CAPTION>

Nine Months ended September 30, February 24, 1988
----- (inception) to
1999 1998 September 30, 1999

| | <C> | <C> | <C> |
|---|----------------|----------------|-----------------|
| Cash flows from operating activities: | | | |
| Net loss | \$ (2,398,000) | \$ (2,636,000) | \$ (25,543,000) |
| Adjustments to reconcile net loss to net cash used in operating activities: | | | |
| Write-off of excess purchase price | - | - | 8,894,000 |
| Warrants issued in payment of consulting expense | 296,000 | - | 865,000 |
| Research expenses related to common stock granted | - | 9,000 | 100,000 |
| Depreciation and amortization | 177,000 | 169,000 | 1,446,000 |
| Deferred revenue | 155,000 | - | 45,000 |
| Licenses | (100,000) | - | (100,000) |
| Change in operating assets and liabilities: | | | |
| Accounts receivable | (3,000) | 1,000 | (4,000) |
| Prepaid expenses and other current assets | 23,000 | 39,000 | (32,000) |
| Other assets | - | 2,000 | (6,000) |
| Accounts payable and accrued expenses | (142,000) | (145,000) | (2,000) |
| Net cash used in operating activities | (1,992,000) | (2,561,000) | (14,337,000) |
| Cash flows from investing activities: | | | |
| Capital expenditures | (3,000) | (4,000) | (1,171,000) |
| Sales of capital equipment | - | - | 15,000 |
| Purchase of Virologix | (102,000) | - | (102,000) |
| Purchase of Tacora, net of cash acquired | - | - | (124,000) |
| Other investing activities | - | (50,000) | (150,000) |
| Net cash used in investing activities | (105,000) | (54,000) | (1,532,000) |

| | | | |
|--|--------------|--------------|--------------|
| ----- | | | |
| Cash flows from financing activities: | | | |
| Proceeds from notes payable | (80,000) | - | 641,000 |
| Payments of principal on obligations | | | |
| under capital leases | (73,000) | (149,000) | (700,000) |
| Cash acquired in merger with Chemex | - | - | 1,587,000 |
| Proceeds from stock issuances, net | 2,789,000 | 4,556,000 | 16,367,000 |
| ----- | | | |
| Net cash provided by financing activities | 2,636,000 | 4,407,000 | 17,895,000 |
| ----- | | | |
| Net increase in cash and cash equivalents | 539,000 | 1,792,000 | 2,026,000 |
| Cash and cash equivalents at beginning of period | 1,487,000 | 438,000 | - |
| ----- | | | |
| Cash and cash equivalents at end of period | \$ 2,026,000 | \$ 2,230,000 | \$ 2,026,000 |
| ===== | | | |
| Cash paid for interest | \$ 11,000 | \$ 18,000 | \$ 188,000 |
| Cash paid for income taxes | - | - | 127,000 |

| | | | |
|---|---------|------|-----------|
| Supplemental disclosure of noncash transactions | | | |
| Payable accrued for fixed asset purchase | \$ - | \$ - | \$ 47,000 |
| Elimination of note payable to Chemex Pharmaceuticals due to merger | - | - | 100,000 |
| Stock issued for license on patents | - | - | 500,000 |
| Equipment purchases financed through capital leases | - | - | 82,000 |
| Net liabilities assumed in acquisition of Tacora Corporation | - | - | 455,000 |
| Net liabilities assumed in acquisition of Virologix Corporation | 362,000 | - | 362,000 |

</TABLE>

The accompanying notes are an integral part of these statements.

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Access Pharmaceuticals, Inc. and Subsidiaries
(a development stage company)

Notes to Condensed Consolidated Financial Statements
Nine Months Ended September 30, 1999 and 1998
(unaudited)

(1) Interim Financial Statements

The consolidated balance sheet as of September 30, 1999 and the consolidated statements of operations for the three and nine months ended and cash flows for the nine months ended September 30, 1999 and 1998 were prepared by management without audit. In the opinion of management, all adjustments, including only normal recurring adjustments necessary for the fair presentation of the financial position, results of operations, and changes in financial position for such periods, have been made.

Certain information and footnote disclosures normally included in financial statements prepared in accordance with generally accepted accounting principles have been condensed or omitted. It is suggested that these financial statements be read in conjunction with the audited consolidated financial statements and notes thereto included in the Company's Annual Report on Form 10-K for the year ended December 31, 1998. The results of operations for the period ended September 30, 1999 are not necessarily indicative of the operating results which may be expected for a full year. The

consolidated balance sheet as of December 31, 1998 contains financial information taken from the audited financial statements as of that date.

(2) Liquidity

The Company has incurred negative cash flows from operations since its inception, and has expended, and expects to continue to expend in the future, substantial funds to complete its planned product development efforts. The Company expects that its existing capital resources will be adequate to fund the Company's operations through the first quarter of 2000. The Company is dependent on raising additional capital to fund the development of its technology and to implement its business plan. Such dependence will continue at least until the Company begins marketing products resulting from its technologies.

If prior to the end of January 2000 the Company is unsuccessful in raising additional capital on acceptable terms, the Company would be required to curtail research and development and general and administrative expenditures so that working capital would cover reduced operations into the second quarter of 2000. There can be no assurance, however that changes in the Company's operating expenses will not result in the expenditure of such resources before such time. If the Company is unable to raise additional capital in the near term, it may be forced to suspend operations.

The Company will require substantial funds to conduct research and development programs, preclinical studies and clinical trials of its potential products, including research and development with respect to the newly acquired technology resulting from the acquisition of

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Virologix. The Company's future capital requirements and adequacy of available funds will depend on many factors, including the successful commercialization of amlexanox; the ability to establish and maintain collaborative arrangements for research, development and commercialization of products with corporate partners; continued scientific progress in the Company's research and development programs; the magnitude, scope and results of preclinical testing and clinical trials; the costs involved in filing, prosecuting and enforcing patent claims; competing technological developments; the cost of manufacturing and scale-up; and the ability to establish and maintain effective commercialization activities and arrangements.

The Company intends to seek additional funding through research and development or licensing arrangements with potential corporate partners, public or private financing, including the sale of up to an additional \$5 million of common stock at a price of \$2 per share in the Company's current equity offering, or from other sources. The Company does not have any committed sources of additional financing and there can be no assurance that additional financing will be available on favorable terms, if at all or that any additional closings of its current equity offering will occur. In the event that adequate funding is not available, the Company may be required to delay, reduce or eliminate one or more of its research or development programs or obtain funds through arrangements with corporate collaborators or others that may require the Company to relinquish greater or all rights to product candidates at an earlier stage of development or on less favorable terms than the Company would otherwise seek. Insufficient financing may also require the Company to relinquish rights to certain of its technologies that the Company would otherwise develop or commercialize itself. If adequate funds are not available, the Company's business, financial condition and results of operations will be materially and adversely affected.

The Independent Auditor's Report on the Company's 1998 consolidated financial statements included an emphasis paragraph regarding the uncertainty of the Company's ability to continue as

a going concern.

(3) Private Placement

The Company has engaged an investment bank to assist the Company in raising funds to support the Company's research and development activities, working capital requirements, acquisitions of complementary companies or technologies and general corporate purposes. On July 20, 1999, with the assistance of the investment bank, the Company completed the first closing of an offering of up to \$8 million of common stock at a per share price of \$2.00 (the offering), receiving gross proceeds of \$3.0 million in such first closing, less issuance costs of \$213,000, from the private placement of 1,500,000 shares of Common Stock. The placement agent for such offering received warrants to purchase 160,721 shares of Common Stock at \$2.00 per share, in accordance with the offering terms and elected to receive 106,217 shares of Common Stock in lieu of certain sales commissions and expenses. There can be no assurances that any additional closings of the private placement will take place.

If and when the Company satisfies all listing requirements, including minimum share price and net equity requirements, the Company intends to submit an application for listing on NASDAQ or an alternate exchange. There can be no assurances that the Company will be listed on NASDAQ or an alternate exchange.

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(4) Merger

On July 20, 1999 and simultaneously with the first closing of the offering, Access Holdings, Inc., a Delaware corporation and a wholly-owned subsidiary of the Company (the "Merger Sub") merged with and into Virologix Corporation, a Delaware corporation ("Virologix"), the separate existence of the Merger Sub ceased, and Virologix became a wholly-owned subsidiary of the Company and each outstanding share of Virologix' common stock was converted into 0.231047 shares of the Company's common stock, representing 999,963 shares of common stock of the Company. The transaction has been accounted for as a purchase.

The following table reflects unaudited consolidated pro forma results of operations of Access and Virologix on the basis that the acquisition had taken place at the beginning of each period presented. Such pro forma amounts are not necessarily indicative of what the actual consolidated results of operations might have been if the acquisition had been effective at the beginning of the respective periods.

<TABLE>

<CAPTION>

| | Three months ended September 30, | | Nine months ended September 30, | |
|---|-------------------------------------|-----------|------------------------------------|-----------|
| | 1999 | 1998 | 1999 | 1998 |
| <S> | <C> | <C> | <C> | <C> |
| Revenue | \$ - | \$ - | \$ - | \$ - |
| Net loss | (731) | (1,032) | (2,738) | (3,302) |
| Basic and diluted net loss per share | \$ (0.12) | \$ (0.17) | \$ (0.45) | \$ (0.66) |

</TABLE>

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ACCESS PHARMACEUTICALS, INC.

A minimum of 1,500,000 and
a maximum of 4,000,000 Shares of Common Stock

SALES AGENCY AGREEMENT

Sunrise Securities Corp.
135 E. 57th Street
New York, New York 10022

July 20, 1999

Dear Sirs:

Access Pharmaceuticals, Inc., a Delaware corporation (the "Company"), proposes to offer for sale in a private offering (the "Offering") pursuant to Rule 506 of Regulation D ("Regulation D") under the Securities Act of 1933, as amended (the "Act"), a minimum of 1,500,000 (including "Affiliate Shares", as hereinafter defined, if any) and a maximum of 4,000,000 shares of common stock, par value \$.01 per share (the "Shares"). This Offering is being made solely to "accredited investors" as defined in Regulation D. This is to confirm our agreement concerning your acting as our exclusive placement agent (the "Placement Agent") in connection with the Offering.

The Company prepared and delivered to the Placement Agent copies of a confidential private placement memorandum relating to, among other things, the Company, the Shares and the terms of the sale of the Shares. Such confidential private placement memorandum, including all exhibits thereto and all documents delivered therewith and incorporated by reference therein, is referred to herein as the "Memorandum" unless such confidential private placement memoranda or any such exhibits or documents shall be supplemented or amended in accordance with this Agreement, in which event the term "Memorandum" shall refer to such confidential private offering memorandum and such exhibits and documents as so supplemented or amended from and after the time of delivery to the Placement Agent of such supplement or amendment.

1. Appointment of Placement Agent.

On the basis of the representations and warranties contained herein, and subject to the terms and conditions set forth herein, the Company hereby appoints you as its Placement Agent and grants to you the exclusive right to offer, as its agent, the Shares pursuant to the terms of this Agreement. On the basis of such representations and warranties, and subject to such conditions,

you hereby accept such appointment and agree to use your best efforts to secure subscriptions to purchase a minimum of 1,500,000 and a maximum of 4,000,000 Shares pursuant to the terms of this Agreement. The agency created hereby is not terminable by the Company except upon termination of the Offering pursuant to the terms of this Agreement or upon expiration of the Offering Period (as hereinafter defined) in accordance with the terms of this Agreement.

2. Terms of the Offering.

(a) A minimum of 1,500,000 and a maximum of 4,000,000 Shares shall be offered for sale to prospective investors in this Offering ("Prospective Investors") at a purchase price of \$2.00 per Share (the "Purchase Price") of the Company's common stock, par value \$.01 (the "Common Stock"). Officers, directors and employees of the Company and the Placement Agent may purchase

Shares on the same terms and conditions as other investors (the "Affiliate Shares"). The Affiliate Shares shall be included in determining whether the minimum and maximum number of Shares have been subscribed for, and all references herein to subscriptions from Prospective Investors shall be deemed to include the Affiliate Shares.

(b) The Offering shall commence on the date hereof and shall expire at 5:00 P.M., New York time, on August 1, 1999, unless extended by mutual agreement of the Company and the Placement Agent. Such period, as the same may be so extended, shall hereinafter be referred to as the "Offering Period".

(c) Each Prospective Investor who desires to purchase Shares shall be required to deliver to the Placement Agent one copy of a subscription agreement in the form annexed to the Memorandum (a "Subscription Agreement"), including the investor questionnaire, and payment in the amount necessary to purchase the number of Shares such Prospective Investor desires to purchase. The Placement Agent shall not have any obligation to independently verify the accuracy or completeness of any information contained in any Subscription Agreement or the authenticity, sufficiency or validity of any check or other form of payment delivered by any Prospective Investor in payment for Shares.

(d) Pursuant to an Escrow Agreement, dated as of March __, 1999 (the "Escrow Agreement"), the Placement Agent will establish a special account with the United States Trust Company of New York (the "Escrow Agent") entitled "Access Pharmaceuticals, Inc. - Escrow Account" (the "Special Account"). The Placement Agent shall deliver each check received from a Prospective Investor to the Escrow Agent for deposit in the Special Account and shall deliver the executed copy of the Subscription Agreement received from such Prospective Investor to the Company. The Company shall notify the Placement Agent promptly of the acceptance or rejection of any subscription. The Company shall not unreasonably reject any subscription.

(e) If subscriptions to purchase at least 1,500,000 Shares are not received from Prospective Investors prior to the expiration of the Offering Period and accepted by the Company, the Offering shall be canceled, all funds received by the Escrow Agent on behalf of the Company shall be refunded in full with interest, and this Agreement and the agency created hereby shall be terminated without any further obligation on the part of either party, except as provided in Section 10 hereof.

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(f) You may engage other persons selected by you to assist you in the Offering (each such person being hereinafter referred to as a "Selected Dealer") and you may allow such persons such part of the compensation payable to you hereunder as you shall determine. Each Selected Dealer shall be required to agree in writing to comply with the provisions of, and to make the representations, warranties and covenants contained in Sections 5(b) and 6(b) hereof by executing a form of Selected Dealer Agreement attached hereto as Exhibit I. On or prior to the Closing (as hereinafter defined), the Placement Agent shall deliver a copy of each executed Selected Dealer Agreement to the Company. By executing this Agreement, the Company hereby agrees to make, and is deemed to make, the representations and warranties to, and covenants and agreements with, each Selected Dealer (including an agreement to indemnify such Selected Dealer under Section 9 hereof) who has executed the Selected Dealer Agreement as are contained in this Agreement.

3. Closing.

(a) Subject to the conditions set forth in Section 8 hereof, if subscriptions to purchase at least 1,500,000 Shares have been received prior to the expiration of the Offering Period and accepted by the Company, the initial closing under this Agreement (the "Closing") shall be held at the offices of Squadron, Ellenoff,

Present & Sheinfeld, LLP ("SEP&S"), 551 Fifth Avenue, New York, New York, at 10:00 A.M., New York time, on the third business day following the date upon which the Placement Agent receives notice from the Company that subscriptions to purchase at least 1,500,000 Shares (including Affiliate Shares) have been so accepted or at such other place, time and/or date as the Company and the Placement Agent shall agree upon. The Company shall provide the notice required by the preceding sentence as promptly as practicable. The date upon which the Closing is held shall hereinafter be referred to as the "Closing Date."

(b) Subject to the conditions set forth in Section 8 hereof, if, subsequent to the date the subscriptions referred to in Section 3(a) hereof are received and accepted and prior to the expiration of the Offering Period, additional subscriptions to purchase Shares are received from Prospective Investors, which subscriptions are accepted by the Company, one or more additional closings under this Agreement (each, an "Additional Closing") shall be held at the offices of SEP&S at 10:00 A.M., New York time, on the third business day following the date upon which the Placement Agent receives notice from the Company that additional subscriptions have been so accepted, or at such other place, time or date as the Company and the Placement Agent shall agree upon. The Company shall notify the Placement Agent as promptly as practicable whether any additional subscriptions so received have been accepted. The date upon which any Additional Closing is held shall hereinafter be referred to as an "Additional Closing Date."

Notwithstanding anything contained here into the contrary, in no event shall the Company accept subscriptions to purchase in excess of 4,000,000 Shares including Affiliate Shares.

(c) At the Closing, or an Additional Closing, as the case may be, the Company shall instruct the Escrow Agent to pay to the Placement Agent at the Closing or an Additional Closing, from the funds deposited in the Special Account in payment for the Shares, the amounts payable to the Placement Agent pursuant to Sections 4 and 7 of this Agreement. Promptly after the Closing Date, or an Additional Closing Date, as the case may be, the Company shall deliver to the purchasers of Shares certificates representing the Shares to which they are entitled.

4. Compensation.

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(a) If subscriptions to purchase at least 1,500,000 Shares (including Affiliate Shares) are received from Prospective Investors prior to the expiration of the Offering Period and accepted by the Company, you shall be entitled, as compensation for your services as Placement Agent under this Agreement, to an amount equal to 10% of the gross proceeds received by the Company from the sale of the Shares. Such compensation is payable by the Company on the Closing Date, or an Additional Closing Date, as the case may be, with respect to the Shares sold on such date and may be paid, at the Placement Agent's option, in part or in whole, in shares of the Common Stock, valued at \$2.00 per share, net of commission, provided, however, that any such shares of Common Stock shall not be included in the calculation of the minimum or the maximum number of Shares offered for sale to prospective investors in the Offering. Any such shares of Common Stock issued pursuant to this paragraph shall be subject to the identical registration rights granted pursuant to the Registration Rights Agreement (as defined below) to investors in the Offering.

(b) If subscriptions to purchase at least 1,500,000 Shares (including Affiliate Shares) have been received from Prospective Investors prior to the expiration of the Offering Period and accepted by the Company, the Company shall issue to you or, at your discretion, your Selected Dealers or your designees, in addition to the amount set forth in Section 4(a) above, warrants (the "Placement Agent Warrants") to purchase a number of Shares of the Company equal to 10% of the aggregate number of Shares

issued in the Offering including Shares issued, if any, to the Placement Agent in satisfaction of its selling commission or the non-accountable expense allowance. Each Placement Agent Warrant will entitle the holder thereof for a five-year period commencing on the first anniversary of the Closing Date or any Additional Closing Date as the case may be, to purchase one share of Common Stock of the Company at an exercise price equal to the Purchase Price per share (the "Warrant Shares"). The Placement Agent Warrants shall be in the form attached hereto as Exhibit II.

(c) Notwithstanding anything contained herein to the contrary, the number of Shares upon which the commission provided for in Section 4(a) and the Placement Agent Warrants described in Section 4(b) shall be based shall include Shares with respect to which the Company unreasonably rejected subscriptions.

(d) If the Offering is terminated by the Company (i) during the Offering Period (provided you are actively pursuing the Offering during such period), (ii) during any extension period (provided you are actively pursuing the Offering during such period), or (iii) at the completion of the Offering (provided that you shall have obtained offers to purchase at least the required minimum), and within six months after such termination, the Company completes the sale of any of its equity securities (including securities convertible into equity securities) for cash, other than in connection with the exercise of existing options, units, warrants, strategic alliances or pursuant to a transaction incident to a sale of the Company, then in any such case, the Company shall pay to you 13% of the gross sales price of such securities and shall issue to you, on the terms set forth in Section 4, warrants to purchase 10% of the securities so sold at an exercise price equal to the sales price per share.

(e) Notwithstanding anything herein to the contrary, all amounts set forth in this Agreement are subject to adjustment for mergers, recapitalizations, stock dividends or any other action having a similar effect on the Common Stock.

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5. Representations and Warranties.

(a) Representations and Warranties of the Company. The Company represents and warrants to, and agrees with, the Placement Agent and the Selected Dealers that:

(i) The Memorandum, as supplemented or amended from time to time, at all times during the period from the date hereof to and including the later of the Closing Date and the expiration of the Offering Period, and the last Additional Closing Date (if any), does not, and during such period will not, contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein not misleading, all in light of the circumstances under which they were made. Each contract, agreement, instrument, lease, license or other document described in the Memorandum is accurately described therein in all material respects.

(ii) No document provided by the Company to Prospective Investors pursuant to Section 6(a)(vii) hereof, and no oral information provided by the Company to Prospective Investors, contains any untrue statement of a material fact or omits to state any material fact required to be stated therein or necessary to make the statements therein not misleading. Contracts to which the Company is a party provided by the Company to Prospective Investors shall not be deemed to contain any untrue statement of a material fact or to omit to state any material fact if the contract so provided is a true, correct and complete copy of such contract, as amended or modified through the date it is so provided.

(iii) The Company has not, directly or indirectly, solicited any offer to buy or offered to sell any Shares or any other securities of the Company during the twelve-month period ending on the date

hereof except as may be described in the Memorandum or which would not be integrated with the sale of the Shares in a manner that would require the registration of the Offering pursuant to the Act and has no present intention to solicit any offer to buy or offer to sell any Shares or any other securities of the Company other than pursuant to this Agreement or pursuant to a registered public offering of the Company's securities which may be commenced after the completion of the Offering.

(iv) The Company is a corporation duly organized, validly existing, and in good standing under the laws of the State of Delaware, with full power and authority, and all necessary consents, authorizations, approvals, orders, licenses, certificates, and permits of and from, and declarations and filings with (collectively, "Consents"), all federal, state, local, foreign, and other governmental authorities and all courts and other tribunals, to own, lease, license and use its properties and assets and to carry on its business in the manner described in the Memorandum, except where the failure to have obtained such Consents would not have a material adverse effect on the Company and the Company has not received any notice of proceedings relating to the revocation or modification of any such consent, authorization, approval, order, license certificate, or permit which, singly or in the aggregate, if the subject of an unfavorable decision, ruling or finding would result in a material adverse change in the financial condition, results of operations, business, properties, assets, liabilities or future prospects of the Company. The Company is duly qualified to do business and is in good standing in every jurisdiction in which its ownership, leasing, licensing or use of property and assets or the conduct of its business makes such qualification necessary. The

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Company's subsidiaries include Tacora Corporation and, after the Closing, giving effect to the merger of a wholly-owned subsidiary of the Company into Virologix Corporation ("Virologix") with Virologix becoming a wholly-owned subsidiary of the Company, Virologix (the "Subsidiaries"), as described in the Memorandum.

(v) Each of the Subsidiaries is a corporation duly organized, validly existing, and in good standing under the laws of the respective jurisdictions set forth in the Memorandum, with full power and authority, and all necessary consents, authorizations, approvals, orders, licenses, certificates, and permits of and from, and declarations and filings with, all federal, state, local, foreign, and other governmental authorities and all courts and other tribunals, to own, lease, license, and use its properties and assets and to carry on its business in the manner described in the Memorandum. Each of the Subsidiaries is duly qualified to do business and is in good standing in every jurisdiction in which its ownership, leasing, licensing, or use of property and assets or the conduct of its business makes such qualification necessary.

(vi) The Company has, as of the date hereof, an authorized and outstanding capitalization as set forth in the Memorandum. Each outstanding share of capital stock of the Company, and each outstanding share of capital stock of each Subsidiary, is duly authorized, validly issued, fully paid and nonassessable and has not been issued and is not owned or held in violation of any preemptive rights set forth in the Company's Certificate of Incorporation or By-laws, each as amended to date, or any agreement to which the Company is a party and in the case of the Subsidiaries, is owned of record and beneficially by the Company, free and clear of all liens, security interests, pledges, charges, encumbrances, stockholders' agreements and voting trusts, except as may be described in the Memorandum. There is no commitment, plan or arrangement to issue, and no outstanding option, warrant or other right calling for the issuance of, any share of capital stock of the Company or of any Subsidiary or any security or other instrument which by its terms is convertible into, exercisable for or exchangeable for shares of capital stock of the Company, except as may be described in the Memorandum. There

is outstanding no security or other instrument which by its terms is convertible into or exchangeable for any class of shares of capital stock of the Company or of any Subsidiary, except as may be described in the Memorandum, which description may be an aggregate description of such securities. The capital stock of the Company conforms to the description thereof contained in the Memorandum.

(vii) The financial statements of the Company included in the Memorandum (by incorporation by reference or otherwise) fairly present the financial position, the results of operations, cash flows and the other information purported to be shown therein at the respective dates and for the respective periods to which they apply. Such financial statements have been prepared in accordance with United States generally accepted accounting principles consistently applied throughout the periods involved, are correct and complete and are in accordance with the books and records of the Company. There has at no time been a material adverse change in the financial condition, results of operations, business, properties, assets, liabilities or future prospects of the Company from the latest information set forth in the Memorandum, except as may be described in such Memorandum as having occurred.

(viii) There is no litigation, arbitration, governmental or other proceeding (formal or informal) or claim or investigation pending or, to the knowledge of the Company, threatened with respect to the Company, or any of the Subsidiaries, or any of its or their operations, businesses,

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properties or assets, except as may be described in the Memorandum or such as individually or in the aggregate do not now have and will not in the future have a material adverse effect upon the operations, business, properties or assets of the Company and the Subsidiaries, taken as a whole. Neither the Company nor any of its Subsidiaries is in violation of, or in default with respect to, any law, rule, regulation, order, judgment or decree, except as may be described in the Memorandum or such as in the aggregate do not now have and will not in the future have a material adverse effect upon the operations, business, properties, assets or future prospects of the Company and the Subsidiaries, taken as a whole.

(ix) Any real property and buildings held under lease by the Company or any of the Subsidiaries are held by it under valid, subsisting and enforceable leases with such exceptions as in the aggregate are not material.

(x) Neither the Company, the Subsidiaries nor, to the knowledge of the Company, any other party, is in violation or breach of or in default with respect to, complying in any material respect with any contract, agreement, instrument, lease, license, arrangement or understanding which is material to the Company or any of the Subsidiaries, as described in the Memorandum, and each such contract, agreement, instrument, lease, license, arrangement and understanding is in full force and effect and is the legal, valid and binding obligation of the parties thereto enforceable as to them in accordance with its terms (subject to applicable bankruptcy, insolvency and other laws affecting the enforceability of creditors' rights generally and to general equitable principles). Except as described in the Memorandum, the Company and each of its Subsidiaries enjoys peaceful and undisturbed possession under all real property leases under which it is operating. Neither the Company, nor any of its Subsidiaries, is in violation or breach of, or in default with respect to, any term of its Certificate of Incorporation or its By-laws, each as amended to date.

(xi) There is no right under any patent, patent application, trademark, trademark application, trade name, service mark, copyright, franchise or other intangible property or asset (all of the foregoing being herein called "Intangibles") necessary to the business of the Company or any of the Subsidiaries as presently conducted or as the Memorandum indicates they contemplate

conducting, except as may be so designated in the Memorandum and which the Company has the right or license to use as necessary. To the Company's knowledge, except as described in the Memorandum, neither the Company nor any of the Subsidiaries has infringed nor is infringing with respect to Intangibles of others, and neither the Company, nor any of its Subsidiaries, has received notice of infringement with respect to asserted Intangibles of others. To the Company's knowledge, except as described in the Memorandum, there is no Intangible of others which has had or may in the future have a material adverse effect on the financial condition, results of operations, business, properties, assets, liabilities or future prospects of the Company or any of the Subsidiaries.

(xii) The Company has all requisite power and authority to execute, deliver and perform this Agreement, the Subscription Agreements, the Escrow Agreement, the Placement Agent Warrants and the Registration Rights Agreement made by the Company for the benefit of purchasers of Shares (the "Registration Rights Agreement") (collectively, the "Operative Agreements") and to consummate the transactions contemplated by the Operative Agreements. All necessary corporate proceedings of the Company have been duly taken to authorize the execution, delivery and performance by the Company of the Operative Agreements. This Agreement and the

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Escrow Agreement have been duly authorized, executed, and delivered by the Company, are the legal, valid and binding obligations of the Company and are enforceable as to the Company in accordance with their terms (subject to applicable bankruptcy, insolvency and other laws affecting the enforceability of creditors' rights generally and to general equitable principles). The Subscription Agreements, the Placement Agent Warrants and the Registration Rights Agreement have been duly authorized by the Company and, when executed and delivered by the Company, will be the legal, valid and binding obligations of the Company enforceable against it in accordance with their respective terms (subject to applicable bankruptcy, insolvency and other laws affecting the enforceability of creditors' rights generally and to general equitable principles). No consent, authorization, approval, order, license, certificate or permit of or from, or registration, qualification, declaration or filing with, any federal, state, local, foreign or other governmental authority or any court or other tribunal is required by the Company for the execution, delivery or performance by the Company of the Operative Agreements or the consummation of the transactions contemplated by the Operative Agreements, except (A) the filing of a Notice of Sales of Securities on Form D pursuant to Regulation D, (B) such consents, authorizations, approvals, registrations and qualifications as may be required under securities or "blue sky" laws in connection with the issuance, sale and delivery of the Shares and Placement Agent Warrants pursuant to this Agreement and the Warrant Shares and Shares underlying the Placement Agent Warrants upon exercise of the Placement Agent Warrants and (C) the filing of a registration statement and any necessary consents, authorizations and approvals thereunder pursuant to the Registration Rights Agreement. No consent of any party to any contract, agreement, instrument, lease, license, arrangement or understanding to which the Company is a party or to which any of their properties or assets are subject is required for the execution, delivery or performance of the Operative Agreements or the consummation of the transactions contemplated by the Operative Agreements, which has not been or will not be obtained prior to the Closing or any Additional Closings and the execution, delivery and performance of the Operative Agreements, and the consummation of the transactions contemplated by the Operative Agreements, will not violate, result in a breach of, conflict with or (with or without the giving of notice or the passage of time or both) entitle any party to terminate, call a default or receive any right under any such contract, agreement, instrument, lease, license, arrangement or understanding (except for any such violation, breach or conflict which has been properly waived thereunder), violate or result in

a breach of any term of the Company's Certificate of Incorporation or By-laws, each as amended to date, or violate, result in a breach of or conflict with any law, rule, regulation, order, judgment or decree binding on the Company or any of the Subsidiaries, or to which any of its operations, businesses, properties or assets are subject.

(xiii) The Shares, the Placement Agent Warrants and the Warrant Shares conform to all statements relating thereto contained in the Memorandum. The Shares, when issued and delivered to the subscribers therefor, pursuant to the terms of this Agreement and the Subscription Agreements, and the Warrant Shares, when issued and delivered pursuant to the terms of the Placement Agent Warrants, shall be duly authorized, validly issued, fully paid and nonassessable and shall not have been issued in violation of any preemptive rights set forth in the Company's Certificate of Incorporation or By-laws, each as amended to date, or any agreement to which the Company is a party.

(xiv) Subsequent to the dates as of which information is given in the Memorandum, and except as may otherwise be properly described in the Memorandum, (A) neither the Company nor any Subsidiary had, except in the ordinary course of business, incurred any

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liability or obligation, primary or contingent, for borrowed money, (B) there has not been any material change in the capital stock, short-term debt or long-term debt of the Company or any Subsidiary, (C) neither the Company nor any Subsidiary had entered into any transaction not in the ordinary course of business, (D) the Company has not purchased any of its outstanding capital stock nor declared or paid any dividend or distribution of any kind on its capital stock, (E) neither the Company nor any Subsidiary had sustained any material loss or interference with its businesses or properties from fire, flood, hurricane, accident or other calamity, whether or not covered by insurance, or from any labor dispute or any legal or governmental proceeding or (F) there has not been any material adverse change, or any development which the Company reasonably believes could result in a prospective material adverse change, in the financial condition results of operations, business, properties, assets, liabilities or future prospects of the Company and the Subsidiaries taken as a whole, except in each case as described in or contemplated by the Memorandum.

(xv) Neither the Company nor, to the knowledge of the Company, any of its affiliates has, directly or through any agent, sold, offered for sale or solicited offers to buy, nor will any of the foregoing directly buy (other than pursuant to the Offering) any security of the Company, as defined in the Act, which is or will be integrated with the sale of the Shares, the Placement Agent Warrants or the Warrant Shares in a manner that would require the registration, pursuant to the Act, of the Offering.

(xvi) Neither the Company nor, to the knowledge of the Company, any of its affiliates has, directly or indirectly, taken any action designed to cause or to result in, or that has constituted or which might reasonably be expected to constitute, the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Shares or sold, bid for, purchased, or paid anyone any compensation for soliciting purchases of, the Shares.

(xvii) The Company and each of its Subsidiaries has good and marketable title to all real and personal property owned by it, in each case free and clear of any security interests, liens, encumbrances, equities, claims and other defects, except such as do not materially and adversely affect the value of such property and do not interfere with the use made or proposed to be made of such property by the Company or any of the Subsidiaries, and any real property and buildings held under lease by the Company are held under valid, subsisting and enforceable leases, with such exceptions as are not material and do not interfere with the use

made or proposed to be made of such property and buildings by the Company or any of the Subsidiaries, in each case except as described in or contemplated by the Memorandum.

(xviii) No labor dispute with the employees of the Company or any of the Subsidiaries exists or is threatened or imminent that could result in a material adverse change in the financial condition, results of operations, business, properties, assets, liabilities or future prospects of the Company and the Subsidiaries taken as a whole, except as described in or contemplated by the Memorandum.

(xix) The Company and its Subsidiaries are insured by insurers of recognized financial responsibility against such losses and risks and in such amounts as are prudent and customary in the businesses in which they are engaged; the Company has not been refused any insurance coverage sought or applied for; and the Company has no reason to believe that it will not

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be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage from insurers of recognized financial responsibility as may be necessary to continue its business at a cost that would not materially and adversely affect the financial condition, results of operations, business, properties, assets, liabilities or future prospects of the Company and the Subsidiaries taken as a whole, except as described in or contemplated by the Memorandum.

(xx) The Company and the Subsidiaries taken as a whole have filed all foreign, federal, state and local tax returns that are required to be filed or has requested extensions thereof (except in any case in which the failure so to file would not have a material adverse affect on the Company and the Subsidiaries taken as a whole); and has paid all taxes required to be paid by it and any other assessment, fine or penalty levied against it to the extent that any of the foregoing is due and payable, except for any such assessment, fine or penalty that is currently being contested in good faith or as described in or contemplated by the Memorandum.

(xxi) To the Company's knowledge, neither the Company nor any Subsidiary is in violation of any federal or state law or regulation relating to occupational safety and health or to the storage, handling or transportation of hazardous or toxic materials and the Company and each Subsidiary have received all permits, licenses or other approvals required of it under applicable federal and state occupational safety and health and environmental laws and regulations to conduct their business, and the Company and each Subsidiary is in compliance with all terms and conditions of any such permit, license or approval, except any such violation of law or regulation, failure to receive required permits, licenses or other approvals or failure to comply with the terms and conditions of such permits, licenses or approvals which would not, singly or in the aggregate, result in a material adverse change in the financial condition, results of operations, business, properties, assets, liabilities or future prospects of the Company, except as described in or contemplated by the Memorandum.

(xxii) The Company and its Subsidiaries maintain a system of internal accounting controls sufficient to provide reasonable assurance that (i) transactions are executed in accordance with management's general or specific authorizations; (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with generally accepted accounting principles and to maintain asset accountability; (iii) access to assets is permitted only in accordance with management's general or specific authorization; and (iv) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences.

(xxiii) The Company has timely filed all reports as required

under the Securities Exchange Act of 1934 (the "Exchange Act") and such reports, as of their respective dates, did not contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein not misleading, all in light of the circumstances under which they were made.

(b) Representations and Warranties of the Placement Agent and Selected Dealers. The Placement Agent, and each Selected Dealer that the Placement Agent may from time to time appoint, by signing the Selected Dealer Agreement, hereby represent and warrant to, and agree with, the Company and each other as to themselves only as follows:

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(i) Neither the Placement Agent nor any Selected Dealer will offer or sell any Shares to any investor which the Placement Agent or such Selected Dealer did not have reasonable grounds to believe and did not believe, was an "accredited investor".

(ii) Neither the Placement Agent nor any Selected Dealer will offer or sell any Shares by means of any form of general solicitation or general advertising, including, without limitation, the following:

(A) any advertisement, article, notice or other communication published in any newspaper, magazine or similar medium or broadcast over television or radio; and

(B) any seminar or meeting whose attendees have been invited by any general solicitation or general advertising.

(iii) The Placement Agent and each Selected Dealer is a member in good standing of the National Association of Securities Dealers, Inc. or a registered representative thereof.

(iv) The representations and warranties contained in the Certificate of Selected Dealer attached to the form of Selected Dealer Agreement are true and correct as to the Selected Dealer which executed such Certificate and are true and correct as to the Placement Agent as if it had executed such a certificate.

(v) Each of the Placement Agent and each Selected Dealer has all requisite power and authority to execute, deliver and perform this Agreement and to consummate the transactions contemplated hereby. All necessary corporate proceedings of the Placement Agent and each Selected Dealer have been duly taken to authorize the execution, delivery and performance by the Placement Agent and each Selected Dealer of this Agreement. This Agreement has been duly authorized, executed, and delivered by the Placement Agent and each Selected Dealer and is the legal, valid and binding obligation of the Placement Agent and each Selected Dealer in accordance with its terms (subject to applicable bankruptcy, insolvency and other laws affecting the enforceability of creditors' rights generally and to general equitable principles).

6. Covenants.

(a) Covenants of the Company. The Company covenants to the Placement Agent and each Selected Dealer that it will:

(i) Notify you immediately, and confirm such notice promptly in writing, (A) when any event shall have occurred during the period commencing on the date hereof and ending on the later of the Closing Date, the expiration of the Offering Period and the last Additional Closing Date (if any) as a result of which the Memorandum would include any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein not misleading, and (B) of the receipt of any notification with respect to the modification, rescission, withdrawal or suspension of the qualification or registration of the Shares or of an exemption from such registration or qualification in any jurisdiction. The

Company will use its best efforts to prevent the issuance of any such modification, rescission, withdrawal or

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suspension and, if any such modification, rescission, withdrawal or suspension is issued and you so request, to obtain the lifting thereof as promptly as possible.

(ii) Not supplement or amend the Memorandum unless you shall have approved of such supplement or amendment in writing. If, at any time during the period commencing on the date hereof and ending on the later of the Closing Date, the expiration of the Offering Period or the last Additional Closing Date (if any), any event shall have occurred as a result of which the Memorandum contains any untrue statement of a material fact or omits to state any material fact required to be stated therein or necessary to make the statements therein not misleading, or if, in the opinion of counsel to the Company or counsel to the Placement Agent, it is necessary at any time to supplement or amend the Memorandum to comply with the Act, Regulation D or any applicable securities or "blue sky" laws, the Company will promptly prepare an appropriate supplement or amendment (in form and substance satisfactory to you) which will correct such statement or omission or which will effect such compliance.

(iii) Deliver without charge to the Placement Agent such number of copies of the Memorandum and any supplement or amendment thereto as may reasonably be requested by the Placement Agent.

(iv) Not, directly or indirectly, solicit any offer to buy from, or offer to sell to any person any Shares except through the Placement Agent.

(v) Not solicit any offer to buy or offer to sell Shares by any form of general solicitation or advertising, including, without limitation, any advertisement, article, notice or other communication published in any newspaper, magazine or similar medium or broadcast over television or radio or any seminar or meeting whose attendees have been invited by any general solicitation or advertising.

(vi) Use its best efforts to qualify or register the Shares for offering and sale under, or establish an exemption from such qualification or registration under, the securities or "blue sky" laws of such jurisdictions as you may reasonably request. The Company will not consummate any sale of Shares in any jurisdiction or in any manner in which such sale may not be lawfully made.

(vii) At all times during the period commencing on the date hereof and ending on the later of the Closing Date, the expiration of the Offering Period and the last Additional Closing Date (if any), provide to each Prospective Investor or his purchaser representative, if any, on request, such information (in addition to that contained in the Memorandum) concerning the Offering, the Company and any other relevant matters as it possesses or can acquire without unreasonable effort or expense and extend to each Prospective Investor or his purchaser representative, if any, the opportunity to ask questions of, and receive answers from, the Company concerning the terms and conditions of the Offering and the business of the Company and to obtain any other additional information, to the extent it possesses the same or can acquire it without unreasonable effort or expense, as such Prospective Investor or purchaser representative may

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consider necessary in making an informed investment decision or in order to verify the accuracy of the information furnished to such Prospective Investor or purchaser representative, as the case may be.

(viii) Before accepting any subscription to purchase Shares from,

or making any sale to, any Prospective Investor, have reasonable grounds to believe and actually believe that (A) such Prospective Investor meets the suitability requirements for investing in the Shares set forth in the Memorandum and (B) such Prospective Investor is an accredited investor.

(ix) Notify you promptly of the acceptance or rejection of any subscription. The Company shall not unreasonably reject any subscription for Shares unless it pays the Placement Agent its compensation pursuant to Section 4 with respect thereto. Any subscription unreasonably rejected shall be deemed to have been accepted for purposes of determining whether at least 1,500,000 Shares (including Affiliate Shares) have been sold solely for the purpose of determining whether the Placement Agent is entitled to its compensation pursuant to Section 4 hereof and this subsection (ix).

(x) File five (5) copies of a Notice of Sales of Securities on Form D with the Securities and Exchange Commission (the "Commission") no later than 15 days after the first sale of the Shares. The Company shall file promptly such amendments to such Notices on Form D as shall become necessary and shall also comply with any filing requirement imposed by the laws of any state or jurisdiction in which offers and sales are made. The Company shall furnish you with copies of all such filings.

(xi) Place the following legend on all certificates representing the Shares and the Placement Agent Warrants:

"The securities represented hereby have not been registered under the Securities Act of 1933, as amended or any state securities laws and neither the securities nor any interest therein may be offered, sold, transferred, pledged or otherwise disposed of except pursuant to an effective registration statement under such act or such laws or an exemption from registration under such act and such laws which, in the opinion of counsel for the holder, which counsel and opinion are reasonably satisfactory to counsel for this corporation, is available."

(xii) Not, directly or indirectly, engage in any act or activity which may jeopardize the status of the offering and sale of the Shares as exempt transactions under the Act or under the securities or "blue sky" laws of any jurisdiction in which the Offering may be made. Without limiting the generality of the foregoing, and notwithstanding anything contained herein to the contrary, the Company shall not, during the six (6) months following completion of the Offering, (A) directly or indirectly, engage in any offering of securities which, if integrated with the Offering in the manner prescribed by Rule 502(a) of Regulation D and applicable releases of the

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Commission, may jeopardize the status of the Offering and sale of the Shares as exempt transactions under Regulation D or (B) engage in any offering of securities, without the opinion of counsel reasonably satisfactory to the Placement Agent, to the effect that such offering would not result in integration with this Offering, or if integration would so result, that such integration would not jeopardize the status of this Offering as an exempt transaction under Regulation D.

(xiii) Apply the net proceeds from the sale of the Shares for the purposes set forth under the caption "Use of Proceeds" in the Memorandum in substantially the manner indicated thereunder.

(xiv) Not, during the period commencing on the date hereof and ending on the later of the Closing Date, the expiration of the Offering Period and the last Additional Closing Date (if any), issue any press release or other communication or hold any press conference with respect to the Company, its financial condition, results of operations, business, properties, assets, liabilities or future prospects or the Offering, without your prior written consent.

(xv) Not, until August 1, 2000, without your prior written consent, offer, issue, sell, contract to sell, grant any option for the sale of or otherwise dispose of, directly or indirectly, any shares of Common Stock (or any security or other instrument which by its terms is convertible into, exercisable for, or exchangeable for shares of Common Stock). Notwithstanding the foregoing, the Company will be able to sell, transfer or dispose of (A) the securities issuable under this Agreement, (B) shares of Common Stock issuable upon the exercise of stock options under any stock option plan of the Company, warrants and other commitments, each of which are outstanding on the date hereof and which are described in the Memorandum, (C) options granted after the date hereof under existing stock option plans, (D) securities disposed of in strategic alliances and (E) shares of Common Stock sold at a price at or over \$8.00 per share (based on the current capitalization and to be adjusted for stock splits). Additionally, prior to August 1, 2000, the Company will not, without your prior written consent, change any terms of the Company's outstanding stock options or warrants.

(xvi) For a period of four years after the date hereof, furnish you, without charge, upon request, the following:

(A) within 90 days after the end of each fiscal year, three (3) copies of financial statements certified by independent certified public accountants, including a balance sheet, statement of income and statement of cash flows of the Company and its then existing subsidiaries, with supporting schedules, prepared in accordance with generally accepted accounting principles, as at the end of such fiscal year and for the 12 months then ended, which may be on a consolidated basis, copies of which financial statements shall also be furnished to the purchasers in this Offering and, within 45 days after the end of each fiscal quarter, three (3) copies of unaudited interim financial statements, as at the end of such quarter and for the three (3) months then ended;

(B) as soon as practicable after they have been sent to stockholders of the Company or filed with the Commission, three (3) copies of each annual and interim financial and

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other report or communication sent by the Company to its stockholders or filed with the Commission; and

(C) as soon as practicable, two copies of every press release and every material news item and article in respect of the Company or its affairs which was released by the Company.

(xvii) Comply in all respects with its obligations under the Operative Agreements.

(xviii) Not, prior to the completion of the Offering, bid for, purchase, attempt to induce others to purchase, or sell, directly or indirectly, any Shares or any other securities of the Company of the same class and series as the Shares in violation of the provisions of Regulation M under the Exchange Act.

(xix) Not, for a period of eighteen (18) months from the date hereof, solicit any offer to buy from or offer to sell (except in an underwritten public offering) to any person introduced to the Company by you in connection with the Offering, who is not a stockholder of the Company at the time of such solicitation, directly or indirectly, any securities of the Company or of any other entity, or provide the name of any such person to any other securities broker or dealer or selling agent, except as otherwise required by law. In the event that the Company or any of its officers, directors or affiliates, directly or indirectly, solicits offers to buy from or offers to sell to any such person any such securities or provides the name of any such person to any other securities broker or dealer or selling agent, and such person purchases such securities or purchases securities from any such other securities broker or dealer or selling agent within such eighteen month period

except in connection with an underwritten public offering, the Company shall pay to the Placement Agent an amount equal to 10% of the aggregate purchase price of the securities so purchased by such person. Set forth on Schedule A hereto is a list of persons and entities introduced to the Company by the Placement Agent.

(xx) Use its best efforts to secure the inclusion of the Common Stock on Nasdaq as soon as it meets the qualification requirements.

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(b) Covenants of the Placement Agent and Selected Dealers.

(i) Neither the Placement Agent nor any Selected Dealer, by signing the Selected Dealer Agreement, will accept the subscription of any person unless immediately before accepting such subscription the Placement Agent or such Selected Dealer has reasonable grounds to believe and does believe that (A) such person is an accredited investor and (B) all representations made and information furnished by such person in the Subscription Agreement and related documents are true and correct in all material respects. The Placement Agent and Selected Dealers agree to notify the Company promptly if the Placement Agent or a Selected Dealer, as applicable, shall, at any time during the period after delivery of the documents furnished by such person to the Company in connection with subscription for Shares and immediately before the sale of Shares to such person, no longer reasonably believe one or more of the foregoing matters with respect to such person.

(ii) Neither the Placement Agent nor any Selected Dealer will solicit purchasers of Shares other than in the jurisdictions in which such solicitation may, upon the advice of counsel, be made under applicable securities or "blue sky" laws and in which the Placement Agent or such Selected Dealer, as the case may be, is qualified so to act.

(iii) Neither the Placement Agent nor any Selected Dealer will sell any Shares to any investor unless a Memorandum is furnished to such investor within a reasonable time prior thereto.

(iv) Upon notice from the Company that the Memorandum is to be amended or supplemented (which the Company will promptly give upon becoming aware of any untrue statement of a material fact required to be stated in the Memorandum or omission to state a material fact necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading), the Placement Agent and each Selected Dealer, if any, will immediately cease use of the Memorandum until the Placement Agent and such Selected Dealers have received such amendment or supplement and thereafter will make use of the Memorandum only as so amended or supplemented, and the Placement Agent and each Selected Dealer, if any, will deliver a copy of such amendment or supplement to each Prospective Investor to whom a copy of the Memorandum had previously been delivered (and who had not returned such copy) and whose subscription had not been rejected.

7. Payment of Expenses.

(a) The Company hereby agrees to pay all fees, charges and expenses of the Offering, including, without limitation, all fees, charges, and expenses in connection with (i) the preparation, printing, reproduction, filing, distribution and mailing of the Memorandum, and all other documents relating to the offering, purchase, sale and delivery of the Shares, and any supplements or amendments thereto, including the fees and expenses of counsel to the Company, and the cost of all copies thereof, (ii) the issuance, sale, transfer and delivery of the Shares and the Placement Agent Warrants, including any transfer or other taxes payable thereon and the fees of any Transfer

Agent, Warrant Agent or Registrar, (iii) the registration or qualification of the Shares or the securing of an exemption therefrom under state or foreign "blue sky" or securities laws, including, without limitation, filing fees payable in the jurisdictions in which such registration or qualification or exemption therefrom is sought, the costs of preparing preliminary, supplemental and final "Blue Sky Surveys" relating to the offer and sale of the Shares and the fees and disbursements of counsel actually incurred to the Placement Agent in connection with such "blue sky" matters, (iv) the filing fees, if any, payable to the Commission; and (v) the retention of the Escrow Agent, including the fees and expenses of the Escrow Agent for serving as such and the fees and expenses of its counsel.

(b) If subscriptions to purchase at least 1,500,000 shares (including the Affiliate Shares) are received prior to the expiration of the Offering Period and accepted by the Company, the Company shall pay to the Placement Agent a non-accountable expense allowance equal to 3% of the gross proceeds. Such amounts (less amounts, if any, previously paid to you in respect of such non-accountable expense allowance) shall be paid by the Company out of the funds received from the sale of the Shares or, at the Placement Agent's option, in part or in whole, in shares of Common Stock valued at \$2.00 per share, net of commission. Any such shares of Common Stock issued pursuant to this paragraph shall be entitled to the identical registration rights granted pursuant to the Registration Rights Agreement to investors in the Offering.

(c) If subscriptions to purchase at least 1,500,000 shares (including the Affiliate Shares) are received prior to the expiration of the Offering Period and accepted by the Company, the Company shall reimburse Robb Peck McCooley Clearing Corporation, as a Selected Dealer, for its reasonable out-of-pocket expenses which in the aggregate shall not exceed \$20,000, in connection with its sale of the Shares, upon submission of appropriate documentation to the Company.

(d) If subscriptions to purchase at least 1,500,000 shares (including the Affiliate Shares) are not received prior to the expiration of the Offering Period or if this Agreement is terminated by the Placement Agent pursuant to Section 8 hereof prior to the issuance, sale and delivery of any Shares, the Company shall reimburse the Placement Agent for its reasonable out-of-pocket expenses hereunder (including, without limitation, the reasonable fees and expenses of counsel) and pay any compensation due with respect to unreasonably rejected subscriptions.

8. Conditions of Placement Agent's Obligations. The obligations of the Placement Agent pursuant to this Agreement shall be subject, in its discretion, to the continuing accuracy of the representations and warranties of the Company contained herein and in each certificate and document contemplated under this Agreement to be delivered to the Placement Agent, as of the date hereof and as of the Closing Date (and, if applicable, each Additional Closing Date) to the performance by the Company of its obligations hereunder, and to the following conditions:

(a) At the Closing and each Additional Closing, as the case may be, the Placement Agent shall have received the favorable opinion of Bingham Dana LLP, counsel for the Company, and Ehrenreich, Eilenberg, Krause & Zivian, counsel for Virologix, and the opinion of patent counsels for the Company, dated the date of delivery, addressed to the Placement Agent, in substantially the form of Exhibit III-1 and Exhibit III-2 hereto, respectively.

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(b) On or prior to the Closing Date and each Additional Closing Date, as the case may be, the Placement Agent shall have been furnished such information, documents and certificates as it may reasonably require for the purpose of enabling it to review the matters referred to in this Section 8 and in order to evidence the

accuracy, completeness or satisfaction of any of the representations, warranties, covenants, agreements or conditions herein contained, or as it may otherwise reasonably request.

(c) At the Closing and each Additional Closing, as the case may be, the Placement Agent shall have received a certificate of the chief executive officer and of the chief financial officer of the Company, dated the Closing Date or such Additional Closing Date, as the case may be, to the effect that, as of the date of this Agreement and as of the Closing Date or such Additional Closing Date, as the case may be, the representations and warranties of the Company contained herein were and are accurate, and that as of the Closing Date or such Additional Closing Date, as the case may be, the obligations to be performed by the Company hereunder on or prior thereto have been fully performed.

(d) All proceedings taken in connection with the issuance, sale and delivery of the Shares shall be reasonably satisfactory in form and substance to you and your counsel.

(e) There shall not have occurred, at any time prior to the Closing or, if applicable, an Additional Closing, as the case may be, (i) any domestic or international event, act or occurrence which has materially disrupted, or in your reasonable opinion will in the immediate future materially disrupt, the securities markets; (ii) a general suspension of, or a general limitation on prices for, trading in securities on the New York Stock Exchange or in the over-the-counter market; (iii) any outbreak of major hostilities or other national or international calamity affecting securities markets in the United States; (iv) any banking moratorium declared by a state or federal authority; (v) any moratorium declared in foreign exchange trading by major international banks or other persons; (vi) any material interruption in the mail service or other means of communication within the United States; (vii) any material adverse change in the business, properties, assets, results of operations or financial condition of the Company; or (viii) any change in the market for securities in general or in political, financial or economic conditions which, in your reasonable business judgment, makes it inadvisable to proceed with the offering, sale and delivery of the Shares.

(f) The Placement Agent shall have received an agreement reflecting the provisions of Section 6(a)(xv) hereof.

Any certificate or other document signed by any officer of the Company on behalf of the Company and delivered to you or to your counsel as required hereunder shall be deemed a representation and warranty by the Company hereunder as to the statements made therein. If any condition to your obligations hereunder has not been fulfilled as and when required to be so fulfilled, you may terminate this Agreement or, if you so elect, in writing waive any such conditions which have not been fulfilled or extend the time for their fulfillment. In the event that you elect to terminate this Agreement, you shall notify the Company of such election in writing.

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Upon such termination, neither party shall have any further liability or obligation to the other except as provided in Section 10 hereof.

9. Indemnification and Contribution.

(a) The Company agrees to indemnify and hold harmless the Placement Agent, the Selected Dealers, their officers, directors, stockholders, employees, agents, advisors, consultants and counsel, and each person, if any, who controls the Placement Agent or a Selected Dealer within the meaning of Section 15 of the Act or Section 20(a) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), against any and all loss, liability, claim, damage and expense whatsoever (which shall include, for all purposes of this Section 9, without limitation, attorneys' fees and any and all reasonable expenses whatsoever incurred in

investigating, preparing or defending against any litigation, commenced or threatened, or any claim whatsoever and any and all amounts paid in settlement of any claim or litigation) as and when incurred arising out of, based upon or in connection with (i) any untrue statement or alleged untrue statement of a material fact contained in (A) the Memorandum or in any document delivered or statement made pursuant to Section 6(a)(vii), or (B) in any application or other document or communication (in this Section 9 collectively called an "application") executed by or on behalf of the Company or based upon written information furnished by or on behalf of the Company filed in any jurisdiction in order to register or qualify the Shares under the "blue sky" or securities laws thereof or in order to secure an exemption from such registration or qualification or filed with the Commission; or any omission or alleged omission to state a material fact required to be stated therein or necessary to make the statements therein not misleading, all in light of the circumstances in which made, unless such statement or omission was made in reliance upon and in conformity with written information furnished to the Company as stated in Section 9(b) with respect to the Placement Agent expressly for inclusion in the Memorandum or in any application, as the case may be; or (ii) any breach of any representation, warranty, covenant or agreement of the Company contained in this Agreement or any Operative Agreement. The foregoing agreement to indemnify shall be in addition to any liability the Company may otherwise have, including liabilities arising under this Agreement.

If any action is brought against the Placement Agent, a Selected Dealer or any of their officers, directors, stockholders, employees, agents, advisors, consultants and counsel, or any controlling persons of the Placement Agent or a Selected Dealer (an "indemnified party"), in respect of which indemnity may be sought against the Company pursuant to the foregoing paragraph, such indemnified party or parties shall promptly notify the Company (the "indemnifying party") in writing of the institution of such action (but the failure so to notify shall not relieve the indemnifying party from any liability it may have other than pursuant to this Section 9(a) unless such failure materially prejudices the indemnifying party), and the indemnifying party shall promptly assume the defense of such action, including the employment of one counsel (reasonably satisfactory to such indemnified party or parties) and payment of expenses. Such indemnified party shall have the right to employ its own counsel in any such case, but the fees and expenses of such counsel shall be at the expense of such indemnified party unless the employment of such counsel shall have been authorized in writing by the indemnifying party in connection with the defense of such action or the indemnifying party shall not have promptly employed counsel reasonably

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satisfactory to such indemnified party or parties to have charge of the defense of such action or such indemnified party or parties shall have reasonably concluded that there may be one or more legal defenses available to it or them or to other indemnified parties which are different from or additional to those available to one or more of the indemnifying parties and it would be inappropriate for the same counsel to represent both parties due to actual or potential differing interests between them, in any of which events such fees and expenses shall be borne by the indemnifying party and the indemnifying party shall not have the right to direct the defense of such action on behalf of the indemnified party or parties. Anything in this paragraph to the contrary notwithstanding, the indemnifying party shall not be liable for any settlement of any such claim or action effected without its written consent. The Company agrees promptly to notify the Placement Agent of the commencement of any litigation or proceedings against the Company or any of its officers or directors in connection with the sale of the Shares, the Memorandum or any application.

(b) The Placement Agent agrees to indemnify and hold harmless the Company, its officers, directors, employees, agents and counsel, and each other person, if any, who controls

the Company within the meaning of Section 15 of the Act or Section 20(a) of the Exchange Act, to the same extent as the foregoing indemnity from the Company to the Placement Agent in Section 9(a), but only with respect to statements or omissions, if any, made in the Memorandum in reliance upon and in conformity with written information furnished to the Company as stated in this Section 9(b) with respect to the Placement Agent expressly for inclusion in the Memorandum. If any action shall be brought against the Company or any other person so indemnified based on the Memorandum and in respect of which indemnity may be sought against the Placement Agent pursuant to this Section 9(b), the Placement Agent shall have the rights and duties given to the indemnifying party, and the Company and each other person so indemnified shall have the rights and duties given to the indemnified parties, by the provisions of Section 9(a). The foregoing agreement to indemnify shall be in addition to any liability the Placement Agent may otherwise have, including liabilities arising under this Agreement.

(c) To provide for just and equitable contribution, if
(i) an indemnified party makes a claim for indemnification pursuant to Section 9(a) or 9(b) but it is found in a final judicial determination, not subject to further appeal, that such indemnification may not be enforced in such case, even though this Agreement expressly provides for indemnification in such case, or
(ii) any indemnified or indemnifying party seeks contribution under the Act, the Exchange Act, or otherwise, then the Company (including for this purpose any contribution made by or on behalf of any officer, director, employee, agent or counsel of the Company or any controlling person of the Company), on the one hand, and the Placement Agent and the Selected Dealers (including for this purpose any contribution by or on behalf of an indemnified party), on the other hand, shall contribute to the losses, liabilities, claims, damages and expenses whatsoever to which any of them may be subject, in such proportions as are appropriate to reflect the relative benefits received by the Company, on

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the one hand, and the Placement Agent and the Selected Dealers, on the other hand; provided, however, that if applicable law does not permit such allocation, then other relevant equitable considerations such as the relative fault of the Company and the Placement Agent and the Selected Dealers in connection with the facts which resulted in such losses, liabilities, claims, damages and expenses shall also be considered. The relative benefits received by the Company, on the one hand, and the Placement Agent and the Selected Dealers, on the other hand, shall be deemed to be in the same proportion as (x) the total proceeds from the Offering (net of compensation payable to the Placement Agent pursuant to Section 4 hereof but before deducting expenses) received by the Company, and (y) the compensation received by the Placement Agent pursuant to Section 4 hereof or, in the case of a Selected Dealer, the allowance paid to such Selected Dealer.

The relative fault, in the case of an untrue statement, alleged untrue statement, omission or alleged omission, shall be determined by, among other things, whether such statement, alleged statement, omission or alleged omission relates to information supplied by the Company or by the Placement Agent and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement, alleged statement, omission or alleged omission. The Company and the Placement Agent agree that it would be unjust and inequitable if the respective obligations of the Company and the Placement Agent and the Selected Dealers for contribution were determined by pro rata or per capita allocation of the aggregate losses, liabilities, claims, damages and expenses or by any other method of allocation that does not reflect the equitable considerations referred to in this Section 9(c). In no case shall the Placement Agent or a Selected Dealer be responsible for a portion of the contribution obligation in excess of the compensation received by it pursuant to Section 4 hereof or the Selected Dealer Agreement,

as the case may be, less the aggregate amount of any damages that such Placement Agent or Selected Dealer has otherwise been required to pay in respect of the same or any substantially similar claim. No person guilty of a fraudulent misrepresentation (within the meaning of Section 11(f) of the Act) shall be entitled to contribution from any person who is not guilty of such fraudulent misrepresentation. For purposes of this Section 9(c), each person, if any, who controls the Placement Agent or a Selected Dealer within the meaning of Section 15 of the Act or Section 20(a) of the Exchange Act and each officer, director, stockholder, employee, agent and counsel of the Placement Agent and the Selected Dealers shall have the same rights to contribution as the Placement Agent or the Selected Dealer, and each person, if any, who controls the Company within the meaning of Section 15 of the Act or Section 20(a) of the Exchange Act and each officer, director, employee, agent and counsel of the Company shall have the same rights to contribution as the Company, subject in each case to the provisions of this Section 9(c). Anything in this Section 9(c) to the contrary notwithstanding, no party shall be liable for contribution with respect to the settlement of any claim or action effected without its written consent. This Section 9(c) is intended to supersede any right to contribution under the Act, the Exchange Act or otherwise.

10. Representations and Agreements to Survive Delivery. All representations, warranties, covenants and agreements contained in this Agreement shall be deemed to be representations, warranties, covenants and agreements at the Closing Date and, if applicable, each Additional Closing Date, and such representations, warranties, covenants and agreements, including the indemnity and contribution agreements contained in Section 9, shall remain operative and in full force and effect regardless of any investigation made by or on behalf of the Placement Agent or any indemnified person, or by or on behalf of the Company or any person or entity which is entitled to be indemnified under Section 9(b), and shall survive termination of this Agreement or the issuance, sale and delivery of the Shares. In addition, notwithstanding any election hereunder or

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any termination of this Agreement, and whether or not the terms of this Agreement are otherwise carried out, the provisions of Sections 6(a)(xvii), 7, 9, 10 and 12 shall survive termination of this Agreement and shall not be affected in any way by such election or termination or failure to carry out the terms of this Agreement or any part thereof.

11. Notices. All communications hereunder, except as may be otherwise specifically provided herein, shall be in writing and, if sent to the Placement Agent, shall be mailed, delivered or telexed or telegraphed and confirmed by letter, to its address set forth above, with a copy to Kenneth R. Koch, Esq. At Squadron, Ellenoff, Plesent & Sheinfeld, LLP, 551 Fifth Avenue, New York, New York 10176 or if sent to the Company, shall be mailed, delivered or telexed or telegraphed and confirmed by letter, to Access Pharmaceuticals, Inc., 2600 Stemmons Freeway, Suite 176, Dallas, Texas 75207, with a copy to Jack Concannon, Esq. at Bingham Dana, LLP, 150 Federal Street, Boston, Massachusetts 02110. All notices hereunder shall be effective upon receipt by the party to which it is addressed.

12. Assignment. This Agreement shall not be assigned by any party hereto without the prior written consent of the other parties hereto.

13. Parties. This Agreement shall inure solely to the benefit of, and shall be binding upon, the Placement Agent and the Company and the persons and entities referred to in Section 9 who are entitled to indemnification or contribution and their respective successors, legal representatives and assigns (which shall not include any purchaser, as such, of Shares), and no other person shall have or be construed to have any legal or equitable right,

remedy or claim under or in respect of or by virtue of this Agreement or any provision herein contained.

14. Construction. This Agreement shall be construed in accordance with the laws of the State of New York, without giving effect to conflict of laws.

15. Counterparts. This Agreement may be executed in counterparts, each of which shall constitute an original and all of which, when taken together, shall constitute one agreement.

16. Entire Agreement. This Agreement, including the Exhibits attached hereto, constitutes the entire agreement between the parties hereto and supersedes all previous negotiations, agreements and commitments with respect thereto, and may only be amended by a written document, signed by duly authorized officers or representatives of each of the parties hereto.

17. Option to Terminate Agreement. The Placement Agent shall have the option to terminate this Agreement in the event that the Memorandum is not satisfactory to the Placement Agent in its sole discretion.

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If the foregoing correctly sets forth the understanding between us, please so indicate in the space provided below for that purpose, whereupon this letter shall constitute a binding agreement among us.

Very truly yours,

ACCESS PHARMACEUTICALS, INC.

By: /s/ Kerry P. Gray

Kerry P. Gray
President

Accepted as of the date first above written.
New York, New York

SUNRISE SECURITIES CORP.

By: /s/ Preston Tsao

Preston Tsao
Managing Partner

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ACCESS PHARMACEUTICALS, INC.

REGISTRATION RIGHTS AGREEMENT

for 1999 Private Placement

THIS REGISTRATION RIGHTS AGREEMENT (the "Agreement") is made by Access Pharmaceuticals, Inc., a corporation formed under the laws of the State of Delaware (the "Company"), for the benefit of the investors listed on Schedule I hereto (collectively, the "Investors" and, individually, an "Investor").

RECITALS

A. The Investors desire to purchase from the Company, and the Company desires to issue and sell to the Investors, a minimum of 1,500,000 and a maximum of 4,000,000 shares ("Shares") of common stock, \$.01 par value per share (the "Common Stock"), in a private placement (the "Private Placement"), conducted in accordance with the Securities Act of 1933, as amended, and the rules and regulations thereunder (collectively, the "Securities Act").

B. As further inducement for the Investors to purchase the Shares from the Company, the Company desires to undertake to register under the Securities Act, the resale of the Shares, in accordance with the terms hereof.

AGREEMENTS

The Company and the Investors covenant and agree as follows:

1. Definitions. For the purposes of this Agreement:

(a) The terms "register," "registered" and "registration" refer to a registration effected by preparing and filing a registration statement or statements or similar documents in compliance with the Securities Act, and the declaration or ordering of effectiveness of such registration statement or document by the Securities and Exchange Commission (the "SEC").

(b) The term "Registrable Securities" means (i) the Investors' Shares, (ii) Shares, if any, issued to Sunrise Securities Corp. in satisfaction of the selling commission and expense allowance and (iii) any Shares issued as (or issuable upon the conversion or exercise of any convertible security, warrant, right or other security which is issued as) a dividend or other distribution with respect to, or in exchange for or in replacement of the Shares, including, but not limited to, the shares underlying the Placement Agent's Warrants, and excluding in all cases, however, any Registrable Securities sold by an Investor in a transaction in which its registration rights under this Agreement are not assigned pursuant to Section 9 of this Agreement.

(c) The term "Investor" includes (i) each Investor (as defined above) and (ii) each person who is a permitted transferee or assignee of the Registrable Securities pursuant to Section 9 of this Agreement.

2. Obligations of the Company. In connection with the registration of the resale of Registrable Securities pursuant to this Agreement, the Company shall, as expeditiously as reasonably possible:

(a) Prepare and file with the SEC, within thirty (30) days after the final closing of the Company's Private Placement, a resale

registration statement or registration statements (the "Registration Statement") with respect to all Registrable Securities included therein, and use its best efforts to cause the Registration Statement to become effective as soon as reasonably possible after such filing, and, with respect to any registration that does not involve an underwriting, to keep the Registration Statement effective pursuant to Rule 415 under the Securities Act for a period of at least two years after the final closing of the Company's Private Placement, or such shorter period as prescribed by Rule 144 promulgated under the Securities Act or during which the Registrable Securities are sold, or until there are no more Registrable Securities, which Registration Statement (including any amendments or supplements thereto and prospectuses contained therein, subject to Section 2(f)) shall not contain any 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, in light of the circumstances in which they were made, not misleading.

(b) Prepare and file with the SEC such amendments (including post-effective amendments) and supplements to the Registration Statement and any prospectus used in connection with the Registration Statement as may be necessary to keep the Registration Statement effective (i) for such period as may be required by the Securities Act with respect to an underwritten offering and (ii) for at least two years after the final closing of the Company's Private Placement, or such shorter period as prescribed by Rule 144, or until there are no more Registrable Securities, with respect to a non-underwritten offering, and during such periods to comply with the provisions of the Securities Act with respect to the disposition of all securities covered by the Registration Statement.

(c) Furnish promptly to each Investor whose Registrable Securities are included in the Registration Statement such number of copies of a prospectus, including a preliminary prospectus, and all amendments and supplements thereto, and of such other documents as such Investor may reasonably request in order to facilitate the disposition of Registrable Securities owned by such Investor.

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(d) Use its reasonable efforts to register and qualify the Registrable Securities covered by the Registration Statement under such other securities or Blue Sky laws of such jurisdiction as shall be reasonably requested by the Investors who hold a majority in interest of the Registrable Securities covered by the Registration Statement and, with respect to a non-underwritten offering, prepare and file in those jurisdictions such amendments (including post-effective amendments) and supplements and to take such other actions as may be necessary to maintain such registration and qualification in effect at all times for a period of at least two years after the final closing of the Company's Private Placement, or such shorter period as prescribed by Rule 144 or during which the Registrable Securities are sold, or until there are no more Registrable Securities, and to take all other actions necessary or advisable to enable the disposition of such securities in such jurisdictions; provided, however, that the Company shall not be required in connection therewith or as a condition thereto to (i) qualify to do business, file a general consent to service of process or subject itself to general taxation in any such states or jurisdictions or (ii) provide any undertaking or make any change in its Certificate of Incorporation or bylaws.

(e) If the Registration Statement relates to an underwritten offering, enter into and perform its obligations under an underwriting agreement, in usual and customary form, including, without limitation, customary indemnification and contribution obligations, with the Underwriter's Representative.

(f) Notify the Investors who hold Registrable Securities being sold (or in the event of an underwritten offering, the Underwriter's Representative), at any time when a prospectus relating to

Registrable Securities covered by the Registration Statement is required to be delivered under the Securities Act, of the happening of any event as a result of which the prospectus included in the Registration Statement, as then in effect, includes an untrue statement of a material fact or omits to state a material fact required to be stated therein or necessary to make the statements therein not misleading in light of the circumstances then existing. The Company shall use its best efforts promptly to amend or supplement the Registration Statement to correct any such untrue statement or omission. The Company may delay amending or supplementing the prospectus for a period of up to 60 days if the Company is then engaged in negotiations regarding a material transaction that has not otherwise been publicly disclosed, and the Inventors shall suspend their sale of Registrable Securities until an appropriate supplement or prospectus has been forwarded to them or the proposed transaction is abandoned.

(g) Notify the Investors who hold Registrable Securities being sold (or in the event of an underwritten offering, the Underwriter's Representative) of the issuance by the SEC of any stop order suspending the effectiveness of the Registration Statement or the initiation of any proceedings for that purpose. The Company will make every reasonable effort to prevent the issuance of any stop order and, if any stop order is issued, to obtain the lifting thereof at the earliest possible time.

(h) Permit a single firm of counsel, designated as selling shareholders' counsel by the holders of a majority in interest of the Registrable Securities being sold, to review the Registration Statement and all amendments and supplements thereto a reasonable period of time prior to their filing, and shall not file any document in a form to which such counsel reasonably objects.

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(i) Make generally available to its security holders as soon as practicable, but not later than forty five (45) days after the close of the period covered thereby, an earnings statement (in form complying with the provisions of Rule 158 under the Securities Act) covering a twelve-month period beginning not later than the first day of the Company's fiscal quarter next following the effective date of the Registration Statement.

(j) At the request of the Investors who hold a majority in interest of the Registrable Securities being sold, furnish to the underwriters, if any, on the date that Registrable Securities are delivered to the underwriters for sale in connection with a registration pursuant to this Agreement (i) an opinion, dated such date, of the counsel representing the Company for the purposes of such registration, in form and substance as is customarily given to underwriters in an underwritten public offering, addressed to the underwriters, and (ii) a letter, dated such date, from the independent certified public accountants of the Company, in form and substance as is customarily given by independent certified public accountants to underwriters in an underwritten public offering, addressed to the underwriters.

(k) Make available for inspection by any underwriters participating in the offering and the counsel, accountants or other agents retained by such underwriter, all pertinent financial and other records, corporate documents and properties of the Company, and cause the Company's officers, directors and employees to supply all information reasonably requested by such underwriters in connection with the Registration Statement.

(l) If the Shares are then listed on a national securities exchange, use its best efforts to cause the Registrable Securities to be listed on such exchange if the listing of such Registrable Securities is then permitted under the rules of such exchange, or if the Shares are not then listed on a national securities exchange, use its best efforts to facilitate the quotation of the Shares on NASDAQ, and use its best efforts to cause continued listing of the Shares so long as the Registration Statement is in effect under the Securities Act.

(m) Provide a transfer agent and registrar, which may be a single entity, for the Registrable Securities not later than the effective date of the Registration Statement.

(n) Take all actions reasonably necessary to facilitate the timely preparation and delivery of certificates (not bearing any restrictive legend) representing the Registrable Securities sold pursuant to the Registration Statement and to enable such certificates to be in such denominations and registered in such names as the Investors or any underwriters may reasonably request.

(o) Take all other actions reasonably necessary to expedite and facilitate disposition by the Investors of the Registrable Securities pursuant to the Registration Statement.

3. Obligations of the Investors. In connection with the registration of the Registrable Securities pursuant to this Agreement, the Investors shall have the following obligations:

(a) It shall be a condition precedent to the obligations of the Company to take any action pursuant to this Agreement with respect to each Investor that such Investor shall furnish to the Company in writing such information regarding itself, the Registrable Securities held by it,

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and the intended methods of disposition of such securities as shall be reasonably required to effect the registration of the Registrable Securities and shall execute such documents in connection with such registration as the Company may reasonably request. At least thirty (30) days prior to the first anticipated filing date of the Registration Statement, the Company shall notify each Investor or counsel for each investor, which may be counsel for the Placement Agent, of the information the Company requires from each such Investor (the "Requested Information") if it elects to have any of his Registrable Securities included in the Registration Statement. If within seven (7) business days of the filing date the Company has not received in writing the Requested Information from an Investor (a "Non-Responsive Investor"), then the Company may file the Registration Statement without including Registrable Securities of such Non-Responsive Investor.

(b) Each Investor by his acceptance of the Registrable Securities agrees to cooperate with the Company in connection with the preparation and filing of any Registration Statement hereunder, unless such Investor has notified the Company in writing of its election to exclude all of its Registrable Securities from the Registration Statement.

(c) In the event Investors holding a majority in interest of the Registrable Securities select underwriters for the offering, each Investor agrees to enter into and perform its obligations under an underwriting agreement, in usual and customary form, including, without limitation, customary indemnification and contribution obligations and market stand-off obligations, with the managing underwriter of such offering and to take such other actions as are reasonably required in order to expedite or facilitate the disposition of the Registrable Securities, unless such Investor has notified the Company in writing of its election to exclude all of his Registrable Securities from the Registration Statement.

(d) Each Investor agrees that, upon receipt of any notice from the Company of the happening of any event of the kind described in Section 2(f), such Investor will immediately discontinue disposition of Registrable Securities pursuant to the Registration Statement covering such Registrable Securities until such Investor's receipt of the copies of the supplemented or amended prospectus contemplated by Section 2(f) and, if so desired by the Company, such Investor shall deliver to the Company (at the expense of the Company) or destroy (and deliver to the Company a certificate of such destruction) all copies, other than the permanent file copies then in such Investor's possession, of the prospectus covering such

Registrable Securities current at the time of receipt of such notice.

(e) No Investor may participate in any underwritten registration hereunder unless such Investor (i) agrees to sell such Investor's Registrable Securities on the basis provided in any underwriting arrangements approved by the Investors entitled hereunder to approve such arrangements, (ii) completes and executes all questionnaires, powers of attorney, indemnities, underwriting agreements and other documents reasonably required under the terms of such underwriting arrangements, and (iii) agrees to pay such Investor's pro rata portion of all underwriting discounts and commissions.

4. Expenses of Registration. All expenses, including, without limitation, all registration, listing, filing and qualification fees, printers and accounting fees, the fees and disbursements of counsel for the Company and the reasonable fees and disbursements of one firm of counsel for the Investors shall be borne by the Company.

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5. Indemnification. In the event any Registrable Securities are included in a Registration Statement under this Agreement:

(a) To the extent permitted by law, the Company will indemnify and hold harmless each Investor, the directors, if any, of such Investor, the officers, if any, of such Investor who sign the Registration Statement, each person, if any, who controls such Investor, any underwriter (as defined in the Securities Act) for the Investors and each person, if any, who controls any such underwriter within the meaning of the Securities Act or the Securities Exchange Act of 1934, as amended (the "Exchange Act"), against any losses, claims, damages, expenses or liabilities, joint or several) to which any of them may become subject under the Securities Act, the Exchange Act, other federal or state law or otherwise, insofar as such losses, claims, damages, expenses or liabilities (or actions or proceedings, whether commenced or threatened, in respect thereof,) arise out of or are based upon any of the following statements, omissions or violations (collectively, a "Violation"): (i) any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement, including any preliminary prospectus or final prospectus contained therein or any amendments or supplements thereto, (ii) the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances in which they were made, not misleading or (iii) any violation or alleged violation by the Company of the Securities Act, the Exchange Act, any state securities law or any rule or regulation promulgated under the Securities Act, the Exchange Act or any state securities law. Subject to the restrictions set forth in Section 5(c) with respect to the number of legal counsel, the Company will reimburse the Investors and each such underwriter or controlling person, promptly as such expenses are incurred, for any legal or other expenses reasonably incurred by them in connection with investigating or defending any such loss, claim, damage, liability, action or proceeding. Notwithstanding anything contained in this Agreement to the contrary, the indemnity agreement contained above in this Section 5(a): (I) shall not apply to amounts paid in settlement of any such loss, claim, damage, liability or action if such settlement is effected without the prior written consent of the Company, which consent shall not be unreasonably withheld, (II) shall not apply to any such case for any such loss, claim, damage, liability or action arising out of or based upon a Violation which occurs in reliance upon and in conformity with written information furnished expressly for use in connection with such registration by the Investors or any such underwriter or controlling person, as the case may be, (III) with respect to any preliminary prospectus, shall not inure to the benefit of any person from whom the person asserting any such claim purchased the Registrable Securities that are the subject thereof (or to the benefit of any person controlling such person) if the untrue statement or omission of material fact contained the preliminary prospectus was corrected in the prospectus, as then amended or supplemented, and (IV) shall not

apply with respect to any Violation contained in a prospectus that the Company has notified the Investors contains a Violation pursuant to Section 2(f) above. Such indemnity shall remain in full force and effect regardless of any investigation made by or on behalf of the Investors or any such underwriter or controlling person and shall survive the transfer of the Registrable Securities by an Investor pursuant to Section 7.

(b) To the extent permitted by law, each Investor, severally and not jointly, will indemnify and hold harmless, to the same extent and in the same manner set forth in Section 5(a), the Company, each of its directors, each of its officers who have signed the Registration Statement, each person, if any, who controls the Company within the meaning of the Securities Act or the Exchange Act, any underwriter and any other stockholder selling securities pursuant to

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the Registration Statement or any of its directors or officers or any person who controls such holder or underwriter, against any losses, claims, damages or liabilities, joint or several) to which any of them may become subject, under the Securities Act, the Exchange Act, other federal or state law or otherwise, insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon any Violation, in each case to the extent (and only to the extent) that such Violation occurs in reliance upon and in conformity with written information furnished by such Investor expressly for use in connection with such registration; and such Investor will reimburse any legal or other expenses reasonably incurred by any of them in connection with investigating or defending any such loss, claim, damage, liability or action; provided, however, that the Investor shall be liable under this Section 5(b) for only that amount of losses, claims, damages and liabilities as does not exceed the proceeds to such Investor as a result of the sale of Registrable Securities pursuant to such registration. Such indemnity shall remain in full force and effect regardless of any investigation made by or on behalf of such indemnified party and shall survive the transfer of the Registrable Securities by the Investors pursuant to Section 7. The Company shall be entitled to receive indemnities from underwriters, selling brokers, dealer managers and similar securities industry professionals participating in the distribution, to the same extent as provided above, with respect to information about such persons so furnished in writing by such persons expressly for inclusion in the Registration Statement.

(c) Promptly after receipt by an indemnified party under this Section 5 of notice of the commencement of any action (including any governmental action), such indemnified party will, if a claim in respect thereof is to be made against any indemnifying party under this Section 5, deliver to the indemnifying party a written notice of the commencement thereof, and the indemnifying party shall have the right to participate in, and, to the extent the indemnifying party so desires, jointly with any other indemnifying party similarly noticed, to assume control of the defense thereof with counsel satisfactory to the indemnifying party; provided, however, that an indemnified party shall have the right to retain its own counsel, with the fees and expenses to be paid by the indemnifying party, if, in the reasonable opinion of counsel for the indemnifying party, representation of such indemnified party by the counsel retained by the indemnifying party would be inappropriate due to actual or potential differing interests between such indemnified party and any other party represented by such counsel in such proceeding. The Company shall pay for only one legal counsel for the Investors. Such legal counsel shall be selected by the Investors holding a majority in interest of the Registrable Securities. The failure to deliver written notice to the indemnifying party within a reasonable time of the commencement of any such action shall relieve such indemnifying party of any liability to the indemnified party under this Section 5 only to the extent prejudicial to its ability to defend such action, but the omission so to deliver written notice to the indemnifying party will not relieve it of any liability that it may have to any indemnified

party otherwise than under section 5. The indemnification required by this Section 5 shall be made by periodic payments of the amount thereof during the course of the investigation or defense, promptly as such expense, loss, damage or liability is incurred and is due and payable.

(d) To the extent any indemnification by an indemnifying party is prohibited or limited by law, the indemnifying party agrees to make the maximum contribution with respect to any amounts for which it would otherwise be liable under this Section 5 to the extent permitted by law; provided, however, that (i) no contribution shall be made under circumstances where the maker would not have been liable for indemnification under the fault standards set forth in this Section 5, (ii) no seller of Registrable Securities guilty of fraudulent misrepresentation (within the

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meaning of Section 11 of the Securities Act) shall be entitled to contribution from any seller of Registrable Securities who was not guilty of such fraudulent misrepresentation, and (iii) contribution by any seller of Registrable Securities shall be limited in amount to the amount of proceeds received by such seller from the sale of such Registrable Securities.

6. Reports Under Securities Exchange Act of 1934. With a view to making available to the Investors the benefits of Rule 144 and any other rule or regulation of the SEC that may at any time permit the Investors to sell securities of the Company to the public without registration, the Company agrees to:

(a) Make and keep public information available, as those terms are understood and defined in Rule 144, at all times after ninety (90) days after the effective date of the first registration statement filed by the Company for the offering of its securities to the general public.

(b) File with the SEC in a timely manner all reports and other documents required of the Company under the Securities Act and the Exchange Act.

(c) Furnish to each Investor, so long as such Investor owns any Registrable Securities, forthwith upon request (i) a written statement by the Company that it has complied with the reporting requirements of Rule 144 (at any time after 90 days after the effective date of the first registration statement filed by the Company), the Securities Act and the Exchange Act (at any time after it has become subject to such reporting requirements), (ii) a copy of the most recent annual or quarterly report of the Company and such other reports and documents so filed by the Company, and (iii) such other information as may be reasonably requested in availing the Investors of any rule or regulation of the SEC which permits the selling of any such securities without registration.

7. Assignments of Registration Rights. The rights to have the Company register securities pursuant to this Agreement may be assigned by the Investors to transferees or assignees of such securities provided that (i) the Company is, within a reasonable time after such transfer, furnished with written notice of the name and address of such transferee or assignee and the securities with respect to which such registration rights are being assigned, (ii) such assignment is in accordance with and permitted by all other agreements between the Company and the transferor or assignor, and (iii) such assignments shall be effective only if immediately following such transfer the further disposition of such securities by the transferee or assignee is restricted under the Securities Act. The term "Investors" as used in this Agreement shall include permitted assignees.

8. Miscellaneous.

(a) Notices required or permitted to be given hereunder shall be in writing and shall be deemed to be sufficiently given when personally delivered or sent by registered mail, return receipt

requested, addressed (i) if to the Company, Access Pharmaceuticals, Inc., 2600 Stemmons Freeway, Suite 176, Dallas, Texas 75207, Attention: President, with a copy to Jack Concannon, Esq. of Bingham Dana LLP, 151 Federal Street, Boston, Massachusetts 02110, and (ii) if to an Investor, at the address set forth under his or her name in the subscription agreement executed by such Investor in connection with its investment, or at such other address as each such party furnishes by notice given in accordance with this Section 8(a).

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(b) Failure of any party to exercise any right or remedy under this Agreement or otherwise, or delay by a party in exercising such right or remedy, will not operate as a waiver thereof. No waiver will be effective unless and until it is in writing and signed by the party giving the waiver.

(c) This Agreement shall be enforced, governed and construed in all respects in accordance with the laws of the State of New York, as such laws are applied by New York courts to agreements entered into and to be performed in New York by and between residents of New York. This Agreement shall be binding upon each Investor and its heirs, estate, legal representatives, successors and permitted assignees and shall inure to the benefit of the Company and its successors and assigns. In the event that any provision of this Agreement is invalid or unenforceable under any applicable statute or rule of law, then such provision shall be deemed inoperative to the extent that it may conflict therewith and shall be deemed modified to conform with such statute or rule of law. Any provision hereof which may prove invalid or unenforceable under any law shall not affect the validity or enforceability of any other provision hereof.

(d) This Agreement constitutes the entire agreement between the parties hereto with respect to the subject matter hereof. Any provision of this Agreement may be amended and the observance thereof may be waived (either generally or in a particular instance and either retroactively or prospectively), only by a writing executed by the Company and Investors who hold a majority in interest of the Registrable Securities. Any amendment or waiver effected in accordance with this Section 8(d) shall be binding upon such Investor and the Company.

(e) Any such person is deemed to be a holder of Registrable Securities whenever such person or entity owns of record such Registrable Securities. If the Company receives conflicting instructions, notices or elections from two or more persons or entities with respect to the same Registrable Securities, then the Company shall be entitled to act upon the basis of the instructions, notice or election received from the registered owner of such Registrable Securities.

Dated this 20 day of July, 1999.

ACCESS PHARMACEUTICALS, INC.

By: /s/ Kerry P. Gray

Kerry P. Gray
President and Chief Executive Officer

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THIS SCHEDULE CONTAINS SUMMARY FINANCIAL INFORMATION FROM THE CONSOLIDATED BALANCE SHEET AND THE CONSOLIDATED STATEMENT OF INCOME FILED AS PART OF THE QUARTERLY REPORT ON FORM 10-Q AND IS QUALIFIED IN ITS ENTIRETY BY REFERENCE TO SUCH QUARTERLY REPORT ON FORM 10-Q.

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