

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

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported):
July 20, 1999

ACCESS PHARMACEUTICALS, INC.

(Exact name of registrant as specified in its charter)

DELAWARE

(State of other jurisdiction of incorporation)

0-9314

83-0221517

(Commission File Number)

(IRS Employer Identification No.)

2600 Stemmons Freeway, Suite 176, Dallas, Texas 75207

(Address of principal executive offices)

(Zip Code)

Registrant's telephone number, including area code:

(214) 905-5100

N/A

(Former Name or Former Address, if Changed Since Last Report)

Item 2. Acquisition Or Disposition Assets.

On February 23, 1999, Access Pharmaceuticals, Inc., a Delaware corporation (the "Registrant"), 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 Registrant (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 Registrant and each outstanding share of Virologix' common stock were converted into 0.231047 shares of the Registrant's common stock representing 1,000,000 shares of common stock of the Registrant. The transaction will be accounted for as a purchase.

Item 7. Financial Statements, Pro Forma Financial Information And Exhibits.

(a) Financial Statement of Business Acquired.

The financial statements of the business acquired are not being filed with this Report. Such financial statements, if required, will be filed within 60 days after the date this Report is filed with the Securities and Exchange Commission (the "Commission").

(b) Pro Forma Financial Information. The pro forma financial information is not being filed with this Report. Such financial statements, if required, will be filed within 60 days after the date this Report is filed with the Commission.

(c) Exhibits.

Exhibit No. Description

Exhibit 2.2 Agreement of Merger and Plan of Reorganization by and among Access Pharmaceuticals, Inc., Access Holdings, Inc. and Virologix Corporation, dated as of February 23, 1999, as amended, including exhibits thereto.

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.

By: /s/ Kerry P. Gray

Title: President and CEO

Dated: August 3, 1999

AGREEMENT OF MERGER AND PLAN OF REORGANIZATION

AGREEMENT (this "Agreement") dated as of February 23, 1999, among ACCESS PHARMACEUTICALS, INC., a Delaware corporation ("Parent"), ACCESS HOLDINGS, INC., a Delaware corporation and direct wholly-owned subsidiary of the Parent ("Acquiror"), and VIROLOGIX CORPORATION, a Delaware corporation ("Target") and such stockholders of the Target as have executed this Agreement on the signature pages hereto (the "Founding Stockholders").

WHEREAS, the Boards of Directors of each of Parent, Acquiror, and Target believe that the merger of Acquiror into Target (the "Merger") would be advantageous and beneficial to their respective corporations and stockholders;

WHEREAS, this Agreement is intended to be and is adopted as a plan of reorganization within the meaning of paragraph 368(a) of the Internal Revenue Code of 1986, as amended (the "Code");

NOW, THEREFORE, in consideration of the mutual covenants and agreements hereinafter set forth and of other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties hereto agree that Acquiror shall be merged with and into Target upon the terms and subject to the conditions set forth in this Agreement.

1. The Merger.

1.1. Closing and Effective Date of Merger. Subject to the closing conditions in Paragraphs 7 and 8 hereof, at a closing to be held at the offices of Parent on such date and at such time prior to the termination date referred to in Paragraph 14 as may be agreed to by the parties or, if not agreed, then on such termination date (the "Closing Date"), Target and Acquiror shall cause to be definitively executed and delivered to one another the Certificate of Merger substantially in the form attached hereto as Exhibit A (the "Certificate of Merger") and shall cause such document to be filed with the Secretary of State of Delaware, in order to cause the Merger contemplated by this Agreement to become effective under the laws of the State of Delaware. The Merger shall become effective on the date and at the time of the filing of the Certificate of Merger with the Secretary of State of Delaware (the "Effective Date"). References herein to the "Surviving Corporation" shall mean Target on and after the Effective Date.

1.2. Terms and Conditions of Merger. Upon the Effective Date, pursuant to the Certificate of Merger and this Agreement,

(a) Acquiror shall be merged with and into Target and the separate existence of Acquiror shall cease;

(b) Target shall continue as the Surviving Corporation, organized under the laws of the state of Delaware, the authorized capital stock of which shall be one thousand (1,000) shares of common stock, par value \$.01 per share;

(c) the Certificate of Incorporation of the Surviving Corporation shall be the Certificate of Incorporation of Acquiror in effect immediately prior to the Effective Date;

(d) each share of Target's common stock (assuming conversion of all shares of Target's preferred stock into shares of Target's common stock), \$0.001 par value per share ("Target Stock"), issued and outstanding immediately prior to the Effective Date (other than any shares held by dissenting stockholders referred to in Paragraph 2.2(d) below) shall by virtue of the Merger become and be converted into .235398 shares (subject to the payment of cash adjustments in lieu of the issuance of fractional shares as provided in Paragraph 2.2(h) herein, the "Conversion Number") of the common stock, par value \$0.01 per share, of Parent ("Parent Stock"), subject to adjustment as provided in Paragraph 2.1 below. As of the Effective Date, each share of Target Stock shall be cancelled and shall cease to exist and no payment shall be made with respect thereto;

(e) the capital stock of Acquiror shall remain outstanding as the capital stock of the Surviving Corporation, all of which shall be owned by Parent as of the Effective Date;

(f) the Surviving Corporation shall have as its By-Laws the By-Laws of Acquiror in effect immediately prior to the Effective

Date;

(g) all of the estate, properties, rights, privileges, powers and franchises of Target and Acquiror and all of their property, real, personal and mixed, and all debts and obligations of any kind of Target or Acquiror shall vest in the Surviving Corporation, without any further act or deed being required therefor; and

(h) the directors and officers of the Surviving Corporation as of the Effective Date shall be those specified in the Certificate of Merger.

2. Antidilution; Payments, Etc.

2.1. Antidilution. If, subsequent to the date of this Agreement but prior to the Effective Date, the shares of Parent Stock or Target Stock issued and outstanding as of the date of this Agreement shall be increased, decreased, or changed into or exchanged for a different number or kind of shares or securities through reorganization, recapitalization, reclassification, stock dividend, stock split, reverse stock split, or other similar changes in Parent's or Target's capitalization, then an appropriate and proportionate adjustment shall be made to the Conversion Number so that each holder of Target Stock immediately prior to the Effective Date shall receive pursuant to Section 1.2(d) hereof: (a) in the event of any such change with respect to Target Stock, that number of shares of Parent Stock (except for fractional shares) that such holder would have received if such change had never occurred, and (b) in the event of any such change with respect to Parent Stock, that number of shares of Parent Stock (except for fractional shares) that such holder would have received as a result of such change if such change had occurred immediately after the Effective Date (and such holders were treated for purposes of such change as holders of Parent Stock).

2.2. Procedures; Fractional Shares, Etc.

(a) Certificates that represent shares of Target Stock that are outstanding immediately prior to the Effective Date (each a "Certificate") and are converted into shares of Parent Stock pursuant to Section 1.2(d) shall, after the Effective Date, be deemed to represent the

shares of the Parent Stock into which such shares have been converted and shall be exchangeable by the holders thereof in the manner provided in paragraphs (b) and (c) below for new certificates representing the shares of Parent Stock into which such shares of Target Stock have been converted.

(b) As promptly as practicable after the Effective Date, Parent or its transfer agent for Parent Stock shall send to each holder of record of shares of Target Stock (other than any such shares held directly or indirectly by Parent or Target) outstanding on the Effective Date (the "Target Stockholders"), transmittal materials for use in exchanging the Certificates for such shares for certificates for the shares of Parent Stock into which such shares of Target Stock have been converted pursuant to Section 1.2(d). Upon surrender of a Certificate to Parent (or the transfer agent for Parent Stock), together with a duly executed letter of transmittal and any other required documents, the holder of such Certificate shall be entitled to receive, in exchange therefore, a certificate for the number of shares of Parent Stock to which such holder is entitled, and such Certificate shall forthwith be canceled.

(c) No dividend or other distribution payable after the Effective Date with respect to Parent Stock shall be paid to the holder of any unsurrendered Certificate until the holder thereof surrenders such Certificate, at which time such holder shall receive all dividends and distributions, without interest thereon, previously payable but withheld from such holder pursuant hereto. After the Effective Date, there shall be no transfers on the stock transfer books of Target of shares of Target Stock. If, after the Effective Date, Certificates are presented to the Parent or its transfer agent for Parent Stock for transfer, they shall be canceled and exchanged for the shares of Parent Stock deliverable in respect thereof as determined in accordance with the provisions and procedures set forth in Section 1.2(d) and this Section 2.2 (or returned to the presenting Person, if the shares of Target Stock formerly represented by such Certificate are held of record by a former Target Stockholder who has duly exercised the appraisal rights described in Section 2.2(d) below).

(d) After the Effective Date, holders of Target Stock shall cease to be, and shall have no rights as, stockholders of Target, other than (i) to receive shares of Parent Stock into which such shares have been converted pursuant to the provisions hereof, and (ii) any rights afforded to any such holder who has demanded appraisal rights in compliance with all provisions of the Delaware General Corporation law concerning the right of such holder to dissent from the Merger and demand appraisal of such shares of

Target Stock.

(e) Neither Parent nor Target nor any other Person shall be liable to any former holder of shares of Target Stock for any shares or any dividends or distributions with respect thereto properly delivered to a public official pursuant to applicable abandoned property, escheat or similar laws.

(f) If any Certificate shall have been lost, stolen, or destroyed, Parent or its transfer agent for Parent Stock will, upon receipt (i) of appropriate evidence as to such loss, theft, or destruction and to the ownership of such Certificate by the person claiming such Certificate to be lost, stolen, or destroyed, and (ii) of appropriate and customary indemnification, issue in exchange for such lost, stolen, or destroyed Certificate the shares of Parent Stock deliverable in respect thereof pursuant to Section 1.2(d) and this Section 2.2.

(g) If any certificate representing shares of Parent Stock is to be issued in a name other than that in which the Certificate surrendered in exchange therefore is registered, it

shall be a condition to the issuance thereof that the Certificate so surrendered shall be properly indorsed (or accompanied by an appropriate instrument of transfer) and otherwise in proper form for transfer (including without limitation that the signature of the transferor shall be properly guaranteed by a commercial bank, trust company or member firm of the New York Stock Exchange), and that the Person requesting such exchange shall pay to the Parent in advance any transfer or other taxes required by reason of the issuance of a certificate representing shares of Parent Stock in any name other than that of the registered holder of the Certificate surrendered, or required for any other reason, or shall establish to the satisfaction of Parent that such tax has been paid or is not payable.

(h) In lieu of the issuance of fractional shares of Parent Stock pursuant to Section 1.2(d), cash adjustments, without interest, will be paid to the holders of Target Stock in respect of any fractional share of Parent Stock that would otherwise be issuable and the amount of such cash adjustment shall be equal to an amount equal to an amount in cash determined by multiplying such holder's fractional interest by \$3.00. For purposes of determining whether, and in what amounts, a particular holder of Target Stock would be entitled to receive cash adjustments under this Section 2.2(h), shares of record held by such holder and represented by two or more certificates shall be aggregated.

(i) Exercise of Options, Warrants and Conversion of Notes. Except as set forth on Schedule 7.9 hereto, on or before the Effective Date, all outstanding stock options, warrants and other rights to purchase or acquire capital stock of the Target shall be exercised or exchanged as provided in Paragraph 7.9 hereof and all outstanding securities exchangeable for or convertible into capital stock of the Target shall be exchanged and/or converted into capital stock of the Target. For all purposes of this Agreement, the shares of the capital stock of the Target issued upon exercise or in exchange for such outstanding stock options, warrants and other rights or upon conversion of any other securities exchangeable for or convertible into the capital stock of Target for purposes of this Agreement and the recipients thereof shall be deemed to be stockholders of the Target.

3. Representations and Warranties of Target. Target and the Founding Stockholders hereby represent and warrant to Parent and Acquiror as follows. For purposes of this Agreement, the term "Knowledge" in relation to Target means the knowledge of Joshua D. Schein or Judson A. Cooper.

3.1. Incorporation; Authority. Target is a corporation duly organized, validly existing and in good standing under the laws of the State of Delaware and has all requisite corporate power and authority to own or lease and operate its properties and to carry on its business as now conducted in all material respects. Target has supplied to Parent complete and correct copies of its Certificate of Incorporation and By-Laws and all amendments thereto.

3.2. Corporate Power, Binding Effect. Subject to the Target Stockholders' approval, Target has all requisite corporate power and authority to enter into this Agreement and the Certificate of Merger, and to perform all of its agreements and obligations under this Agreement and the Certificate of Merger in accordance with their respective terms. This Agreement has been duly authorized by Target's Board of Directors, has been duly executed and delivered by Target and constitutes the legal, valid and binding obligation of Target, enforceable against Target in accordance with its terms, subject only, in respect of the consummation of the Merger, to requisite

approval by the Target Stockholders, and except that (i) such enforcement may

be subject to applicable bankruptcy, insolvency, reorganization, moratorium or other similar laws affecting creditors' rights generally and (ii) the remedy of specific performance and injunctive and other forms of equitable relief may be subject to equitable defenses and to the discretion of the court before which a proceeding therefor may be brought (collectively, the "Enforcement Exceptions"). Upon execution and delivery by Target of the Certificate of Merger on the Closing Date, the Certificate of Merger will have been duly authorized, executed and delivered by, and constitute the legal, valid and binding obligation of, Target subject to the Enforcement Exceptions. Neither the execution, delivery or performance by Target of this Agreement nor of the Certificate of Merger in accordance with their respective terms will result in any violation of or default or creation of any lien under, or the acceleration or vesting or modification of any right or obligation under, or in any conflict with, Target's Certificate of Incorporation or by-laws or of any agreement, instrument, judgment, decree, order, statute, rule or regulation binding on or applicable to Target, except where any of the foregoing would not have a material adverse effect on the business, assets or financial condition of Target.

3.3. Subsidiaries. Target does not have any subsidiaries and does not own or hold of record and/or beneficially any shares of any class in the capital stock of any corporation. Target does not own any legal and/or beneficial interests in any partnerships, business trusts or joint ventures or in any other unincorporated business enterprise.

3.4. Qualification. Target is duly qualified and in good standing as a foreign corporation in each jurisdiction in which the character of the properties owned or leased or the nature of the activities conducted by it makes such qualification necessary.

3.5. Capitalization. The authorized capital of Target consists of (i) 25,000,000 shares of common stock, \$.0001 par value per share, 3,659,288 shares of which are issued and outstanding on the date hereof, (ii) 120 shares of Series A Preferred Stock, \$.0001 par value per share, of which no shares are issued or outstanding on the date hereof, and (iii) 1,350,000 shares of Series B Preferred Stock, \$.0001 par value per share, of which 294,418 shares are issued and outstanding on the date hereof (such Series B Preferred Stock will convert into 588,836 shares of Target's common stock upon the consummation of the Merger). All such outstanding shares of Target Stock are owned of record by the Target's stockholders as set forth on Schedule 3.5 hereto and are validly issued, fully paid and non-assessable. Except as set forth in Schedule 3.5, Target is neither a party to nor is bound by any outstanding subscriptions, options, warrants, calls, commitments or agreements of any character calling for Target to issue, deliver or sell, or cause to be issued, delivered or sold any shares of Target Stock or any other equity security of Target or any securities convertible into, exchangeable for or representing the right to subscribe for, purchase or otherwise receive any shares of Target Stock or any other equity security of Target or obligating Target to grant, extend or enter into any such subscriptions, options, warrants, calls, commitments or agreements. As of the date hereof there are no outstanding contractual obligations of the Target to repurchase, redeem or otherwise acquire any shares of capital stock of the Target.

3.6. Lawful Issuance. All of the outstanding shares of Target Stock and Target Preferred Stock were issued pursuant to exemptions from registration under the Securities Act of 1933, as amended (the "Securities Act"), and applicable state and other securities laws, and all rules and regulations thereunder. There exists no valid right to rescind any purchase thereof from or issuance thereof by Target. No class of securities of Target is required to be registered under any provision of the Securities Exchange Act of 1934, as amended (the "Exchange Act").

3.7. Financial Statements. Attached as Schedule 3.7 hereto, are copies of (i) the audited balance sheet of Target as of December 31, 1996, (the "Audited Balance Sheet"), and the related audited statements of income and stockholders' equity and changes in financial position of Target for the fiscal years ended December 31, 1995 and 1996 accompanied by a report and opinion thereon of Price Waterhouse (currently known as PricewaterhouseCoopers LLP) and (ii) the unaudited balance sheet of Target for the quarter ended September 30, 1998, and related unaudited statements of income and stockholders equity for such quarter. Additionally, Target has provided Parent with unaudited quarterly balance sheets and related statements of income for the year ended December 31, 1997 and all quarters after December 31, 1997, and up to and including the date of execution and delivery of this Agreement and will deliver any additional quarterly reports thereafter

up to and including the Closing Date. The Audited Balance Sheet and each other such balance sheet fairly presents the financial condition of Target in all material respects as of its date; and each of such statements of income and stockholders' equity and changes in financial position and statements of operations fairly presents the results of operations, stockholders' equity and changes in financial position of Target for the period covered thereby.

3.8. Absence of Certain Changes. Except as set forth on Schedule 3.8, since the date of the Audited Balance Sheet, there has not been: (i) any change in the business and Business Plan of Target or in its relationships with suppliers, licensees, scientists, researchers, licensors or the like other than changes which were both in the ordinary course of business and have not had a material adverse effect on the business, assets or financial condition of Target; (ii) any acquisition or disposition by Target of any material amount of assets or properties other than in the ordinary course of business; (iii) any damage, destruction or loss, whether or not covered by insurance, materially and adversely affecting, either in any case or in the aggregate, the business of Target; (iv) any declaration, setting aside or payment of any dividend or any other distributions in respect of any class of the capital stock of Target; (v) any issuance of any shares of any class of the capital stock of Target or any direct or indirect redemption, purchase or other acquisition of any shares of any class of the capital stock of Target; (vi) any increase in the compensation, pension or other benefits payable or to become payable by Target to any of its officers or employees, or any bonus payments or arrangements made to or with any of them; (vii) any entry by Target into any transaction other than in the ordinary course of business; (viii) any incurrence by Target of any material obligations or liabilities, whether absolute, accrued, contingent or otherwise (including, without limitation, liabilities as guarantor or otherwise with respect to obligations of others), other than obligations and liabilities incurred in the ordinary course of business; (ix) any mortgage, pledge, lien, lease, security interest or other charge or encumbrance on any of the assets, tangible or intangible, of Target, other than those arising by operation of law which do not materially impair the operation of Target's business; (x) any change in accounting principles, practices or methods used by Target; or (xi) any discharge or satisfaction by Target of any lien or encumbrance or payment by Target of any obligation or liability (fixed or contingent) other than (A) current liabilities included in the Audited Balance Sheet and (B) current liabilities incurred since the date of the Audited Balance Sheet in the ordinary course of business.

3.9. Title to Property, Leases, etc. Except as set forth in Schedule 3.9(a) hereto, Target has good and marketable title to all of its tangible properties and assets, including, without limitation, all those reflected in the Audited Balance Sheet (except for properties or assets sold or otherwise disposed of in the ordinary course of business since the date of the Audited Balance Sheet) and in the Business Plan, all free and clear of all liens, pledges, charges, security interests, mortgages, encumbrances or title retention agreements of any kind or nature.

Schedule 3.9(b) hereto sets forth a complete and correct list of all capital assets and real properties of Target having a book or fair market value in excess of \$10,000. Schedule 3.9(c) hereto sets forth a complete and correct description of all leases of real property under which Target is lessor or lessee and all other leases having a remaining term of more than twelve (12) months or an aggregate remaining rental obligation of more than \$10,000 to which Target is a party, whether as lessor or lessee. Complete and correct copies of all such leases have been delivered to Parent. Each such lease is valid and subsisting and no event or condition exists which constitutes, or after notice or lapse of time or both would constitute, a default thereunder.

3.10. Indebtedness. Except for Indebtedness (as defined in Paragraph 16) reflected or reserved against in the Audited Balance Sheet and Indebtedness incurred in the ordinary course of business after the date of the Audited Balance Sheet, Target has no material Indebtedness outstanding at the date hereof. Except as set forth on Schedule 3.10, Target is not in default with respect to any outstanding Indebtedness or any instrument relating thereto and no such Indebtedness or any instrument or agreement relating thereto purports to limit the issuance of any securities by Target or the operation of the business of Target. Complete and correct copies of all instruments (including all amendments, supplements, waivers and consents) relating to any Indebtedness of Target have been made available to Parent.

3.11. Absence of Undisclosed Liabilities. Except to the extent reflected or reserved against in the Audited Balance Sheet or incurred in the ordinary course of business after the date of the Audited Balance Sheet or

described in any Schedule hereto, Target has no liabilities or obligations of any nature, whether accrued, absolute, contingent or otherwise (including, without limitation, liabilities as guarantor or otherwise with respect to obligations of others) and whether due or to become due, including, without limitation, any liabilities for taxes due or to become due, which would be required by generally accepted accounting principles to be reflected on a balance sheet of Target.

3.12. Taxes and Tax Returns.

(a) All Taxes of any nature whatsoever due and payable by Target prior to the execution hereof and all Tax Returns required to be filed prior to such date have been properly computed in all respects, duly and timely filed (taking into consideration extensions of time to file) and fully paid and discharged. There are no outstanding agreements or waivers extending the statutory period of limitations applicable to any Tax or Tax Return for any period. Target has paid all Taxes which have become due pursuant to Tax Returns and has paid all installments of estimated Taxes due. All Taxes and other assessments and levies which it is required by law to withhold or to collect have been duly withheld and collected, and have been paid over to the proper governmental authorities to the extent due and payable. All Taxes not yet due and payable have been properly accrued on the financial statements of Target. Subsequent to the date hereof and prior to the Closing Date hereunder, all Tax Returns shall be timely and accurately filed, and any Tax payable as shown thereby shall be paid, as required by applicable law. Target has not requested nor been granted an extension of the time for filing any Tax Return to a date later than the Closing Date. There are no determined material tax deficiencies or proposed tax assessments (or to the best of its knowledge and belief, the prospects for the same) against it. Target has not incurred any liability for penalties, assessments or interest under any federal, state, local or foreign tax laws. Target has withheld and paid all Taxes required to have been withheld and paid by it in

connection with amounts paid or owing to any employee, creditor, independent contractor or other third party.

(b) There are no liens for Taxes (other than current Taxes not yet due and payable) on Target's assets. There is no audit, action, suit, or taxing authority proceeding now in progress, pending or threatened against Target or with respect to any Tax of Target, and no claim has ever been made by a taxing authority in a jurisdiction where Target does not pay Tax or file Tax Returns that Target is or may be subject to Taxes assessed by that jurisdiction.

(c) Target has not been a member of any affiliated group (as defined in Section 1504 of the Code) or filed or been included in a combined, consolidated, aggregate, or unitary income Tax Return. Target has never been and is not now a party to or bound by any Tax indemnification, Tax allocation, or Tax sharing agreement or other contractual obligation pursuant to which it is or may at any time in the future be obligated to indemnify any other person or entity with respect to Taxes.

(d) Target is not a party to any agreement, contract, arrangement, or plan that has resulted, or could result by reason of the transactions contemplated hereby, separately or in the aggregate, in the payment of any "excess parachute payments" within the meaning of Section 280G of the Code.

(e) Target has provided Parent with true and complete copies of all Tax Returns filed with respect to it for taxable periods ending after December 31, 1990, and all examination reports and statements of deficiencies assessed against or agreed to be paid by it with respect to such taxable periods.

3.13. Litigation, etc. Except as set forth on Schedule 3.13 hereto, no action, suit, proceeding or investigation (whether conducted by any judicial or regulatory body or other person) is pending or, to the Knowledge of Target, threatened against Target (nor is there any basis therefor to the Knowledge of Target) which questions the validity of this Agreement or any action taken or to be taken pursuant hereto or which might reasonably be expected, either in any case or in the aggregate, to materially adversely affect the business, assets, or financial condition of Target or materially impair the right or the ability of Target to carry on its business substantially as now conducted.

3.14. Safety, Zoning and Environmental Matters.

Neither the offices or properties in or on which Target carries on its business nor the activities carried on therein are in violation of any zoning, health or safety law or regulation, including, without limitation, the Occupational Safety

and Health Act of 1970, as amended, except where a violation would not have a material adverse effect on the business, assets or financial condition of the Target. To Target's Knowledge:

(a) Target is not in violation of any judgment, decree, order, law, license, rule or regulation purporting to regulate environmental matters, including without limitation, those arising under the Resource Conservation and Recovery Act ("RCRA"), the Comprehensive Environmental Response, Compensation and Liability Act of 1980 as amended ("CERCLA"), the Superfund Amendments and Reauthorization Act of 1986 ("SARA"), the Federal Clean Water Act, the Federal Clean Air Act, the Toxic Substances Control Act, or any state or local

statute, regulation, ordinance, order or decree relating to health, safety or the environment (hereinafter "Environmental Laws"), which violation would have a material adverse effect on the business, assets, or financial condition of Target;

(b) Target has not received notice from any third party including without limitation any federal, state or local governmental authority, (i) that Target or any predecessor in interest has been identified by the United States Environmental Protection Agency ("EPA") as a potentially responsible party under CERCLA with respect to a site listed on the National Priorities List, 40 C.F.R. Part 300 Appendix B (1986); (ii) that any hazardous waste as defined by 42 U.S.C. Paragraph 6903(5), any hazardous substances as defined by 42 U.S.C. Paragraph 9601(14), any pollutant or contaminant as defined by 42 U.S.C. Paragraph 9601(33) and any toxic substance, oil or hazardous materials or other chemicals or substances regulated by any Environmental Laws ("Hazardous Substances") which Target or any other person or entity has generated, transported or disposed of has been found at any site at which a federal, state or local agency or other third party has conducted or has ordered that Target conduct a remedial investigation, removal or other response action pursuant to any Environmental Law; or (iii) that Target is or shall be a named party to any claim, action, cause of action, complaint (contingent or otherwise) legal or administrative proceeding arising out of any third party's incurrence of costs, expenses, losses or damages of any kind whatsoever in connection with the release of Hazardous Substances;

(c) except where any of the following would not have a material adverse effect on the business, assets, or financial condition of Target, (i) no portion of the property of Target has been used for the handling, manufacturing, processing, storage or disposal of Hazardous Substances except in accordance with applicable Environmental Laws; and no underground tank or other underground storage receptacle for Hazardous Substances is located on such properties; (ii) in the course of any activities conducted by Target no Hazardous Substances have been generated or are being used on such properties except in accordance with applicable Environmental Laws; (iii) there have been no releases (i.e. any past or present releasing, spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, disposing or dumping) or threatened releases of Hazardous Substances on, upon, into or from the properties of Target, which releases would have a material adverse effect on the value of such properties or adjacent properties or the environment; (iv) there have been no releases on, upon, from or into any real property in the vicinity of the real properties of Target which, through soil or groundwater contamination, have come to be located on, and which would have a material adverse effect on the value of, the properties of Target; and (v) in addition, any Hazardous Substances that have been generated on the properties of Target, have been transported in accordance with applicable Environmental Laws; and

(d) none of the properties of Target are currently subject to any applicable environmental cleanup responsibility law or environmental restrictive transfer law or regulation by virtue of the transactions set forth herein and contemplated hereby.

3.15. Labor Relations. Target is in compliance in all material respects with all federal and state laws respecting employment and employment practices, terms and conditions of employment, wages and hours and nondiscrimination in employment, and is not engaged in any unfair labor practice. There is no charge pending or, to the knowledge of Target, threatened against Target alleging unlawful discrimination in employment practices before any court or agency and there is no charge of or proceeding with regard to any unfair labor practice against Target pending before the National Labor Relations Board. There is no labor strike, dispute, slow-down or work

stoppage actually pending or to the knowledge of Target threatened against or involving Target. No representation question exists respecting any of the employees of Target. No grievance or arbitration proceeding arising out of or under any collective bargaining agreement is pending against Target and no claim therefor has been asserted. None of the employees of Target is covered by any collective bargaining agreement, and no collective bargaining agreement is currently being negotiated by Target. Except as described on Schedule 3.15 hereto, Target has not experienced any work stoppage or other material labor difficulty during the last five years.

3.16. Contracts. Except for contracts, agreements, or other arrangements that have been fully performed and with respect to which Target has no further obligations or liabilities and except as listed in Schedule 3.16, Target is not a party to or otherwise bound by any agreement, instrument, or commitment that is material to its financial condition, operations, business or assets, and Target is not a party to or otherwise bound by any agreement, instrument, or commitment that may materially and adversely affect its ability to consummate the transactions contemplated hereby, including without limitation any:

(a) agreement for the purchase, sale, lease, or license by or from it of assets, products, or services requiring total payments by or to it in excess of \$10,000 in any instance, or entered into other than in the ordinary course of the operation of its business;

(b) agreement or other commitment pursuant to which it has agreed to indemnify or hold harmless any other Person, including without limitation, for any liabilities, penalties, losses, damages, or costs, or expenses related thereto, arising out of or in connection with any presence, use, generation, treatment, storage, transportation, recycling, disposal, or release of any Hazardous Substances;

(c) (i) employment agreement, (ii) consulting agreement, or (iii) agreement providing for severance payments or other additional rights or benefits (whether or not optional) in the event of the sale or other change in control of it;

(d) agreement with any current or former affiliate, stockholder, officer or director of it or with any Person in which, to Target's Knowledge, any such affiliate of it has an interest;

Target has delivered or made available to Parent correct and complete copies (or written summaries of the material terms of oral agreements or understandings) of each agreement, instrument, and commitment listed in Schedule 3.16 hereto, each as amended to date. Each such agreement, instrument, and commitment is a valid, binding and enforceable obligation of Target, and, to the Knowledge of Target, of the other party or parties thereto, subject as to enforcement to the Enforcement Exceptions, and is in full force and effect. Neither Target nor, to its Knowledge, any other party thereto, is in breach of, default under or noncompliance with any term of any such agreement, instrument, or commitment (nor to the Knowledge of Target is there any reasonable basis for any of the foregoing). No agreement, instrument, or commitment listed in Schedule 3.16 hereto, includes or incorporates any provision, the effect of which could reasonably be expected to enlarge or accelerate any of the obligations of Target or to give additional rights to any other party thereto, or to terminate, lapse, trigger consent rights of any other person or entity in respect thereof, or in any other way be affected, by reason of the transactions contemplated by this Agreement.

3.17. Intellectual Property. Schedule 3.17 contains an accurate and complete list of all patents, patent applications, trademarks, tradenames, service marks, logos, copyrights, and licenses known to be used in or convenient or necessary to Target's business as now being conducted or as described in the Business Plan (collectively, and together with any technology, know-how, trade secrets, processes, research, data, clinical trial program, formulations, works-in-process, formulas and techniques used in, in the possession or control of, or necessary or convenient to its business, the "Intellectual Property"). Target owns, or is licensed or otherwise has the full unrestricted right to use (and has not received notice or any other indication disputing or challenging its right of use thereof), all Intellectual Property used in or necessary or convenient to its business or research program, and no other intellectual property rights, privileges, licenses, contracts, or other instruments, or evidences of interests are believed necessary to the conduct of its business or research program as currently conducted or as contemplated by Target's Business Plan, a copy of which has been delivered to Parent. In any instance where Target's rights to Intellectual Property arise under a license or similar agreement, this is indicated in Schedule 3.17 and such rights are licensed exclusively to it, except as indicated in Schedule 3.17. Except as indicated in

Schedule 3.17, it has no obligation to compensate any other Person for the use of any Intellectual Property. Schedule 3.17 lists every instance in which it has granted to any other person any license or other right to use in any manner any of the Intellectual Property, whether or not requiring the payment of royalties (other than commercial licenses of software entered into in the ordinary course of business). No other person has an interest in or right or license to use any of its Intellectual Property. To the knowledge of Target, none of Target's Intellectual Property is being infringed by others, or is subject to any outstanding order, decree, judgment, or stipulation. Except as set forth in Schedule 3.17, no litigation (or other proceedings in or before any court or other governmental, adjudicatory, arbitral, or administrative body) relating to its Intellectual Property is pending, or to the best of its knowledge, threatened, nor is there any basis for any such litigation or proceeding. No litigation (or other proceedings in or before any court or other governmental, adjudicatory, arbitral, or administrative body) charging Target with infringement of any patent, trademark, copyright, or other proprietary right is pending, or threatened, nor, to the best of Target's knowledge, is there any basis for any such litigation or proceeding. Target maintains reasonable security measures for the preservation of the secrecy and proprietary nature of such of its Intellectual Property as constitutes trade secrets.

3.18. Insurance. Schedule 3.18 lists the policies of theft, fire, liability (including products liability), worker's compensation, life, property and casualty, directors' and officers', and other insurance owned or held by it. Such policies of insurance are maintained with financially sound and reputable insurance companies, funds, or underwriters, are of the kinds and cover such risks, and are in such amounts and with such deductibles and exclusions, as are consistent with prudent business practice. All such policies are in full force and effect, are sufficient for compliance in all material respects by it with all requirements of law and of all agreements to which it is a party, and provide that they will remain in full force and effect through the respective dates set forth in Schedule 3.18 and will not terminate or lapse or otherwise be affected in any way by reason of the Merger or the other transactions contemplated hereby.

3.19. Governmental Consent, Non-Contravention, etc. Except as described in Schedule 3.19, Target holds no licenses, permits or other authorizations issued by any governmental agency to Target related to its properties, Intellectual Property, research program or business. No consent, approval or authorization of or registration, designation, declaration or filing with any governmental authority, federal or other, on the part of Target, is required in connection

with the Merger or the consummation of any other transaction contemplated hereby, except for the filing of the Certificate of Merger with the Secretary of State of Delaware. The execution and delivery of this Agreement and the consummation of the transactions contemplated hereby will not violate (i) any provision of the charter or by-laws of Target, or (ii) any order, judgment, injunction, award or decree of any court or state or federal governmental or regulatory body applicable to Target.

3.20. Employee Benefit Plans. Target does not maintain or have any obligation to make contributions to, any employee benefit plan (an "ERISA Plan") within the meaning of Section 3(3) of the United States Employee Retirement Income Security Act of 1974, as amended ("ERISA"), or, except as set forth on Schedule 3.20 hereto, any other retirement, profit sharing, stock option, stock bonus or employee benefit plan (a "Non-ERISA Plan"). Target has heretofore delivered to Parent true, correct and complete copies of each Non-ERISA Plan. All such Non-ERISA Plans have been maintained and operated in all material respects in accordance with all federal, state and local laws applicable to such plans, and the terms and conditions of the respective plan documents.

3.21. Potential Conflicts of Interest. Except as set forth on Schedule 3.21, no officer or director of Target (i) owns, directly or indirectly, any interest in (excepting not more than 1% stock holdings for investment purposes in securities of publicly held and traded companies) or is an officer, director, employee or consultant of any Person that is a lessor, lessee, customer or supplier of Target; (ii) owns, directly or indirectly, in whole or in part, any tangible or intangible property which Target is using or the use of which is necessary for the business of Target; or (iii) has any cause of action or other claim whatsoever against, or owes any amount to, Target, except for claims in the ordinary course of business, such as for accrued vacation pay, accrued benefits under employee benefit plans and similar

matters and agreements.

3.22. Brokers. Except as set forth on Schedule 3.22, no finder, broker, agent or other intermediary has been retained or utilized by, or has acted for or on behalf of, Target in connection with the negotiation or consummation of the transactions contemplated hereby.

3.23. Compliance with Other Instruments, Laws, etc. Target has complied in all material respects with, and is in compliance in all material respects with, (i) all laws, statutes, governmental regulations and all judicial or administrative tribunal orders, judgments, writs, injunctions, decrees or similar commands applicable to its business, (ii) all unwaived terms and provisions of all contracts, agreements and indentures to which Target is a party, or by which Target or any of its properties is subject, and (iii) its charter and by-laws, each as amended to date, except where any such failure to comply would not have a material adverse effect on the business, assets or financial condition of Target. Except as described on Schedule 3.23, Target does not have or need any licenses, permits or other authorizations from governmental authorities for the conduct of its business or in connection with the ownership or use of its properties, except where the failure to have any such license, permit or other authorization would not have a material adverse effect on the business, assets or financial condition of the Target.

3.24. Minute Books. The minute books of Target made available to Acquiror for inspection accurately record therein all actions taken by Target's Board of Directors and shareholders.

3.25. Absence of Registration Obligations. Except as set forth on Schedule 3.25 hereto, Target has no obligation, contingent or otherwise, by reason of any agreement to register any of its securities under the Securities Act.

3.26. Ownership of Parent Stock. As of the date hereof, the Target (i) does not beneficially own, directly or indirectly, and (ii) is not a party to any agreement, arrangement or understanding for the purpose of acquiring, holding, voting or disposing of, in each case, shares of capital stock of Parent, which in the aggregate represent 5% or more of the outstanding shares of capital stock of Parent entitled to vote generally in the election of directors.

3.27. Full Disclosure. No representation or warranty by Target in this Agreement or in any Exhibit hereto or in its disclosure schedules hereto or in its Business Plan contains or will contain any untrue statement of a material fact or omits or will omit to state a material fact required to be stated therein or necessary to make the statements contained therein not false or misleading. There is no fact relating to the business, research program or condition of Target that it has not disclosed to Parent in writing and that could reasonably be expected to result in a Material Adverse Effect to Target.

3.28. Agreements to Vote in Favor of the Merger. Target has received binding, written agreements to vote in favor of approving this Agreement and the Merger from stockholders holding at least 50.1% of the issued and outstanding shares of the voting capital stock of Target.

4. Representations and Warranties of Parent and Acquiror. Parent and Acquiror represent and warrant to Target as follows. For purposes of this Agreement, the term "Knowledge" in relation to Parent or Acquiror means the knowledge of Kerry P. Gray or Stephen B. Thompson.

4.1. Organization and Standing of Parent and Acquiror. Each of Parent and Acquiror is a corporation duly organized, validly existing and in corporate good standing under the laws of the State of Delaware, and has all requisite corporate power and authority to own or lease and operate its properties and to carry on its business as now conducted. Each of Parent and Acquiror has delivered to Target complete and correct copies of its Certificate of Incorporation and By-Laws and all amendments thereto. Parent is duly qualified and in good standing as a foreign corporation in each jurisdiction, if any, in which the character of the properties owned or leased or the nature of the activities conducted by it makes such qualification necessary.

4.2. Corporate Power, Binding Effect. Each of Parent and Acquiror has all requisite corporate power and authority to enter into this Agreement and the Registration Rights Agreement among the Parent and each of the Target Stockholders substantially in the Form of Exhibit B attached hereto (the "Registration Rights Agreement") and to perform all of its agreements and obligations under this Agreement and the Registration Rights Agreement in accordance with their respective terms. Acquiror has all requisite power and authority to enter into the Certificate of Merger and to

perform all of its obligations under the Certificate of Merger. This Agreement and the Registration Rights Agreement have been duly authorized by each of Parent's and Acquiror's respective Boards of Directors, has been duly executed and delivered by Parent and Acquiror and constitutes the legal, valid and binding obligations of Parent and Acquiror, enforceable against Parent and Acquiror in accordance with its terms. Neither the execution, delivery or performance by either Parent or Acquiror of this Agreement or the Certificate of Merger

or the Registration Rights Agreement, as applicable, in accordance with their respective terms will result in any violation of or default or creation of any lien under, or the acceleration or vesting or modification of any right or obligation under, or in any conflict with, either Parent's or Acquiror's

Certificate of Incorporation or by-laws or of any agreement, instrument, judgment, decree, order, statute, rule or regulation binding on or applicable to Parent or Acquiror, except where any of the foregoing would not have a material adverse effect on the business, assets or financial condition of Parent or Acquiror.

4.3. Capitalization. The authorized capital stock of Acquiror consists of 1000 shares of common stock, par value \$.001 per share, all of which shares have been issued to and are owned by Parent as of the date hereof. The authorized capital stock of Parent consists of 20,000,000 shares of Parent Stock, 3,429,402 shares of which are issued and outstanding on the date hereof and 2,000,000 shares of preferred stock, none of which shares of preferred stock are issued and outstanding as of the date hereof. All of such outstanding shares are validly issued and outstanding, fully paid and nonassessable. All shares of Parent Stock to be issued to Target Stockholders under this Agreement (including under Paragraphs 2.1, 2.2 and 2.3) will, when issued, be duly authorized, validly issued, fully paid and nonassessable and will not be subject to the pre-emptive rights of others. Except as set forth in the Parent Reports (as defined below), Parent is neither a party to nor is bound by any outstanding subscriptions, options, warrants, calls, commitments or agreements of any character calling for Parent to issue, deliver or sell, or cause to be issued, delivered or sold any shares of any equity security of Parent or any securities convertible into, exchangeable for or representing the right to subscribe for, purchase or otherwise receive any shares of any equity security of Parent or obligating Parent to grant, extend or enter into any such subscriptions, options, warrants, calls, commitments or agreements.

4.4. Reports and Financial Statements. Parent has previously furnished to Target complete and accurate copies, as amended or supplemented, of its (i) Annual Reports on Form 10-K for the fiscal years ended 1996 (the "1996 10-K") and 1997 (the "1997 10-K"), together with all exhibits thereto, as filed with the Securities and Exchange Commission (the "Commission"), (ii) proxy statements relating to the Special Meeting of Stockholders and Annual Meeting of Stockholders held on April 14, 1998 and June 12, 1998, respectively and, (iii) Quarterly Reports on Form 10-Q, together with all exhibits thereto, as filed with the Commission since December 31, 1997 and (iv) other reports filed by Parent with the Commission since December 31, 1997 (such reports and other filings, together with any amendments or supplements thereto, are collectively referred to herein as the "Parent Reports"). The 1996 10-K and the 1997 10-K contain true and complete copies of Parent's audited balance sheet (each, a "Parent Balance Sheet") as at December 31, respectively, of 1996 and 1997 and audited statements of operations and audited consolidated statements of cash flows for each of the periods then ended (collectively, the "Parent Financial Statements"). The Parent Financial Statements present fairly the financial position of Parent as of December 31, respectively, of 1996 and 1997 and the results of operations and cash flows for each of the respective periods then ended all in conformity with generally accepted accounting principles applied on a consistent basis, except as stated therein. Except as set forth on Schedule 4.4 hereto and except as contemplated by this Agreement or disclosed in the 1997 10-K or the Parent Financial Statements or in subsequent Forms 10-Q filed by the Parent with the Commission or in the notes thereto, since December 31, 1997, there has been no material adverse change in the business, assets, financial condition or results of operations of the Parent.

Parent has filed with the Commission all forms, reports, schedules, statements and other documents required to be filed by it since January 1, 1996 under the Securities Act (as herein defined) and the Securities Exchange Act of 1934, as amended, except for any non-filings or

noncompliance which are not in the aggregate material to the financial condition, results of operations or business of Parent or which will not prevent or delay in any material respect the consummation of the transactions contemplated hereby or under the Registration Rights Agreement including, but not limited to, the filing of a registration statement with respect to the shares of Parent Stock to be issued in the Merger. No form, report, schedule, statement or other document filed by Parent with the Commission since January 1, 1998 contained any untrue statement of a material fact or omitted to state a material fact necessary, at the time such document was filed, in order to make the statements therein, in light of the circumstances under which they were made, not misleading, other than such facts as were corrected in any subsequent form, report, schedule, statement or other document filed with the Commission by the Parent.

4.5. Government Consents, etc. No consent, approval or authorization of or registration, designation, declaration or filing with any governmental authority, federal or other, on the part of it is required in connection with the Merger or the consummation of any other transaction contemplated hereby, except for the filing of the Certificate of Merger with the Secretary of State of Delaware and any filings required under the Registration Rights Agreement. The execution and delivery of this Agreement and the consummation of the transactions contemplated hereby will not violate (i) any provision of the charter and by-laws of Parent or Acquiror, or (ii) any order, judgment, injunction, award or decree of any court or state or federal governmental or regulatory body applicable to Parent or Acquiror.

4.6. Brokers. Neither Parent nor Acquiror has retained, utilized or been represented by any broker or finder in connection with the negotiation or consummation of this Agreement or the transactions contemplated hereby.

4.7. Full Disclosure. To the best of its knowledge and belief, no representations or warranties of Parent or Acquiror herein or in the Schedules hereto are materially misleading.

4.8. Acquiror. Acquiror has been formed solely for the purpose of executing and delivering this Agreement and consummating the transactions contemplated hereby. Since the date of its incorporation, Acquiror has neither engaged in nor transacted any business or activity of any nature whatsoever other than activities related to its corporate organization and the execution and delivery of this Agreement. Acquiror has no assets or properties or debts, liabilities or obligations of any kind whatsoever, and with the exception of this Agreement, is not a party to any contract, agreement or undertaking of any nature.

4.9. Compliance with Other Instruments, Laws, etc. Parent has complied in all material respects with, and is in compliance in all material respects with, (i) all laws, statutes, governmental regulations and all judicial or administrative tribunal orders, judgments, writs, injunctions, decrees or similar commands applicable to its business, (ii) all unwaived terms and provisions of all contracts, agreements and indentures to which Parent is a party, or by which Parent or any of its properties is subject, and (iii) its charter and by-laws, each as amended to date, except where such failure to comply would not have a material adverse effect on the business, assets or financial condition of Parent. Except as set forth on Schedule 4.9, Parent does not have or need any licenses, permits or other authorizations from governmental authorities for the conduct of its

business or in connection with the ownership or use of its properties, except where the failure to have any such license, permit or other authorization would not have a material adverse effect on the business, assets or financial condition of Parent.

4.10. Minute Books. The minute books of the Parent and the Acquiror made available to Target for inspection accurately record therein all actions taken by Parent's and Acquiror's respective Boards of Directors and shareholders.

5. Conduct of Target Business Prior to Effective Date.

Target covenants and agrees that, from and after the date of this Agreement and until the Effective Date, except as otherwise provided herein or specifically consented to or approved by Parent in writing:

5.1. Full Access. Target shall afford to Parent and Acquiror and their authorized representatives full access during normal business hours and with reasonable advance notice to all properties, books, records, contracts and documents of Target and a full opportunity to make such

investigations as they shall reasonably desire to make of Target, and the Target shall furnish or cause to be furnished to Parent and Acquiror and their authorized representatives all such information with respect to the affairs and businesses of Target as Parent or Acquiror may reasonably request.

5.2. Carry on in Regular Course. Target shall use commercially reasonable efforts to preserve all of its accounting and business records, corporate records, trade secrets and proprietary information and other Intellectual Property for the benefit of the Surviving Corporation.

5.3. No Dividends, Issuances, Repurchases, etc. Target shall not declare or pay any dividends (whether in cash, shares of stock or otherwise) on, or make any other distribution in respect of any shares of its capital stock, or, except as set forth on Schedule 5.3, issue, purchase, redeem or acquire for value any shares of its capital stock, or issue any options, warrants or other rights to acquire shares of its capital stock or securities exchangeable for or convertible into shares of its capital stock, except for the issuance of shares of capital stock of Target upon the exercise of options or warrants outstanding on the date hereof or upon the conversion of convertible promissory notes outstanding on the date hereof as provided in Paragraphs 2.2(i) and 7.9 of this Agreement.

5.4. Employment. Except as set forth on Schedule 5.4 hereto, Target does not employ any employees and has no obligations to any former employees.

5.5. Contracts and Commitments. Target shall not enter into any contract or commitment or engage in any transaction not in the usual and ordinary course of business and consistent with its normal business practices, including without limitation, any contract or commitment relating to Target's Intellectual Property.

5.6. Sale of Capital Assets. Target shall not (i) sell, lease as lessor, license as licensor, or otherwise dispose of any capital asset with a market value in excess of \$10,000, or of capital assets of market value aggregating with respect to Target taken as a whole in excess of \$10,000, (ii) sell, lease as lessor, license as licensor, or otherwise dispose of any asset other than in the ordinary course of business; provided, that Target shall not license any of Target's Intellectual Property, (iii) borrow money, (iv) incur or pay any material liability other than in the ordinary

course of business, or (v) guarantee or otherwise incur any material liability with respect to the obligation of any other Person.

5.7. Preservation of Organization. Target shall use commercially reasonable efforts to preserve for Parent and Acquiror the present relationships with suppliers, scientists, researchers, licensors, parties to contracts and others having business relations with Target. Target shall not amend its Certificate of Incorporation or by-laws. Target shall not merge or consolidate with any other corporation, or acquire any stock of, or, except in the ordinary course of business, acquire any assets or property of any other business entity whatsoever.

5.8. No Default. Target shall not do any act or omit to do any act, or permit any act or omission to act, which will cause a material breach of any contract, commitment or obligation of Target.

5.9. Compliance with Laws. Target shall duly comply with all laws, regulations and orders applicable with respect to its business.

5.10. Advice of Change. Target shall promptly advise Parent in writing of any development or change in circumstance (including any litigation to which it may become a party or of which it may gain Knowledge) that does or could reasonably be expected to (i) call into question the validity of this Agreement or any action taken or to be taken pursuant hereto, (ii) adversely affect the ability of the parties to consummate the transactions contemplated hereby, or (iii) have any material adverse effect on the business, Business Plan, financial condition, or assets of Target.

5.11. Target Stockholders Meeting; No Shopping, etc. Target shall either call a special meeting of the Target Stockholders to consider and vote upon the approval of this Agreement and the Merger and the other transactions contemplated hereby or shall obtain the requisite minimum required stockholder approval by written consent in accordance with Target's Certificate of Incorporation, By-Laws and applicable Delaware law. Target shall recommend to its stockholders the approval of this Agreement and the Merger and the other transactions contemplated hereby and shall use its best efforts to solicit and obtain the requisite vote of approval. From the date hereof until March 31, 1999, Target shall not solicit from any person or otherwise encourage or support any person in making any offers, inquiries or proposals relating to the acquisition of any securities or assets of Target or any merger with Target and will not supply to any

person any non-public information concerning Target for any such purpose or with any such likely effect.

5.12. Consents of Third Parties. Target shall use commercially reasonable efforts to secure, before the Closing Date, the consent, in form and substance satisfactory to Parent and Parent's counsel, to the consummation of the transactions contemplated by this Agreement, by each party to any contract, commitment or obligation of Target, in each case under which such consent is required.

5.13. Satisfaction of Conditions Precedent. Target shall use commercially reasonable efforts to cause the satisfaction of the conditions precedent contained in Paragraphs 7 and 8 hereof.

5.14. Transactions with Affiliates. Target shall not enter into any transactions with any of its affiliates without the prior written consent of Parent, which consent will not be unreasonably withheld or delayed.

6. Conduct of Parent Business Prior to Effective Date.

Parent covenants and agrees that, from and after the date of this Agreement and until the Effective Date, except as otherwise provided herein or specifically consented to or approved by Target in writing:

6.1. Compliance with Laws. Parent shall duly comply with all laws, regulations and orders applicable with respect to its business, except where any of the foregoing would not have a material adverse effect on the business, assets or financial condition of Parent.

6.2. Advice of Change. Parent shall promptly advise Target in writing of any development or change in circumstance (including any litigation to which it may become a party or of which it may gain Knowledge) that does or could reasonably be expected to (i) call into question the validity of this Agreement or any action taken or to be taken pursuant hereto, (ii) adversely affect the ability of the parties to consummate the transactions contemplated hereby, or (iii) have any material adverse effect on the business or financial condition of Parent.

6.3. Satisfaction of Conditions Precedent. Parent shall use its best efforts to cause the satisfaction of the conditions precedent contained in Paragraphs 7 and 8 hereof.

6.4. Carry on in Regular Course. Parent shall use commercially reasonable efforts to carry on its business in the usual and ordinary course and to preserve its organization and relationships and not to (i) issue any shares of Parent Stock, (ii) declare or pay any dividends to its stockholders, or repurchase any shares of Parent Stock, (iii) amend its corporate charter or by-laws, or (iv) sell or pledge, or agree to sell or pledge, any shares of the capital stock of the Acquiror; provided, however, that this Section 6.4 shall not operate as to prevent the entry into or consummation of any of the transactions contemplated in this Agreement or in the agreements constituting exhibits hereto, including without limitation the private placement referred to in Section 7.18, below.

7. Conditions Precedent to Parent's and Acquiror's Obligations.

Notwithstanding the provisions of Paragraphs 1 and 2, Parent and Acquiror shall be obligated to perform the acts contemplated for performance by them under Paragraphs 1 and 2 only if each of the following conditions is satisfied at or prior to the Closing Date, unless any such condition is waived by Parent and Acquiror:

7.1. Accuracy of Representations and Warranties by Target. The representations and warranties of Target set forth in Paragraph 3 of this Agreement (including any schedules thereto) shall be true and correct in all material respects as of the Closing Date with the same force and effect as though made again at and as of the Closing Date, except for changes permitted or required by this Agreement.

7.2. Compliance by Target. Target shall have performed and complied in all material respects with all covenants and agreements contained in this Agreement required to be performed or complied with by it on or before the Closing Date.

7.3. Approval by Target Stockholders; Delivery of Agreement of Merger. The Target Stockholders shall have authorized and approved this Agreement and the Merger contemplated hereby as required by applicable law and the Certificate of Incorporation and By-laws of Target and Target shall have duly executed and delivered or caused to be duly executed and delivered the Certificate of Merger and the Related Agreements.

7.4. No Restraining Order. No restraining order or injunction or other order issued by any court of competent jurisdiction, or other legal restraint or prohibition shall prevent the consummation of the Merger or other transactions contemplated by this Agreement, and no petition or request for any such injunction or other order shall be pending.

7.5. No Material Change. There shall not have been any material adverse change in the business or assets of Target.

7.6. Officers' Certificates. Target shall have executed and delivered to Acquiror and Parent at and as of the Closing (i) a certificate, duly executed by Target's President or any Vice President, in form and substance satisfactory to Parent and Parent's counsel, certifying that each of the conditions specified in this Paragraph 7 have been satisfied and (ii) a certificate in the form of Exhibit C attached hereto.

7.7. Resignations of Directors and Officers. All of the directors and officers of Target that Parent or the Acquiror have requested resign their positions shall have resigned their positions with Target on or prior to the Closing Date, and prior thereto shall have executed such appropriate documents with respect to the transfer or establishment of bank accounts, signing authority, etc., as Parent shall have requested.

7.8. Opinion of Target's Counsel. Target shall have delivered to Parent and Acquiror an opinion of Ehrenreich Eilenberg Krause & Zivian LLP, counsel to Target, dated the Closing Date, such opinion to contain customary exceptions, limitations and assumptions, to be based in part on customary certificates of public officials and Target officers, and to be in form and substance reasonably satisfactory to Parent and substantially in the form of Exhibit D attached hereto.

7.9. Exercise and Exchange of Stock Options; Conversion of Convertible Promissory Notes; Release of Claims. Except as provided on Schedule 7.9 hereto, each outstanding stock option, warrant, and other right to acquire the capital stock of Target shall have been exercised, waived or released and/or Target shall have entered into an agreement, satisfactory in form and substance to Parent and its counsel, with each person holding outstanding stock options, warrants, and other rights to purchase shares of the capital stock of Target (including convertible debt). Target's Stock Plan shall have been terminated as of the Closing Date and shall be of no further force or effect.

7.10. Liabilities of Target. Other than (i) accounts payable of not more than \$157,890, (ii) the reasonable costs and expenses of Target incurred (including the fees and disbursements of counsel) in connection with the transactions contemplated in this Agreement and in the agreements constituting Exhibits hereto, not to exceed \$33,000 in the aggregate, (iii) loans payable to the Founding Stockholders in the aggregate of \$80,000, (iv) future accounting expenses including, without limitation, the payment of franchise taxes (not to exceed \$3,000 in the

aggregate), (v) costs associated with two national stage filings and one PCT filing (approximately \$41,000 in the aggregate), (vi) costs associated with the maintenance of patent applications (not to exceed \$2,500 per month), and (vii) documented administrative operating expenses of Target (but not including any payments of rent in respect of Target's offices) incurred through the Closing (not to exceed \$1,000 per month in the aggregate), there shall be no other liabilities (and including no capital lease obligations) shown on the unaudited balance sheet of Target dated the Closing Date, such unaudited balance sheet fairly presenting the financial condition of Target as of such date in all material respects and being acceptable to Parent (the "Target Closing Balance Sheet").

7.11. Tax Opinion. The delivery by Bingham Dana LLP to Parent and Acquiror of an opinion, in form and substance reasonably acceptable to Parent and Acquiror, that the Merger is a tax free reorganization under Section 368(a) of the Code.

7.12. Consents. All consents required to be secured by Target pursuant to Paragraph 5.12 shall have been secured on or prior to the Closing Date. Target shall further have obtained consent letters from Rockefeller University and The National Institutes of Health in form and substance reasonably satisfactory to Parent and Acquiror.

7.13. Lock-Up Agreement. Target Stockholders holding in the aggregate ninety percent (90%) of the Target Stock shall have executed and delivered to Parent Lock-Up Agreements substantially in the form of Exhibit E attached hereto ("Lock-Up Agreements"); provided, however, that any Target Stockholders who do not enter into a Lock-Up Agreement shall not be a party to, and shall not receive the benefit of any registration rights under, the Registration Rights Agreement. Lock-Up Agreements executed by Richard Stone, Nathan Low, Judson A. Cooper, Joshua D. Schein and Steven Oliveira shall have a term of one (1) year from the Effective Date and Lock-Up Agreements executed by any other Target Stockholders shall have a term of six (6) months from the Effective Date.

7.14. Employment Agreements. All of the employment and consulting agreements to which Target is a party or to or by which Target

is bound shall have been resolved upon terms and conditions acceptable to Parent. Without limiting the foregoing, Target shall have terminated all employment agreements and other compensation arrangements with William Hall and Hilary Koprowski.

7.15. Proceedings and Documents Satisfactory. All proceedings in connection with the Merger contemplated by this Agreement and the other transactions contemplated hereby and all certificates and documents delivered to Parent or Acquiror pursuant to this Paragraph 7 or otherwise reasonably requested by Parent or Acquiror shall be executed and delivered by Target and shall be reasonably satisfactory to Parent, Acquiror and their counsel.

7.16. Private Placement. The issuance of the Parent Stock to the Target Stockholders shall qualify as a private placement under Regulation D of the Securities Act and shall be exempt from registration under the Federal Securities laws and all state and other securities laws.

7.17. Dissenting Shares. Holders of at least 90% of the issued and outstanding shares of Target Stock shall have voted in favor of or consented to the Merger or shall have otherwise waived or failed to perfect any appraisal rights to which they may otherwise be entitled

under Section 262 of the Delaware General Corporation Law, as amended, and the President and Secretary of Target shall have delivered to Parent a certificate dated as of the Closing Date to the foregoing effect.

7.18. Closing of Private Placement. Parent shall have successfully closed in a private placement qualified as such pursuant to Regulation D of the Securities Act a transaction for the sale of \$3,000,000 in shares of Parent Stock to be issued at a price of \$3.00 per share of Parent Stock to subscribers therefor.

7.19. NIH Licensing Agreement. The exclusive Patent License Agreement among the Target, The National Institutes of Health, the Centers for Disease Control and Prevention, the Food and Drug administration and certain other parties thereto (the "NIH License Agreement") shall have been executed in form and substance satisfactory to Parent and Acquiror. License payments pursuant to the NIH License Agreement will be for the account of the Surviving Corporation.

7.20. Preferred Stock. No shares of preferred stock of the Target shall be issued or outstanding and any shares thereof previously outstanding shall have been converted to or exchanged for shares of Target Stock on terms and conditions and with such documentation as are in form and substance reasonably satisfactory to Parent and Acquiror.

8. Conditions Precedent to Target's Obligations. Notwithstanding the provisions of Paragraphs 1 and 2, Target and Target Stockholders shall be obligated to perform the acts contemplated for performance by them under Paragraphs 1 and 2 only if each of the following conditions is satisfied at or prior to the Closing Date, unless any such condition is waived by Target:

8.1. Accuracy of Representations and Warranties by Parent and Acquiror. The representations and warranties of Parent and Acquiror set forth in Paragraph 4 of this Agreement and in any Schedules to this Agreement shall be true and correct in all material respects as of the Closing Date with the same force and effect as though made again at and as of the Closing Date, except for changes permitted or required by this Agreement.

8.2. Compliance by Parent and Acquiror. Parent and Acquiror shall have performed and complied in all material respects with all of the covenants and agreements required to be performed or complied with by them by the Closing Date.

8.3. No Restraining Order. No restraining order or injunction or other order issued by any court of competent jurisdiction, or other legal restraint or prohibition shall prevent the Merger or other transactions contemplated by this Agreement, and no petition or request for any such injunction or other order shall be pending.

8.4. Parent Certificates. Parent shall have delivered to Target (i) a certificate of its President or one of its Vice Presidents dated the Closing Date, in form and substance satisfactory to Target and Target's counsel, certifying that the conditions set forth in each of Paragraphs 8.1, 8.2, and 8.3 have been satisfied, and (ii) a certificate in the form attached hereto as Exhibit F.

8.5. Opinion of Parent's Counsel. Parent shall have

delivered to Target an opinion of Bingham Dana LLP, counsel for Parent and Acquiror, dated the Closing Date, such

opinion to contain customary exceptions, limitations and assumptions and to be based in part on customary certificates of public officials and Parent officers, and to be in form and substance reasonably satisfactory to Target and substantially similar to Exhibit G attached hereto.

8.6. No Material Change. There shall not have been any material adverse change in the business or assets of Parent.

8.7. Proceedings and Documents Satisfactory. All proceedings in connection with the Merger contemplated by this Agreement and the other transactions contemplated hereby and all certificates and documents delivered to Target pursuant to this Section 8 or otherwise reasonably requested by Target shall be executed and delivered by Parent and shall be reasonably satisfactory to Target and its counsel.

8.8. Closing of Private Placement. Parent shall have successfully closed in a private placement qualified as such pursuant to Regulation D of the Securities Act a transaction for the sale of \$3,000,000 in shares of Parent Stock to be issued at a price of \$3.00 per share of Parent Stock to subscribers therefor.

9. Covenants of the Parties.

9.1. No Solicitation. Unless and until this Agreement shall have been terminated by Acquiror or Target pursuant to Section 14 hereof, neither Target nor any of its offices, directors, employees, representatives, or agents (including without limitation their investment bankers, accountants and counsel, collectively, the "Target Agents") shall directly or indirectly encourage, solicit, initiate, or participate in any discussions or negotiations with, or provide any information to, any Person (other than the other parties hereto) concerning any offer or proposal for any merger, tender offer, sale, lease as lessor, license as licensor, or other disposition of substantial assets, sale of shares of capital stock or debt securities, or similar transaction involving it (an "Acquisition Proposal"), and shall not enter into any discussion of any business transaction with a third party that would involve any receipt, transmission, or disclosure of its confidential information, except in the ordinary course of business. Each of the Target and any of the Target Agents shall immediately communicate to Parent the terms of any proposal, discussion, negotiation, or inquiry relating to an Acquisition Proposal (including the identity of the party making such proposal or inquiry) that it receives in respect of any such transaction (which shall mean that any such communication shall be delivered no less promptly than by telephone or telecopy within two business days of receipt of any such proposal or inquiry).

9.2. Approval of Stockholders. Acquiror and Target shall (i) as promptly as practicable, take all steps necessary duly to call, give notice of, convene, and hold a meeting of its stockholders for the purposes of approving this Agreement, the Merger and the other transactions contemplated hereby, (ii) recommend to its stockholders, the approval of such matters to be submitted by it to its stockholders, and (iii) use its best efforts to obtain the necessary approvals of its stockholders of the proposals described above.

9.3. Affiliates. Acquiror and Target shall, not later than ten (10) days after the date of this Agreement, identify in a letter to the other, after consultation with outside counsel, all Persons that it believes may be deemed to be "affiliates" of such party, as that term is used in and for purposes of Accounting Series Release 130 and 135, as amended, of the SEC.

9.4. Further Assurance. Subject to the terms and conditions set forth in this Agreement, each of the parties to this Agreement shall use its best efforts, as promptly as practicable, to take or cause to be taken, all actions, and to do or cause to be done, all other things, as are necessary, proper, or advisable under applicable laws and regulations to consummate and make effective the transactions contemplated by this Agreement.

9.5. Disclosure Statements. From time to time prior to the Effective Date, and in any event immediately prior to the Effective Date, each party shall promptly supplement or amend its disclosure schedules with respect to any matter hereafter arising that, if existing, occurring, or know at the date of this Agreement, would have been required to be set forth or described in such disclosure schedules or that is necessary to correct any information in such disclosure schedules that is or has become inaccurate.

Notwithstanding the foregoing, if any such supplement or amendment discloses a Material Adverse Effect, the conditions to consummate the Merger set forth in Section 7 shall be deemed not to have been satisfied.

9.6. Satisfaction of Conditions Precedent. Each of the parties to this Agreement shall use its best efforts to cause the satisfaction on or before June 1, 1999 of the conditions precedent contained in Sections 7 and 8 of this Agreement that impose obligations on it or require action on its part or the part of any of its stockholders or affiliates.

10. Confidential Information; No Publicity. Any and all non-public information disclosed by Parent and Acquiror to Target or by Target to Parent or Acquiror as a result of the negotiations leading to the execution of this Agreement, or in furtherance hereof, shall remain confidential and be subject to the Confidentiality Agreement dated October 27, 1998 between Parent and Target. If the consummation of the transactions contemplated by this Agreement does not take place for any reason, each of Parent and Acquiror on the one hand and Target on the other will return promptly all documents containing non-public information relating to the other side.

11. Securities Laws Matters. Target agrees to cooperate with Parent and Acquiror in qualifying the issue of Parent Stock to the Target Stockholders under Paragraph 4(2) and/or Regulation D of the Commission under the Securities Act and in complying with all state and other securities laws in respect thereto. Neither Target nor any of its agents is or shall be authorized to act on Parent's or Acquiror's behalf with respect to any aspect of the transactions contemplated by this Agreement or make any solicitations of or representations to any of the Target Stockholders on Parent's or Acquiror's behalf. Neither this Agreement nor any other by Parent or Acquiror shall be deemed an offer with respect to Parent Stock.

12. Survival and Materiality of Representations. Each of the representations and warranties made by the parties hereto shall survive the Closing Date and Effective Date and consummation of the transactions contemplated hereby.

13. Tax Consequences to the Parties. Parent and Acquiror, on the one hand, and Target, on the other, understand and agree that neither Parent and Acquiror, on the one hand, nor Target, on the other, are making any representation or warranty as to the tax consequences of this Agreement and the events and actions contemplated hereby. Nonetheless, all parties hereto agree to report the transactions contemplated hereby on their respective federal income tax returns as a tax-free reorganization under Paragraph 368(a) of the Code and to take no action inconsistent with such characterization.

14. Termination; Liabilities Consequent Thereon. This Agreement, the Related Agreements and (if executed) the Certificate of Merger may be terminated and the Merger contemplated hereby abandoned at any time prior to the Effective Date (whether before or after approval of the Merger by the Target Stockholders or by Parent as sole stockholder of Acquiror) only as follows:

(a) by Parent or Acquiror, upon notice to Target if (i) Target shall be in material breach of its obligations hereunder and shall not have cured such breach within a period of ten (10) days after written notice from Parent or Acquiror or (ii) if the conditions set forth in Paragraph 7 shall not have been satisfied, or waived by Parent, on or prior to June 1, 1999 or (iii) a material adverse change in any representation or warranty made by Target herein or (iv) any material adverse change in the business or operations of the Target; or

(b) by Target, upon notice to Parent, if (i) Parent or Acquiror shall be in material breach of its obligations hereunder and shall not have cured such breach within a period of ten (10) days after receipt of written notice from Target or (ii) if the conditions set forth in Paragraph 8 shall not have been satisfied, or waived by Target, on or prior to June 1, 1999 or (iii) a material adverse change in any representation or warranty made by Parent or Acquiror herein or (iv) any material adverse change in the business or operations of Parent; or

(c) at any time by mutual agreement of the Boards of Directors of Parent and Target.

15. Indemnification.

15.1. By Target's Stockholders.

(a) If the Closing occurs, then each of the Target Stockholders severally shall indemnify and hold Parent and Acquiror and their respective directors, officers, employees, shareholders, agents, attorneys, successors, assigns and affiliates (collectively, the "Access Indemnified Parties") harmless from and with respect to any and all claims, judgments, proceedings, actions, suits, investigations, liabilities, losses,

reasonable costs (including the reasonable fees and disbursements of attorneys), expenses and damages including without limitation under federal or state securities laws (collectively, "Damages") related to or arising out of (i) any material failure or breach of any representation or warranty of Target or the Target Stockholders, or (ii) any material failure to perform any covenant, obligation, undertaking or agreement of Target or of any of the Target Stockholders contained in this Agreement (including any Schedules hereto) or in the Agreements constituting Exhibits hereto.

(b) The parties hereto agree and acknowledge that the obligations of the Target Stockholders under this Paragraph 15.1 shall be limited to the forfeiture (pursuant to the procedure set forth in Paragraph 15.3, below) to the Access Indemnified Parties, forthwith on demand therefor, of a number of shares of Parent Stock (the "Forfeited Shares") equal to the quotient obtained by dividing the amount of any claim for Damages by \$3.00; provided, however, that regardless of the amount of any claims for Damages by the Access Indemnified Parties, none of the Target Stockholders shall be required to forfeit to the Access Indemnified Parties a number of shares of Parent Stock in the aggregate in excess of the lesser of (i) twenty percent (20%) of the number of shares of Parent Stock which such Target Stockholder is entitled to receive by operation of Paragraph 1.2 of this Agreement,

or (ii) his pro rata share of any such claim for Damages by the Access Indemnified Parties; provided, further, however, that any cap on the indemnification obligation of the Target Stockholders set forth in this Paragraph 15.1(b) shall not apply to claims, if any, which are based upon (x) fraud, or (y) a knowing or intentional breach of any representation, warranty or covenant.

(c) The Target Stockholders shall have no liability for indemnification hereunder unless and until the aggregate Damages of the Access Indemnified Parties exceed Fifty Thousand Dollars (\$50,000), in which event the Target Stockholders' indemnification obligation shall include the amount of such Damages between zero and \$50,000.

(d) The adoption of this Agreement and the approval of the Merger by the Target Stockholders shall constitute approval by the Target Stockholders of all of the arrangements relating hereto and thereto, including without limitation, (i) the appointment of the Representatives (as hereinafter defined), and (ii) the authority of the Representatives to defend and/or settle any claims for which the Target Stockholders may be required to indemnify the Access Indemnified Parties pursuant to this Paragraph 15. All decisions and actions by the Representatives shall be binding upon all Target Stockholders and no Target Stockholders shall have the right to object, dissent, protest or otherwise contest the same.

(e) The Parent and Surviving Corporation agree that they will not seek indemnification from any of Judson A. Cooper, Nathan Low, Steven Oliveira, Joshua D. Schein or Richard Stone without at the same time seeking indemnification from the other four of such persons.

(f) Notwithstanding any other provision of this Paragraph 15, the indemnification obligations of each of the Target Stockholders hereunder shall be limited to claims in respect of any breach of any representation, warranty or covenant by the Target or by each of such Target Stockholders individually; provided, however, that the limitation set forth in this clause (f) shall not apply to claims, if any, which are based upon (x) fraud, or (y) a knowing or intentional breach of any such representation, warranty or covenant. In addition, such indemnification obligations shall survive for a period of six months from the Closing except for (x) claims based upon fraud or a knowing or intentional breach of any such representation, warranty, or covenant and (y) claims for which Parent or the Surviving Corporation delivered a notice to the Representatives (as defined in Paragraph 15.4 hereof) prior to the end of such six month period.

15.2. Of Target's Officers and Directors. If the Closing occurs, then from and after the Effective Date, the Surviving Corporation shall indemnify, defend and hold harmless William W. Hall, Judson A. Cooper and Joshua D. Schein (the "D/O Indemnified Parties", who are referred to hereinafter collectively with the Access Indemnified Parties as the "Indemnified Parties") against any Damages (including without limitation any Damages relating to this Agreement or the transactions contemplated hereby), but only to the extent based or arising in whole or in part on or out of the fact that such of the D/O Indemnified Parties is or was an officer or director of Target, whether pertaining to any matter existing or occurring at or prior to the Effective Time, and whether asserted or claimed prior to, at, or after the Effective Time;

provided, however, that to the extent any claim for indemnification pursuant to this Paragraph 15.2 involves claims for payments to third parties including without limitation payments in settlement of any claim, action, suit, proceeding or investigation, the D/O Indemnified Parties shall not be entitled to indemnification pursuant to this Paragraph 15.2 unless the Surviving Corporation shall have given its prior written consent to

such payment; provided, further, however, that notwithstanding any other provision hereof, the D/O Indemnified Parties shall under no circumstances be entitled to indemnification in respect of any claims, actions or Damages relating to any matter or Damages in connection with or in respect of which the Access Indemnified Parties are entitled to indemnification pursuant to Paragraph 15.1 hereof.

15.3. Method of Asserting Claims.

(a) All claims for indemnification by any Indemnified Parties pursuant to this Paragraph 15 shall be made in accordance with the provisions of this Agreement.

(b) The Indemnified Parties shall give prompt written notification to the Representatives or the Surviving Corporation, as applicable, of the actual or threatened commencement of any action, suit or proceeding (and the facts constituting the basis therefor) or any other basis for which indemnification pursuant to this Paragraph 15 may be sought (an "Indemnification Notice"). Such Indemnification Notice shall specify, if known, the amount or an estimate of the amount of the liability arising therefrom.

(c) In the case of a claim for indemnification brought by any of the Access Indemnified Parties, each of the Target Stockholders shall, forthwith upon receipt of an Indemnification Notice, forward (pursuant to Paragraph 18.2 hereof) to Parent certificates representing a number of shares of Parent Stock at least equal to the number of Forfeited Shares required (or estimated to be required) to be forfeited by each such Target Stockholder; promptly upon receipt of such certificate(s) from the Target Stockholders, the Parent shall (x) distribute the Forfeited Shares (or, as agreed between Parent and any other Access Indemnified Parties, the proceeds thereof, valued at \$3.00 per share of Parent Stock) to the Access Indemnified Parties, and (y) return to each of the Target Stockholders certificates representing the difference, if any, between the number of shares of Parent Stock represented by the certificate(s) surrendered to the Parent pursuant to this Paragraph 15.3(c) and the number of Forfeited Shares forfeited by each such Target Stockholder pursuant to the terms of this Paragraph 15.

(d) Within thirty (30) days after delivery of an Indemnification Notice, the Representatives or the Surviving Corporation, as the case may be, may, upon written notice thereof to the applicable Indemnified Parties, assume control of the defense of any action, suit or proceeding brought by any person other than the applicable Indemnified Parties with counsel reasonably satisfactory to the applicable Indemnified Parties. If the Representatives or the Surviving Corporation, as applicable, do(es) not so assume control of such defense, then the applicable Indemnified Parties shall control such defense. The party not controlling such defense may participate therein at its own expense; provided that if the Representatives or the Surviving Corporation, as the case may be, assume(s) control of such defense and the counsel selected by the Representatives or the Surviving Corporation (as applicable) concludes that such counsel has a conflict of interest due to the existence of conflicting or different defenses available to the Target Stockholders or Surviving Corporation, as applicable, and Indemnified Parties with respect to such action, suit or proceeding, then the reasonable fees and expenses of one firm of separate counsel for all of the applicable Indemnified Parties shall be paid by the Target Stockholders or Surviving Corporation, as applicable. The party controlling such defense shall keep the other party advised of the status of such action, suit or proceeding and the defense thereof and shall consider in good faith recommendations made by the other party with respect thereto. The applicable Indemnified Parties shall not agree to any settlement of such action, suit or proceeding without the prior written consent

of the Representatives or the Surviving Corporation, as applicable, which consent shall not be unreasonably withheld. The Representatives or the Surviving Corporation, as applicable, shall not agree to any settlement of such action, suit or proceeding without the prior written consent of the applicable Indemnified Parties, which consent shall not be unreasonably withheld.

(e) The provisions of this Article 15 shall survive any termination of this Agreement and shall inure to the benefit of, and

be enforceable by, any heirs, successors, assigns or representatives of any of the Indemnified Parties.

15.4. Appointment of Representatives.

(a) Target and Target Stockholders hereby appoint Joshua D. Schein and Judson A. Cooper (the "Representatives" and each a "Representative") to represent the Target Stockholders for the purposes specified in this Agreement (including acting as a purchaser representative under Regulation D of the Securities Act if necessary).

(b) The Representatives shall not be liable for any error of judgment, or any action taken, suffered or omitted to be taken hereunder except in the case of bad faith, nor shall they be liable for the default or misconduct of any employee, agent or attorney appointed by them who shall have been selected with reasonable care. The Representatives may consult with counsel of their own choice and shall have full and complete authorization and protection for any action taken or suffered by them hereunder in good faith or in accordance with the opinion of such counsel.

(c) The Representatives (or any successor Representatives hereunder) may at any time resign and be discharged of the duties imposed hereunder by giving at least fifteen (15) days' prior notice to the Target Stockholders, in which event, or upon the death or legal disability of any Representative, the Target Stockholders shall appoint a successor Representative by written consent of the holders of a majority of the capital stock of Target at the Effective Date ("Pro Rata Shares").

(d) All actions of the Representatives under this Paragraph 15 may be taken by either Representative individually or both Representatives jointly, except that each Representative agrees not to take any action singly unless it is impracticable under the circumstances to first consult with the other Representative.

16. Expenses. All expenses incurred by Target or any Target Stockholder in connection with the preparation and execution of this Agreement and the other agreements contemplated hereby and the consummation of the transactions contemplated hereby and thereby, including any expenses of finders, brokers, attorneys or the like, shall be borne by Target or the Target Stockholders, as the case may be; provided, however, that the reasonable expenses (including, without limitation, the fees and disbursements of counsel to the Target) incurred by Target in connection with the preparation and execution of this Agreement and the Agreements constituting Exhibits hereto shall be deemed to be acceptable to Parent for purposes of the Target Closing Balance Sheet (as such term is defined in Section 7.10, above), so long as such expenses do not exceed \$33,000 in the aggregate. All expenses incurred by Parent or Acquiror shall be borne by Parent.

17. Certain Definitions.

As used herein the following terms not otherwise defined shall have the following respective meanings:

"Business Plan": the business plan of Target dated November 1998, a copy of which has been delivered to Parent.

"Indebtedness": (a) All indebtedness for borrowed money or other obligations, commitments or liabilities, whether current or long-term, contingent or matured, secured or unsecured, (b) all indebtedness of the deferred purchase price of property or services represented by a note or security agreement, (c) all indebtedness created or arising under any conditional sale or other title retention agreement (even though the rights and remedies of the seller or lender under such agreement in the event of default may be limited to repossession or sale of such property), (d) all indebtedness secured by a purchase money mortgage or other lien to secure all or part to the purchase price of property subject to such mortgage or lien, (e) all obligations under leases that have been or must be, in accordance with GAAP, recorded as capital leases in respect of which it is liable as lessee, (f) any liability in respect of banker's acceptances or letters of credit, and (g) all indebtedness of Target, the Target Stockholders or any other Person that is guaranteed by Target or that Target has agreed (contingently or otherwise) to purchase or otherwise acquire or in respect of which Target has otherwise assured a creditor against loss.

"Person": any natural person, entity, or association, including without limitation any corporation, partnership, limited liability company, government (or agency or subdivision thereof), trust, joint venture, or proprietorship.

"Securities Act": shall mean the Securities Act of 1933, as amended, and the rules and regulations of the Commission thereunder, all as the same shall be in effect from time to time.

"Tax": any federal, state, local, or foreign income, gross receipts, franchise, estimated, alternative minimum, add-on minimum, sales, use,

transfer, registration, value added, excise, natural resources, severance, stamp, occupation, premium, windfall profit, environmental, customs, duties, real property, personal property, capital stock, intangibles, social security, unemployment, disability, payroll, license, employee, or other tax or levy, of any kind whatsoever, including any interest, penalties, or additions to tax in respect of the foregoing.

"Tax Return": any return, declaration, report, claim for refund, information return, or other document (including any related or supporting estimates, elections, schedules, statements, or information) filed or required to be filed in connection with the determination, assessment, or collection of any Tax or the administration of any laws, regulations, or administrative requirements relating to any Tax.

18. Miscellaneous Provisions.

18.1. Amendments. This Agreement may be amended in any manner and at any time prior to the submission of this Agreement to the Target Stockholders and, after such submission, may be amended to extend the Closing Date and termination date referred to in Paragraph 14 or to make other amendments which, in the opinion of the respective counsel for Parent and Target, do not substantially alter the terms hereof, by written instrument stating that it is an amendment of this

Agreement executed by Parent, Acquiror and Target and approved by the Boards of Directors of Acquiror and Target.

18.2. Notices and Representatives. Any notice expressly provided for under this Agreement shall be in writing, shall be given either manually or by written telecommunication, fax or mail, and shall be deemed sufficiently given when received by the party to be notified at its address set forth below or if and when mailed by registered mail, postage prepaid, addressed to such party at such address. Any party and any representative designated below may, by notice to the others, change its address for receiving such notices. Target agrees to forward any notices addressed to any of the Target Stockholders to such Target Stockholder(s) at the address of record reflected in the books and records of the Target.

Address for notices to Parent and Acquiror:

ACCESS Pharmaceuticals, Inc.
2600 Stemmons Frwy, Suite 176
Dallas, TX 75207-2107
Attn: Kerry P. Gray, President
Fax: (214) 905-5101
Phone: (214) 905-5100

with a copy to:

John J. Concannon III, Esq.
Bingham Dana LLP
150 Federal Street
Boston, MA 02110
Fax: (617) 951-8736
Phone: (617) 951-8000

Address for notices to Target and to the Target Stockholders:

Virologix Corporation
420 Lexington Avenue, Suite 620
New York, NY 10017
Fax: (212) 697-3160
Phone: (212) 672-9170

with a copy to the Representative:

Messrs. Judson A. Cooper and Joshua D. Schein
Prism Ventures LLC
420 Lexington Avenue, Suite 620
New York, NY 10017
Fax: (212) 697-3160
Phone: (212) 672-9150

and with another copy to:

Adam D. Eilenberg, Esq.
Ehrenreich, Eilenberg, Krause & Zivian LLP

11 East 44th Street
New York, NY 10017
Fax: (212) 986-2399
Phone: (212) 986-9700

18.3. Assignment and Benefits of Agreement. This Agreement shall be binding upon and shall inure to the benefit of the parties and their respective successors, but may not be assigned without the written consent of the other parties to this Agreement. Except as aforesaid, nothing in this Agreement, express or implied, is intended to confer upon any person other than the parties hereto any rights under or by reason of this Agreement.

18.4. Governing Law. This Agreement shall be construed and enforced in accordance with, and rights of the parties shall be governed by, the internal laws of the State of Delaware (without reference to principles of conflicts or choice of law that would cause the application of the internal laws of any other jurisdiction).

18.5. SUBMISSION TO JURISDICTION; WAIVERS. PARENT, ACQUIROR, TARGET, THE TARGET STOCKHOLDERS AND EACH OF THE OTHER TARGET STOCKHOLDERS (BY APPROVAL OF THIS AGREEMENT AND THE TRANSACTIONS CONTEMPLATED HEREBY), FOR ITSELF AND ON BEHALF OF ITS SUCCESSORS, ASSIGNS AND TRANSFEREES, HEREBY IRREVOCABLY AND UNCONDITIONALLY:

(i) SUBMITS FOR ITSELF AND ITS PROPERTY IN ANY LEGAL ACTION OR PROCEEDING RELATING TO THIS AGREEMENT OR FOR RECOGNITION AND ENFORCEMENT OF ANY JUDGMENT IN RESPECT THEREOF, TO THE NONEXCLUSIVE GENERAL JURISDICTION OF THE COURTS OF THE STATE OF TEXAS, THE COURTS OF THE UNITED STATES OF AMERICA FOR THE DISTRICT OF TEXAS AND APPELLATE COURTS FROM ANY THEREOF;

(ii) CONSENTS THAT ANY SUCH ACTION OR PROCEEDING MAY BE BROUGHT IN SUCH COURTS, AND WAIVES ANY OBJECTION THAT IT MAY NOW OR HEREAFTER HAVE TO THE VENUE OF ANY SUCH ACTION OR PROCEEDING IN ANY SUCH COURT OR THAT SUCH ACTION OR PROCEEDING WAS BROUGHT IN AN INCONVENIENT COURT AND AGREES NOT TO PLEAD OR CLAIM THE SAME;

(iii) AGREES THAT SERVICE OF PROCESS IN ANY SUCH ACTION OR PROCEEDING MAY BE EFFECTED BY MAILING A COPY THEREOF BY REGISTERED OR CERTIFIED MAIL (OR ANY SUBSTANTIALLY SIMILAR FORM OF MAIL), POSTAGE PREPAID, AT ITS ADDRESS AS PROVIDED IN PARAGRAPH 17.2 HEREOF OR AT SUCH OTHER ADDRESS AS IT SHALL HAVE NOTIFIED EACH OF THE OTHER PARTIES HERETO IN THE MANNER PROVIDED IN PARAGRAPH 17.2 HEREOF;

(iv) AGREES THAT NOTHING HEREIN SHALL AFFECT THE RIGHT TO EFFECT SERVICE OF PROCESS IN ANY OTHER MANNER PERMITTED BY LAW; AND

(v) WAIVES TRIAL BY JURY IN ANY LEGAL ACTION OR PROCEEDING RELATING TO THIS AGREEMENT AND FOR ANY COUNTERCLAIM THEREIN.

18.6. Counterparts. This Agreement may be executed by the parties in separate counterparts, each of which when so executed and delivered shall be an original, but all such counterparts shall together constitute but one and the same instrument.

18.7. Section Headings. All enumerated subdivisions of this Agreement are herein referred to as "Paragraph." The headings of sections or subsections are for reference only and shall not limit or control the meaning thereof.

18.8. Public Statements or Releases. The parties hereto each agree that no party to this Agreement shall make, issue or release any public announcement, statement or acknowledgment of the existence of, or reveal the status of, the transactions provided for herein, without first obtaining the consent of the other parties hereto. Nothing contained in

this Paragraph 18.8 shall prevent any party from making such public announcements as such party may consider necessary in order to satisfy such party's legal or contractual obligations.

[Remainder of Page Intentionally Left Blank]

IN WITNESS WHEREOF, the parties hereto have duly executed this Agreement as an instrument under seal as of the date and year first above written.

PARENT:
ACCESS Pharmaceuticals, Inc.
By: /s/ Kerry P. Gray

President & Chief Executive Officer

ACQUIROR:
ACCESS Holdings, Inc.
By: /s/ Kerry P. Gray

President & Chief Executive Officer

TARGET:
Virologix Corporation
By: /s/ Josua D. Schein

Title: Director

FOUNDING STOCKHOLDERS:
/s/ Judson A. Cooper

Judson A. Cooper

/s/ Joshua D. Schein

Joshua D. Schein

/s/ Richard Stone

Richard Stone

Acknowledged and Agreed for the purpose of being bound by any terms of this Agreement relating to the agreements, obligations and covenants of the Representatives:

/s/ Joshua D. Schein

Joshua D. Schein

/s/ Judson A. Cooper

Judson A. Cooper

DISCLOSURE SCHEDULES, VIROLOGIX CORPORATION ("VIROLOGIX")

Schedule 3.5

VIROLOGIX COMMON STOCK (assuming conversion of all Series B Preferred*)

| | |
|---------------------------------|---------|
| Allie, Gary & Barbara | 18,000 |
| Amore Perpetuo Trust | 36,000 |
| Anzalone Family LP DTD 12-30-93 | 34,250 |
| Alfred J. Anzalone Family LP | 54,000 |
| Anzalone 1995 Trust | 90,000 |
| Ash, David | 285,834 |
| Blumenthal, Harry | 36,000 |

| | |
|------------------------------|-------------------------|
| Carroll, Douglas | 4,500 |
| Carson, James | 18,000 |
| Central Yeshiva | 30,000 |
| Chelsey Capital | 4,500 |
| Chiarulli, Frank | 4,500 |
| Chidylo, Peter & Nancy | 22,834 |
| Cooper, Judson | 543,750 |
| Corbin, Charles | 4,500 |
| Fish, Daniel | 27,000 |
| Gold, Kenneth | 2,250 |
| Goldblatt, Herbert & Marlene | 2,250 |
| Gross Foundation | 120,000 |
| Hall, William | 215,000 |
| Herman, Gabriel & Ellen | 2,250 |
| Heymann, Jerry | 37,500 |
| Hudak, Thomas | 117,668 |
| Hurwitz, Marc | 36,000 |
| Jacobson, Eli | 24,000 |
| Kaufman, Gary | 4,500 |
| Kaufman, David | 50,000 |
| Lanier, Thomas | 1,800 |
| Low, Nathan | 159,375 |
| Markowitz, Jeffrey | 4,500 |
| McCooey, David | 4,500 |
| Mendel, Gary | 18,000 |
| Michelizzi, Maryann | 15,000 |
| Milstein, Albert | 4,500 |
| Milstein, Howard | 311,288 |
| Nayden, Denis | 108,000 |
| Oliviera, Steven | 393,750 |
| Prism Ventures | 50,000 |
| Peck, Barton & Alice | 4,500 |
| Praschil, Robert | 4,500 |
| Reich, Yaron | 18,000 |
| Rickel, Robert | 39,000 |
| Rozen, David | 36,000 |
| Schein, Joshua | 543,750 |
| Shoup, Stefan | 18,000 |
| Shoup, Jane | 18,000 |
| Sirotkin, Paul | 36,000 |
| Sirotkin, Martin | 36,000 |
| Smith, Beverly | 15,000 |
| Spitz, Howard | 2,700 |
| Stanley, Glenn | 4,500 |
| Stanley, Joseph | 4,500 |
| Stanley, Rita | 4,500 |
| Stanley, Stuart | 4,500 |
| Stone, David | 60,000 |
| Stone, Richard | 354,375 |
| Takahashi, Hidehiro | 90,000 |
| Teate, William | 9,000 |
| Winston IPO Investments | 36,000 |
| Zukier, Herz | 13,500 |
| Total: | <u><u>4,248,124</u></u> |

*OUTSTANDING SERIES B PREFERRED STOCK
(to be converted into 2 shares of Virologix Common Stock prior to Closing)

| Name of Shareholder | No. of Shares of Series B | No. of Shares of Common After Conversion |
|------------------------|---------------------------|---|
| Allie, Gary & Barbara | 9,000 | 18,000 |
| Anzalone Family LP | 13,750 | 27,500 |
| Ash, David | 64,167 | 128,334 |
| Carson, James | 9,000 | 18,000 |
| Chidylo, Peter & Nancy | 9,167 | 18,334 |
| Fish, Daniel | 13,500 | 27,000 |
| Hudak, Thomas | 18,334 | 36,668 |

| | | |
|------------------|---------|---------|
| Mendel, Gary | 9,000 | 18,000 |
| Milstein, Howard | 54,000 | 108,000 |
| Nayden, Denis | 54,000 | 108,000 |
| Sirotkin, Paul | 18,000 | 36,000 |
| Sirotkin, Martin | 18,000 | 36,000 |
| Teate, William | 4,500 | 9,000 |
| | ----- | ----- |
| Total: | 294,418 | 588,836 |
| | ===== | ===== |

VIROLOGIX OPTIONS

| | |
|-----------------|---------------------------|
| Golikov, Peter | 12,500 @ \$6.00 per share |
| Song, Elizabeth | 2,500 @ \$6.00 per share |
| | ----- |
| Total: | 15,000 @ \$6.00 per share |
| | ===== |

VIROLOGIX WARRANTS

| | |
|------------------------|----------------------------|
| Anzalone Family LP | 7,500 @ \$3.00 per share |
| Ash, David | 35,000 @ \$3.00 per share |
| Chidylo, Peter & Nancy | 5,000 @ \$3.00 per share |
| Hudak, Thomas | 10,000 @ \$3.00 per share |
| Koprowski, Hilary | 10,000 @ \$3.00 per share |
| Milstein, Howard | 50,000 @ \$3.00 per share |
| | ----- |
| Total: | 117,500 @ \$3.00 per share |
| | ===== |

Total Common Stock, Options and Warrants: 4,380,624
=====

Schedule 3.7

Virologix Financial Statements
December 31, 1996 - attached
September 30, 1998 - attached

Schedule 3.8

(i) Material Changes since December 31, 1996:

Personnel: Peter Golikov resigned as President on 3/2/98; Elizabeth Song resigned as Director of Viral Research on 8/3/98. Dr. William Hall, Chief Scientific Officer, is owed approximately \$75,000 by Virologix for accrued and unpaid compensation under his Employment Agreement; Judson Cooper and Joshua Schein resigned as Chief Financial Officer and Executive Vice President, respectively, in August 1998. In December 1997, CSO Ventures LLC agreed to terminate its 6/1/96 consulting agreement with Virologix. In August 1998, Prism Ventures LLC (of which Messrs. Cooper and Schein are members) agreed to terminate its 1/1/98 consulting agreement with Virologix and David Kaufman terminated his 3/7/98 consulting agreement.

(ii) Acquisition or disposition of assets: None

(iii) Damages, destruction or loss: None

(iv) Dividends or distributions: None

(v) Issuances of securities:

| Date | Transaction |
|------------|---|
| ----- | ----- |
| April 1997 | \$300,000 loan and 50,000 warrants issued at \$3.00 per share. The loan subsequently converted into 203,288 shares of Common Stock. |

| | |
|-------------------|---|
| June, August 1997 | Series A Preferred Stock Offering, \$864,000 raised, converted into a total of 576,000 shares of Common Stock |
|-------------------|---|

October 1997 Series B Preferred Stock Offering, \$ 486,000 raised, 189,000 shares of Series B Preferred Stock issued (each to be converted into two (2) shares of Common Stock as a closing condition to the Merger); \$287,500 principal amount of 1996 bridge loans converted into 105,418 Series B Preferred Stock (each to be converted into two (2) shares of Common Stock as a closing condition to the Merger) and an aggregate of 57,500 warrants at an exercise price of \$3.00 per share issued to the four (4) lenders who elected to convert.

August 1998 Cancellation of existing Cooper and Schein Employment Agreements and forgiveness of all amounts owed and owing to Cooper and Schein under such agreements in consideration for the issuance of an aggregate amount of 150,000 shares of Common Stock to each of Cooper and Schein. Cancellation of Prism Ventures LLC Consulting Agreement and David Kaufman Consulting Agreement and forgiveness of all amounts owed and owing thereunder (except for \$70,000 still owing to Prism) in consideration for the issuance of an aggregate amount of 50,000 shares of Common Stock to each of Prism and Kaufman.

Other Former employees Elizabeth Song and Peter Golikov have options to purchase 2,500 shares and 12,500 shares respectively of the Company's Common Stock at an exercise price of \$6.00 per share. Hilary Koprowski, who was to sit on the Company's Scientific Advisory Board, has options to purchase 10,000 shares of the Company's Common Stock at an exercise price of \$3.00 per share.

(vi) Increase in compensation: None

(vii) Non-ordinary course transactions: None

(viii) Incurrence of material obligations: None

(ix) Mortgages, liens: None

(x) Changes in accounting principles: None

(xi) Discharge of Liens: None

Schedule 3.9

(a) Liens: None

(b) Tangible assets greater than \$10,000: None

(c) Leases: Virologix has a month-to-month lease arrangements for office facilities at 420 Lexington Avenue, New York, NY with SIGA Pharmaceuticals, Inc. ("SIGA"), a Delaware public company in which the Founding Stockholders collectively are controlling stockholders and whose officers and directors include Judson Cooper and Joshua Schein. The rent is \$1,000 per month, commencing March 1998 and will terminate upon consummation of the Merger. All of the rent has been paid.

Schedule 3.10

Indebtedness: Loans in November 1998 of \$80,000 in aggregate from Richard Stone, Steven Oliveira, Judson Cooper and Joshua Schein (\$20,000 each), payable upon the earlier of 1 year or the consummation of a financing or merger transaction by Virologix, at a rate of interest equal to the minimum applicable rate as announced by the Treasury Department in effect as of November 1, 1998. The loans will be repaid upon consummation of the Merger.

Schedule 3.13

Litigation: Litigation threatened by stockholder David Ash against broker Steven Oliveira, CSO Investments LLC and Virologix regarding his initial and follow-on investments in Virologix. To the knowledge of Virologix, no action has been commenced against the Company. Mr. Ash has commenced an arbitration against Mr. Oliveira.

Schedule 3.15

Labor Relations Issues: None

Schedule 3.16

Contracts:

1. Rockefeller License Agreement, 2/27/96
2. NIH License Agreement (signature of NIH is pending)
3. Judson Cooper Employment Agreement dated as of 1/1/96, as amended 2/10/97 and termination agreement dated 8/2/98
4. Joshua Schein Employment Agreement dated as of 1/1/96, as amended 2/10/97 and termination agreement dated 8/2/98
5. David Kaufman Consulting Agreement dated 3/7/98 and termination agreement dated 8/2/98
6. Research Support Agreement dated as of 2/1/96 with University College Dublin, expired 12/31/97 (Virologix is in arrears in the last quarterly payment of \$53,625)
7. Elizabeth Song Employment Agreement, 1/1/97 (terminated)
8. Peter Golikov Employment Agreement, 2/10/97 (terminated)
9. Dr. William Hall Employment Agreement dated as of 1/1/96 (Virologix is in arrears in the amount of approximately \$75,000)
10. Prism Ventures LLC Consulting Agreement dated as of 1/1/98 and termination agreement dated 8/2/98
11. CSO Ventures LLC Consulting Agreement dated as of 6/1/96 and termination agreement dated 12/1/97

Schedule 3.17

Intellectual Property:

1. Technology licensed by Virologix under Rockefeller License Agreement as described therein.
2. Negotiations regarding licensing by Virologix of technology from the NIH as described in the draft license agreement as provided to
3. Virologix is not a licensor of any intellectual property

Schedule 3.18

Insurance policies: Virologix currently maintains only one insurance policy for officers' and directors' liability (General Star Indemnity Company, Policy No. IYA829073A).

Schedule 3.19

Governmental permits: None

Schedule 3.20

Employee Benefit Plans:

1. 1996 Incentive and Non Qualified Stock Option Plan, 375,000 shares authorized; 90,000 options originally granted; 15,000 options currently outstanding
2. 401(k) Plan: Participants Elizabeth Song and Peter Golikov have withdrawn their accounts; only remaining beneficiary is Dr. William Hall with an account balance of less than \$8,000

Schedule 3.21

Conflicts of Interest:

1. Virologix Lease: See Schedule 3.9(c)
2. Judson Cooper and Joshua Schein, directors of Virologix and formerly officers, are members of Prism Ventures LLC which terminated its consulting agreement with Virologix in August 1998.
3. Judson Cooper and Joshua Schein, directors of Virologix and formerly officers, were members of CSO Ventures LLC which terminated its consulting agreement with Virologix in December 1997.

Schedule 3.22

Contract Defaults:

1. Research Support Agreement (expired), University College, Dublin (last quarter's payment still owing)
2. Employment Agreement with Dr. William Hall (approximately \$75,000 owing)

Schedule 3.25

Registration Rights: None

Schedule 4.9

Licenses, Permits and Other Governmental Authorizations: None

Schedule 5.3

Changes in capitalization: conversion of any outstanding Series B Preferred Stock

Schedule 5.4

Obligations to former employees: Dr. William Hall, approximately \$75,000.

Schedule 7.9

VIROLOGIX OPTIONS

| | |
|-----------------|---------------------------|
| Golikov, Peter | 12,500 @ \$6.00 per share |
| Song, Elizabeth | 2,500 @ \$6.00 per share |
| | ----- |
| Total: | 15,000 @ \$6.00 per share |
| | ===== |

VIROLOGIX WARRANTS

| | |
|------------------------|----------------------------|
| Anzalone Family LP | 7,500 @ \$3.00 per share |
| Ash, David | 35,000 @ \$3.00 per share |
| Chidylo, Peter & Nancy | 5,000 @ \$3.00 per share |
| Hudak, Thomas | 10,000 @ \$3.00 per share |
| Koprowski, Hilary | 10,000 @ \$3.00 per share |
| Milstein, Howard | 50,000 @ \$3.00 per share |
| | ----- |
| Total: | 117,500 @ \$3.00 per share |
| | ===== |

Exhibit A

CERTIFICATE OF MERGER
 OF
 ACCESS HOLDINGS, INC.
 WITH AND INTO
 VIROLOGIX CORPORATION

The undersigned hereby certify as follows:

1. The respective names and states of incorporation of the constituent corporations participating in the merger hereby effected (the "Merger") are Access Holdings, Inc. ("Holdings"), a Delaware corporation, and Virologix Corporation ("Virologix"), a Delaware corporation.

2. An Agreement of Merger and Plan of Reorganization (the "Merger Agreement"), dated as of February 23, 1999, by and among Holdings, ACCESS Pharmaceuticals, Inc., a Delaware corporation, and Virologix, has been approved, adopted, certified, executed, and acknowledged by each of the constituent corporations in accordance with Section 251 of the Delaware General Corporation Law.

3. The name of the surviving corporation in the Merger is Virologix Corporation.

4. The Certificate of Incorporation and By-Laws, respectively, of Holdings, as amended and in effect immediately prior to the effective time of the Merger, shall be, respectively, the Certificate of Incorporation and By-Laws of the surviving corporation.

5. A copy of the Merger Agreement is on file at the principal place of business of the surviving corporation, the address of which is as follows:

Virologix Corporation
c/o ACCESS Pharmaceuticals, Inc.
2600 N. Stemmons Freeway, Suite 176
Dallas, Texas 75207-2107

6. A copy of the Merger Agreement will be furnished by the surviving corporation, on request and without cost, to any stockholder of the constituent corporations.

7. This Certificate of Merger shall be effective upon the filing hereof with the Secretary of State of the State of Delaware.

Executed on _____, 1999.

ACCESS Holdings, Inc.

Virologix Corp.

By _____
Kerry P. Gray
President and
Chief Executive Officer

By _____
Name
President

Attest:

Attest:

Name
Secretary

Name
Secretary

Exhibit B

REGISTRATION RIGHTS AGREEMENT

This Registration Rights Agreement (this "Agreement"), dated as of February 23, 1999, is made by and among ACCESS PHARMACEUTICALS, INC., a Delaware corporation (the "Company"), and each of the individuals or entities listed on Schedule 1 attached hereto (the "Stockholders").

NOW THEREFORE, in consideration of the mutual covenants

contained herein and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties hereto agree as follows:

1. Definitions. All capitalized terms used herein without definition shall have the meanings ascribed to such terms in the Agreement of Merger and Plan of Reorganization (the "Merger Agreement"), dated as of even date herewith, by and among the Company, ACCESS Holdings Inc., a Delaware corporation, and Virologix Corporation, a Delaware corporation. For the purposes of this Agreement, the following terms shall have the respective meanings set forth below or elsewhere in this Agreement as referred to below:

"Business Day" shall mean any day that is not a Saturday, a Sunday or a legal holiday in the State of Delaware.

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

"Registrable Securities" shall mean, collectively, any and all shares of Parent Stock now or hereafter issued to the Stockholders pursuant to the Merger Agreement; provided, however, that with respect to any such shares of Parent Stock, such shares of Parent Stock shall cease to be Registrable Securities when (a) such shares of Parent Stock have been disposed of by the Stockholders thereof in a public distribution of securities effected pursuant to this Agreement, (b) such shares of Parent Stock become eligible for resale pursuant to Rule 144 promulgated under the Securities Act (as hereinafter defined) or other provision of substantially similar effect, or (c) such shares of Parent Stock have ceased to be outstanding.

"Required Stockholders" shall mean, at the relevant time of reference thereto, those Stockholders holding, in the aggregate, thirty percent (30%) of the Registrable Securities then held by all Stockholders.

"Securities Act" shall mean the Securities Act of 1933, as amended and in effect from time to time.

2. Registration and Sale.

(a) Subject to the limitations set forth in this Paragraph 2(a) and in Paragraphs 2(b) and (c) below, on such dates no later than six (6) months and twelve (12) months (as applicable) after the Effective Date (each a "Registration Date") or at any earlier time in the discretion of the Company, subject, however, to the provisions of Paragraph 7 herein, the Company shall use commercially reasonable efforts to cause all of the Registrable Securities held by the Stockholders as of such date to be registered for resale to the public pursuant to a registration statement on Form SB-2 (or comparable or successor form) under the Securities Act, which shall be a "shelf registration" made pursuant to Rule 415 adopted pursuant to the Securities Act. On or before each Registration Date, the Company shall prepare and file, and use commercially reasonable efforts to prosecute to effectiveness, an appropriate filing with the Commission of a registration statement covering all of the Registrable Securities of the Stockholders as of such Registration Date as have not previously been registered as of such Registration Date.

Notwithstanding anything to the contrary contained in this Paragraph 2(a), the Company shall have no obligation of any kind whatsoever under this Paragraph 2(a) with respect to registering Registrable Securities under the Securities Act unless the number of Registrable Securities issued to the Stockholders on such date to be registered for resale to the public under the Securities Act by the Stockholders (net of Registrable Securities that have been withdrawn from registration pursuant to the last two sentences of Paragraph 2(c) below) is equal at least to 100,000 shares.

(b) Notwithstanding anything to the contrary set forth in Paragraph 2(a) above, the Company shall not be obligated to prepare or file any registration statement pursuant to Paragraph 2(a) hereof, or to prepare or file any amendment or supplement thereto, and the Stockholders agree that they shall not sell any Registrable Securities, at any time when the Company, in the good faith and reasonable judgment of its Board of Directors, reasonably believes that the filing thereof at that time, or the

offering or sale of Registrable Securities pursuant thereto, (a) would materially adversely affect a pending or proposed public offering of capital stock of the Company, or an acquisition, merger, recapitalization, consolidation, reorganization or other transaction, or any negotiations, discussions or pending proposals with respect thereto, or (b) would require the disclosure of information that would have a material adverse effect on the Company, is likely to materially adversely affect the Company or any pending transaction or negotiations of the Company, or would constitute a violation of the Securities Act or any state or other applicable securities laws; provided, however, that the filing of a registration statement, or any supplement or amendment thereto, by the Company may be deferred pursuant to this Paragraph 2(b), and the restrictions on the sale of Registrable Securities by the Stockholders shall be effective, only for the minimum period of time necessary under the circumstances, but not to exceed sixty (60) days and in any event no more than two deferrals shall be allowed in any twelve (12) month period. In the case of any such delay, the Company shall deliver to the Stockholders or the Representative a written certificate of the Company's Chief Executive Officer certifying that such delay is necessary in the good faith and reasonable judgment of the Company.

(c) The Company shall be entitled to include in any registration statement filed or to be filed by the Company pursuant to Paragraph 2(a) above shares of the capital stock of the Company to be sold by the Company for its own account or for the account of any other stockholders of the Company.

3. Further Obligations of the Company. Whenever the Company is required to register Registrable Securities under this Agreement, it agrees that it shall also do the following as expeditiously as commercially reasonable:

(a) prepare and file with the Commission a registration statement on Form SB-2 (or other applicable form, as determined by the Company) with respect to such Registrable Securities and use commercially reasonable efforts to cause such registration statement to become and remain effective for a period of time required for the disposition of such Registrable Securities by the Stockholders thereof; provided, however, that such period shall not be longer than the second anniversary of the Closing Date of the Merger or, if less, the date on which the Registrable Securities may be sold under Rule 144 or any successor provision promulgated under the Securities Act having substantially similar effect, unless the Company otherwise agrees in its sole discretion;

(b) prepare and file with the Commission such amendments and supplements to such registration statement and the prospectus used in connection therewith as may be necessary to keep such registration statement effective for the applicable time period set forth in Section 3(a);

(c) furnish to each Stockholder offering Registrable Securities under such registration statement such number of copies of a summary prospectus or other final prospectus as such Stockholder may reasonably request;

(d) register or qualify the Registrable Securities covered by such registration statement under the securities or blue sky laws of such jurisdictions within the United States as each Stockholder shall reasonably request unless an available exemption to such registration or qualification requirements is then available; provided that the Company shall not be obligated to register or qualify such Registrable Securities in any jurisdiction in which such registration or qualification would require the Company to qualify as a foreign corporation or file any general consent to service of process where it is not then so qualified or otherwise required to be qualified or has not theretofore so consented;

(e) timely file with the Commission such information as the Commission may prescribe under Sections 13 or 15(d) of the Securities Exchange Act of 1934, as amended, and otherwise use commercially reasonable efforts to ensure that the public information requirements of Rule 144 under the Securities Act are

satisfied with respect to the Company; and

(f) notify the Stockholders of the issuance by the Commission of any stop order suspending the effectiveness of a registration statement registering the Registrable Securities or their resale which is known to the Company or the initiation of any proceedings for that purpose which are known to the Company.

4. [Reserved].

5. Expenses; Limitations on Registration.

(a) All expenses incurred by the Company in complying with its obligations under this Agreement shall be paid by the Company, except that the Company shall not be liable for any fees, discounts or commissions to any underwriter or any fees or disbursements of counsel for any underwriter or any Stockholder (other than such one attorney or law firm retained by the Stockholders, and reasonably satisfactory to the Company) in respect of the Registrable Securities sold by any Stockholders.

(b) It shall be a condition precedent to the obligation of the Company to take any action pursuant to this Agreement in respect of the Registrable Securities which are to be registered at the request of any Stockholder that such Stockholder shall furnish to the Company or the underwriters such information regarding the Stockholder and the Registrable Securities held by such Stockholder as the Company or the underwriters shall reasonably request and shall be required in connection with the action taken by the Company.

6. Indemnification and Contribution.

(a) Indemnification by the Company. If any Registrable Securities are registered for resale under the Securities Act pursuant to this Agreement, the Company shall indemnify and hold harmless each Stockholder of such Registrable Securities and such Stockholder's directors, officers, employees and agents, against any losses, claims, damages, liabilities or expenses, joint or several, to which such Stockholder or any such director, officer, employee or agent may become subject under the Securities Act or any other statute or at common law, insofar as such losses, claims, damages, liabilities or expenses (or actions in respect thereof) arise out of or are based upon (i) any untrue statement of any material fact contained, on the effective date thereof, in any registration statement under which such Registrable Securities were registered under the Securities Act or any final prospectus contained therein (in each case as amended or supplemented, including without limitation, any update pursuant to Rule 424(b) under the Securities Act), provided that such final prospectus was used to effect a sale by such Stockholder; provided, however, that the Company shall not be liable in any such case to the extent that any such loss, claim, damage, liability or expense arises out of or is based upon any untrue statement or alleged untrue statement or any omission or alleged omission made in such registration statement, final prospectus, or amendment or supplement in reliance upon and in conformity with information furnished to the Company by such Stockholder or by Virologix Corporation. Such indemnity shall remain in full force and effect regardless of any investigation made by or on behalf of such Stockholder or such director, officer, employee or agent.

(b) Stockholders' Indemnification. In connection with any registration statement in which a Stockholder is participating, each such Stockholder will furnish to the Company such information as shall reasonably be requested by the Company for use in any such registration statement or prospectus and shall severally, and not jointly, indemnify, to the extent permitted by law, the Company, its directors, officers, employees and agents against any losses, claims, damages, liabilities and expenses (under the Securities Act, at common law or otherwise) caused by or resulting from any untrue statement or alleged untrue statement of a material fact contained in any registration statement filed by the Company under the Securities Act, or any final prospectus included therein (in each case as

amended or supplemented,

including without limitation, any update pursuant to Rule 424(b) under the Securities Act), but only to the extent that such untrue statement of a material fact is contained in, or such material fact is omitted from, information furnished by such Stockholder, and such Stockholder shall reimburse the Indemnitees for any legal and any other expenses reasonably incurred in connection with investigating or defending, settling or satisfying any such loss, claim, damage, liability or expense; provided, however, that the obligations of such Stockholders hereunder shall be limited to an amount equal to the proceeds to each Stockholder of Registrable Securities sold in connection with such registration.

(c) Indemnification Procedures. Promptly after receipt by an indemnified party hereunder of notice of the commencement of any action, such indemnified party shall, if a claim in respect thereof is to be made against the indemnifying party hereunder, notify the indemnifying party in writing thereof (an "Indemnification Notice"), but the omission so to notify the indemnifying party shall not relieve it from any liability which it may have to any indemnified party unless the indemnifying party is materially and adversely affected thereby. In case any such action shall be brought against any indemnified party and it shall notify the indemnifying party of the commencement thereof, the indemnifying party shall be entitled to participate in and, to the extent it shall wish, to assume and undertake the defense thereof and, after notice from the indemnifying party to such indemnified party of its election so to assume and undertake the defense thereof, the indemnifying party shall not be liable to such indemnified party under this Paragraph 6(c) for any legal expenses subsequently incurred by such indemnified party in connection with the defense thereof. Notwithstanding the foregoing, the indemnified party shall have the right to employ its own counsel at its expense unless (i) the employment of such counsel shall have been authorized in writing by the indemnifying party or (ii) the attorneys for the indemnifying party shall have concluded that there are defenses available to the indemnified party that are different from or additional to those available to the indemnifying party and such counsel reasonably concludes that it is therefore unable to represent the interests of both the indemnified and indemnifying party (in which case the indemnifying party may employ separate counsel). In no event shall the indemnifying party be liable for fees and expenses of more than one counsel separate from its own counsel.

7. Termination of Registration Rights. Notwithstanding anything in this Agreement to the contrary, the registration rights provided to the Stockholders pursuant to Section 2 of this Agreement shall terminate and be of no further force or effect as to any particular Registrable Securities, when such Registrable Securities may be publicly sold pursuant to Rule 144 under the Securities Act.

8. Miscellaneous.

(a) Notices. All notices and other communications pursuant to this Agreement shall be in writing, either hand delivered or sent by certified or registered mail with charges prepaid or by commercial courier guaranteeing next business day delivery, or sent by telex, facsimile machine or telegraph, and shall be addressed:

(i) in the case of the Company, to the Company at its principal office set forth in the Merger Agreement; and

(ii) in the case of a Stockholder, to the address set forth on Schedule 1 to this Agreement.

Any notice or other communication pursuant to this Agreement shall be deemed to have been duly given or made and to have become effective (i) when delivered in hand to the party to which it was directed, (ii) if sent by telex, telecopier, facsimile machine or telegraph and properly addressed in accordance with the foregoing provisions of this Section 8(a), when received by the addressee, (iii) if sent by commercial courier guaranteeing next business day delivery, on the business day following the date of delivery to such courier, or (iv) if sent by first-class mail, postage prepaid, and properly addressed in accordance with the

foregoing provisions of this Section 8(a), (A) when received by the addressee, or (B) on the third business day following the day of dispatch thereof, whichever of (A) or (B) shall be the earlier.

(b) Assignment. This Agreement shall inure to the benefit of and be binding upon each Stockholder and its, his or her heirs and successors. This Agreement shall inure to the benefit of and be binding upon the Company and its successors and assigns. The Stockholders' rights and obligations and each Stockholder's rights and obligations under this Agreement may only be assigned or delegated if each Stockholder's Registrable Securities are assigned to the same party to which the rights hereunder are assigned or delegated, and such assignment of Registrable Securities is not in violation of the Securities Act or any state securities laws as set forth in the written opinion of counsel to such Stockholder, reasonably satisfactory to the Company. The Company's rights and obligations under this Agreement shall not be assigned or delegated.

(c) Amendment and Waiver. This Agreement may not be amended except by an instrument in writing signed by the Company and by the Required Stockholders. Any Stockholder may waive any of its, his or her rights under this Agreement (including, without limitation, such Stockholder's right to cause any other Person to comply with such other Person's obligations under this Agreement) only by an instrument in writing signed by such Stockholder; provided, however, that (i) any rights under this Agreement which inure to the benefit of any and all Stockholders (including, without limitation, the right of any and all Stockholders to cause any other Person to comply with such other Person's obligations under this Agreement) may be waived on behalf of any and all Stockholders by an instrument in writing signed by the Required Stockholders. Any waiver, pursuant to this Subsection 8(c), of a breach of this Agreement shall not operate or be construed as a waiver of any subsequent breach.

(d) Governing Law; Headings. This agreement shall be governed by and construed in accordance with the laws of the State of Delaware. The headings in this Agreement are for convenience only and shall not affect the construction hereof.

(e) Severability. In the event that any provision of this Agreement shall be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby.

(f) Entire Agreement. This Agreement is intended by the parties as a final expression of their agreement and intended to be a complete and exclusive statement of the agreement and understanding of the parties hereto in respect of the subject matter contained herein and therein. This Agreement supersedes all prior agreements and understandings between the parties with respect to the subject matter contained herein and therein.

(g) Gender and Number. Whenever the context may require, any pronouns used herein shall include the corresponding masculine, feminine or neuter forms, and the plural form of names, defined terms, nouns and pronouns shall include the singular and vice-versa.

(h) Counterparts. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, and it shall not be necessary in making proof of this Agreement to produce or account for more than one such counterpart.

IN WITNESS WHEREOF, the Company and the Stockholders have executed this Agreement under seal as of the date first above written.

By: _____
Kerry P. Gray, President

STOCKHOLDER REPRESENTATIVE

By _____

[Remainder of Page Intentionally Left Blank]

Schedule 1

Stockholders

Exhibit C

Virologix Corporation

OFFICER'S CERTIFICATE

I, _____, the duly elected, qualified and acting
_____ of
Virologix Corporation, a Delaware corporation ("Virologix"), do
hereby certify in such capacity and not individually that:

1. The representations and warranties made by Virologix contained in the Agreement of Merger and Plan of Reorganization (the "Merger Agreement") dated as of February 23, 1999, by and among Virologix, Access Holdings, Inc., a Delaware corporation ("Holdings"), and Access Pharmaceuticals, Inc., a Delaware corporation (the "Parent"), are true and correct in all material respects at and as of the date hereof with the same effect as though such representations and warranties had been made or given at and as of the date hereof, except to the extent that any such representation or warranty relates specifically to an earlier date.

2. Virologix has performed and complied in all material respects with all of the obligations to be performed or complied with by it under the Merger Agreement on or prior to the date hereof.

3. To the best of my knowledge, no restraining order or injunction or other order or other legal restraint or prohibition exists which would have the effect of preventing the merger contemplated by the Merger Agreement or the other transactions contemplated thereby.

4. Each of the conditions to the obligations of the Parent and Access Holdings set forth in Section 7 of the Merger Agreement have been satisfied on or prior to the date hereof.

4. Virologix mailed the [Information Memorandum, dated _____, 1999] to all of the Stockholders of Virologix on or about _____, 1999.

IN WITNESS WHEREOF, I have hereunto set my hand on this _____ day of _____, 1999.

By:
Title:

Exhibit D

February ____, 1999

ACCESS Pharmaceuticals, Inc.
2600 N. Stemmons Frwy.
Dallas, TX 75207-2107

Re: Virologix Corporation

Ladies and Gentlemen:

We have acted as counsel to Virologix Corporation (the "Company"), a Delaware corporation, in connection with the negotiation, execution and delivery of the agreement of Merger and Plan of Reorganization, dated as of February 23, 1999 (the "Merger Agreement"), by and among the Company, ACCESS Pharmaceuticals, Inc., a Delaware corporation ("Parent"), ACCESS Holdings, Inc., a Delaware corporation and direct wholly-owned subsidiary of Parent ("Acquirer"), and certain stockholders of the Company (the "Stockholders"), and the merger of the Acquirer with and into the Company pursuant to the Merger Agreement and the consummation of the other transactions contemplated by the Merger Agreement. Capitalized terms used and not otherwise defined in this opinion letter have the respective meanings ascribed to them in the Merger Agreement.

We have examined copies of the Merger Agreement, the Registration Rights Agreement and such other agreements, instruments, certificates, corporate and public records, and other documents as we have deemed necessary for purposes of this opinion.

As to any opinion below relating to the existence, qualification or standing of the Company in any jurisdiction, our opinion relies entirely upon, and is limited by, those certificates of public officials attached as Exhibit A.

We have assumed the genuineness of all signatures, the conformity to the originals of all documents reviewed by us as copies, the authenticity and completeness of all original documents reviewed by us in original or copy form, the authority of each person executing any document or instrument (other than on behalf of the Company) to execute such document or instrument, and the legal competence of each individual executing any document or instrument. We have assumed that the Merger Agreement has been duly authorized, executed, and delivered by each of the parties thereto (other than the Company) and constitutes the valid and binding obligation of such parties, and is enforceable against such parties in accordance with its terms.

With respect to all matters of fact (including factual conclusions and characterizations and descriptions of purpose, intention, or other state of mind), we have relied entirely upon the representations of Holdings, Parent and the Company set forth in the Merger Agreement, and certificates of officers of the Company, and have assumed, without independent inquiry or investigation, the accuracy of those representations and certificates.

When an opinion set forth below is given to our knowledge, the relevant knowledge is limited to the actual knowledge of the individual lawyers in this firm who have participated directly in the specific transactions to which this opinion relates, and without any special or additional inquiry or investigation undertaken for the purposes of this opinion.

Each opinion set forth below relating to the enforceability of any agreement or instrument against the Company is subject to the following general qualifications:

(i) as to any instrument delivered by the Company, we assume that Holdings or Parent, as appropriate, has received the agreed-to consideration therefor;

(ii) as to any agreement to which the Company is a party, we assume that such agreement is the binding obligation of each other party thereto (except for the Company);

(iii) the enforceability of any obligation of the Company may be limited by bankruptcy, insolvency, fraudulent conveyance, reorganization, moratorium, marshaling, or other laws and rules of law affecting the enforcement generally of creditors' rights and remedies (including such as may deny giving effect to waivers of debtors' or guarantors' rights), and may be subject to or limited by considerations of public policy;

(iv) no opinion is given herein as to the enforceability of any particular provision of any agreement relating to remedies after default or as to the availability of any specific or equitable relief of any kind;

(v) the enforcement of any of your rights may in all cases be subject to an implied duty of good faith and to general principles of equity (regardless of whether such enforceability is considered in a proceeding at law or in equity); and

(vi) the enforceability of any obligation of the Company to provide indemnification or contribution in connection with any liability under federal or state securities laws may be subject to limitations arising under federal or state securities laws or public policy on the enforceability of provisions providing for indemnity or contribution.

We give no opinion herein with respect to any antitrust laws of any jurisdiction. We give no opinion herein with respect to the securities laws of any jurisdiction, other than the Federal laws of the United States of America.

Subject to the limitations set forth herein, we have made such examination of law as we have deemed necessary for the purposes of this opinion. This opinion is limited solely to the laws of State of New York, the General Corporation Law of the State of Delaware, as applied by courts located in Delaware (the "DGCL"), and the Federal laws of the United States of America, in each case to the extent that the same may apply to or govern such transactions. We note that the Merger Agreement states that it is governed by the laws of the State of Delaware. To the extent that any matter with respect to which we give any opinion herein is governed by the laws of any other jurisdiction (including without limitation the contract and other laws of the State of Delaware), we have assumed, with your permission and without investigation, that such laws are the same as the

internal substantive laws of the State of New York. No opinion is given herein as to the choice of law, or except as specifically set forth above, internal substantive rules of law that any tribunal may apply to the transactions referred to herein.

We understand that all of the foregoing assumptions and limitations are acceptable to you.

Based upon the subject to the foregoing, it is our opinion that except as disclosed in or contemplated by the Merger Agreement (including the schedules and exhibits thereto):

1. The Company is a corporation validly existing and in corporate good standing under the laws of the State of Delaware, with all requisite corporate power and authority to own its properties and to conduct its business as now conducted. The Company is not required to be qualified to do business in any other jurisdictions to conduct its business as presently conducted by it.

2. The authorized capital stock of the Company consists of

(i) 25,000,000 shares of Common Stock, \$.0001 par value per share, of which 4,248,124 shares are issued and outstanding as of the date hereof (and all of which have been duly authorized and validly issued and are fully paid, non-assessable and owned of record as set forth on Schedule 3.5 to the Merger Agreement), (ii) 120 shares of Series A Preferred Stock, \$.0001 par value per share, of which no shares are issued or outstanding on the date hereof, and (iii) 1,350,000 shares of Series B Preferred Stock, \$.0001 par value per share, of which no shares are issued or outstanding on the date hereof. To the best of our knowledge, the Company neither has nor is bound by any (i) outstanding subscriptions, options, rights, warrants, calls, commitments, understandings, or agreements of any character, including any right of conversion or exchange under any outstanding security, instrument, or agreement, obligating the Company to issue, deliver, or sell, or cause to be issued, delivered, or sold, any shares of its Common Stock, Preferred Stock or any other equity security of it, or any securities described in the following clause, (ii) securities convertible into, exchangeable for, or representing the right to subscribe for, purchase, or otherwise receive any shares of its Common Stock, Preferred Stock or any other equity security of it, or obligating it to grant, extend, or enter into any such subscriptions, options, warrants, calls, commitments, or agreements, (iii) outstanding obligations, contractual or otherwise, to repurchase, redeem, or otherwise acquire any shares of its capital stock, (iv) any agreement or instrument relating to the voting of any of its voting securities, or (v) agreement or instrument under which any Person has the right to require the Company to effect, or to include any securities held by such Person in, any registration under the Securities Act of 1933, as amended (the "Securities Act").

3. Assuming compliance by Parent and Acquirer with applicable requirements of the General Corporation Law of the State of Delaware (the "DGCL"), upon the due filing of the Certificate of Merger with the Secretary of State of the State of Delaware and the recording of the Delaware Certificate of Merger in the office of the Recorder for the County of New Castle, Delaware, the Merger will become effective in accordance with the General Corporation Law of the State of Delaware, the Merger Agreement and the Certificate of Merger.

4. The Company has all requisite corporate power and authority to execute and deliver the Merger Agreement, to perform its obligations thereunder, and to consummate the Merger and the other transactions contemplated by the Merger Agreement. The execution and delivery by the Company of the Merger Agreement, the performance by the Company of its obligations thereunder,

and the consummation by the Company of the Merger Agreement have been duly authorized by all necessary corporate action on the part of the Company, including the approval of its stockholders, in accordance with the DGCL, and no further action on the part of the Company or its stockholders is required under the DGCL to consummate the Merger, other than the filing of the Certificate of Merger with the Secretary of State of the State of Delaware and the recording thereof with the County Recorder for the County of New Castle, Delaware. The Merger Agreement has been duly executed and delivered by the Company and is a legal, valid, and binding obligation of the Company and the Founding Stockholders, enforceable against the Company and the Founding Stockholders in accordance with its terms.

5. The execution, delivery, and performance by the Company of its obligations under the Merger Agreement and the consummation by it of the Merger and the other transactions contemplated by the Merger Agreement (i) do not and will not violate any provisions of its Certificate of Incorporation or By-Laws, each as amended to date, (ii) do not and will not violate the DGCL or any law, statute, rule, or regulation of the federal government of the United States, the State of New York, or the State of Delaware, (iii) do not and will not require the Company to obtain any approval, consent, or waiver of, or to make any filing with, any governmental body or regulatory agency of the United States of America, (iv) to the best of our knowledge, do not and will not require the Company to obtain any approval, consent, or waiver of, or to make any filing with, any other Person that has not already been obtained or made, and (v) to the best

of our knowledge, do not and will not result (with or without the giving of notice or the lapse of time or both) in any violation of or default or creation of any lien under, or the acceleration or vesting or modification of any right or obligation under, or in any conflict with, any judgement, decree, or other order of a court or governmental authority binding on or applicable to it, or any agreement or instrument to which it is a party or by which it is bound, including without limitation any agreement or instrument under which any Person has the right to acquire securities from the Company or to require the Company to register securities in a registration statement under the Securities Act.

6. The Merger has been duly authorized by all requisite corporate action on the part of the Company, including the approval of its shareholders, in accordance with the DGCL and no further action on the part of the Company or its shareholders is required under the DGCL to consummate the Merger, other than the filing of the Certificate of Merger with the Secretary of State of the State of Delaware and the recording of the Certificate of Merger in the office of the Recorder for the County of New Castle, Delaware.

7. To the best of our knowledge and except as disclosed in the Merger Agreement or the schedules annexed thereto, there is no action, suit, proceeding, or investigation pending or threatened against the Company or its stockholders that is reasonably likely to result, either in any case or in the aggregate, in any material adverse change with respect to it, or that calls into question the validity of the Merger Agreement or any action taken or to be taken by the Company pursuant thereto.

All of the opinions rendered herein are as of the date hereof. We assume no obligation to update such opinions to reflect any facts or circumstances that hereafter may come to our attention or any changes in the law hereafter may occur. This opinion is being rendered solely for your benefit and is not to be relied upon by any third party without our express prior written consent.

Very truly yours,

EHRENREICH EILENBERG KRAUSE
& ZIVIAN LLP

Exhibit E

February __, 1999

ACCESS Pharmaceuticals, Inc.
2600 N. Stemmons Frwy.
Dallas, TX 75207

Re: Lock-Up Agreement

Ladies and Gentlemen:

The undersigned understands that Virologix Corporation, a Delaware corporation ("Virologix"), intends to merge (the "Merger") with ACCESS Holdings, Inc., a Delaware corporation and direct wholly-owned subsidiary of ACCESS Pharmaceuticals, Inc., a Delaware corporation (the "Parent"), pursuant to an Agreement of Merger and Plan of Reorganization, of even date herewith (the "Merger Agreement"), with Virologix being the surviving corporation. In connection with the Merger and pursuant to the terms of the Merger Agreement, all of the outstanding shares of capital stock of Virologix will automatically be converted into shares of Parent Stock (as such term is defined in the Merger Agreement). All capitalized terms used herein without definition shall have the definitions assigned to them in the Merger Agreement.

In partial satisfaction of the conditions to the closing of the Merger pursuant to the Merger Agreement, the undersigned hereby agrees not to offer for sale, sell, transfer, distribute, grant any option for the sale of,

assign, sell short or otherwise dispose of, directly or indirectly, or exercise any registration rights with respect to (collectively, to "Sell"), any shares of Parent Stock that are beneficially owned by the undersigned or which the undersigned has the right to acquire (collectively, the "Shares") during the period commencing on the Closing Date of the Merger and ending on the [first] anniversary thereof, at which time the limitations in this Agreement shall terminate.

If the Merger Agreement is terminated by either Parent or Virologix or otherwise pursuant to the terms of the Merger Agreement, then the undersigned will no longer be bound by this Agreement.

By: _____
Name:

Exhibit F

ACCESS Pharmaceuticals, Inc.
Access Holdings, Inc.

OFFICER'S CERTIFICATE

I, Kerry P. Gray, the duly elected, qualified and acting President of Access Holdings, Inc. ("Holdings"), a Delaware corporation, and the duly elected, qualified and acting President of Access Pharmaceuticals, Inc. (the "Parent"), a Delaware Corporation, do hereby certify in such capacities and not individually that:

1. The representations and warranties made by Holdings and Parent in the Agreement of Merger and Plan of Reorganization (the "Merger Agreement"), dated as of February 23, 1999, by and among Holdings, Parent and Virologix Corporation, a Delaware corporation ("Virologix"), are true and correct in all material respects at and as of the date hereof with the same effect as though such representations and warranties had been made or given at and as of the date hereof, except to the extent that any such representation or warranty relates specifically to an earlier date.

2. Holdings and Parent have performed and complied in all material respects with all of the obligations to be performed or complied with by them under the Merger Agreement on or prior to the date hereof.

3. To the best of my knowledge, no restraining order or injunction or other order or other legal restraint or prohibition exists which would have the effect of preventing the merger contemplated by the Merger Agreement or the other transactions contemplated thereby.

4. Each of the conditions to the obligations of Virologix set forth in Sections 8.1, 8.2 and 8.3 of the Merger Agreement have been satisfied on or prior to the date hereof.

IN WITNESS WHEREOF, I have hereunto set my hand on this _____ day of _____, 1999.

Kerry P. Gray
President, Access Holdings, Inc. &
ACCESS Pharmaceuticals, Inc.

Exhibit G

Subject to Internal
Review and Clearance

February __, 1999

Virologix Corporation
420 Lexington Avenue, Suite 620
New York, NY 10017

Re: ACCESS Pharmaceuticals, Inc.

Ladies and Gentlemen:

We have acted as counsel to ACCESS Pharmaceuticals, Inc., a Delaware corporation ("Parent"), and Access Holdings, Inc., a Delaware corporation ("Holdings"), in connection with (i) the negotiation, execution, and delivery of the Agreement of Merger and Plan of Reorganization, dated as of February 23, 1999 (the "Merger Agreement"), by and among Holdings, Parent and Virologix Corporation, a Delaware corporation ("Virologix"), and (ii) the merger of Holdings with and into Virologix (the "Merger") pursuant to the Merger Agreement and the consummation of the other transactions contemplated by the Merger Agreement. Capitalized terms used and not otherwise defined in this opinion letter have the respective meanings ascribed to them in the Merger Agreement.

We have examined copies of the Merger Agreement, the Registration Rights Agreement and such other agreements, instruments, certificates, corporate and public records, and other documents as we have deemed necessary for purposes of this opinion.

As to any opinion below relating to the existence, qualification or standing of Holdings or Parent in any jurisdiction, our opinion relies entirely upon, and is limited by, those certificates of public officials attached as Exhibit A.

We have assumed the genuineness of all signatures, the conformity to the originals of all documents reviewed by us as copies, the authenticity and completeness of all original documents reviewed by us in original or copy form, the authority of each person executing any document or instrument (other than on behalf of Holdings or Parent) to execute such document or instrument, and the legal competence of each individual executing any document or instrument. We have assumed that the Merger Agreement has been duly authorized, executed, and delivered by each of the parties thereto (other than Parent and Holdings) and constitutes the valid and binding obligation of such parties, and is enforceable against such parties in accordance with its terms.

With respect to all matters of fact (including factual conclusions and characterizations and descriptions of purpose, intention, or other state of mind), we have relied entirely upon the

Virologix Corporation
February __, 1999
Page 2

representations of Holdings, Parent and you set forth in the Merger Agreement, and certificates of officers of Holdings and Parent, and have assumed, without independent inquiry or investigation, the accuracy of those representations and certificates.

When an opinion set forth below is given to our knowledge, the relevant knowledge is limited to the actual knowledge of the individual lawyers in this firm who have participated directly in the specific transactions to which this opinion relates, and without any special or additional inquiry or investigation undertaken for the purposes of this opinion.

Each opinion set forth below relating to the enforceability of any agreement or instrument against Holdings or Parent is subject to the following general qualifications:

(i) as to any instrument delivered by Holdings or Parent, we assume that Holdings or Parent, as appropriate, has received the agreed-to consideration therefor;

(ii) as to any agreement to which Holdings or Parent is a party, we assume that such agreement is the binding obligation of each other party thereto (except for Parent or Holdings);

(iii) the enforceability of any obligation of Holdings or Parent may be limited by bankruptcy, insolvency, fraudulent conveyance, reorganization, moratorium, marshaling, or other laws and rules of law affecting the enforcement generally of creditors' rights and remedies (including such as may deny giving effect to waivers of debtors' or guarantors' rights), and may be subject to or limited by considerations of public policy;

(iv) no opinion is given herein as to the enforceability of any particular provision of any agreement relating to remedies after default or as to the availability of any specific or equitable relief of any kind;

(v) the enforcement of any of your rights may in all cases be subject to an implied duty of good faith and to general principles of equity (regardless of whether such enforceability is considered in a proceeding at law or in equity); and

(vi) the enforceability of any obligation of Holdings or Parent to provide indemnification or contribution in connection with any liability under federal or state securities laws may be subject to limitations arising under federal or state securities laws or public policy on the enforceability of provisions providing for indemnity or contribution.

We give no opinion herein with respect to any antitrust laws of any jurisdiction. We give no opinion herein with respect to the securities laws of any jurisdiction, other than the Federal laws of the United States of America (but only as specifically set forth in the last sentence of paragraph 8).

Subject to the limitations set forth herein, we have made such examination of law as we have deemed necessary for the purposes of this opinion. This opinion is limited solely to the laws of The Commonwealth of Massachusetts, the General Corporation Law of the State of Delaware, as applied by courts located in Delaware (the "DGCL"), and the Federal laws of the United States of

Virologix Corpoartion
February __, 1999
Page 3

America, in each case to the extent that the same may apply to or govern such transactions. We note that the Merger Agreement states that it is governed by the laws of the State of Delaware. To the extent that any matter with respect to which we give any opinion herein is governed by the laws of any other jurisdiction (including without limitation the contract and other laws of the State of Delaware), we have assumed, with your permission and without investigation, that such laws are the same as the internal substantive laws of the Commonwealth of Massachusetts. No opinion is given herein as to the choice of law, or except as specifically set forth above, internal substantive rules of law that any tribunal may apply to the transactions referred to herein.

We understand that all of the foregoing assumptions and limitations are acceptable to you.

Based upon and subject to the foregoing, it is our opinion that, except as disclosed in or contemplated by the Merger Agreement (including the schedules and exhibits thereto):

1. Each of Holdings and Parent is a corporation validly existing and in corporate good standing under the laws of the State of Delaware, with all requisite corporate power and authority to enter into the transactions contemplated by the Merger Agreement and the Registration Rights Agreement.

2. The authorized capital stock of Holdings consists of 1,000 shares of Common Stock, \$.001 par value per share. To our knowledge, there are no outstanding subscriptions, options, calls, contracts, commitments, understandings, restrictions, arrangements, rights, or warrants, including any right of conversion or exchange under any outstanding security, instrument or agreement, obligating Holdings to issue, deliver, or sell, or cause to be issued, delivered or sold, additional shares of the capital stock of Holdings or obligating Holdings to enter into any such agreement or commitment. To our knowledge, there are no voting trusts, or other agreements or understandings with respect to the voting of any shares of Holdings' capital stock to which Holdings is a party or by which it is bound.

3. Assuming (i) compliance by you with the applicable provisions of the DGCL and your certificate of incorporation and bylaws and (ii) that the Merger Agreement has been duly approved and adopted by your stockholders, upon the due filing of the Certificate of Merger with the Secretary of State of the State of Delaware and recording of the Certificate of Merger in the office of the Recorder for the County of New Castle, Delaware, the Merger will become effective in accordance with the DGCL, the Merger Agreement and the Certificate of Merger.

4. Each of Holdings and Parent has all requisite corporate power and authority to execute and deliver the Merger Agreement and the Registration Rights Agreement. The Merger Agreement has been duly authorized, executed, and delivered by Holdings and Parent, and constitutes a valid and binding obligation of each of Holdings and Parent, enforceable against each of Holdings and Parent in accordance with its terms.

5. None of the execution and delivery of the Merger Agreement or the Registration Rights Agreement by Holdings or Parent, the performance by Holdings or Parent of its obligations thereunder, nor the consummation by Holdings or Parent of the transactions thereby contemplated (i) has violated or will violate any provision of either of Holdings' or Parent's Certificate of Incorporation or by-laws, in each case as amended and in effect on the date hereof, (ii) to our

Virologix Corporation
February __, 1999
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knowledge, has resulted or will result in any material breach or material violation by Holdings or Parent of, or constitute a default by Holdings or Parent under, any material indenture, material mortgage, material deed of trust, material loan or credit agreement, or other material agreement or material instrument by which Holdings or Parent or either of their properties are bound, (iii) to our knowledge, has violated or will violate any order, writ, judgment, injunction, or decree of any court or other governmental agency or instrumentality applicable to Holdings or Parent or either of their properties, or (iv) to our knowledge, has required or will require Holdings or Parent to obtain any approval, consent, or waiver of, or to make any filing with, any other Person that has not already been obtained or made (other than any required filings under the Securities Act of 1933).

6. To our knowledge, but without having investigated any governmental records or court dockets, and without having made any other independent investigation, there is no action, suit or proceeding pending against the Parent before any court or any governmental body in which there is a reasonable possibility of an adverse decision which could reasonably be expected to impair the consummation of the transactions contemplated by the Merger Agreement and the Registration Rights Agreement.

7. The Merger has been duly authorized by all requisite corporate action on the part of Holdings, including the approval of its stockholder, in accordance with the DGCL, and no further action on the part of Holdings or its stockholders is required under the DGCL to consummate the Merger, other than the filing of the Certificate of Merger with the Secretary of State of the State of Delaware and the recording of the Certificate of Merger in the office of the Recorder for the County of New Castle, Delaware.

8. The shares of Parent Stock, when issued in accordance with the provisions of the Merger Agreement, will be duly and validly issued, fully paid and non-assessable shares of the common stock of the Parent, free of pre-emptive rights arising under the DGCL or Parent's Certificate of Incorporation or By-Laws. The issuance of the shares of Parent Stock by Parent to the Target Stockholders will not be subject to the registration requirements of the Securities Act of 1933, as amended.

All of the opinions rendered herein are as of the date hereof. We assume no obligation to update such opinions to reflect any facts or circumstances that hereafter may come to our attention or any changes in the law that hereafter may occur. This opinion is being rendered solely for your benefit and is not to be relied upon by any third party without our express prior written consent.

Very truly yours,

BINGHAM DANA LLP

Exhibit A

(attach copies of certificates of public officials)

AMENDMENT NO. 1 TO AGREEMENT OF MERGER AND PLAN OF REORGANIZATION

This Amendment No. 1 (this "Amendment") to the Agreement of Merger and Plan of Reorganization, dated as of February 23, 1999 (the "Agreement"), is made as of the ___ day of April 1999, among ACCESS PHARMACEUTICALS, INC., a Delaware corporation ("Parent"), ACCESS HOLDINGS, INC., a Delaware corporation and direct wholly-owned subsidiary of the Parent ("Acquiror"), and VIROLOGIX CORPORATION, a Delaware corporation ("Target") and such stockholders of the Target as have executed the Agreement on the signature pages thereto (the "Founding Stockholders").

BACKGROUND

WHEREAS, the parties have entered into the Agreement which, among other matters, provides for the merger of Acquiror with and into Target; and

WHEREAS, the parties hereto wish to amend the terms of the Agreement in certain respects;

NOW, THEREFORE, in consideration of the premises and the mutual covenants and agreements contained herein, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties hereto, intending to be legally bound hereby, do hereby agree as follows:

1. Capitalized terms used but not otherwise defined herein shall have such meanings herein as are ascribed thereto in the Agreement.

2. Section 1.2(d) of the Agreement is hereby amended by deleting it in its entirety and inserting, in its place, the following:

"(d) each share of Target's common stock (assuming conversion of all shares of Target's preferred stock into shares of Target's common stock), \$0.001 par value per share ("Target Stock"), issued and outstanding immediately prior to the Effective Date (other than any shares held by dissenting stockholders referred to in Paragraph 2.2(d) below) shall by virtue of

the Merger become and be converted into .231047 shares (subject to the payment of cash adjustments in lieu of the issuance of fractional shares as provided in Paragraph 2.2(h) herein, the "Conversion Number") of the common stock, par value \$0.01 per share, of Parent ("Parent Stock"), subject to adjustment as provided in Paragraph 2.1 below, provided, however, that under no circumstances shall the Target Stockholders (as such term is defined in Paragraph 2.2(b), below) receive, in the aggregate, more than 1,000,000 shares of Parent Stock upon the conversion and exchange of such Target Stock into shares of Parent Stock. As of the Effective Date, each share of Target Stock shall be cancelled and shall cease to exist and no payment shall be made with respect thereto,"

3. Schedule 3.5 of the Agreement is hereby amended by deleting it in its entirety and inserting, in its place, the following:

"Schedule 3.5

VIROLOGIX COMMON STOCK
(assuming conversion of all Series B Preferred*)

| | |
|---------------------------------|---------|
| Allie, Gary & Barbara | 18,000 |
| Amore Perpetuo Trust | 36,000 |
| Anzalone Family LP DTD 12-30-93 | 34,250 |
| Alfred J. Anzalone Family LP | 54,000 |
| Anzalone 1995 Trust | 90,000 |
| Ash, David | 365,834 |
| Blumenthal, Harry | 36,000 |
| Carroll, Douglas | 4,500 |
| Carson, James | 18,000 |
| Central Yeshiva | 30,000 |
| Chelsey Capital | 4,500 |
| Chiarulli, Frank | 4,500 |
| Chidylo, Peter & Nancy | 22,834 |
| Cooper, Judson | 543,750 |
| Corbin, Charles | 4,500 |
| Fish, Daniel | 27,000 |
| Gold, Kenneth | 2,250 |
| Goldblatt, Herbert & Marlene | 2,250 |
| Gross Foundation | 120,000 |
| Hall, William | 215,000 |
| Herman, Gabriel & Ellen | 2,250 |
| Heymann, Jerry | 37,500 |
| Hudak, Thomas | 117,668 |
| Hurwitz, Marc | 36,000 |
| Jacobson, Eli | 24,000 |
| Kaufman, Gary | 4,500 |
| Kaufman, David | 50,000 |
| Lanier, Thomas | 1,800 |
| Low, Nathan | 159,375 |
| Markowitz, Jeffrey | 4,500 |
| McCooey, David | 4,500 |
| Mendel, Gary | 18,000 |
| Michelizzi, Maryann | 15,000 |
| Milstein, Albert | 4,500 |
| Milstein, Howard | 311,288 |
| Nayden, Denis | 108,000 |
| Oliviera, Steven | 393,750 |
| Prism Ventures | 50,000 |
| Peck, Barton & Alice | 4,500 |
| Praschil, Robert | 4,500 |
| Reich, Yaron | 18,000 |
| Rickel, Robert | 39,000 |
| Rozen, David | 36,000 |
| Schein, Joshua | 543,750 |
| Shoup, Stefan | 18,000 |
| Shoup, Jane | 18,000 |
| Sirotkin, Paul | 36,000 |
| Sirotkin, Martin | 36,000 |
| Smith, Beverly | 15,000 |
| Spitz, Howard | 2,700 |
| Stanley, Glenn | 4,500 |

| | |
|-------------------------|-------------------------|
| Stanley, Joseph | 4,500 |
| Stanley, Rita | 4,500 |
| Stanley, Stuart | 4,500 |
| Stone, David | 60,000 |
| Stone, Richard | 354,375 |
| Takahashi, Hidehiro | 90,000 |
| Teate, William | 9,000 |
| Winston IPO Investments | 36,000 |
| Zukier, Herz | 13,500 |
| ----- | |
| Total: | <u><u>4,328,124</u></u> |

***OUTSTANDING SERIES B PREFERRED STOCK**

(to be converted into 2 shares of Virologix Common Stock prior to Closing)

| Name of Shareholder | No. of Shares of Series B | No. of Shares of Common |
|------------------------|---------------------------|-------------------------|
| | After Conversion | |
| ----- | | |
| Allie, Gary & Barbara | 9,000 | 18,000 |
| Anzalone Family LP | 13,750 | 27,500 |
| Ash, David | 64,167 | 128,334 |
| Carson, James | 9,000 | 18,000 |
| Chidylo, Peter & Nancy | 9,167 | 18,334 |
| Fish, Daniel | 13,500 | 27,000 |
| Hudak, Thomas | 18,334 | 36,668 |
| Mendel, Gary | 9,000 | 18,000 |
| Milstein, Howard | 54,000 | 108,000 |
| Nayden, Denis | 54,000 | 108,000 |
| Sirotkin, Paul | 18,000 | 36,000 |
| Sirotkin, Martin | 18,000 | 36,000 |
| Teate, William | 4,500 | 9,000 |
| ----- | | |
| Total: | <u><u>294,418</u></u> | <u><u>588,836</u></u> |

VIROLOGIX OPTIONS

| | |
|-----------------|---|
| Golikov, Peter | 12,500 @ \$6.00 per share |
| Song, Elizabeth | 2,500 @ \$6.00 per share |
| ----- | |
| Total: | <u><u>15,000 @ \$6.00 per share</u></u> |

VIROLOGIX WARRANTS

| | |
|------------------------|--|
| Anzalone Family LP | 7,500 @ \$3.00 per share |
| Ash, David | 35,000 @ \$3.00 per share |
| Chidylo, Peter & Nancy | 5,000 @ \$3.00 per share |
| Hudak, Thomas | 10,000 @ \$3.00 per share |
| Koprowski, Hilary | 10,000 @ \$3.00 per share |
| Milstein, Howard | 50,000 @ \$3.00 per share |
| ----- | |
| Total: | <u><u>117,500 @ \$3.00 per share</u></u> |

Total Common Stock, Options and Warrants: 4,460,624"

4. Schedule 3.8 of the Agreement is hereby amended by deleting it in its entirety and inserting, in its place, the following:

"Schedule 3.8

(i) Material Changes since December 31, 1996:

Personnel: Peter Golikov resigned as President on 3/2/98; Elizabeth Song resigned as Director of Viral Research on 8/3/98. Dr. William

Hall, Chief Scientific Officer, is owed approximately \$75,000 by Virologix for accrued and unpaid compensation under his Employment Agreement; Judson Cooper and Joshua Schein resigned as Chief Financial Officer and Executive Vice President, respectively, in August 1998. In December 1997, CSO Ventures LLC agreed to terminate its 6/1/96 consulting agreement with Virologix. In August 1998, Prism Ventures LLC (of which Messrs. Cooper and Schein are members) agreed to terminate its 1/1/98 consulting agreement with Virologix and David Kaufman terminated his 3/7/98 consulting agreement.

(ii) Acquisition or disposition of assets: None

(iii) Damages, destruction or loss: None

(iv) Dividends or distributions: None

(v) Issuances of securities:

| Date | Transaction |
|-------------------|---|
| April 1997 | \$300,000 loan and 50,000 warrants issued at \$3.00 per share. The loan subsequently converted into 203,288 shares of Common Stock. |
| June, August 1997 | Series A Preferred Stock Offering, \$864,000 raised, converted into a total of 576,000 shares of Common Stock |
| October 1997 | Series B Preferred Stock Offering, \$ 486,000 raised, 189,000 shares of Series B Preferred Stock issued (each to be converted into two (2) shares of Common Stock as a closing condition to the Merger); \$287,500 principal amount of 1996 bridge loans converted into 105,418 Series B Preferred Stock (each to be converted into two (2) shares of Common Stock as a closing condition to the Merger) and an aggregate of 57,500 warrants at an exercise price of \$3.00 per share issued to the four (4) lenders who elected to convert. |
| August 1998 | Cancellation of existing Cooper and Schein Employment Agreements and forgiveness of all amounts owed and owing to Cooper and Schein under such agreements in consideration for the issuance of an aggregate amount of 150,000 shares of Common Stock to each of Cooper and Schein. Cancellation of Prism Ventures LLC ("Prism") Consulting Agreement and David Kaufman Consulting Agreement and forgiveness of all amounts owed and owing thereunder in consideration for the issuance of an aggregate amount of 50,000 shares of Common Stock to each of Prism and Kaufman and the payment of \$70,000 to Prism. |
| Other | Former employees Elizabeth Song and Peter Golikov have options to purchase 2,500 shares and 12,500 shares respectively of the Company's Common Stock at an exercise price of \$6.00 per share. Hilary Koprowski, who was to sit on the Company's Scientific Advisory Board, has options to purchase 10,000 shares of the Company's Common Stock at an exercise price of \$3.00 per share. On March 2, 1999, the Company issued to David Ash 80,000 shares of Virologix common stock in settlement of a dispute. |

(vi) Increase in compensation: None

(vii) Non-ordinary course transactions: None

(viii) Incurrence of material obligations: None

(ix) Mortgages, liens: None

(x) Changes in accounting principles: None

(xi) Discharge of Liens: None"

5. Schedule 3.13 to the Agreement is hereby amended by deleting it in its entirety and inserting, in its place, the following:

"Schedule 3.13

No litigation is threatened or has been commenced against Virologix."

6. Except as specifically amended hereby, the Agreement remains in full force and effect in the form and substance in effect immediately prior to the effectiveness of this Amendment.

7. For purposes of Section 18.1 of the Agreement, this Amendment No. 1 forms a part of the Agreement.

8. This Amendment (i) may be executed by facsimile signature which shall be deemed to be an original for all purposes, (ii) may be executed in any number of counterparts, each of which shall be deemed to be an original and all of which, when taken together, shall constitute but one and the same instrument, and (iii) shall be construed and enforced in accordance with, and the rights of the parties shall be governed by, the internal laws of the State of Delaware (without reference to principles of conflicts or choice of law that would cause the application of the internal laws of any other jurisdiction).

[Remainder of Page Intentionally Left Blank]

IN WITNESS WHEREOF, the parties hereto have duly executed this Agreement as an instrument under seal as of the date and year first above written.

PARENT:
ACCESS Pharmaceuticals, Inc.

By: /s/ Kerry P. Gray

President & Chief Executive Officer

ACQUIROR:
ACCESS Holdings, Inc.

By: /s/ Kerry P. Gray

President & Chief Executive Officer

TARGET:
Virologix Corporation

By: /s/ Joshua D. Schein

Title: Director

FOUNDING STOCKHOLDERS:

/s/ Judson A. Cooper

Judson A. Cooper

/s/ Joshua D. Schein

Joshua D. Schein

/s/ Richard Stone

Richard Stone

Acknowledged and Agreed
for the purpose of being

bound by any terms of this Agreement relating to the agreements, obligations and covenants of the Representatives

/s/ Judson A. Cooper

Judson A. Cooper

/s/ Joshua D. Schein

Joshua D. Schein

AMENDMENT NO. 2 TO AGREEMENT OF MERGER AND PLAN OF REORGANIZATION

This Amendment No. 2 (this "Amendment") to the Agreement of Merger and Plan of Reorganization, dated as of February 23, 1999 (the "Agreement"), is made as of the 1st day of June 1999, among ACCESS PHARMACEUTICALS, INC., a Delaware corporation ("Parent"), ACCESS HOLDINGS, INC., a Delaware corporation and direct wholly-owned subsidiary of the Parent ("Acquiror"), and VIROLOGIX CORPORATION, a Delaware corporation ("Target") and such stockholders of the Target as have executed the Agreement on the signature pages thereto (the "Founding Stockholders").

BACKGROUND

WHEREAS, the parties have entered into the Agreement which, among other matters, provides for the merger of Acquiror with and into Target; and

WHEREAS, the parties hereto wish to amend the terms of the Agreement in certain respects;

NOW, THEREFORE, in consideration of the premises and the mutual covenants and agreements contained herein, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties hereto, intending to be legally bound hereby, do hereby agree as follows:

1. Capitalized terms used but not otherwise defined herein shall have such meanings herein as are ascribed thereto in the Agreement.
2. Section 5.11 of the Agreement is hereby amended by deleting the date "March 31, 1999" set forth in the eighth line thereof and substituting in its place the date "June 30, 1999".
3. Section 9.6 of the Agreement is hereby amended by deleting the date "June 1, 1999" set forth in the second line thereof and substituting in its place the date "June 30, 1999".
4. Section 14(a) of the Agreement is hereby amended by deleting the date "June 1, 1999" set forth in the fourth line thereof and substituting in its place the date "June 30, 1999".
5. Section 14(b) of the Agreement is hereby amended by deleting the date "June 1, 1999" set forth in the fourth line thereof and substituting in its place the date "June 30, 1999".
6. Except as specifically amended hereby, the Agreement remains in full force and effect in the form and substance in effect immediately prior to the effectiveness of this Amendment.

7. For purposes of Section 18.1 of the Agreement, this Amendment No. 2 forms a part of the Agreement.

8. This Amendment (i) may be executed by facsimile signature which shall be deemed to be an original for all purposes, (ii) may be executed in any number of counterparts, each of which shall be deemed to be an original and all of which, when taken together, shall constitute but one and the same instrument, and (iii) shall be construed and enforced in

accordance with, and the rights of the parties shall be governed by, the internal laws of the State of Delaware (without reference to principles of conflicts or choice of law that would cause the application of the internal laws of any other jurisdiction).

[The remainder of this page is intentionally left blank]

IN WITNESS WHEREOF, the parties hereto have duly executed this Agreement as an instrument under seal as of the date and year first above written.

PARENT:
ACCESS Pharmaceuticals, Inc.

By: /s/ Kerry P. Gray

President & Chief Executive Officer

ACQUIROR:
ACCESS Holdings, Inc.

By: /s/ Kerry P. Gray

President & Chief Executive Officer

TARGET:
Virologix Corporation

By: /s/ Joshua D. Schein

Title: President

FOUNDING STOCKHOLDERS:

/s/ Joshua A. Cooper

Judson A. Cooper

/s/ Joshua D. Schein

Joshua D. Schein

/s/ Richard Stone

Richard Stone

Acknowledged and Agreed for the purpose of being bound by any terms of this Agreement relating to the agreements, obligations and covenants of the Representatives

/s/ Judson A. Cooper

Judson A. Cooper

/s/ Joshua D. Schein

Joshua D. Schein

AMENDMENT NO. 3 TO AGREEMENT OF MERGER AND PLAN OF REORGANIZATION

This Amendment No. 3 (this "Amendment") to the Agreement of Merger and Plan of Reorganization, dated as of February 23, 1999, as amended (the "Agreement"), is made as of the 30th day of June 1999, among ACCESS PHARMACEUTICALS, INC., a Delaware corporation ("Parent"), ACCESS HOLDINGS, INC., a Delaware corporation and direct wholly-owned subsidiary of the Parent ("Acquiror"), and VIROLOGIX CORPORATION, a Delaware corporation ("Target") and such stockholders of the Target as have executed the Agreement on the signature pages thereto (the "Founding Stockholders").

BACKGROUND

WHEREAS, the parties have entered into the Agreement which, among other matters, provides for the merger of Acquiror with and into Target; and

WHEREAS, the parties hereto wish to amend the terms of the Agreement in certain respects;

NOW, THEREFORE, in consideration of the premises and the mutual covenants and agreements contained herein, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties hereto, intending to be legally bound hereby, do hereby agree as follows:

1. Capitalized terms used but not otherwise defined herein shall have such meanings herein as are ascribed thereto in the Agreement.
2. Section 5.11 of the Agreement is hereby amended by deleting the date "June 30, 1999" set forth in the eighth line thereof and substituting in its place the date "July 30, 1999".
3. Section 7.18 of the Agreement is hereby amended by deleting the price "\$3.00 per share" set forth in the third line thereof and substituting in its place the price "\$2.00 per share".
4. Section 8.8 of the Agreement is hereby amended by deleting the price "\$3.00 per share" set forth in the third line thereof and substituting in its place the price "\$2.00 per share".
5. Section 9.6 of the Agreement is hereby amended by deleting the date "June 30, 1999" set forth in the second line thereof and substituting in its place the date "July 30, 1999".
6. Section 14(a) of the Agreement is hereby amended by deleting the date "June 30, 1999" set forth in the fourth line thereof and substituting in its place the date "July 30, 1999".
7. Section 14(b) of the Agreement is hereby amended by deleting the date "June 30, 1999" set forth in the fourth line thereof and substituting in its place the date "July 30, 1999".
8. Except as specifically amended hereby, the Agreement remains in full force and effect in the form and substance in effect immediately prior to the effectiveness of

this Amendment.

9. For purposes of Section 18.1 of the Agreement, this Amendment No. 3 forms a part of the Agreement.

10. This Amendment

(i) may be executed by facsimile signature which shall be deemed to be an original for all purposes, (ii) may be executed in any number of counterparts, each of which shall be deemed to be an original and all of which, when taken together, shall constitute but one and the same instrument, and (iii) shall be construed and enforced in accordance with, and the rights of the parties shall be governed by, the internal laws of the State of Delaware (without reference to principles of conflicts or choice of law that would cause the application of the internal laws of any other jurisdiction).

[The remainder of this page is intentionally left blank]

IN WITNESS WHEREOF,
the parties hereto have duly executed this Amendment as an instrument under seal as of the date and year first above written.

PARENT:
ACCESS Pharmaceuticals, Inc.

By: /s/ Kerry P. Gray

Title: President and CEO

ACQUIROR:
ACCESS Holdings, Inc.

By: /s/ Kerry P. Gray

Title: President

TARGET:
Virologix Corporation

By: /s/ Joshua D. Schein

Title: President

FOUNDING STOCKHOLDERS:

/s/ Judson A. Cooper

Judson A. Cooper

/s/ Joshua D. Schein

Joshua D. Schein

/s/ Richard Stone

Richard Stone

Acknowledged and Agreed
for the purpose of being
bound by any terms of this
Agreement relating to the
agreements, obligations and
covenants of the
Representatives

/s/ Judson A. Cooper

Judson A. Cooper

/s/ Joshua D. Schein

Joshua D. Schein