

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): May 7, 2003

STEMCELLS, INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction
of incorporation)

0-19871

(Commission File Number)

94-3078125

(I.R.S. Employer
Identification Number)

**3155 Porter Drive
Palo Alto, California 94304**

(Address, of principal executive offices, including zip code)

(650) 475-3100

(Registrant's Telephone number including area code)

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Item 5. Other Events.

On May 7, 2003, StemCells, Inc. (the “Company”) entered into an agreement to issue 4 million shares of common stock to The Riverview Group, LLC, a New York based private equity investment firm (“Riverview”), for total consideration of \$6.5 million. In addition, the Company will issue to Riverview a warrant to purchase 1,898,000 shares of common stock. The transaction is subject to normal closing conditions.

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

(c)	Exhibits	
	4.1	Form of Warrant to be issued by StemCells, Inc. to The Riverview Group, LLC for purchase of common stock.
	99.1	Securities Purchase Agreement dated as of May 7, 2003 between StemCells, Inc. and Riverview Group, LLC.
	99.2	Form of Registration Rights Agreement between StemCells, Inc. and The Riverview Group, LLC.

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 hereunto duly authorized.

STEMCELLS, INC

By: /s/ Martin McGlynn

Martin McGlynn
President and Chief Executive Officer

Date: May 12, 2003

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FORM OF WARRANT

NEITHER THE ISSUANCE AND SALE OF THE SECURITIES REPRESENTED BY THIS CERTIFICATE NOR THE SECURITIES INTO WHICH THESE SECURITIES ARE EXERCISABLE HAVE BEEN REGISTERED OR QUALIFIED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR ANY STATE SECURITIES LAWS. SUCH SECURITIES MAY NOT BE SOLD, TRANSFERRED OR OTHERWISE DISPOSED OF WITHOUT EITHER (I) AN EFFECTIVE REGISTRATION STATEMENT FOR THE SECURITIES UNDER THE SECURITIES ACT OF 1933, AS AMENDED, AND ANY APPLICABLE STATE SECURITIES LAWS, (II) AN OPINION OF COUNSEL, IN A GENERALLY ACCEPTABLE FORM, THAT SUCH TRANSFER MAY BE MADE WITHOUT REGISTRATION OR QUALIFICATION UNDER SAID ACT OR APPLICABLE STATE SECURITIES LAWS OR (III) SUCH TRANSFER BEING MADE PURSUANT TO RULE 144 OR RULE 144A UNDER SAID ACT. NOTWITHSTANDING THE FOREGOING, THIS WARRANT AND THE SECURITIES INTO WHICH THIS WARRANT IS EXERCISABLE MAY BE PLEDGED IN CONNECTION WITH A BONA FIDE MARGIN ACCOUNT OR OTHER LOAN OR FINANCING ARRANGEMENT SECURED BY THE SECURITIES.

STEMCELLS, INC.

WARRANT TO PURCHASE COMMON STOCK

Warrant No.: _____

Number of Shares: 1,898,000

Date of Issuance: May __, 2003 ("ISSUANCE DATE")

StemCells, Inc., a Delaware corporation (the "COMPANY"), hereby certifies that, for Ten United States Dollars (\$10.00) and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, RIVERVIEW GROUP, LLC, the registered holder hereof or its permitted assigns, is entitled, subject to the terms set forth below, to purchase from the Company, at the Exercise Price (as defined below) then in effect, upon surrender of this Warrant to Purchase Common Stock (including all Warrants to Purchase Common Stock issued in exchange, transfer or replacement hereof, the "WARRANT"), at any time or times on or after the date hereof, but not after 11:59 P.M., New York Time, on the Expiration Date (as defined below), One Million Eight Hundred Ninety-Eight Thousand (1,898,000) fully paid nonassessable shares of Common Stock (as defined below) (the "WARRANT SHARES"). Except as otherwise defined herein, capitalized terms in this Warrant shall have the meanings set forth in Section 15. Notwithstanding any assignment of this Warrant in whole or in part, Riverview Group, LLC shall remain obligated to pay the exercise price for the Warrant Shares. This Warrant is one of the Warrants to Purchase Common Stock (the "SPA WARRANTS") issued pursuant to Section 1 of that certain Securities Purchase Agreement, dated as of May [7], 2003 (the "INITIAL ISSUANCE DATE"), among the Company and the purchasers (the "PURCHASERS") referred to therein (the "SECURITIES PURCHASE AGREEMENT").

1. EXERCISE OF WARRANT.

(a) Mechanics of Exercise. Subject to the terms and conditions hereof (including, without limitation, the limitations set forth in Section 1(f)), this Warrant may be exercised by the holder hereof on any day from and after the date on which the Company obtains the Stockholder Approval, in whole or in part, by (i) delivery of a written notice, in the form attached hereto as Exhibit A (the "EXERCISE NOTICE"), of such holder's election to exercise this Warrant, (ii) payment to the Company of an amount equal to the applicable Exercise Price multiplied by the number of Warrant Shares as to which this Warrant is being exercised (the "AGGREGATE EXERCISE PRICE") in cash or by wire transfer of immediately available funds and (iii) the surrender to a common carrier for overnight delivery to the Company, on or as soon as practicable following the date the holder of this Warrant delivers the Exercise Notice to the Company, of this Warrant (or an indemnification undertaking with respect to this Warrant in the case of its loss, theft or destruction). On or before the third Business Day following the date on which the Company has received each of the Exercise Notice, the Aggregate Exercise Price and this Warrant (or an indemnification undertaking with respect to this Warrant in the case of its loss, theft or destruction) (the "EXERCISE DELIVERY DOCUMENTS"), the Company shall (X) issue and deliver to the address specified in the Exercise Notice, a certificate, registered in the name of the holder of this Warrant or its designee, for the number of shares of Common Stock to which the holder of this Warrant is entitled pursuant to such exercise, or (Y) provided that the Company's transfer agent (the "TRANSFER AGENT") is participating in The Depository Trust

Company ("DTC") Fast Automated Securities Transfer Program, upon the request of the holder, credit such aggregate number of shares of Common Stock to which the holder of this Warrant is entitled pursuant to such exercise to the holder's or its designee's balance account with DTC through its Deposit Withdrawal Agent Commission system. Upon delivery of the Exercise Notice and Aggregate Exercise Price referred to in clause (ii) above, the holder of this Warrant shall be deemed for all corporate purposes to have become the holder of record of the Warrant Shares with respect to which this Warrant has been exercised, irrespective of the date of delivery of this Warrant as required by clause (iii) above or the certificates evidencing such Warrant Shares. If the number of Warrant Shares represented by this Warrant submitted for exercise pursuant to this Section 1(a) is greater than the number of Warrant Shares being acquired upon an exercise, then the Company shall as soon as practicable and in no event later than three Business Days after any exercise and at its own expense, issue a new Warrant (in accordance with Section 7(d)) representing the right to purchase the number of Warrant Shares purchasable immediately prior to such exercise under this Warrant, less the number of Warrant Shares with respect to which this Warrant is exercised. No fractional shares of Common Stock are to be issued upon the exercise of this Warrant, but rather the number of shares of Common Stock to be issued shall be rounded up to the nearest whole number. The Company shall pay any and all taxes, including without limitation, all documentary stamp, transfer or similar taxes, or other incidental expense that may be payable with respect to the issuance and delivery of Warrant Shares upon exercise of this Warrant.

(b) Exercise Price. For purposes of this Warrant, "EXERCISE PRICE" means \$1.50, subject to adjustment as provided herein.

(c) Company's Failure to Timely Deliver Securities.

(i) Failure to Deliver Shares. Subject to Section 1(f), if the Company shall fail for any reason or for no reason to issue to the holder, within three Business Days of receipt of the Exercise Delivery Documents, a certificate for the number of shares of Common Stock to which the holder is entitled or to credit the holder's balance account with DTC for such number of shares of Common Stock to which the holder is entitled upon the holder's exercise of this Warrant, the Company shall pay as additional damages in cash to such holder on each day after such third Business Day that the issuance of such Common Stock certificate is not timely effected an amount equal to 1.0% of the product of (A) the sum of the number of shares of Common Stock not issued to the holder on a timely basis and to which the holder is entitled and (B) the Closing Sale Price of the Common Stock on the trading day immediately preceding the last possible date which the Company could have issued such Common Stock to the holder without violating Section 1(a). In addition, the holder, upon written notice to the Company, may void its Exercise Notice with respect to, and have returned, any portion of this Warrant that has not been exercised pursuant to such Exercise Notice; provided that the voiding of an Exercise Notice shall not affect the Company's obligations to make any payments which have accrued prior to the date of such notice pursuant to this Section 1(c)(i) or otherwise.

(ii) Failure to Deliver New Warrant. If within ten Business Days after the Company's receipt of the Exercise Delivery Documents, the Company fails to deliver a new Warrant to the holder for the number of shares of Common Stock to which such holder is entitled, the Company shall pay as additional damages in cash to such holder on each day after such tenth Business Day that such delivery of such new Warrant is not timely effected an amount equal to 1.0% of the product of (A) the number of shares of Common Stock represented by the portion of this Warrant which is not being exercised and (B) the Closing Sale Price of the Common Stock on the trading day immediately preceding the last possible date which the Company could have issued such Warrant to the holder without violating Section 1(a).

(d) Disputes. In the case of a dispute as to the determination of the Exercise Price or the arithmetic calculation of the Warrant Shares, the Company shall promptly issue to the holder the number of Warrant Shares that are not disputed and resolve such dispute in accordance with Section 11.

(e) Limitations on Exercises.

(i) Beneficial Ownership. The Company shall not effect the exercise of this Warrant, and no Person (as defined below) who is a holder of this Warrant shall have the right to exercise this Warrant, to the extent that after giving effect to such exercise, such Person (together with such Person's affiliates) would beneficially own in excess of [9.99%] of the shares of the Common Stock outstanding immediately after giving effect to such exercise. For purposes of the foregoing sentence, the aggregate number of shares of Common Stock beneficially owned by such Person and its affiliates shall include the number of shares of Common Stock issuable upon exercise of this Warrant with respect to which the determination of such sentence is being made, but shall exclude shares of Common Stock which would be issuable upon (i) exercise of the remaining, unexercised portion of this Warrant beneficially owned by such Person and its affiliates and (ii) exercise or conversion of the unexercised or unconverted portion of any other securities of the Company beneficially owned by such Person and its affiliates (including, without limitation, any convertible notes or convertible preferred stock or warrants) subject to a limitation on conversion or exercise analogous to the limitation contained herein. Except as set forth in the preceding sentence, for purposes of this paragraph, beneficial ownership shall be calculated in accordance with Section 13(d) of the Securities Exchange Act of 1934, as amended. For purposes of this Warrant, in determining the number of outstanding shares of Common Stock a holder may rely on the number of outstanding shares of Common Stock as reflected in (1) the Company's most recent Form 10-Q, Form 10-K or other public filing with the Securities and Exchange Commission, as the case may be, (2) a more recent public announcement by the Company or (3) any other notice by the Company or its Transfer Agent setting forth the number of shares of Common Stock outstanding. For any reason at any time, upon the written or oral request of the holder of this Warrant, the Company shall within one Business Days confirm orally and in writing to the holder of this Warrant the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the

Company, including the SPA Securities and the SPA Warrants, by the holder of this Warrant and its affiliates since the date as of which such number of outstanding shares of Common Stock was reported.

(ii) Principal Market Regulation. The Company shall not be obligated to issue any shares of Common Stock upon exercise of this Warrant if the issuance of such shares of Common Stock would exceed that number of shares of Common Stock which the Company may issue upon exercise of this Warrant (including, as applicable, any shares of Common Stock issued upon conversion of or as payment of any interest under the SPA Securities) without breaching the Company's obligations under the rules or regulations of the Principal Market (the "EXCHANGE CAP"), except that such limitation shall not apply in the event that the Company obtains the approval of its shareholders as required by the applicable rules of the Principal Market for issuances of Common Stock in excess of such amount. Until such approval is obtained, no Purchaser shall be issued, upon exercise of any SPA Warrants, shares of Common Stock. The Company shall not be obligated to make any penalty payments, including those contemplated by Section 1(c) of this Warrant, by reason of the application of this Section 1(e).

(f) Forced Exercise. Notwithstanding the foregoing, in the event that at any time following the effective date of the Registration Statement filed pursuant to Section 2(a) of the Registration Rights Agreement, the Conditions to Cancellation of Right to Exercise Warrant (as defined below) are satisfied, then the Company shall have the right to send a written notice to the holder hereof on the Business Day immediately after the Measuring Period indicating that the right of the holder to further exercise this Warrant will terminate on the twentieth (20th) trading day (the "Warrant Cancellation Date") following receipt of such written notice as to the Warrants for which the holder has not delivered an Exercise Notice as of such termination date. "Conditions to Cancellation of Right to Exercise Warrant " means the following conditions: (i) on each day during the period beginning on the first day of the Measuring Period (as defined below) and ending on the Warrant Cancellation Date, the Registration Statement registering the Registrable Securities (as defined in the Registration Rights Agreement) shall be effective and available for the sale of at least all of the Registrable Securities required to be included in such Registration Statement and there shall not have been any Grace Periods; (ii) on each day during the period beginning on the Initial Issuance Date and ending on the Warrant Cancellation Date, the Common Stock is designated for quotation on The New York Stock Exchange, Inc. (the "NYSE"), The NASDAQ National Market ("NASDAQ") or the NASDAQ SmallCap Market and shall not have been suspended from trading on such exchange or market (other than suspensions of not more than one day and occurring prior to the Warrant Cancellation Date due to business announcements by the Company) nor on each day during the period beginning on the first day of the Measuring Period (as defined below) and ending on the Warrant Cancellation Date shall delisting or suspension by such exchange or market been threatened or pending either (A) in writing by such exchange or market or (B) by falling below the minimum listing maintenance requirements of such exchange or market; (iii) during the period beginning on the Initial Issuance Date and ending on and including the Warrant Cancellation Date, there shall not have occurred (A) an event that would cause the Company to be in breach of any of its representations, warranties or covenants as if the Company had made such representation, warranty or covenant or any such date or (B) the public announcement of a pending, proposed or intended Organic

Change, unless such pending, proposed or intended Organic Change has been terminated, abandoned or consummated and the Company has publicly announced such termination, abandonment or consummation of such Organic Change; (iv) during the period beginning on the Initial Issuance Date and ending on and including the Warrant Cancellation Date, the Company shall have delivered unrestricted shares of Common Stock upon resale of the Common Shares (as defined in the Securities Purchase Agreement) and Warrant Shares upon exercise of the Warrants to the holders on a timely basis; (v) the Company shall not have failed to timely make any payments to the holder within 5 Business Days of when such payment is due, whether as interest or penalty payments; (vi) the Company shall have no knowledge of any fact that would cause the Registration Statements required pursuant to the Registration Rights Agreement not to be effective and available for the sale of at least all of the Registrable Securities in accordance with the terms of the Registration Rights Agreement; (vii) the Company otherwise shall have been in material compliance with and shall not have breached, in any material respect, any provision, covenant, representation or warranty of the Securities Purchase Agreement, the Registration Rights Agreement and any of the Warrants; and (viii) the Closing Sale Price for any ten consecutive trading days (the "Measuring Period") is equal to or greater than \$2.50 (subject to adjustment for stock splits, stock dividends, recapitalizations, combinations, reverse stock splits or other similar events).

2. ADJUSTMENT OF EXERCISE PRICE AND NUMBER OF WARRANT SHARES. The Exercise Price and the number of Warrant Shares shall be adjusted from time to time as follows:

(a) Adjustment upon Subdivision or Combination of Common Stock. If the Company at any time after the date of issuance of this Warrant subdivides (by any stock split, stock dividend, recapitalization or otherwise) one or more classes of its outstanding shares of Common Stock into a greater number of shares, the Exercise Price in effect immediately prior to such subdivision will be proportionately reduced and the number of Warrant Shares will be proportionately increased. If the Company at any time after the date of issuance of this Warrant combines (by combination, reverse stock split or otherwise) one or more classes of its outstanding shares of Common Stock into a smaller number of shares, the Exercise Price in effect immediately prior to such combination will be proportionately increased and the number of Warrant Shares will be proportionately decreased. Any adjustment under this Section 2(a) shall become effective at the close of business on the date the subdivision or combination becomes effective.

(b) Other Considerations. All calculations under this Section 2 shall be made by the Company in good faith.

3. PURCHASE RIGHTS; ORGANIC CHANGE.

(a) Purchase Rights. If at any time the Company grants, issues or sells any Options, Convertible Securities or rights to purchase stock, warrants, securities or other property pro rata to the record holders of any class of Common Stock (the "PURCHASE RIGHTS"), then the holder of this Warrant will be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which such holder could have acquired if such holder had

held the number of shares of Common Stock acquirable upon complete exercise of this Warrant (without regard to any limitations on the exercise of this Warrant) immediately before the date on which a record is taken for the grant, issuance or sale of such Purchase Rights, or, if no such record is taken, the date as of which the record holders of Common Stock are to be determined for the grant, issue or sale of such Purchase Rights.

(b) Organic Change. Any recapitalization, reorganization, reclassification, consolidation, merger, sale of all or substantially all of the Company's assets to another Person or other transaction, in each case which is effected in such a way that holders of Common Stock are entitled to receive securities or assets with respect to or in exchange for Common Stock is referred to herein as an "ORGANIC CHANGE." Subject to Section 4(n) of the Securities Purchase Agreement, prior to the consummation of any (i) sale of all or substantially all of the Company's assets to an acquiring Person or (ii) other Organic Change following which the Company is not a surviving entity, the Company will secure from the Person purchasing such assets or the Person issuing the securities or providing the assets in such Organic Change (in each case, the "ACQUIRING ENTITY") a written agreement (in form and substance reasonably satisfactory to the holders of SPA Warrants representing at least two-thirds of the shares of Common Stock obtainable upon exercise of the SPA Warrants then outstanding) to deliver to the holder of this Warrant in exchange for this Warrant, a security of the Acquiring Entity evidenced by a written instrument substantially similar in form and substance to this Warrant and reasonably satisfactory to the holder of this Warrant (including, an adjusted exercise price equal to the value for the Common Stock reflected by the terms of such consolidation, merger or sale, and exercisable for a corresponding number of shares of Common Stock acquirable and receivable upon exercise of this Warrant (without regard to any limitations on the exercise of this Warrant)), if the value so reflected is less than the Exercise Price in effect immediately prior to such consolidation, merger or sale). In the event that an Acquiring Entity is directly or indirectly controlled by a company or entity whose common stock or similar equity interest is listed, designated or quoted on a securities exchange or trading market, the holder of this Warrant may elect to treat such Person as the Acquiring Entity for purposes of this Section 3(b). Prior to the consummation of any other Organic Change, the Company shall make appropriate provision (in form and substance reasonably satisfactory to the holders of SPA Warrants representing at least two-thirds of the shares of Common Stock obtainable upon exercise of the SPA Warrants then outstanding) to insure that the holder of this Warrant thereafter will have the right to acquire and receive in lieu of or in addition to (as the case may be) the shares of Common Stock immediately theretofore acquirable and receivable upon the exercise of this Warrant (without regard to any limitations on the exercise of this Warrant), such shares of stock, securities or assets that would have been issued or payable in such Organic Change with respect to or in exchange for the number of shares of Common Stock which would have been acquirable and receivable upon the exercise of this Warrant as of the date of such Organic Change (without regard to any limitations on the exercise of this Warrant).

4. NONCIRCUMVENTION. The Company hereby covenants and agrees that the Company will not, by amendment of its Certificate of Incorporation or through any reorganization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities, or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, and will at all times in good faith carry out all the provisions of this

Warrant and take all action as may be required to protect the rights of the holder of this Warrant. Without limiting the generality of the foregoing, the Company (i) will not increase the par value of any shares of Common Stock receivable upon the exercise of this Warrant above the Exercise Price then in effect, (ii) will take all such actions as may be necessary or appropriate in order that the Company may validly and legally issue fully paid and nonassessable shares of Common Stock upon the exercise of this Warrant, and (iii) will, so long as any of the SPA Warrants are outstanding, take all action necessary to reserve and keep available out of its authorized and unissued Common Stock, solely for the purpose of effecting the exercise of the SPA Warrants, the number of shares of Common Stock as shall from time to time be necessary to effect the exercise of the SPA Warrants then outstanding (without regard to any limitations on exercise) in accordance with Section 3(c) of the Securities Purchase Agreement.

5. WARRANT HOLDER NOT DEEMED A STOCKHOLDER. Except as otherwise specifically provided herein, no holder, solely in such Person's capacity as a holder, of this Warrant shall be entitled to vote or receive dividends or be deemed the holder of shares of the Company for any purpose, nor shall anything contained in this Warrant be construed to confer upon the holder hereof, solely in such Person's capacity as a holder of this Warrant, any of the rights of a shareholder of the Company or any right to vote, give or withhold consent to any corporate action (whether any reorganization, issue of stock, reclassification of stock, consolidation, merger, conveyance or otherwise), receive notice of meetings, receive dividends or subscription rights, or otherwise, prior to the issuance to the holder of this Warrant of the Warrant Shares which such Person is then entitled to receive upon the due exercise of this Warrant. In addition, nothing contained in this Warrant shall be construed as imposing any liabilities on such holder to purchase any securities (upon exercise of this Warrant or otherwise) or as a stockholder of the Company, whether such liabilities are asserted by the Company or by creditors of the Company. Notwithstanding this Section 5, the Company will provide the holder of this Warrant with copies of the same notices and other information given to the stockholders of the Company generally, contemporaneously with the giving thereof to the stockholders.

6. REISSUANCE OF WARRANTS.

(a) Transfer of Warrant. If this Warrant is to be transferred in compliance with the provisions hereof, the holder shall surrender this Warrant to the Company, whereupon the Company will forthwith issue and deliver upon the order of the holder of this Warrant a new Warrant (in accordance with Section 6(d)), registered as the holder of this Warrant may request, representing the right to purchase the number of Warrant Shares being transferred by the Holder and, if less than the total number of Warrant Shares then underlying this Warrant is being transferred, a new Warrant (in accordance with Section 7(d)) to the holder of this Warrant representing the right to purchase the number of Warrant Shares not being transferred.

(b) Lost, Stolen or Mutilated Warrant. Upon receipt by the Company of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant, and, in the case of loss, theft or destruction, of any indemnification undertaking by the holder of this Warrant to the Company in customary form and, in the case of mutilation, upon surrender and cancellation of this Warrant, the Company shall execute and deliver to the Holder a new Warrant (in accordance with Section 6(d)) representing the right to purchase the Warrant

Shares then underlying this Warrant.

(c) Warrant Exchangeable for Multiple Warrants. This Warrant is exchangeable, upon the surrender hereof by the holder of this Warrant at the principal office of the Company, for a new Warrant or Warrants (in accordance with Section 6(d)) representing in the aggregate the right to purchase the number of Warrant Shares then underlying this Warrant, and each such new Warrant will represent the right to purchase such portion of such Warrant Shares as is designated by the holder of this Warrant at the time of such surrender; provided, however, that no Warrants for fractional shares of Common Stock shall be given.

(d) Issuance of New Warrants. Whenever the Company is required to issue a new Warrant pursuant to the terms of this Warrant, such new Warrant (i) shall be of like tenor with this Warrant, (ii) shall represent, as indicated on the face of such new Warrant, the right to purchase the Warrant Shares then underlying this Warrant (or in the case of a new Warrant being issued pursuant to Section 6(a) or Section 6(c), the Warrant Shares designated by the holder of this Warrant which, when added to the number of shares of Common Stock underlying the other new Warrants issued in connection with such issuance, does not exceed the number of Warrant Shares then underlying this Warrant), (iii) shall have an issuance date, as indicated on the face of such new Warrant, which is the same as the Issuance Date, and (iv) shall have the same rights and conditions as this Warrant.

7. NOTICES. Whenever notice is required to be given under this Warrant, unless otherwise provided herein, such notice shall be given in accordance with Section 9(f) of the Securities Purchase Agreement. The Company shall provide the holder of this Warrant with prompt written notice of all actions taken pursuant to this Warrant, including in reasonable detail a description of such action and the reason therefore. Without limiting the generality of the foregoing, the Company will give written notice to the holder of this Warrant (i) immediately upon any adjustment of the Exercise Price or number of Warrant Shares or number or kind of securities purchasable upon exercise of this Warrant, setting forth in reasonable detail, and certifying, the facts requiring such adjustment and the calculation of such adjustment and (ii) at least ten days prior to the date on which the Company closes its books or takes a record, or in the event that the Company does not so close its books or take a record, at least ten days prior to the date of any such event, (A) with respect to any dividend or distribution upon the Common Stock, (B) with respect to any grants, issues or sales of any Options, Convertible Securities or rights to purchase stock, warrants, securities or other property to holders of Common Stock or (C) for determining rights to vote with respect to any Change of Control (as defined in the SPA Securities), dissolution or liquidation, provided in each case that such information shall be made known to the public prior to or in conjunction with such notice being provided to such holder. Notwithstanding the foregoing, Section 4(i) of the Securities Purchase Agreement shall apply to all notices given pursuant to this Warrant.

8. AMENDMENT AND WAIVER. Except as otherwise provided herein, the provisions of this Warrant may be amended and the Company may take any action herein prohibited, or omit to perform any act herein required to be performed by it, only if the Company has obtained the written consent of the holders of SPA Warrants representing at least a majority of the shares of Common Stock obtainable upon exercise of the SPA Warrants then outstanding;

provided that no such action may increase the exercise price of any SPA Warrant or decrease the number of shares or class of stock obtainable upon exercise of any SPA Warrant without the written consent of the holder of this Warrant. No such amendment shall be effective to the extent that it applies to less than all of the holders of the SPA Warrants then outstanding.

9. GOVERNING LAW. This Warrant shall be construed and enforced in accordance with, and all questions concerning the construction, validity, interpretation and performance of this Warrant shall be governed by, the internal laws of the State of New York, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of New York or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of New York.

10. CONSTRUCTION; HEADINGS. This Warrant shall be deemed to be jointly drafted by the Company and all the Purchasers and shall not be construed against any person as the drafter hereof. The headings of this Warrant are for convenience of reference and shall not form part of, or affect the interpretation of, this Warrant.

11. DISPUTE RESOLUTION. In the case of a dispute as to the determination of the Exercise Price or the arithmetic calculation of the Warrant Shares, the Company shall submit the disputed determinations or arithmetic calculations via facsimile within two Business Days of receipt of the Exercise Notice giving rise to such dispute, as the case may be, to the holder of this Warrant. If the holder of this Warrant and the Company are unable to agree upon such determination or calculation of the Exercise Price or the Warrant Shares within three Business Days of such disputed determination or arithmetic calculation being submitted to the Holder, then the Company shall, within two Business Days submit via facsimile (a) the disputed determination of the Exercise Price to an independent, reputable investment bank selected by the Company and approved by the holder of this Warrant or (b) the disputed arithmetic calculation of the Warrant Shares to the Company's independent, outside accountant. The Company shall cause the investment bank or the accountant, as the case may be, to perform the determinations or calculations and notify the Company and the Holder of the results no later than ten Business Days from the time it receives the disputed determinations or calculations. Such investment bank's or accountant's determination or calculation, as the case may be, shall be binding upon all parties absent demonstrable error.

12. REMEDIES, OTHER OBLIGATIONS, BREACHES AND INJUNCTIVE RELIEF. The remedies provided in this Warrant shall be cumulative and in addition to all other remedies available under this Warrant, the Securities Purchase Agreement, the SPA Securities and the Registration Rights Agreement, at law or in equity (including a decree of specific performance and/or other injunctive relief), and nothing herein shall limit the right of the holder of this Warrant right to pursue actual damages for any failure by the Company to comply with the terms of this Warrant. The Company acknowledges that a breach by it of its obligations hereunder will cause irreparable harm to the holder of this Warrant and that the remedy at law for any such breach may be inadequate. The Company therefore agrees that, in the event of any such breach or threatened breach, the holder of this Warrant shall be entitled, in addition to all other available remedies, to an injunction restraining any breach, without the necessity of showing economic loss and without any bond or other security being required.

13. TRANSFER. Subject to compliance with any applicable securities laws, this Warrant may be offered for sale, sold, transferred or assigned without the consent of the Company, except as may otherwise be required by Section 2(f) of the Securities Purchase Agreement or any other provision of this Warrant.

14. CERTAIN DEFINITIONS. For purposes of this Warrant, the following terms shall have the following meanings:

(a) "BLOOMBERG" means Bloomberg Financial Markets.

(b) "BUSINESS DAY" means any day other than Saturday, Sunday or other day on which commercial banks in The City of New York are authorized or required by law to remain closed.

(c) "CLOSING BID PRICE" and "CLOSING SALE PRICE" means, for any security as of any date, the last closing bid price and last closing trade price, respectively, for such security on the Principal Market, as reported by Bloomberg, or, if the Principal Market begins to operate on an extended hours basis and does not designate the closing bid price or the closing trade price, as the case may be, then the last bid price or last trade price, respectively, of such security prior to 4:00:00 p.m., New York Time, as reported by Bloomberg, or, if the Principal Market is not the principal securities exchange or trading market for such security, the last closing bid price or last trade price, respectively, of such security on the principal securities exchange or trading market where such security is listed or traded as reported by Bloomberg, or if the foregoing do not apply, the last closing bid price or last trade price, respectively, of such security in the over-the-counter market on the electronic bulletin board for such security as reported by Bloomberg, or, if no closing bid price or last trade price, respectively, is reported for such security by Bloomberg, the average of the bid prices, or the ask prices, respectively, of any market makers for such security as reported in the "pink sheets" by Pink Sheets LLC (formerly the National Quotation Bureau, Inc.). If the Closing Bid Price or the Closing Sale Price cannot be calculated for a security on a particular date on any of the foregoing bases, the Closing Bid Price or the Closing Sale Price, as the case may be, of such security on such date shall be the fair market value as mutually determined by the Company and the Holder. If the Company and the Holder are unable to agree upon the fair market value of such security, then such dispute shall be resolved pursuant to Section 11. All such determinations to be appropriately adjusted for any stock dividend, stock split, stock combination or other similar transaction during the applicable calculation period.

(d) "COMMON STOCK" means (i) the Company's common stock, par value \$0.01 per share, and (ii) any capital stock into which such Common Stock shall have been changed or any capital stock resulting from a reclassification of such Common Stock.

(e) "CONVERTIBLE SECURITIES" means any stock or securities (other than Options) directly or indirectly convertible into or exercisable or exchangeable for Common Stock.

(f) "EXPIRATION DATE" means the date two years after the Closing Date (as

defined in the Securities Purchase Agreement) pursuant to which this Warrant was initially issued or, if such date falls on a day other than a Business Day or on which trading does not take place on the Principal Market (a "HOLIDAY"), the next date that is not a Holiday.

(g) "OPTIONS" means any rights, warrants or options to subscribe for or purchase Common Stock or Convertible Securities.

(h) "PERSON" means an individual, a limited liability company, a partnership, a joint venture, a corporation, a trust, an unincorporated organization, any other entity and a government or any department or agency thereof.

(i) "PRINCIPAL MARKET" means The NASDAQ National Market or in the event that the Company is no longer listed with The NASDAQ National Market, the market or exchange on which the Common Stock is then listed and traded, which only may be The New York Stock Exchange, Inc., the American Stock Exchange or The NASDAQ SmallCap Market.

(j) "REGISTRATION RIGHTS AGREEMENT" means that certain registration rights agreement between the Company and the Purchasers.

(k) "SPA SECURITIES" means the shares of Common Stock issued pursuant to the Securities Purchase Agreement.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the Company has caused this Warrant to Purchase Common Stock to be duly executed as of the Issuance Date set out above.

STEMCELLS, INC.

By: _____
Name: Iris Brest
Title: General Counsel

EXERCISE NOTICE

TO BE EXECUTED BY THE REGISTERED HOLDER TO EXERCISE THIS
WARRANT TO PURCHASE COMMON STOCK

STEMCELLS, INC.

The undersigned holder hereby exercises the right to purchase _____ of the shares of Common Stock ("WARRANT SHARES") of StemCells, Inc., a Delaware corporation (the "COMPANY"), evidenced by the attached Warrant to Purchase Common Stock (the "WARRANT"), and tenders herewith payment to the Company of the aggregate exercise price in full, equal to \$_____, together with all applicable transfer taxes, if any.

Please issue the Warrant Shares in the following name and to the following address:

Issue to:

Facsimile Number:

Authorization:

Account Number:
(if electronic book entry transfer)

Transaction Code Number:
(if electronic book entry transfer)

To the extent the foregoing exercise is for less than the full number of Warrant Shares issuable pursuant to the Warrant, a replacement Warrant representing the remainder of the Warrant Shares issuable (and otherwise of like form, tenor and effect) shall be delivered to holder.

The undersigned confirms the continuing validity of, and reaffirms as of the date hereof, the representations and warranties set forth in Section 2 of the Securities Purchase Agreement, dated as of May [7], 2003, by and among the Company and the Buyers named therein. The undersigned agrees to comply with the prospectus delivery requirements (to the extent applicable) under the applicable securities laws in connection with any transfer of the aforesaid Warrant Shares.

Date: _____, _____

Name of Registered Holder

By:
Name:
Title:

ACKNOWLEDGMENT

The Company hereby acknowledges this Exercise Notice and hereby directs EquiServe Trust Company, N.A. to issue the above indicated number of shares of Common Stock in accordance with the Transfer Agent Instructions dated May __, 2003 from the Company and acknowledged and agreed to by EquiServe Trust Company, N.A.

STEMCELLS, INC.

By: _____
Name:
Title:

SECURITIES PURCHASE AGREEMENT

SECURITIES PURCHASE AGREEMENT (the "AGREEMENT"), dated as of May 7, 2003, by and among StemCells, Inc., a Delaware corporation, with headquarters located at 3155 Porter Drive, Palo Alto, California 94304 (the "COMPANY"), and the investors listed on the Schedule of Buyers attached hereto (individually, a "BUYER" and collectively, the "BUYERS").

WHEREAS:

A. The Company and each Buyer is executing and delivering this Agreement in reliance upon the exemption from securities registration afforded by Section 4(2) of the Securities Act of 1933, as amended (the "1933 ACT"), and Rule 506 of Regulation D ("REGULATION D") as promulgated by the United States Securities and Exchange Commission (the "SEC") under the 1933 Act;

B. Each Buyer wishes to purchase, and the Company wishes to sell, upon the terms and conditions stated in this Agreement, (i) that aggregate principal amount of shares of the Company's Common Stock, par value \$0.01 per share (the "COMMON STOCK") set forth opposite such Buyer's name in column (3) on the Schedule of Buyers (which aggregate amount for all Buyers together shall be \$6,500,000 and shall collectively be referred to herein as the "COMMON SHARES") and (ii) warrants, in substantially the form attached hereto as Exhibit A (the "WARRANTS"), to acquire 1,898,000 shares of Common Stock (as exercised, collectively, the "WARRANT SHARES");

C. Contemporaneously with the consummation of the transactions contemplated by this Agreement, the parties have agreed to execute and deliver a Registration Rights Agreement, substantially in the form attached hereto as Exhibit B (the "REGISTRATION RIGHTS AGREEMENT"), pursuant to which the Company will agree to provide certain registration rights with respect to the Common Shares, and the Warrant Shares under the 1933 Act and the rules and regulations promulgated thereunder, and applicable state securities laws.

D. The Common Shares, the Warrants and the Warrant Shares collectively are referred to herein as the "SECURITIES".

NOW, THEREFORE, the Company and each Buyer hereby agree as follows:

1. PURCHASE AND SALE OF COMMON SHARES AND WARRANTS.

(a) Purchase of Common Shares and Warrants.

Subject to the satisfaction (or waiver) of the conditions set forth in Sections 6(a) and 7(a) below, the Company shall issue and sell to each Buyer, and each Buyer severally, but not jointly, agrees to purchase from the Company on the Closing Date (as defined below), the number of Common Shares as is set forth opposite such Buyer's name in column (3) on the Schedule of Buyers, along with Warrants to acquire that number of Warrant Shares as is set forth opposite such Buyer's name in column (4) on the Schedule of Buyers (the "CLOSING").

(b) Purchase Price. The purchase price for each Buyer (the "PURCHASE PRICE") of the Common Shares and related Warrants to be purchased by each such Buyer at Closing shall be equal to \$1.625 for each Common Share and related Warrants being purchased by such Buyer at the Closing.

(c) Closing Date. The date and time of the Closing (the "CLOSING DATE") shall be 10:00 a.m., New York City Time, on the second Business Day after notification of satisfaction (or waiver) of the conditions to the Closing set forth in Sections 6(a) and 7(a) below (or such later date as is mutually agreed to by the Company and each Buyer).

(d) Form of Payment. On the Closing Date, (i) each Buyer shall pay its Purchase Price to the Company for the Common Shares and Warrants to be issued and sold to such Buyer at the Closing, by wire transfer of immediately available funds in accordance with the Company's written wire instructions, and (ii) the Company shall deliver to each Buyer, the Common Shares (in the amounts as such Buyer shall request) that such Buyer is then purchasing along with the Warrants (in the amounts as such Buyer shall request) such Buyer is purchasing, duly executed on behalf of the Company and registered in the name of such Buyer or its designee.

2. BUYER'S REPRESENTATIONS AND WARRANTIES.

Each Buyer represents and warrants with respect to only itself as of the date hereof and as of the Closing Date that:

(a) No Public Sale or Distribution; Prior Sales. Such Buyer is (i) acquiring the Common Shares and the Warrants and (ii) upon exercise of the Warrants will acquire the Warrant Shares issuable upon exercise thereof, for its own account in the ordinary course of its business for investment purposes only and not with a view towards, or for resale in connection with, the public sale or distribution thereof, except pursuant to sales registered or exempted under the 1933 Act and has no agreement or understanding, directly or indirectly, with any Person to distribute any of the Securities; provided, however, that by making the representations herein, such Buyer does not agree to hold any of the Securities for any minimum or other specific term and reserves the right to dispose of the Securities at any time in accordance with or pursuant to a registration statement or an exemption under the 1933 Act. On each of May 6, 2003 and May 7, 2003, such Buyer has not sold any shares of Common Stock.

(b) Accredited Investor Status. Such Buyer is an "accredited investor" as that term is defined in Rule 501(a) of Regulation D.

(c) Reliance on Exemptions. Such Buyer understands that the Securities are being offered and sold to it in reliance on specific exemptions from the registration requirements of United States federal and state securities laws and that the Company is relying in part upon the truth and accuracy of, and such Buyer's compliance with, the representations, warranties, agreements, acknowledgments and understandings of such Buyer set forth herein in order to determine the availability of such exemptions and the eligibility of such Buyer to acquire the Securities.

(d) Information. Such Buyer and its advisors, if any, have been furnished with all materials relating to the business, finances, prospects and operations of the Company and each Subsidiary and materials relating to the offer and sale of the Securities which have been requested by such Buyer. Such Buyer and its advisors, if any, have been afforded the opportunity to ask questions of the Company. Neither such inquiries nor any other due diligence investigations conducted by such Buyer or its advisors, if any, or its representatives shall modify, amend or affect such Buyer's right to rely on the Company's representations and warranties contained herein. Such Buyer understands that its investment in the Securities involves a high degree of risk and is able to afford a complete loss of such investment. Such Buyer has sought such accounting, legal and tax advice as it has considered necessary to make an informed investment decision with respect to its acquisition of the Securities.

(e) No Governmental Review. Such Buyer understands that no United States federal or state agency or any other government or governmental agency has passed on or made any recommendation or endorsement of the Securities or the fairness or suitability of the investment in the Securities nor have such authorities passed upon or endorsed the merits of the offering of the Securities.

(f) Transfer or Resale. Such Buyer understands that except as provided in the Registration Rights Agreement: (i) the Securities have not been and are not being registered under the 1933 Act or any state securities laws, and may not be offered for sale, sold, assigned or transferred unless (A) subsequently registered thereunder, (B) such Buyer shall have delivered to the Company an opinion of counsel, in a form reasonably acceptable to the Company, to the effect that such Securities to be sold, assigned or transferred may be sold, assigned or transferred pursuant to an exemption from such registration, or (C) such Buyer provides the Company with reasonable assurance that such Securities can be sold, assigned or transferred pursuant to Rule 144 or Rule 144A promulgated under the 1933 Act, as amended, (or a successor rule thereto) (collectively, "RULE 144"); (ii) any sale of the Securities made in reliance on Rule 144 may be made only in accordance with the terms of Rule 144 and further, if Rule 144 is not applicable, any resale of the Securities under circumstances in which the seller (or the Person (as defined in Section 3(r)) through whom the sale is made) may be deemed to be an underwriter (as that term is defined in the 1933 Act) may require compliance with some other exemption under the 1933 Act or the rules and regulations of the SEC thereunder; and (iii) neither the Company nor any other Person is under any obligation to register the Securities under the 1933 Act or any state securities laws or to comply with the terms and conditions of any exemption thereunder. The Securities may be pledged in connection with a bona fide margin account or other loan secured by the Securities and such pledge of Securities shall not be deemed to be a transfer, sale or assignment of the Securities hereunder, and no Buyer effecting a pledge of Securities shall be required to provide the Company with any notice thereof or otherwise make any delivery to the Company pursuant to this Agreement or any other Transaction Document, including, without limitation, this Section 2(f); provided, that in order to make any sale, transfer or assignment of Securities, such Buyer and its pledgee makes such disposition in accordance with or pursuant to a registration statement or an exemption under the 1933 Act.

(g) Legends. Such Buyer understands that the certificates or other instruments representing the Common Shares and the Warrants and, until such time as the resale

of the Common Shares and the Warrant Shares have been registered under the 1933 Act as contemplated by the Registration Rights Agreement, the stock certificates representing the Common Shares and the Warrant Shares, except as set forth below, shall bear any legend as required by the "blue sky" laws of any state and a restrictive legend in substantially the following form (and a stop-transfer order may be placed against transfer of such stock certificates):

[NEITHER THE ISSUANCE AND SALE OF THE SECURITIES REPRESENTED BY THIS CERTIFICATE NOR THE SECURITIES INTO WHICH THESE SECURITIES ARE EXERCISABLE HAVE BEEN] [THE SECURITIES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN] REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR APPLICABLE STATE SECURITIES LAWS. THE SECURITIES MAY NOT BE OFFERED FOR SALE, SOLD, TRANSFERRED OR ASSIGNED (I) IN THE ABSENCE OF (A) AN EFFECTIVE REGISTRATION STATEMENT FOR THE SECURITIES UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR APPLICABLE STATE SECURITIES LAWS, OR (B) AN OPINION OF COUNSEL, IN A FORM REASONABLY ACCEPTABLE TO THE COMPANY, THAT REGISTRATION IS NOT REQUIRED UNDER SAID ACT OR APPLICABLE STATE SECURITIES LAWS OR (II) UNLESS SOLD PURSUANT TO RULE 144 OR RULE 144A UNDER SAID ACT. NOTWITHSTANDING THE FOREGOING, THE SECURITIES MAY BE PLEDGED IN CONNECTION WITH A BONA FIDE MARGIN ACCOUNT OR OTHER LOAN OR FINANCING ARRANGEMENT SECURED BY THE SECURITIES.

The legend set forth above shall be removed and the Company shall issue a certificate without such legend to the holder of the Securities upon which it is stamped, if, unless otherwise required by state securities laws, (i) such Securities are registered for sale under the 1933 Act, (ii) in connection with a sale, assignment or other transfer, such holder provides the Company with an opinion of counsel, in a form reasonably acceptable to the Company, to the effect that such sale, assignment or transfer of the Securities may be made without registration under the 1933 Act and that such legend is no longer required, or (iii) such holder provides the Company with reasonable assurance that the Securities can be sold, assigned or transferred pursuant to Rule 144 and that such legend is no longer required.

(h) Validity; Enforcement. This Agreement has been, and the Registration Rights Agreement will be on the Closing Date, duly and validly authorized, executed and delivered on behalf of such Buyer and shall constitute the legal, valid and binding obligations of such Buyer enforceable against such Buyer in accordance with their respective terms, except as such enforceability may be limited by general principles of equity or to applicable bankruptcy, insolvency, reorganization, moratorium, liquidation and other similar laws relating to, or affecting generally, the enforcement of applicable creditors' rights and remedies.

(i) Residency. Such Buyer is a resident of that country or state specified below its address on the Schedule of Buyers.

(j) Organization. Such Buyer duly organized and validly existing in good standing under the laws of the jurisdiction of its organization, and has the requisite power and authorization to execute and deliver this Agreement and to consummate the transaction contemplated hereby.

(k) No Conflicts. The execution, delivery and performance of this Agreement and the Registration Rights Agreement by such Buyer and the consummation by such Buyer of the transactions contemplated hereby and thereby will not (i) result in a violation of the constituent documents of such Buyer or (ii) conflict with, or constitute a default (or an event which with notice or lapse of time or both would become a default) under, or give to others any rights of termination, amendment, acceleration or cancellation of, any material agreement, indenture or instrument to which such Buyer is a party, or (iii) result in a violation of any law, rule, regulation, order, judgment or decree applicable to such Buyer or by which any property or asset of such Buyer is bound or affected, except in the case of clauses (ii) and (iii), for such breaches or defaults as would not be reasonably expected to have a material adverse effect on such Buyer's ability to consummate the transactions contemplated hereby.

(l) No Other Representations and Warranties. Each Buyer acknowledges that, except for the representations and warranties contained in the Transaction Documents, the Seller is not making any other express or implied representation or warranty on its behalf.

(m) General Solicitation. Such Buyer is not purchasing the Securities as a result of any advertisement, article, notice or other communication regarding the Securities published in any newspaper, magazine or similar media or broadcast over television or radio or presented at any seminar or any other general solicitation or general advertisement.

3. REPRESENTATIONS AND WARRANTIES OF THE COMPANY.

Except as is set forth in the SEC Documents (as defined below) or the Disclosure Schedules, the Company represents and warrants to each of the Buyers as of the date hereof and as of the Closing Date that:

(a) Organization and Qualification. Each of the Company and its Subsidiaries are corporations duly organized and validly existing in good standing under the laws of the jurisdiction in which they are incorporated, and have the requisite corporate power and authorization to own their properties and to carry on their business as now being conducted. Each of the Company and each Subsidiary is duly qualified as a foreign corporation to do business and is in good standing in every jurisdiction in which its ownership of property or the nature of the business conducted by it makes such qualification necessary, except to the extent that the failure to be so qualified or be in good standing would not have a Material Adverse Effect. As used in this Agreement, "MATERIAL ADVERSE EFFECT" means any material adverse effect on the business, properties, assets, operations, results of operations, or financial condition of the Company and its Subsidiaries, taken as a whole, or on the transactions contemplated hereby or by the agreements and instruments to be entered into in connection herewith, or on the authority or ability of the Company to perform its obligations under the Transaction Documents (as defined below). For purposes of this Agreement, "SUBSIDIARY" means any entity in which

the Company, directly or indirectly, owns capital stock or holds an equity or similar interest. The Company has no Subsidiaries other than StemCells California, Inc., a California corporation.

(b) Authorization; Enforcement; Validity. The Company has the requisite corporate power and authority to enter into and perform its obligations under this Agreement, the Registration Rights Agreement, the Irrevocable Transfer Agent Instructions (as defined in Section 5(b)), the Warrants and each of the other agreements entered into or to be entered into on the Closing Date by the parties hereto in connection with the transactions contemplated by this Agreement (collectively, the "TRANSACTION DOCUMENTS") and, to issue the Securities in accordance with the terms hereof and thereof. The execution and delivery of the Transaction Documents by the Company and the consummation by the Company of the transactions contemplated hereby and thereby, including, without limitation, the issuance of the Common Shares and the Warrants and the reservation for issuance and the issuance of the Warrant Shares issuable upon exercise thereof have been duly authorized by the Company's Board of Directors and no further consent or authorization is required by the Company, its Board of Directors or its stockholders. This Agreement and the other Transaction Documents of even date herewith have been duly executed and delivered by the Company, and constitute the legal, valid and binding obligations of the Company enforceable against the Company in accordance with their respective terms, except (i) as such enforceability may be limited by general principles of equity or applicable bankruptcy, insolvency, reorganization, moratorium, liquidation or similar laws relating to, or affecting generally, the enforcement of applicable creditors' rights and remedies, or (ii) as any rights to indemnity or contribution hereunder may be limited by federal and state securities laws and public policy consideration. As of the Closing, the Transaction Documents dated as of the Closing Date and required to have been executed and delivered with respect to the Closing shall have been duly executed and delivered by the Company, and shall constitute the legal, valid and binding obligations of the Company enforceable against the Company in accordance with their respective terms, except (i) as such enforceability may be limited by general principles of equity or applicable bankruptcy, insolvency, reorganization, moratorium, liquidation or similar laws relating to, or affecting generally, the enforcement of applicable creditor's rights and remedies or (ii) as any rights to indemnity or contribution hereunder may be limited by federal and state securities laws and public policy consideration.

(c) Issuance of Securities. The Common Shares and Warrants are duly authorized and, upon issuance in accordance with the terms hereof, shall be free from all taxes, liens and charges with respect to the issue thereof. As of the Closing Date, the Company shall have duly authorized and reserved for issuance a number of shares of Common Stock which equals the number of Warrant Shares. The Company shall, so long as any of the Warrants are outstanding, take all action necessary to reserve and keep available out of its authorized and unissued Capital Stock, solely for the purpose of effecting the exercise of the Warrants, 120% of the number of shares of Common Stock issuable upon exercise of the Warrants. Upon exercise in accordance with the Warrants, the Warrant Shares will be validly issued, fully paid and nonassessable and free from all taxes, liens and charges with respect to the issue thereof, with the holders being entitled to all rights accorded to a holder of Common Stock. Assuming the accuracy of each of the representations and warranties set forth in Section 2 hereof, the offer and sale by the Company of the Securities is exempt from registration under the 1933 Act.

(d) No Conflicts. Assuming the accuracy of all representations made by the Buyers herein, the execution, delivery and performance of the Transaction Documents by the Company and the consummation by the Company of the transactions contemplated hereby and thereby (including, without limitation, the issuance of the Common Shares and Warrants and reservation for issuance and issuance of the Warrant Shares) will not (i) result in a violation of the certificate of incorporation, any certificate of designations, preferences and rights of any outstanding series of preferred stock or Bylaws of the Company or any Subsidiary or (ii) conflict with, or constitute a default (or an event which with notice or lapse of time or both would become a default) under, or give to others any rights of termination, amendment, acceleration or cancellation of, any material agreement, indenture or instrument to which the Company or any Subsidiary is a party, or (iii) result in a violation of any law, rule, regulation, order, judgment or decree (including federal and state securities laws and regulations and the rules and regulations of the NASDAQ SmallCap Market (the "PRINCIPAL MARKET")) applicable to the Company or any Subsidiary or by which any property or asset of the Company or any Subsidiary is bound or affected, except in the case of clauses (ii) and (iii), for such breaches or defaults as would not be reasonably expected to have a Material Adverse Effect.

(e) Consents. The Company is not required to obtain any consent, authorization or order of, or make any filing or registration with, any court, governmental agency or any regulatory or self-regulatory agency or any other Person in order for it to execute, deliver or perform any of its obligations under or contemplated by the Transaction Documents, in each case in accordance with the terms hereof or thereof. All consents, authorizations, orders, filings and registrations which the Company is required to obtain pursuant to the preceding sentence have been obtained or effected on or prior to the Closing Date other than (i) the filing with the Commission of the Registration Statement, the application(s) to the Principal Market for the listing of the Common Shares and Warrant Shares for trading thereon in the time and manner required thereby, and applicable Blue Sky filings, (b) such as have already been obtained and the filing of a Form D with the SEC, and (c) compliance with Rule 4310(c)(17) of the National Association of Securities Dealers, Inc. The Company and each Subsidiary are unaware of any facts or circumstances that might prevent the Company from obtaining or effecting any of the foregoing. Except (i) for the facts that the Common Stock has previously traded below \$1.00 and the Company's shareholders equity is (as of the date hereof) less than \$2.5 million and (ii) as disclosed on Schedule 3(e), the Company is not in violation of the listing requirements of the Principal Market and has no knowledge of any facts that would reasonably lead to delisting or suspension of the Common Stock in the foreseeable future.

(f) Acknowledgment Regarding Buyer's Purchase of Securities. The Company acknowledges and agrees that each Buyer is acting solely in the capacity of arm's length purchaser with respect to the Transaction Documents and the transactions contemplated hereby and thereby. The Company further acknowledges that no Buyer is acting as a financial advisor or fiduciary of the Company (or in any similar capacity) with respect to the Transaction Documents and the transactions contemplated hereby and thereby, and any advice given by a Buyer or any of its representatives or agents in connection with the Transaction Documents and the transactions contemplated hereby and thereby is merely incidental to such Buyer's purchase of the Securities. The Company further represents to each Buyer that the Company's decision to enter into the Transaction Documents has been based solely on the independent evaluation by the Company and its representatives.

(g) No General Solicitation; Placement Agent's Fees.

Neither the Company, nor any of its affiliates, nor any Person acting on its or their behalf, has engaged in any form of general solicitation or general advertising (within the meaning of Regulation D) in connection with the offer or sale of the Securities. The Company shall be responsible for the payment of any placement agent's fees, financial advisory fees, or brokers' commissions (other than for persons engaged by any Buyer or its investment advisor, or at the direction of any of them) relating to or arising out of the transactions contemplated hereby. The Company shall pay, and hold each Buyer harmless against, any liability, loss or expense (including, without limitation, attorney's fees and out-of-pocket expenses) arising in connection with any such claim.

(h) No Integrated Offering. None of the Company, any

Subsidiary, any of their affiliates, and any Person acting on their behalf has, directly or indirectly, made any offers or sales of any security or solicited any offers to buy any security, under circumstances that would require registration of any of the Securities under the 1933 Act or cause this offering of the Securities to be integrated with prior offerings by the Company for purposes of the 1933 Act or any applicable stockholder approval provisions, including, without limitation, under the rules and regulations of any exchange or automated quotation system on which any of the securities of the Company are listed or designated. None of the Company, any Subsidiary, their affiliates and any Person acting on their behalf will take any action or steps referred to in the preceding sentence that would require registration of any of the Securities under the 1933 Act (other than pursuant to the Registration Rights Agreement) or cause the offering of the Securities to be integrated with other offerings.

(i) Dilutive Effect. The Company understands and

acknowledges that the number of Warrant Shares issuable upon exercise of the Warrants will increase in certain circumstances. The Company further acknowledges that its obligation to issue the Warrant Shares upon exercise of the Warrants in accordance with this Agreement and the Warrants is absolute and unconditional regardless of the dilutive effect that such issuance may have on the ownership interests of other stockholders of the Company.

(j) Application of Takeover Protections; Rights

Agreement. The Company and its board of directors have taken all necessary action, if any, in order to render inapplicable any control share acquisition, business combination, poison pill (including any distribution under a rights agreement) or other similar anti-takeover provision under the Certificate of Incorporation (as defined in Section 3(q)) or the laws of the state of its incorporation which is or could become applicable to any Buyer as a result of the transactions contemplated by this Agreement, including, without limitation, the Company's issuance of the Securities and any Buyer's ownership of the Securities.

(k) SEC Documents; Financial Statements. Since December

31, 2001, the Company has timely filed all reports, schedules, forms, statements and other documents required to be filed by it with the SEC pursuant to the reporting requirements of the 1934 Act (all of the foregoing filed prior to the date hereof or prior to the date of the Closing, and all exhibits included therein and financial statements and schedules thereto and documents incorporated by reference therein being hereinafter referred to as the "SEC DOCUMENTS"). The Company has delivered to the Buyers or their respective representatives true, correct and complete copies of the SEC Documents not available on the EDGAR system. As of their respective dates, the SEC

Documents complied in all material respects with the requirements of the 1934 Act and the rules and regulations of the SEC promulgated thereunder applicable to the SEC Documents, and none of the SEC Documents, at the time they were filed with the SEC, contained any untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. As of their respective dates, the financial statements of the Company included in the SEC Documents complied as to form in all material respects with applicable accounting requirements and the published rules and regulations of the SEC with respect thereto. Such financial statements have been prepared in accordance with generally accepted accounting principles, consistently applied, during the periods involved (except (i) as may be otherwise indicated in such financial statements or the notes thereto, or (ii) in the case of unaudited interim statements, to the extent they may exclude footnotes or may be condensed or summary statements) and fairly present in all material respects the financial position of the Company and each Subsidiary as of the dates thereof and the results of its operations and cash flows for the periods then ended (subject, in the case of unaudited statements, to normal year-end audit adjustments). After giving effect to the 8-K Filing (as defined below), no other information provided by or on behalf of the Company to the Buyers which is not included in the SEC Documents, including, without limitation, information referred to in Section 2(d) of this Agreement, contains any untrue statement of a material fact or omits to state any material fact necessary in order to make the statements therein, in the light of the circumstance under which they are or were made, not misleading.

(l) Absence of Certain Changes. Except as disclosed in Schedule 3(l), since December 31, 2002, there has been no material adverse change and no material adverse development in the business, properties, operations, financial condition, or results of operations of the Company or any Subsidiary. Since December 31, 2002, the Company has not (i) declared or paid any dividends (other than in connection with the Company's 3% Cumulative Convertible Preferred Stock), (ii) sold any assets, individually or in the aggregate, in excess of \$100,000 outside of the ordinary course of business or (iii) had capital expenditures, individually or in the aggregate, in excess of \$500,000. The Company has not taken any steps to seek protection pursuant to any bankruptcy law nor does the Company have any knowledge or reason to believe that its creditors intend to initiate involuntary bankruptcy proceedings or any actual knowledge of any fact which would reasonably lead a creditor to do so. The Company, after giving effect to the transactions contemplated hereby to occur at each Closing, will not be Insolvent (as defined below). For purposes of this Section 3(l), "INSOLVENT" means (i) the present fair saleable value of the Company's assets is less than the amount required to pay the Company's total indebtedness, contingent or otherwise, (ii) the Company is unable to pay its debts and liabilities, subordinated, contingent or otherwise, as such debts and liabilities become absolute and matured, (iii) the Company intends to incur or believes that it will incur debts that would be beyond its ability to pay as such debts mature or (iv) the Company has unreasonably small capital with which to conduct the business in which it is engaged as such business is now conducted and is proposed to be conducted.

(m) No Undisclosed Events, Liabilities, Developments or Circumstances. No event, liability, development or circumstance has occurred or exists, or is contemplated to occur, with respect to the Company or any Subsidiary or their respective business, properties, prospects, operations or financial condition, that would be required to be disclosed by the Company under

applicable securities laws on a registration statement on Form S-1 filed with the SEC relating to an issuance and sale by the Company of its Common Stock and which has not been publicly announced.

(n) Conduct of Business; Regulatory Permits. Neither the Company nor any Subsidiary is in violation of any term of or in default under its Certificate of Incorporation, any Certificate of Designations, Preferences and Rights of any outstanding series of preferred stock of the Company or Bylaws or their organizational charter or bylaws, respectively. Neither the Company nor any Subsidiary is in violation of any judgment, decree or order or any statute, ordinance, rule or regulation applicable to the Company or any Subsidiary, except for possible violations which would not, individually or in the aggregate, have a Material Adverse Effect. Except as set forth in Section 3(e) hereof (including Schedule 3(e)) and without limiting the generality of the foregoing, the Company is not in violation of any of the rules, regulations or requirements of the Principal Market and has no knowledge of any facts or circumstances that would reasonably lead to delisting or suspension of the Common Stock by the Principal Market in the foreseeable future. Except as set forth in Section 3(e) hereof (including Schedule 3(e)), since December 23, 2002, (i) the Common Stock has been designated for quotation or listed on the Principal Market, (ii) trading in the Common Stock has not been suspended by the SEC or the Principal Market and (iii) the Company has received no communication, written or oral, from the SEC or the Principal Market regarding the suspension or delisting of the Common Stock from the Principal Market. The Company and its Subsidiaries possess all certificates, authorizations and permits issued by the appropriate federal, state or foreign regulatory authorities necessary to conduct their respective businesses, except where the failure to possess such certificates, authorizations or permits would not have, individually or in the aggregate, a Material Adverse Effect, and neither the Company nor any Subsidiary has received any notice of proceedings relating to the revocation or modification of its certificate, authorization or permit.

(o) Foreign Corrupt Practices. Neither the Company, nor any Subsidiary, nor any director, officer, agent, employee or other Person acting on behalf of the Company or any Subsidiary has, in the course of its actions for, or on behalf of, the Company (i) used any corporate funds for any unlawful contribution, gift, entertainment or other unlawful expenses relating to political activity; (ii) made any direct or indirect unlawful payment to any foreign or domestic government official or employee from corporate funds; (iii) violated or is in violation of any provision of the U.S. Foreign Corrupt Practices Act of 1977, as amended; or (iv) made any unlawful bribe, rebate, payoff, influence payment, kickback or other unlawful payment to any foreign or domestic government official or employee.

(p) Transactions With Affiliates. Except as set forth in the Company's Annual Report on Form 10-K for the year ended December 31, 2002, none of the officers, directors or employees of the Company is presently a party to any transaction with the Company or any Subsidiary (other than for ordinary course services as employees, officers or directors), including any contract, agreement or other arrangement providing for the furnishing of services to or by, providing for rental of real or personal property to or from, or otherwise requiring payments to or from any such officer, director or employee or, to the knowledge of the Company, any corporation, partnership, trust or other entity in which any such officer, director, or employee has a substantial interest or is an officer, director, trustee or partner.

(q) Equity Capitalization. Except for subsequent issuances of common stock upon exercise or conversion of common stock equivalents set forth in the Company's most recent periodic report filed with the SEC, the capitalization of the Company is as set forth in the Company's most recent periodic report and most recent current report on Form 8-K filed with the SEC. Except as set forth in the SEC Documents (i) no shares of the Company's capital stock are subject to preemptive rights or any other similar rights or any liens or encumbrances suffered or permitted by the Company; (ii) there are no outstanding options, warrants, scrip, rights to subscribe to, calls or commitments of any character whatsoever relating to, or securities or rights convertible into, or exercisable or exchangeable for, any shares of capital stock of the Company or any Subsidiary, or contracts, commitments, understandings or arrangements by which the Company or any Subsidiary is or may become bound to issue additional shares of capital stock of the Company or any Subsidiary or options, warrants, scrip, rights to subscribe to, calls or commitments of any character whatsoever relating to, or securities or rights convertible into, or exercisable or exchangeable for, any shares of capital stock of the Company or any Subsidiary; (iii) there are no outstanding debt securities, notes, credit agreements, credit facilities or other agreements, documents or instruments evidencing Indebtedness (as defined in Section 3(r)) of the Company or any Subsidiary or by which the Company or any Subsidiary is or may become bound; (iv) there are no financing statements securing obligations in any material amounts, either singly or in the aggregate, filed in connection with the Company; (v) there are no agreements or arrangements under which the Company or any Subsidiary is obligated to register the sale of their securities under the 1933 Act (except the Registration Rights Agreement); (vi) there are no outstanding securities or instruments of the Company or any Subsidiary which contain any redemption or similar provisions, and there are no contracts, commitments, understandings or arrangements by which the Company or any Subsidiary is or may become bound to redeem a security of the Company or any Subsidiary; (vii) there are no securities or instruments containing anti-dilution or similar provisions that will be triggered by the issuance of the Securities; (viii) the Company does not have any stock appreciation rights or "phantom stock" plans or agreements or any similar plan or agreement; and (ix) the Company and its Subsidiaries have no liabilities or obligations required to be disclosed in the SEC Documents (as defined herein) but not so disclosed in the SEC Documents, other than those incurred in the ordinary course of the Company's or any Subsidiary's respective businesses and which, individually or in the aggregate, do not or would not have a Material Adverse Effect. The Company has furnished to the Buyer true, correct and complete copies of the Company's Certificate of Incorporation, as amended and as in effect on the date hereof (the "CERTIFICATE OF INCORPORATION"), and the Company's Bylaws, as amended and as in effect on the date hereof (the "BYLAWS"), and the terms of all securities convertible into, or exercisable or exchangeable for, Common Stock and the material rights of the holders thereof in respect thereto.

(r) Indebtedness and Other Contracts. Except as disclosed in the SEC Documents, neither the Company nor any Subsidiary (i) has any material outstanding Indebtedness (as defined below), (ii) is a party to any contract, agreement or instrument, the violation of which, or default under which, by the other party(ies) to such contract, agreement or instrument would result in a Material Adverse Effect, (iii) is in violation of any term of or in default under any contract, agreement or instrument relating to any Indebtedness, except where such violations and defaults would not result, individually or in the aggregate, in a Material Adverse Effect, or (iv) is a party to any contract, agreement or instrument relating to any Indebtedness, the performance of which, in the judgment of the Company's officers, has or is

expected to have a Material Adverse Effect. The SEC Documents set forth each of the Company's "material contracts," as such term is used in Item 601 of Regulation S-K promulgated by the SEC. For purposes of this Agreement: (x) "INDEBTEDNESS" of any Person means, without duplication (A) all indebtedness for borrowed money, (B) all obligations issued, undertaken or assumed as the deferred purchase price of property or services (other than trade payables entered into in the ordinary course of business), (C) all reimbursement or payment obligations with respect to letters of credit, surety bonds and other similar instruments, (D) all obligations evidenced by notes, bonds, debentures or similar instruments, including obligations so evidenced incurred in connection with the acquisition of property, assets or businesses, (E) all indebtedness created or arising under any conditional sale or other title retention agreement, or incurred as financing, in either case with respect to any property or assets acquired with the proceeds of such indebtedness (even though the rights and remedies of the seller or bank under such agreement in the event of default are limited to repossession or sale of such property), (F) all monetary obligations under any leasing or similar arrangement which, in connection with generally accepted accounting principles, consistently applied for the periods covered thereby, is classified as a capital lease, (G) all indebtedness referred to in clauses (A) through (F) above secured by (or for which the holder of such Indebtedness has an existing right, contingent or otherwise, to be secured by) any mortgage, lien, pledge, charge, security interest or other encumbrance upon or in any property or assets (including accounts and contract rights) owned by any Person, even though the Person which owns such assets or property has not assumed or become liable for the payment of such indebtedness, and (H) all Contingent Obligations in respect of indebtedness or obligations of others of the kinds referred to in clauses (A) through (G) above; (y) "CONTINGENT OBLIGATION" means, as to any Person, any direct or indirect liability, contingent or otherwise, of that Person with respect to any indebtedness, lease, dividend or other obligation of another Person if the primary purpose or intent of the Person incurring such liability, or the primary effect thereof, is to provide assurance to the obligee of such liability that such liability will be paid or discharged, or that any agreements relating thereto will be complied with, or that the holders of such liability will be protected (in whole or in part) against loss with respect thereto; and (z) "PERSON" means an individual, a limited liability company, a partnership, a joint venture, a corporation, a trust, an unincorporated organization and a government or any department or agency thereof.

(s) Absence of Litigation. There is no action, suit, proceeding, inquiry or investigation before or by the Principal Market, any court, public board, government agency, self-regulatory organization or body pending or, to the knowledge of the Company, threatened against or affecting the Company, the Common Stock or any Subsidiary or any of the Company's or any Subsidiary's officers or directors in their capacities as such.

(t) Insurance. The Company and its Subsidiaries are insured by insurers of recognized financial responsibility against such losses and risks and in such amounts as management of the Company believes to be prudent and customary in the businesses in which the Company and its Subsidiaries are engaged. Neither the Company nor any Subsidiary has been refused any insurance coverage sought or applied for and neither the Company nor any Subsidiary has any reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage from similar insurers as may be necessary to continue its business at a cost that would not have a Material Adverse Effect.

(u) Employee Relations. (i) Neither the Company nor any Subsidiary is a party to any collective bargaining agreement or employs any member of a union. The Company and its Subsidiaries believe that their relations with their employees are good. No executive officer of the Company (as defined in Rule 501(f) of the 1933 Act) has notified the Company that such officer intends to leave the Company or otherwise terminate such officer's employment with the Company. No executive officer of the Company, to the knowledge of the Company, is, or is now expected to be, in violation of any material term of any employment contract, confidentiality, disclosure or proprietary information agreement, non-competition agreement, or any other contract or agreement or any restrictive covenant, and the continued employment of each such executive officer does not subject the Company or any Subsidiary to any liability with respect to any of the foregoing matters.

(ii) The Company and its Subsidiaries are in compliance with all federal, state, local and foreign laws and regulations respecting employment and employment practices, terms and conditions of employment and wages and hours, except where failure to be in compliance would not, either individually or in the aggregate, reasonably be expected to result in a Material Adverse Effect.

(v) Title. The Company and its Subsidiaries have good and marketable title to all personal property owned by them which is material to the business of the Company and its Subsidiaries, in each case free and clear of all liens, encumbrances and defects or such as do not materially affect the value of such property and do not interfere with the use made and proposed to be made of such property by the Company and its Subsidiaries. Neither the Company nor any Subsidiary owns any real property. Any real property and facilities held under lease by the Company and its Subsidiaries are held by them under valid, subsisting and enforceable leases with such exceptions as are not material and do not interfere with the use made and proposed to be made of such property and buildings by the Company and its Subsidiaries.

(w) Intellectual Property Rights. The Company and its Subsidiaries own or possess adequate rights or licenses to use all trademarks, trade names, service marks, service mark registrations, service names, patents, patent rights, copyrights, inventions, licenses, approvals, governmental authorizations, trade secrets and other intellectual property rights ("INTELLECTUAL PROPERTY RIGHTS") necessary to conduct their respective businesses as now conducted. Except as set forth in Schedule 3(w), none of the Company's issued patents that are assigned to it or any Intellectual Property Rights that are material to the business of the Company have expired or terminated, or are expected to expire or terminate within three years from the date of this Agreement. The Company does not have any knowledge of any infringement by the Company or any Subsidiary of Intellectual Property Rights of others except where such infringement would not, individually or in the aggregate, have a Material Adverse Effect on the Company. There is no claim, action or proceeding being made or brought, or to the knowledge of the Company, being threatened, against the Company or any Subsidiary regarding its Intellectual Property Rights which could have a Material Adverse Effect. The Company is unaware of any facts or circumstances which might give rise to any of the foregoing infringements or claims, actions or proceedings. The Company and its Subsidiaries have taken reasonable security measures to protect the secrecy, confidentiality and value of all of their Intellectual Property Rights.

(x) Environmental Laws. The Company and its Subsidiaries (i) are in compliance with any and all Environmental Laws (as hereinafter defined), (ii) have received all permits, licenses or other approvals required of them under applicable Environmental Laws to conduct their respective businesses and (iii) are in compliance with all terms and conditions of any such permit, license or approval where, in each of the foregoing clauses (i), (ii) and (iii), the failure to so comply could be reasonably expected to have, individually or in the aggregate, a Material Adverse Effect. The term "ENVIRONMENTAL LAWS" means all federal, state, local or foreign laws relating to pollution or protection of human health or the environment (including, without limitation, ambient air, surface water, groundwater, land surface or subsurface strata), including, without limitation, laws relating to emissions, discharges, releases or threatened releases of chemicals, pollutants, contaminants, or toxic or hazardous substances or wastes (collectively, "HAZARDOUS MATERIALS") into the environment, or otherwise relating to the manufacture, processing, distribution, use, treatment, storage, disposal, transport or handling of Hazardous Materials, as well as all authorizations, codes, decrees, demands or demand letters, injunctions, judgments, licenses, notices or notice letters, orders, permits, plans or regulations issued, entered, promulgated or approved thereunder.

(y) Subsidiary Rights. The Company has the unrestricted right to vote, and (subject to limitations imposed by applicable law) to receive dividends and distributions on, all capital securities of each Subsidiary as owned by the Company.

(z) Tax Status. The Company and each Subsidiary (i) has made or filed all federal and state income and all other tax returns, reports and declarations required by any jurisdiction to which it is subject, (ii) has paid all taxes and other governmental assessments and charges that are material in amount, shown or determined to be due on such returns, reports and declarations, except those being contested in good faith and (iii) has set aside on its books provision reasonably adequate for the payment of all taxes for periods subsequent to the periods to which such returns, reports or declarations apply. There are no unpaid taxes in any material amount claimed to be due by the taxing authority of any jurisdiction, and the officers of the Company know of no reasonable basis for any such claim.

(aa) Internal Accounting Controls. The Company and each Subsidiary maintain a system of internal accounting controls sufficient to provide reasonable assurance that (i) transactions are executed in accordance with management's general or specific authorizations, (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with generally accepted accounting principles and to maintain asset and liability accountability, (iii) access to assets or incurrence of liabilities is permitted only in accordance with management's general or specific authorization and (iv) the recorded accountability for assets and liabilities is compared with the existing assets and liabilities at reasonable intervals and appropriate action is taken with respect to any difference. In addition, the Company has established and maintains disclosure controls and procedures as defined in Rule 13a-14 under the 1934 Act and in compliance with Rule 13a-15 under the 1934 Act.

(bb) Disclosure. Except for the existence and terms of this Agreement and the transactions contemplated hereby, the Company confirms that neither it nor any other Person acting on its behalf has provided any of the Buyers or their respective agents or counsel with any information that constitutes or might constitute material, nonpublic information. The Borrower

understands and confirms that each of the Buyers will rely on the foregoing representations in effecting transactions in securities of the Company. All disclosure provided to the Buyers regarding the Company, its business and the transactions contemplated hereby, including the Schedules to this Agreement, furnished by or on behalf of the Company are true and correct and do not contain any untrue statement of a material fact or omit to state any material fact necessary in order to make the statements made therein, in light of the circumstances under which they were made, not misleading. No event or circumstance has occurred or information exists with respect to the Company or any Subsidiary or either of its or their respective business, properties, prospects, operations or financial conditions, which, under applicable law, rule or regulation, requires public disclosure or announcement by the Company but which has not been so publicly announced or disclosed (assuming for this purpose that the Company's reports filed under the Exchange Act of 1934, as amended, are being incorporated into an effective registration statement filed by the Company under the 1933 Act). The Company acknowledges and agrees that no Buyer makes or has made any representations or warranties with respect to the transactions contemplated hereby other than those specifically set forth in Section 2.

(cc) Sarbanes-Oxley Act. The Company is in compliance with any and all applicable requirements of the Sarbanes-Oxley Act of 2002 that are effective as of the date hereof, and any and all applicable rules and regulations promulgated by the SEC thereunder that are effective as of the date hereof, except where such noncompliance would not have a Material Adverse Effect.

(dd) FDA Compliance. The Company and its Subsidiaries, and the manufacture, marketing and sales of the Company's products, complies with any and all applicable requirements of the Federal Food, Drug and Cosmetic Act, 21 U.S.C. ss.301, et seq., any rules and regulations of the Food and Drug Administration promulgated thereunder, and any similar laws outside of the United States to which the company is subject, except where such noncompliance would not have a Material Adverse Effect.

4. COVENANTS.

(a) Reasonable Best Efforts. Each party shall use its reasonable best efforts timely to satisfy each of the conditions to be satisfied by it as provided in Sections 6 and 7 of this Agreement.

(b) Form D and Blue Sky. The Company agrees to file a Form D with respect to the Securities as required under Regulation D and to provide a copy thereof to each Buyer promptly after such filing. The Company shall, on or before the Closing Date, take such action as the Company shall reasonably determine is necessary in order to obtain an exemption for or to qualify the Securities for sale to the Buyers at the Closing pursuant to this Agreement under applicable securities or "Blue Sky" laws of the states of the United States (or to obtain an exemption from such qualification), and shall provide evidence of any such action so taken to the Buyers on or prior to the Closing Date. The Company shall make all filings and reports that it reasonably determines are necessary relating to the offer and sale of the Securities required under applicable securities or "Blue Sky" laws of the states of the United States following the Closing Date; provided, however, that the Company shall not for any such purpose be required to qualify generally to transact business as a foreign corporation in any jurisdiction where it is not so

qualified or to consent to general service of process in any such jurisdiction. Each Buyer shall cooperate with the Company in connection with such filings and, upon the request of the Company, will provide all information relating to the Buyer reasonably required for such filing.

(c) Reporting Status. Until the date on which the Investors (as defined in the Registration Rights Agreement) shall have sold all the Common Shares and Warrant Shares and none of the Warrants is outstanding (the "REPORTING PERIOD"), the Company shall timely file all reports required to be filed with the SEC pursuant to the 1934 Act, and the Company shall not terminate its status as an issuer required to file reports under the 1934 Act even if the 1934 Act or the rules and regulations thereunder would otherwise permit such termination.

(d) Use of Proceeds. The Company will use the proceeds from the sale of the Securities for working capital, general corporate and other purposes.

(e) Financial Information. The Company agrees to send the following to each Investor during the Reporting Period (i) unless the following are filed with the SEC through EDGAR and are available to the public through the EDGAR system, within one (1) Business Day after the filing thereof with the SEC, a copy of its Annual Reports on Form 10-K, its Quarterly Reports on Form 10-Q, any Current Reports on Form 8-K and any registration statements (other than on Form S-8) or amendments filed pursuant to the 1933 Act, (ii) on the same day as the public release thereof, facsimile copies of all press releases issued by the Company or any Subsidiary, and (iii) copies of any notices and other information made available or given to the stockholders of the Company generally, contemporaneously with the making available or giving thereof to the stockholders. As used herein, "BUSINESS DAY" means any day other than Saturday, Sunday or other day on which commercial banks in The City of New York are authorized or required by law to remain closed.

(f) Listing. The Company shall promptly secure the listing of all of the Registrable Securities (as defined in the Registration Rights Agreement) upon each national securities exchange and automated quotation system, if any, upon which shares of Common Stock are then listed (subject to official notice of issuance) and shall maintain, so long as any other shares of Common Stock shall be so listed, such listing of all Registrable Securities from time to time issuable under the terms of the Transaction Documents. The Company shall use its best efforts to maintain the Common Stock's authorization for quotation on the Principal Market. Neither the Company nor any Subsidiary shall take any action which would be reasonably expected to result in the delisting or suspension of the Common Stock on the Principal Market and shall comply, in all material respect, with the rules and regulations of the Principal Market. The Company shall pay all fees and expenses in connection with satisfying its obligations under this Section 4(f).

(g) Fees. The Company shall reimburse the Buyers in the aggregate \$10,000 for the Buyers reasonable expenses incurred in connection with the preparation, execution and performance of this Agreement and the transactions contemplated hereunder. The Company shall be responsible for the payment of any placement agent's fees or broker's commissions relating to or arising out of the transactions contemplated hereby. Except as otherwise set forth in this Agreement or in the Registration Rights Agreement, each party to this Agreement shall bear its own expenses in connection with the sale of the Securities to the Buyers.

(h) Pledge of Securities. The Company acknowledges and agrees that the Securities may be pledged by an Investor (as defined in the Registration Rights Agreement) in connection with a bona fide margin agreement or other loan or financing arrangement that is secured by the Securities. The pledge of Securities shall not be deemed to be a transfer, sale or assignment of the Securities hereunder, and no Investor effecting a pledge of Securities shall be required to provide the Company with any notice thereof or otherwise make any delivery to the Company pursuant to this Agreement or any other Transaction Document, including, without limitation, Section 2(f) of this Agreement; provided that an Investor and its pledgee shall be required to comply with the provisions of Section 2(f) hereof in order to effect a sale, transfer or assignment of Securities to such pledgee. The Company hereby agrees to execute and deliver such documentation as a pledgee of the Securities may reasonably request in connection with a pledge of the Securities to such pledgee by an Investor.

(i) Disclosure of Transactions and Other Material Information. On or before 8:30 a.m., New York City Time, on the third Trading Day following the Closing Date, the Company shall file a Current Report on Form 8-K describing the terms of the transactions contemplated by the Transaction Documents in the form required by the 1934 Act, and attaching the material Transaction Documents (including, without limitation, this Agreement (and all schedules to this Agreement), the form of Warrant and the form of Registration Rights Agreement) as exhibits to such filing (including all attachments, the "8-K FILING"). From and after the filing of the 8-K Filing with the SEC, no Buyer shall be in possession of any material, nonpublic information received from the Company, any Subsidiary or any of its respective officers, directors, employees or agents, that is not disclosed in the 8-K Filing. The Company shall not, and shall cause each Subsidiary and each of its respective officers, directors, employees and agents, not to, provide any Buyer with any material nonpublic information regarding the Company or any Subsidiary from and after the filing of the 8-K Filing with the SEC (x) without the express written consent of such Buyer and (y) unless such Buyer shall have executed a customary and reasonable written agreement regarding the confidentiality of such information; provided, however, that an attempt by the Company to comply with the provisions of Section 4(l) hereof shall not be deemed to violate this Section 4(i). In the event of a breach of the foregoing covenant by the Company, any Subsidiary, or its each of respective officers, directors, employees and agents, in addition to any other remedy provided herein or in the Transaction Documents, a Buyer shall have the right to demand that the Company make a public disclosure, and if the Company fails to do so within two Business Days the Buyer may make a public disclosure, in the form of a press release, public advertisement or otherwise, of such material nonpublic information without the prior approval by the Company, each Subsidiary, or each of its respective officers, directors, employees or agents. No Buyer shall have any liability to the Company, any Subsidiary, or any of its or their respective officers, directors, employees, shareholders or agents for any such disclosure unless such Buyer acts with gross negligence or willful misconduct. Subject to the foregoing, neither the Company nor any Buyer shall issue any press releases or any other public statements with respect to the transactions contemplated hereby without the prior written consent of the Company, in the case of such a press release or public statement by any Buyer, or the Buyers, in the case of such a press release or public statement by the Company, such consent not to be unreasonably withheld or delayed; provided, however, that the Company shall be entitled, without the prior approval of any Buyer, to make any press release or other public disclosure with respect to such transactions (i) in substantial conformity with the 8-K Filing (1) and contemporaneously therewith or (2) in connection with

the Company's periodic reports filed with the Commission and (ii) as is required by applicable law and regulations, including the applicable rules and regulations of the Principal Market (provided that in the case of clause (i) each Buyer shall be consulted by the Company in connection with any such press release or other public disclosure prior to its release).

(j) Additional Securities; Additional Registration Statements. For so long as any Buyer beneficially owns any Warrants, the Company will not issue any other securities that would cause a breach or default under the Warrants. Except as disclosed on Schedule 4(j), until such time as the Registration Statement (as defined in the Registration Rights Agreement) is declared effective by the SEC, the Company will not file a registration statement under the 1933 Act relating to securities that are not the Securities.

(k) Corporate Existence. So long as any Buyer beneficially owns any Warrants, the Company shall not effect a merger or consolidation or sale of all or substantially all of the Company's assets unless the surviving or successor entity in such transaction (i) assumes the Company's obligations hereunder and under the agreements and instruments entered into in connection herewith and (ii) is a publicly traded corporation whose common stock is quoted on or listed for trading on a Principal Market.

(l) Right to Match. (i) For a period of 12 months following the Closing Date, the Company shall not issue, sell or exchange, agree or obligate itself to issue, sell or exchange or reserve or set aside for issuance, sale or exchange, (A) any shares of Common Stock, (B) any other equity security of the Company, including without limitation shares of preferred stock, (C) any debt security of the Company (other than debt with no equity feature), including without limitation any debt security which by its terms is convertible into or exchangeable for any equity security of the Company, (D) any security of the Company that is a combination of debt and equity, or (E) any option, warrant or other right to subscribe for, purchase or otherwise acquire any such equity security or any such debt security of the Company (any security described in the foregoing (A) through (E) being the "OTHER INVESTORS OFFERED SECURITIES"), unless in each case the Company shall simultaneously offer to sell to the Buyers identical securities in identical aggregate amounts, units, or principal amounts, and in all respects upon terms and conditions, including, without limitation, unit price and interest rates, identical to the Other Investors Offered Securities (the "BUYER OFFERED SECURITIES"), as follows: In connection with any offering of Other Investors Offered Securities, the Company shall offer to sell to each Buyer (1) that portion of the Buyer Offered Securities as the number of shares of Common Stock (including all Common Shares and Warrant Shares on an as-converted basis) then held by such Buyer and acquired pursuant to the terms of the Transaction Documents, bears to the total number of shares of Common Stock (including all shares of capital stock convertible into Common Stock on an as-converted basis) held on such date by all Buyers and acquired pursuant to the terms of the Transaction Documents (the "BASIC AMOUNT"), and (2) such additional portion of the Buyer Offered Securities as such Buyer shall indicate it will purchase should the other Buyers subscribe for less than their Basic Amounts (the "UNDERSUBSCRIPTION AMOUNT"), at a price and on such other terms as shall have been specified by the Company in writing delivered to such Buyer (the "OFFER"), which Offer by its terms shall remain open and irrevocable for a period of twenty (20) days from receipt of the Offer.

(ii) Notice of each Buyer's intention to accept, in whole or in part, any

Offer made pursuant to Section 4(1)(i) shall be evidenced by a writing signed by such Buyer and delivered to the Company prior to the end of the 20-day period of such offer, setting forth such of the Buyer's Basic Amount as such Buyer elects to purchase and, if such Buyer shall elect to purchase all of its Basic Amount, the Undersubscription Amount as such Buyer shall elect to purchase (the "NOTICE OF ACCEPTANCE"). If the Basic Amounts subscribed for by all Buyers are less than the total Buyer Offered Securities then each Buyer who has set forth Undersubscription Amounts in its Notice of Acceptance shall be entitled to purchase all Undersubscription Amounts it has subscribed for; provided, however, that should the Undersubscription Amounts subscribed for exceed the difference between the Buyer Offered Securities and the Basic Amounts subscribed for (the "AVAILABLE UNDERSUBSCRIPTION AMOUNT"), each Buyer who has subscribed for any Undersubscription Amount shall be entitled to purchase only that portion of the Available Undersubscription Amount as the Undersubscription Amount subscribed for by such Buyer bears to the total Undersubscription Amounts subscribed for by all Buyers, subject to rounding by the Board of Directors to the extent it deems reasonably necessary.

(v) Closing. Upon each closing under this Section 4(1), which shall include full payment to the Company, simultaneously with the purchase of the Other Investors Offered Securities, the Buyer shall purchase from the Company, and the Company shall sell to the Buyer the number of Buyer Offered Securities specified in the Notices of Acceptance, as reduced pursuant to Section 4(1)(iv) if the Buyers have so elected, upon the terms and conditions specified in the Offer. The purchase by the Buyers of any Buyer Offered Securities is subject in all cases to the preparation, execution and delivery by the Company and the Buyers of a purchase agreement relating to such Buyer Offered Securities reasonably satisfactory in form and substance to the Buyers and their respective counsel.

(vi) Further Sale. In each case, any Buyer Offered Securities not purchased by the Buyers and any Other Investors Offered Securities not purchased by any other Person or Persons in accordance with Section 4 may not be sold or otherwise disposed of until they are again offered to the Buyers to the same extent, and under the procedures, specified in Section 4(1).

(vii) Exception. The rights of the Buyers under this Section 4(1) shall not apply to: (A) Common Stock issued as a stock dividend to holders of Common Stock or upon any subdivision or combination of shares of Common Stock, (B) shares of Common Stock issued upon exercise of the Warrants, (C) securities of the Company issued in connection with (1) one or more strategic partnerships or joint ventures in which there is a significant commercial relationship with the Company, (2) the acquisition of any other business or entity, (3) research, licensing, collaboration, joint venture or similar arrangement, or (4) compensation or similar arrangements with employees, officers, directors, consultants or service providers (which, in the case of consultants or service providers, does not involve any cash payment by such consultant or service provider).

(m) Reservation of Shares. The Company shall take all action necessary to at all times have authorized, and reserved for the purpose of issuance, from and after the Closing Date, a number of shares of Common Stock issuable upon exercise of the Warrants being issued at the Closing in conformity with Section 3(c).

(n) No Short Sales. Each Buyer agrees, solely as to itself and its affiliates, that, from and after the date hereof and at any time that such Buyer holds any Securities, such Buyer shall not engage in short sales of the Common Stock in amounts that exceed the sum of the number of shares of Common Stock held by such Buyer and its affiliates and the number of shares of Common Stock issuable pursuant to the exercise or conversion of any other security (without regard to limitations on exercise or conversion contained therein, if any) held by such Buyer and its affiliates.

5. REGISTER; TRANSFER AGENT INSTRUCTIONS.

(a) Register. The Company shall maintain at its principal executive offices (or such other office or agency of the Company as it may designate by notice to each holder of Warrants), a register for the Warrants, in which the Company shall record the name and address of the Person in whose name the Warrants have been issued (including the name and address of each transferee), and the number of Warrant Shares issuable upon exercise of the Warrants held by such Person. The Company shall keep the register open and available at all times during business hours for inspection of any Buyer or its legal representatives.

(b) Transfer Agent Instructions. The Company shall issue irrevocable instructions to its transfer agent, and any subsequent transfer agent, to issue certificates or credit shares to the applicable balance accounts at DTC, registered in the name of each Buyer or its respective nominee(s), for the Warrant SHARES in such amounts as specified from time to time by each Buyer to the Company upon exercise of the Warrants in the form of Exhibit C attached hereto (the "IRREVOCABLE TRANSFER AGENT INSTRUCTIONS"). The Company warrants that no instruction other than the Irrevocable Transfer Agent Instructions referred to in this Section 5(b), and stop transfer instructions to give effect to Section 2(f) hereof, will be given by the Company to its transfer agent, and that the Securities shall otherwise be freely transferable on the books and records of the Company as and to the extent provided in this Agreement and the other Transaction Documents. If a Buyer effects a sale, assignment or transfer of the Securities in accordance with Section 2(f), the Company shall permit the transfer and shall promptly instruct its transfer agent to issue one or more certificates or credit shares to the applicable balance accounts at DTC in such name and in such denominations as specified by such Buyer to effect such sale, transfer or assignment. In the event that such sale, assignment or transfer involves Common Shares or Warrant Shares sold, assigned or transferred pursuant to an effective registration statement or pursuant to Rule 144 where no transfer restrictions or limitations will apply after such transaction, the transfer agent shall issue such Common Shares or Warrant Shares, as the case may be, to the Buyer, assignee or transferee, as the case may be, without any restrictive legend. The Company acknowledges that a breach by it of its obligations hereunder will cause irreparable harm to a Buyer. Accordingly, the Company acknowledges that the remedy at law for a breach of its obligations under this Section 5(b) will be inadequate and agrees, in the event of a breach or threatened breach by the Company of the provisions of this Section 5(b), that a Buyer shall be entitled, in addition to all other available remedies, to an order and/or injunction restraining any breach and requiring immediate issuance and transfer, without the necessity of showing economic loss and without any bond or other security being required.

6. CONDITIONS TO THE COMPANY'S OBLIGATION TO SELL.

(a) Closing Date. The obligation of the Company hereunder to issue and sell the Common Shares and the related Warrants to each Buyer at the Closing is subject to the satisfaction, at or before the Closing Date, of each of the following conditions, provided that these conditions are for the Company's sole benefit and may be waived by the Company at any time in its sole discretion by providing each Buyer with prior written notice thereof:

(i) Such Buyer shall have executed each of the Transaction Documents to which it is a party and delivered the same to the Company.

(ii) Such Buyer shall have delivered to the Company the Purchase Price (less, the amounts withheld pursuant to Section 4(g)) for the Common Shares and the related Warrants being purchased by such Buyer at the Closing by wire transfer of immediately available funds pursuant to the wire instructions provided by the Company.

(iii) The representations and warranties of such Buyer shall be true and correct in all material respects (except for representations and warranties that are qualified by materiality, which shall be true and correct in all respects) as of the date when made and as of the Closing Date as though made at that time (except for representations and warranties that speak as of a specific date), and such Buyer shall have performed, satisfied and complied in all material respects (except for covenants, agreements and conditions that are qualified by materiality, which shall be complied with in all respects) with the covenants, agreements and conditions required by this Agreement to be performed, satisfied or complied with by such Buyer at or prior to the Closing Date. The Company shall have received a certificate, executed by an authorized officer of each Buyer, dated as of the Closing Date, to the foregoing effect in the form attached hereto as Exhibit D.

7. CONDITIONS TO EACH BUYER'S OBLIGATION TO PURCHASE.

(a) Closing Date. The obligation of each Buyer hereunder to purchase the Common Shares and the related Warrants at the Closing is subject to the satisfaction, at or before the Closing Date, of each of the following conditions, provided that these conditions are for each Buyer's sole benefit and may be waived by such Buyer at any time in its sole discretion by providing the Company with prior written notice thereof:

(i) The Company shall have executed and delivered to such Buyer (i) each of the Transaction Documents and (ii) the Common Shares (in such amounts as such Buyer shall request) and the related Warrants (in such amounts as such Buyer shall request) being purchased by such Buyer at the Closing pursuant to this Agreement.

(ii) Such Buyer shall have received the opinion of Ropes & Gray LLP, the Company's counsel, dated as of the Closing Date, in form, scope and substance reasonably satisfactory to such Buyer and in substantially the form of Exhibit E attached hereto.

(iii) The Company shall have delivered to such Buyer a copy of the Irrevocable Transfer Agent Instructions, in the form of Exhibit C attached hereto, which

instructions shall have been delivered to and acknowledged in writing by the Company's transfer agent.

(iv) The Company shall have delivered to such Buyer a certificate evidencing the incorporation and good standing of the Company in its state of incorporation issued by the Secretary of State of such state of incorporation as of a date within 10 days of the Closing Date.

(v) The Company shall have delivered to such Buyer a certificate evidencing the Company's qualification as a foreign corporation and good standing issued by the Secretary of State of the State of California as of a date within 10 days of the Closing Date.

(vi) The Company shall have delivered to such Buyer a certified copy of the Certificate of Incorporation as certified by the Secretary of State of the State of Delaware within 10 days of the Closing Date.

(vii) The Company shall have delivered to such Buyer a certificate, executed by the Secretary of the Company and dated as of the Closing Date, as to (i) the resolutions consistent with Section 3(b) as adopted by the Company's Board of Directors in a form reasonably acceptable to such Buyer (the "RESOLUTIONS"), (ii) the Certificate of Incorporation and (iii) the Bylaws, each as in effect at the Closing, in the form attached hereto as Exhibit F.

(viii) The representations and warranties of the Company shall be true and correct in all material respects (except for representations and warranties that are qualified by materiality, which shall be true and correct in all respects) as of the date when made and as of the Closing Date as though made at that time (except for representations and warranties that speak as of a specific date) and the Company shall have performed, satisfied and complied in all material respects (except for covenants, agreements and conditions that are qualified by materiality, which shall be complied with in all respects) with the covenants, agreements and conditions required by the Transaction Documents to be performed, satisfied or complied with by the Company at or prior to the Closing Date. Such Buyer shall have received a certificate, executed by the Chief Executive Officer of the Company, dated as of the Closing Date, to the foregoing effect and as to such other matters as may be reasonably requested by such Buyer in the form attached hereto as Exhibit G.

(ix) The Company shall have delivered to such Buyer a letter from the Company's transfer agent certifying the number of shares of Common Stock outstanding as of a date within five days of the Closing Date.

(x) The Company shall have obtained all governmental, regulatory or third party consents and approvals, if any, necessary for the sale of the Common Shares and the Warrants, including, without limitation, the expiration or waiver of the 15-day period set forth in Rule 4310(c)(17) of the National Association of Securities Dealers, Inc.

(xi) The Company shall have delivered to such Buyer such other documents relating to the transactions contemplated by this Agreement as such Buyer or its counsel may reasonably request.

8. TERMINATION. In the event that the Closing shall not have occurred with respect to a Buyer on or before forty-five (45) days from the date hereof due to the Company's or such Buyer's failure to satisfy the conditions set forth in Sections 6 and 7 above (and the nonbreaching party's failure to waive such unsatisfied condition(s)), the nonbreaching party shall have the option to terminate this Agreement with respect to such breaching party at the close of business on such date without liability of any party to any other party; provided, however, that if this Agreement is terminated pursuant to this Section 8, the Company shall remain obligated to reimburse the Buyers for the expenses described in Section 4(g) above.

9. MISCELLANEOUS.

(a) Governing Law; Jurisdiction; Jury Trial. All questions concerning the construction, validity, enforcement and interpretation of this Agreement shall be governed by the internal laws of the State of New York, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of New York or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of New York. Each party hereby irrevocably submits to the non-exclusive jurisdiction of the state and federal courts sitting in The City of New York, Borough of Manhattan for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper. Each party hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by mailing a copy thereof to such party at the address for such notices to it under this Agreement and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. EACH PARTY HEREBY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE, AND AGREES NOT TO REQUEST, A JURY TRIAL FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION WITH OR ARISING OUT OF THIS AGREEMENT OR ANY TRANSACTION CONTEMPLATED HEREBY.

(b) Counterparts. This Agreement may be executed in two or more identical counterparts, all of which shall be considered one and the same agreement and shall become effective when counterparts have been signed by each party and delivered to the other party; provided that a facsimile signature shall be considered due execution and shall be binding upon the signatory thereto with the same force and effect as if the signature were an original, not a facsimile signature.

(c) Headings. The headings of this Agreement are for convenience of reference and shall not form part of, or affect the interpretation of, this Agreement.

(d) Severability. If any provision of this Agreement shall be invalid or unenforceable in any jurisdiction, such invalidity or unenforceability shall not affect the validity or enforceability of the remainder of this Agreement in that jurisdiction or the validity or enforceability of any provision of this Agreement in any other jurisdiction.

(e) Entire Agreement; Amendments. This Agreement supersedes all other prior oral or written agreements between the Buyers, the Company, their affiliates and Persons acting on their behalf with respect to the matters discussed herein, and this Agreement and the instruments referenced herein contain the entire understanding of the parties with respect to the matters covered herein and therein and, except as specifically set forth herein or therein, neither the Company nor any Buyer makes any representation, warranty, covenant or undertaking with respect to such matters. No provision of this Agreement may be amended other than by an instrument in writing signed by the Company and the holders of Common Shares representing at least a majority of the amount of the Common Shares, or, if prior to the Closing Date, the Buyers listed on the Schedule of Buyers as being obligated to purchase at least a majority of the amount of the Common Shares. No provision hereof may be waived other than by an instrument in writing signed by the party against whom enforcement is sought. No such amendment shall be effective to the extent that it applies to less than all of the holders of the Common Shares then outstanding. No consideration shall be offered or paid to any Person to amend or consent to a waiver or modification of any provision of any of the Transaction Documents unless the same consideration also is offered to all of the parties to the Transaction Documents, holders of Common Shares or holders of the Warrants, as the case may be. The Company has not, directly or indirectly, made any agreements with any Buyers relating to the terms or conditions of the transactions contemplated by the Transaction Documents except as set forth in the Transaction Documents.

(f) Notices. Any notices, consents, waivers or other communications required or permitted to be given under the terms of this Agreement must be in writing and will be deemed to have been delivered: (i) upon receipt, when delivered personally; (ii) upon receipt, when sent by facsimile (provided confirmation of transmission is mechanically or electronically generated and kept on file by the sending party); or (iii) one Business Day after deposit with an overnight courier service, in each case properly addressed to the party to receive the same. The addresses and facsimile numbers for such communications shall be:

If to the Company:

StemCells, Inc.
3155 Porter Drive
Palo Alto, California 94304
Telephone: (650) 475-3100
Facsimile: (650) 475-3101
Attention: Martin McGlynn

with a copy to:

Ropes & Gray LLP
One International Place
Boston, Massachusetts 02110
Telephone: (617) 951-7000
Facsimile: (617) 951-7050
Attention: Geoffrey Davis

If to the Transfer Agent:

BankBoston, N.A.
c/o Boston EquiServe, L.P.
P.O. Box 8040
Boston, Massachusetts 02266-8040
Telephone: (781) 575-2130
Facsimile: (781) 575-2549

If to a Buyer, to its address and facsimile number set forth on the Schedule of Buyers, with copies to such Buyer's representatives as set forth on the Schedule of Buyers, or to such other address and/or facsimile number and/or to the attention of such other Person as the recipient party has specified by written notice given to each other party five (5) days prior to the effectiveness of such change. Written confirmation of receipt (A) given by the recipient of such notice, consent, waiver or other communication, (B) mechanically or electronically generated by the sender's facsimile machine containing the time, date, recipient facsimile number and an image of the first page of such transmission or (C) provided by an overnight courier service shall be rebuttable evidence of personal service, receipt by facsimile or receipt from an overnight courier service in accordance with clause (i), (ii) or (iii) above, respectively.

(g) Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of the parties and their respective successors and assigns, including any purchasers of the Common Shares or the Warrants. The Company shall not assign this Agreement or any rights or obligations hereunder without the prior written consent of the holders of Common Shares representing at least a majority of the number of the Common Shares. A Buyer may assign some or all of its rights hereunder without the consent of the Company, in which event such assignee shall be deemed to be a Buyer hereunder with respect to such assigned rights.

(h) No Third Party Beneficiaries. This Agreement is intended for the benefit of the parties hereto and their respective permitted successors and assigns, and is not for the benefit of, nor may any provision hereof be enforced by, any other Person.

(i) Survival. Unless this Agreement is terminated under Section 8, the representations and warranties of the Company and the Buyers contained in Sections 2 and 3, the agreements and covenants set forth in Sections 4, 5 and 9 shall survive the Closing. Each Buyer shall be responsible only for its own representations, warranties, agreements and covenants hereunder.

(j) Further Assurances. Each party shall do and perform, or cause to be done and performed, all such further acts and things, and shall execute and deliver all such other agreements, certificates, instruments and documents, as the other party may reasonably request in order to carry out the intent and accomplish the purposes of this Agreement and the consummation of the transactions contemplated hereby.

(k) Indemnification. In consideration of each Buyer's execution and delivery of the Transaction Documents and acquiring the Securities thereunder and in addition to all of the Company's other obligations under the Transaction Documents, the Company shall defend,

protect, indemnify and hold harmless each Buyer and each other holder of the Securities and all of their stockholders, partners, members, officers, directors, employees and direct or indirect investors and any of the foregoing Persons' agents or other representatives (including, without limitation, those retained in connection with the transactions contemplated by this Agreement) (collectively, the "INDEMNITEES") from and against any and all actions, causes of action, suits, claims, losses, costs, penalties, fees, liabilities and damages, and expenses in connection therewith (irrespective of whether any such Indemnitee is a party to the action for which indemnification hereunder is sought), and including reasonable attorneys' fees and disbursements (the "INDEMNIFIED LIABILITIES"), incurred by any Indemnitee to the extent resulting from or relating to (a) any misrepresentation or breach of any representation or warranty made by the Company in the Transaction Documents or any other certificate, instrument or document contemplated hereby or thereby, (b) any breach of any covenant, agreement or obligation of the Company contained in the Transaction Documents or any other certificate, instrument or document contemplated hereby or thereby or (c) any cause of action, suit or claim brought or made against such Indemnitee by a third party (including for these purposes a derivative action brought on behalf of the Company) and arising out of or resulting from (i) the execution, delivery, performance or enforcement of the Transaction Documents or any other certificate, instrument or document contemplated hereby or thereby, (ii) any transaction financed or to be financed in whole or in part, directly or indirectly, with the proceeds of the issuance of the Securities, or (iii) the status of such Buyer or holder of the Securities as an investor in the Company. To the extent that the foregoing undertaking by the Company may be unenforceable for any reason, the Company shall make the maximum contribution to the payment and satisfaction of each of the Indemnified Liabilities which is permissible under applicable law. Except as otherwise set forth herein, the mechanics and procedures with respect to the rights and obligations under this Section 9(k) shall be the same as those set forth in Section 6 of the Registration Rights Agreement.

(l) No Strict Construction. The language used in this Agreement will be deemed to be the language chosen by the parties to express their mutual intent, and no rules of strict construction will be applied against any party.

(m) Remedies. Each Buyer and each holder of the Securities shall have all rights and remedies set forth in the Transaction Documents and all rights and remedies which such holders have been granted at any time under any other agreement or contract and all of the rights which such holders have under any law. Any Person having any rights under any provision of this Agreement shall be entitled to enforce such rights specifically (without posting a bond or other security), to recover damages by reason of any breach of any provision of this Agreement and to exercise all other rights granted by law. Furthermore, the Company recognizes that in the event that it fails to perform, observe, or discharge any or all of its obligations under this Agreement, any remedy at law may prove to be inadequate relief to the Buyers. The Company therefore agrees that the Buyers shall be entitled to seek temporary and permanent injunctive relief in any such case without the necessity of proving actual damages and without posting a bond or other security.

(n) Payment Set Aside. To the extent that the Company makes a payment or payments to the Buyers hereunder or pursuant to any of the other Transaction Documents or the Buyers enforce or exercise their rights hereunder or thereunder, and such payment or payments

or the proceeds of such enforcement or exercise or any part thereof are subsequently invalidated, declared to be fraudulent or preferential, set aside, recovered from, disgorged by or are required to be refunded, repaid or otherwise restored to the Company, a trustee, receiver or any other Person under any law (including, without limitation, any bankruptcy law, state or federal law, common law or equitable cause of action), then to the extent of any such restoration the obligation or part thereof originally intended to be satisfied shall be revived and continued in full force and effect as if such payment had not been made or such enforcement or setoff had not occurred.

(o) Independent Nature of Buyers' Obligations and Rights.

The obligations of each Buyer under any Transaction Document are several and not joint with the obligations of any other Buyer, and no Buyer shall be responsible in any way for the performance of the obligations of any other Buyer under any Transaction Document. Nothing contained herein or in any other Transaction Document, and no action taken by any Buyer pursuant hereto or thereto, shall be deemed to constitute the Buyers as a partnership, an association, a joint venture or any other kind of entity, or create a presumption that the Buyers are in any way acting in concert or as a group with respect to such obligations or the transactions contemplated by the Transaction Documents. Each Buyer confirms that it has independently participated in the negotiation of the transaction contemplated hereby with the advice of its own counsel and advisors. Each Buyer shall be entitled to independently protect and enforce its rights, including, without limitations, the rights arising out of this Agreement or out of any other Transaction Documents, and it shall not be necessary for any other Buyer to be joined as an additional party in any proceeding for such purpose.

IN WITNESS WHEREOF, each Buyer and the Company have caused this Securities Purchase Agreement to be duly executed as of the date first written above.

COMPANY:	BUYERS:
STEMCELLS, INC.	THE RIVERVIEW GROUP, LLC
By: /s/ Iris Brest	By: /s/ Terry Feeney
-----	-----
Name: Iris Brest	Name: Terry Feeney
Title: General Counsel	Title: Chief Operating Officer

SCHEDULE OF BUYERS

(1)	(2)	(3)	(4)	(5)
BUYER	ADDRESS AND FACSIMILE NUMBER	NUMBER OF COMMON SHARES	NUMBER OF WARRANTS	LEGAL REPRESENTATIVE'S ADDRESS AND FACSIMILE NUMBER
THE RIVERVIEW GROUP, LLC	666 Fifth Avenue, 8th floor New York, New York 10103 Attention: Manager Facsimile: (212) 841-4141 Telephone: (212) 841-4100 Residence: New York	5,000,000	898,000	Schulte Roth & Zabel LLP 919 Third Avenue New York, NY 10022 Attn: Eleazer Klein, Esq. Facsimile: (212) 593-5955 Telephone: (212) 756-2000

EXHIBITS

Exhibit A	Form of Warrants
Exhibit B	Form of Registration Rights Agreement
Exhibit C	Form of Irrevocable Transfer Agent Instructions
Exhibit D	Form of Buyer Certificate
Exhibit E	Form of Company Counsel Opinion
Exhibit F	Form of Secretary's Certificate
Exhibit G	Form of Officer's Certificate

SCHEDULES

Schedule 3(e)	Consents
Schedule 3(l)	Absence of Certain Changes
Schedule 3(w)	Intellectual Property
Schedule 4(j)	Additional Registration Statements

SCHEDULE 3(e)

The Company received a letter from Nasdaq on April 22, 2003 informing it that the Company's closing bid price was below \$1.00 for thirty consecutive days.

SCHEDULE 3(1)

None.

SCHEDULE 3(w)

None.

SCHEDULE 4(j)

Pursuant to an Agreement dated April 9, 2003 between the Company and Riverview Group, L.L.C. ("Riverview"), the Company will file a registration statement covering the resale by Riverview of shares of the Company's common stock.

REGISTRATION RIGHTS AGREEMENT

REGISTRATION RIGHTS AGREEMENT (this "AGREEMENT"), dated as of May __, 2003, by and among StemCells, Inc., a Delaware corporation, with headquarters located at 3155 Porter Drive, Palo Alto, California 94304 (the "COMPANY"), and the investors listed on the Schedule of Buyers attached hereto (each, a "BUYER" and collectively, the "BUYERS").

WHEREAS:

A. In connection with the Securities Purchase Agreement by and among the parties hereto of even date herewith (the "SECURITIES PURCHASE AGREEMENT"), the Company has agreed, upon the terms and subject to the conditions of the Securities Purchase Agreement, to issue and sell on the date hereof to each Buyer (i) Four (4) million shares (the "COMMON SHARES") of the Company's common stock, par value \$.01 per share (the "COMMON STOCK"), and (ii) warrants (the "WARRANTS") which will be exercisable to purchase shares of Common Stock (as exercised collectively, the "WARRANT SHARES");

B. To induce the Buyers to execute and deliver the Securities Purchase Agreement, the Company has agreed to provide certain registration rights under the Securities Act of 1933, as amended, and the rules and regulations thereunder, or any similar successor statute (collectively, the "1933 ACT"), and applicable state securities laws.

NOW, THEREFORE, in consideration of the premises and the mutual covenants contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Company and each of the Buyers hereby agree as follows:

1. Definitions.

As used in this Agreement, the following terms shall have the following meanings:

a. "BUSINESS DAY" means any day other than Saturday, Sunday or any other day on which commercial banks in The City of New York are authorized or required by law to remain closed.

b. "INVESTOR" means a Buyer, any transferee or assignee thereof to whom a Buyer assigns its rights under this Agreement and who agrees to become bound by the provisions of this Agreement in accordance with Section 9 and any transferee or assignee thereof to whom a transferee or assignee assigns its rights under this Agreement and who agrees to become bound by the provisions of this Agreement in accordance with Section 9.

c. "PERSON" means an individual, a limited liability company, a partnership, a joint venture, a corporation, a trust, an unincorporated organization and governmental or any department or agency thereof.

d. "REGISTER," "REGISTERED," and "REGISTRATION" refer to a registration effected by preparing and filing one or more Registration Statements (as defined below) in compliance with the 1933 Act and pursuant to Rule 415 under the 1933 Act or any successor rule providing for offering securities on a continuous or delayed basis ("RULE 415"), and the declaration or ordering of effectiveness of such Registration Statement(s) by the United States Securities and Exchange Commission (the "SEC").

e. "REGISTRABLE SECURITIES" means (i) the Common Shares, (ii) the Warrant Shares issued or issuable upon exercise of the Warrants and (iii) any shares of capital stock issued or issuable with respect to the Common Shares, the Warrant Shares or the Warrants as a result of any stock split, stock dividend, recapitalization, exchange or similar event or otherwise, without regard to any limitations on exercise of the Warrants.

f. "REGISTRATION STATEMENT" means a registration statement or registration statements of the Company filed under the 1933 Act covering the Registrable Securities.

Capitalized terms used herein and not otherwise defined herein shall have the respective meanings set forth in the Securities Purchase Agreement.

2. Registration.

a. Mandatory Registration. The Company shall prepare, and, as soon as practicable but in no event later than 30 days after the date hereof (the "FILING DEADLINE"), file with the SEC a Registration Statement on Form S-3 covering the resale of all of the Registrable Securities. In the event that Form S-3 is unavailable for such a registration, the Company shall use such other form as is available for such a registration, subject to the provisions of Section 2(d). The Registration Statement prepared pursuant hereto shall register for resale Six (6) million shares of Common Stock (subject to adjustment). The Company shall use its reasonable best efforts to have the Registration Statement declared effective by the SEC as soon as practicable, but in no event later than the date which is (i) in the event that the Registration Statement is not subject to a full review by the SEC, 60 days after the date hereof or (ii) in the event that the Registration Statement is subject to a full review by the SEC, 120 days after the date hereof (the "EFFECTIVENESS DEADLINE").

b. Allocation of Registrable Securities. The initial number of Registrable Securities included in any Registration Statement and each increase in the number of Registrable Securities included therein shall be allocated pro rata among the Investors based on the number of Registrable Securities held by each Investor at the time the Registration Statement covering such initial number of Registrable Securities or increase thereof is declared effective by the SEC. In the event that an Investor sells or otherwise transfers any of such Investor's Registrable Securities, each transferee shall be allocated a pro rata portion of the then remaining number of Registrable Securities included in such Registration Statement for such transferor. Any shares of Common Stock included in a Registration Statement and which remain allocated to any Person which ceases to hold any Registrable Securities covered by such Registration Statement shall be allocated to the remaining Investors, pro rata based on the number of

Registrable Securities then held by such Investors which are covered by such Registration Statement. In no event shall the Company include any securities other than Registrable Securities on any Registration Statement without the prior written consent of Buyers holding at least a majority of the Registrable Securities.

c. Legal Counsel. Subject to Section 5 hereof, the Buyers holding at least a majority of the Registrable Securities shall have the right to select one legal counsel to review and oversee any registration pursuant to this Section 2 ("LEGAL COUNSEL"), which shall be Schulte Roth & Zabel LLP or such other counsel as thereafter designated by the holders of at least a majority of the Registrable Securities. The Company and Legal Counsel shall reasonably cooperate with each other in performing the Company's obligations under this Agreement.

d. Ineligibility for Form S-3. In the event that Form S-3 is not available for the registration of the resale of Registrable Securities hereunder, the Company shall (i) register the resale of the Registrable Securities on another appropriate form reasonably acceptable to the holders of at least a majority of the Registrable Securities and (ii) undertake to register the Registrable Securities on Form S-3 as soon as such form is available, provided that the Company shall maintain the effectiveness of the Registration Statement then in effect until such time as a Registration Statement on Form S-3 covering the Registrable Securities has been declared effective by the SEC.

e. Sufficient Number of Shares Registered. In the event the number of shares available under a Registration Statement filed pursuant to Section 2(a) is insufficient to cover all of the Registrable Securities required to be covered by such Registration Statement or an Investor's allocated portion of the Registrable Securities pursuant to Section 2(b), the Company shall amend the applicable Registration Statement, or file a new Registration Statement (on the short form available therefor, if applicable), or both, so as to cover at least the number of such Registrable Securities as of the trading day immediately preceding the date of the filing of such amendment or new Registration Statement, in each case, as soon as practicable, but in any event not later than fifteen (15) days after the Company becomes aware of the necessity therefor. The Company shall use its reasonable best efforts to cause such amendment and/or new Registration Statement to become effective as soon as practicable following the filing thereof. For purposes of the foregoing provision, the number of shares available under a Registration Statement shall be deemed "insufficient to cover all of the Registrable Securities" if at any time the number of shares of Common Stock available for resale under such Registration Statement is less than the number of Registrable Securities issued or issuable upon exercise of the Warrants. The calculation set forth in the foregoing sentence shall be made without regard to any limitations on the exercise of the Warrants and such calculation shall assume that the Warrants are then exercisable into shares of Common Stock at the then prevailing Warrant Exercise Price (as defined in the Warrants).

f. Effect of Failure to File and Obtain and Maintain Effectiveness of Registration Statement. If (i) a Registration Statement covering all the Registrable Securities required to be covered thereby and required to be filed by the Company pursuant to this Agreement is (A) not filed with the SEC on or before the Filing Deadline (a "FILING FAILURE") or (B) not declared effective by the SEC on or before the Effectiveness Deadline (an

"EFFECTIVENESS FAILURE") or (ii) on any day after such Registration Statement has been declared effective by the SEC sales of all the Registrable Securities required to be included on such Registration Statement cannot be made (other than during an Allowable Grace Period (as defined in Section 3(r)) pursuant to such Registration Statement (including, without limitation, because of a failure to keep such Registration Statement effective, to disclose such information as is necessary for sales to be made pursuant to such Registration Statement or to register sufficient shares of Common Stock) (a "MAINTENANCE FAILURE"), then, as partial relief for the damages to any holder by reason of any such delay in or reduction of its ability to sell the underlying shares of Common Stock (which remedy shall not be exclusive of any other remedies available at law or in equity), the Company shall pay to each Investor relating to such Registration Statement: on the earlier of the last day of each 30 day period after a Filing Failure, an Effectiveness Failure and the initial day of a Maintenance Failure, as the case may be until such event is cured, or on the third Business Day after any such Filing Failure, Effectiveness Failure or Maintenance Failure is cured, an amount in cash equal to the product of (i) the Aggregate Purchase Price multiplied by (ii) 0.02, provided, however, that such payment shall apply on a pro-rata basis for any portion of a 30 day period prior to the cure of a Filing Failure, Effectiveness Failure or Maintenance Failure as applicable. In the event the Company fails to make any payments pursuant to this Section 2(f) in a timely manner, such payments shall bear interest at the rate of 1.0% per month, or such lower maximum amount as is permitted by law, (prorated for partial months) until paid in full.

3. Related Obligations.

At such time as the Company is obligated to file a Registration Statement with the SEC pursuant to Section 2(a), 2(d) or 2(e), the Company will use its reasonable best efforts to effect the registration of the Registrable Securities in accordance with the intended method of disposition thereof and, pursuant thereto, the Company shall have the following obligations:

a. The Company shall submit to the SEC, within two (2) Business Days after the Company learns that no review of a particular Registration Statement will be made by the staff of the SEC or that the staff of the SEC has no further comments on a particular Registration Statement, as the case may be, a request for acceleration of effectiveness of such Registration Statement to a time and date not later than 48 hours after the submission of such request. The Company shall keep each Registration Statement effective pursuant to Rule 415 at all times until the earlier of (i) the date as of which the Investors may sell all of the Registrable Securities covered by such Registration Statement without restriction pursuant to Rule 144(k) (or successor thereto) promulgated under the 1933 Act or (ii) the date on which the Investors shall have sold all the Registrable Securities covered by such Registration Statement (the "REGISTRATION PERIOD"). The Company shall ensure that each Registration Statement (including any amendments or supplements thereto and prospectuses contained therein) shall not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein, or necessary to make the statements therein (in the case of prospectuses, in the light of the circumstances in which they were made) not misleading.

b. The Company shall prepare and file with the SEC such amendments (including post-effective amendments) and supplements to a Registration Statement

and the prospectus used in connection with such Registration Statement, which prospectus is to be filed pursuant to Rule 424 promulgated under the 1933 Act, as may be necessary to keep such Registration Statement effective at all times during the Registration Period, and, during such period, comply with the provisions of the 1933 Act with respect to the disposition of all Registrable Securities of the Company covered by such Registration Statement until such time as all of such Registrable Securities shall have been disposed of in accordance with the intended methods of disposition by the seller or sellers thereof as set forth in such Registration Statement. In the case of amendments and supplements to a Registration Statement which are required to be filed pursuant to this Agreement (including pursuant to this Section 3(b)) by reason of the Company filing a report on Form 10-K, Form 10-Q or Form 8-K or any analogous report under the Securities Exchange Act of 1934, as amended (the "1934 ACT"), the Company shall have incorporated such report by reference into such Registration Statement, if applicable, or shall file such amendments or supplements with the SEC on the same day on which the 1934 Act report is filed which created the requirement for the Company to amend or supplement such Registration Statement.

c. The Company shall (A) permit Legal Counsel to review and comment upon (i) a Registration Statement at least five (5) Business Days prior to its filing with the SEC and (ii) all amendments and supplements to all Registration Statements (except for Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K and any similar or successor reports) within a reasonable number of days prior to their filing with the SEC, and (B) not file any Registration Statement or amendment or supplement thereto in a form to which Legal Counsel reasonably objects. The Company shall not submit a request for acceleration of the effectiveness of a Registration Statement or any amendment or supplement thereto without the prior approval of Legal Counsel, which consent shall not be unreasonably withheld or delayed. The Company shall furnish to Legal Counsel, without charge, (i) copies of any correspondence from the SEC or the staff of the SEC to the Company or its representatives relating to any Registration Statement, (ii) promptly after the same is prepared and filed with the SEC, one copy of any Registration Statement and any amendment(s) thereto, including financial statements and schedules, all documents, including exhibits if reasonably requested by the Investor, incorporated therein by reference, if requested by an Investor and not otherwise available on the EDGAR system, and all other exhibits and (iii) upon the effectiveness of any Registration Statement, one copy of the prospectus included in such Registration Statement and all amendments and supplements thereto. The Company and Legal Counsel shall reasonably cooperate with each other in performing the Company's obligations pursuant to this Section 3.

d. The Company shall furnish to each Investor whose Registrable Securities are included in any Registration Statement, without charge, (i) promptly after the same is prepared and filed with the SEC, at least one copy of such Registration Statement and any amendment(s) thereto, including financial statements and schedules, all documents, including exhibits, incorporated therein by reference, if requested by an Investor and not otherwise available on the EDGAR system, all other exhibits if reasonably requested by the Investor and each preliminary prospectus, (ii) upon the effectiveness of any Registration Statement, ten (10) copies of the prospectus included in such Registration Statement and all amendments and supplements thereto (or such other number of copies as such Investor may

reasonably request) and (iii) such other documents, including copies of any preliminary or final prospectus, as such Investor may reasonably request from time to time in order to facilitate the disposition of the Registrable Securities owned by such Investor.

e. The Company shall use its reasonable best efforts to (i) register and qualify, unless an exemption from registration and qualification applies, the resale by Investors of the Registrable Securities covered by a Registration Statement under such other securities or "blue sky" laws of such jurisdictions in the United States as the Investor may reasonably request, (ii) prepare and file in those jurisdictions such amendments (including post-effective amendments) and supplements to such registrations and qualifications as may be necessary to maintain the effectiveness thereof during the Registration Period, (iii) take such other actions as may be necessary to maintain such registrations and qualifications in effect at all times during the Registration Period, and (iv) take all other actions reasonably necessary or advisable to qualify the Registrable Securities for sale in such jurisdictions; provided, however, that the Company shall not be required in connection therewith or as a condition thereto to (x) qualify to do business in any jurisdiction where it would not otherwise be required to qualify but for this Section 3(e), (y) subject itself to taxation in any such jurisdiction, or (z) file a general consent to service of process in any such jurisdiction. The Company shall promptly notify Legal Counsel and each Investor who holds Registrable Securities of the receipt by the Company of any notification with respect to the suspension of the registration or qualification of any of the Registrable Securities for sale under the securities or "blue sky" laws of any jurisdiction in the United States or its receipt of actual notice of the initiation or threatening of any proceeding for such purpose.

f. The Company shall notify Legal Counsel and each Investor in writing of the happening of any event, as promptly as reasonably practicable after becoming aware of such event, as a result of which the prospectus included in a Registration Statement, as then in effect, includes an untrue statement of a material fact or omission to state a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading (provided that in no event shall such notice contain any material, nonpublic information), and, subject to Section 3(r), promptly prepare a supplement or amendment to such Registration Statement to correct such untrue statement or omission, and deliver ten (10) copies of such supplement or amendment to Legal Counsel and each Investor (or such other number of copies as Legal Counsel or such Investor may reasonably request). The Company shall also promptly notify Legal Counsel and each Investor in writing (i) when a prospectus or any prospectus supplement or post-effective amendment has been filed, and when a Registration Statement or any post-effective amendment has become effective (notification of such effectiveness shall be delivered to Legal Counsel and each Investor by facsimile on the same day of such effectiveness and by overnight mail), (ii) of any request by the SEC for amendments or supplements to a Registration Statement or related prospectus or related information, and (iii) of the Company's reasonable determination that a post-effective amendment to a Registration Statement would be appropriate.

g. The Company shall use its reasonable best efforts to prevent the issuance of any stop order or other suspension of effectiveness of a Registration Statement, or the suspension of the qualification of any of the Registrable Securities for sale in any jurisdiction

and, if such an order or suspension is issued, to obtain the withdrawal of such order or suspension at the earliest reasonably possible moment and to notify Legal Counsel and each Investor who holds Registrable Securities being sold of the issuance of such order and the resolution thereof or its receipt of actual notice of the initiation or threat of any proceeding for such purpose.

h. If any Investor is required under applicable securities law to be described in the Registration Statement as an underwriter, at the reasonable request of such Investor, the Company shall furnish to such Investor, on the date of the effectiveness of the Registration Statement and thereafter from time to time on such dates as an Investor may reasonably request (i) a letter, dated such date, from the Company's independent certified public accountants in form and substance as is customarily given by independent certified public accountants to underwriters in an underwritten public offering, addressed to the Investors, and (ii) an opinion, dated as of such date, of counsel representing the Company for purposes of such Registration Statement, in form, scope and substance as is customarily given in an underwritten public offering, addressed to the Investors.

i. Upon the written request of one Investor (as may be designated by the holders of at least a majority of the Registrable Securities) in connection with any Investor's due diligence requirements, if any, the Company shall make available for inspection by (i) any Investor, (ii) Legal Counsel and (iii) one firm of accountants or other agents retained by the Investors (collectively, the "INSPECTORS"), all pertinent financial and other records, and pertinent corporate documents and properties of the Company (collectively, the "RECORDS"), as shall be reasonably deemed necessary by each Inspector, and cause the Company's officers, directors and employees to supply all information which any Inspector may reasonably request; provided, however, that each Inspector shall agree in writing (in a form reasonably acceptable to the Company) to hold in strict confidence and shall not make any disclosure (except to an Investor) or use of any Record or other information which the Company determines in good faith to be confidential, and of which determination the Inspectors are so notified, unless (a) the disclosure of such Records is necessary to avoid or correct a misstatement or omission in any Registration Statement or is otherwise required under the 1933 Act, (b) the release of such Records is ordered pursuant to a final, non-appealable subpoena or order from a court or government body of competent jurisdiction, or (c) the information in such Records has been made generally available to the public other than by disclosure in violation of this or any other agreement of which the Inspector has knowledge. Each Investor agrees that it shall, upon learning that disclosure of such Records is sought in or by a court or governmental body of competent jurisdiction or through other means, give prompt notice to the Company and allow the Company, at its expense, to undertake appropriate action to prevent disclosure of, or to obtain a protective order for, the Records deemed confidential. Nothing herein (or in any other confidentiality agreement between the Company and any Investor) shall be deemed to limit the Investors' ability to sell Registrable Securities in a manner which is otherwise consistent with applicable laws and regulations.

j. The Company shall hold in confidence and not make any disclosure of information concerning an Investor provided to the Company unless (i) disclosure of such information is necessary to comply with federal or state securities laws or applicable rules and regulations of NASDAQ or any other relevant market or exchange, (ii) the disclosure

of such information is necessary to avoid or correct a misstatement or omission in any Registration Statement, (iii) the release of such information is ordered pursuant to a subpoena or other final, non-appealable order from a court or governmental body of competent jurisdiction, or (iv) such information has been made generally available to the public other than by disclosure in violation of this Agreement or any other agreement of which the Company has knowledge. The Company agrees that it shall, upon learning that disclosure of such information concerning an Investor is sought in or by a court or governmental body of competent jurisdiction or through other means, give prompt written notice to such Investor and allow such Investor, at the Investor's expense, to undertake appropriate action to prevent disclosure of, or to obtain a protective order for, such information.

k. The Company shall use its reasonable best efforts either to (i) cause all the Registrable Securities covered by a Registration Statement to be listed on each securities exchange on which securities of the same class or series issued by the Company are then listed, if any, if the listing of such Registrable Securities is then permitted under the rules of such exchange, or (ii) secure designation and quotation of all the Registrable Securities covered by a Registration Statement on the NASDAQ National Market, or (iii) if, despite the Company's reasonable best efforts to satisfy the preceding clause (i) or (ii), the Company is unsuccessful in satisfying the preceding clause (i) or (ii), to secure the inclusion for quotation on The NASDAQ SmallCap Market for such Registrable Securities and, without limiting the generality of the foregoing, to use its reasonable best efforts to arrange for at least two market makers to register with the National Association of Securities Dealers, Inc. ("NASD") as such with respect to such Registrable Securities. The Company shall pay all fees and expenses in connection with satisfying its obligation under this Section 3(k).

l. If requested by the Investors, the Company shall cooperate with the Investors who hold Registrable Securities being offered and, to the extent applicable, facilitate the timely preparation and delivery of certificates (which, if a Registration Statement is then in effect covering the resale of the shares represented by such certificates, shall not bear any restrictive legend) representing the Registrable Securities to be offered pursuant to a Registration Statement and enable such certificates to be in such denominations or amounts, as the case may be, as the Investors may reasonably request and registered in such names as the Investors may request.

m. If requested by an Investor, the Company shall (i) as soon as practicable incorporate in a prospectus supplement or post-effective amendment such information as an Investor reasonably requests to be included therein relating to the sale and distribution of Registrable Securities, including, without limitation, information with respect to the number of Registrable Securities being offered or sold, the purchase price being paid therefor and any other terms of the offering of the Registrable Securities to be sold in such offering; (ii) as soon as practicable make all required filings of such prospectus supplement or post-effective amendment after being notified of the matters to be incorporated in such prospectus supplement or post-effective amendment; and (iii) as soon as practicable, supplement or make amendments to any Registration Statement if reasonably requested by an Investor holding any Registrable Securities.

n. The Company take all other reasonable actions requested by Investors holding a majority of the Registrable Securities necessary to expedite and facilitate disposition by the Investors of the Registrable Securities pursuant to the Registration Statement.

o. The Company shall make generally available to its security holders as soon as practical, but not later than ninety (90) days after the close of the period covered thereby, an earnings statement (in form complying with, and in the manner provided by, the provisions of Rule 158 under the 1933 Act) covering a twelve-month period beginning not later than the first day of the Company's fiscal quarter next following the effective date of a Registration Statement.

p. The Company shall otherwise use its reasonable best efforts to comply with all applicable rules and regulations of the SEC in connection with any registration hereunder.

q. Within two (2) Business Days after a Registration Statement which covers Registrable Securities is ordered effective by the SEC, the Company shall deliver, and shall cause legal counsel for the Company to deliver, to the transfer agent for such Registrable Securities (with copies to the Investors whose Registrable Securities are included in such Registration Statement) confirmation that such Registration Statement has been declared effective by the SEC in the form attached hereto as Exhibit A.

r. Notwithstanding anything to the contrary herein, at any time after the Registration Statement has been declared effective by the SEC, the Company may delay the disclosure of material non-public information concerning the Company the disclosure of which at the time is not, in the good faith opinion of the Board of Directors of the Company and its counsel, in the best interest of the Company and, based upon the advice of counsel to the Company, otherwise required (a "GRACE PERIOD"); provided, that the Company shall promptly (i) notify the Investors in writing of the existence of a Grace Period in conformity with the provisions of this Section 3(r) (provided that in each notice the Company will not disclose the content of such material non-public information to the Investors) and the date on which the Grace Period will begin, and (ii) notify the Investors in writing of the date on which the Grace Period ends; and, provided further, that no Grace Period shall exceed ten (10) consecutive days and during any three hundred sixty five (365) day period such Grace Periods shall not exceed an aggregate of thirty (30) days and the first day of any Grace Period must be at least two (2) trading days after the last day of any prior Grace Period (each, an "ALLOWABLE GRACE PERIOD"). For purposes of determining the length of a Grace Period above, the Grace Period shall begin on and include the date the Investors receive the notice referred to in clause (i) and shall end on and include the later of the date the Investors receive the notice referred to in clause (ii) and the date referred to in such notice. The provisions of Section 3(g) hereof shall not be applicable during the period of any Allowable Grace Period. Upon expiration of the Grace Period, the Company shall again be bound by the first sentence of Section 3(f) with respect to the information giving rise thereto unless such material non-public information is no longer applicable. Notwithstanding anything to the contrary, the Company shall cause its transfer agent to deliver unlegended shares of Common Stock to a transferee of an Investor in accordance with the terms of the Securities Purchase Agreement in connection with any sale of Registrable Securities with

respect to which an Investor has entered into a contract for sale, and delivered a copy of the prospectus included as part of the applicable Registration Statement, prior to the Investor's receipt of the notice of a Grace Period and for which the Investor has not yet settled.

4. Obligations Of The Investors.

a. At least seven (7) Business Days prior to the first anticipated filing date of a Registration Statement, the Company shall notify each Investor in writing of the information the Company requires from each such Investor if such Investor elects to have any of such Investor's Registrable Securities included in such Registration Statement. It shall be a condition precedent to the obligations of the Company to complete the registration pursuant to this Agreement with respect to the Registrable Securities of a particular Investor that such Investor shall furnish, in a manner consistent with the last sentence of this Section 4(a), to the Company such information regarding itself, the Registrable Securities held by it and the intended method of disposition of the Registrable Securities held by it as shall be reasonably required to effect the effectiveness of the registration of such Registrable Securities and shall execute such documents in connection with such registration as the Company may reasonably request. All such information provided to the Company by an Investor pursuant to the prior sentence shall be in writing, and such writing shall expressly acknowledge that the information is being provided for use in connection with the preparation of the Registration Statement or any such amendment thereof or supplement thereto.

b. Each Investor, by such Investor's acceptance of the Registrable Securities, agrees to cooperate with the Company as reasonably requested by the Company in connection with the preparation and filing of any Registration Statement hereunder, unless such Investor has notified the Company in writing of such Investor's election to exclude all of such Investor's Registrable Securities from such Registration Statement.

c. Each Investor agrees that, upon receipt of any notice from the Company of the happening of any event of the kind described in Section 3(g) or the first sentence of 3(f), such Investor will immediately discontinue disposition of Registrable Securities pursuant to any Registration Statement(s) covering such Registrable Securities until such Investor's receipt of the copies of the supplemented or amended prospectus contemplated by Section 3(g) or the first sentence of 3(f) or receipt of notice that no supplement or amendment is required. Notwithstanding anything to the contrary, the Company shall cause its transfer agent to deliver unlegended shares of Common Stock to a transferee of an Investor in accordance with the terms of the Securities Purchase Agreement in connection with any sale of Registrable Securities with respect to which an Investor has entered into a contract for sale prior to the Investor's receipt of a notice from the Company of the happening of any event of the kind described in Section 3(g) or the first sentence of 3(f) and for which the Investor has not yet settled.

d. Each Investor covenants and agrees that it will comply with the prospectus delivery requirements of the 1933 Act as applicable to it in connection with sales of Registrable Securities pursuant to a Registration Statement.

5. Expenses of Registration.

All reasonable expenses, other than underwriting discounts and commissions (which shall be borne by the Investors), incurred in connection with the performance of the Company's obligations hereunder and under the transactions contemplated hereby, including registrations, filings or qualifications pursuant to Sections 2 and 3, including, without limitation, all registration, listing and qualifications fees, printers and accounting fees, and fees and disbursements of counsel for the Company shall be paid by the Company.

6. Indemnification.

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

a. To the fullest extent permitted by law, the Company will, and hereby does, indemnify, hold harmless and defend each Investor, the directors, officers, partners, employees, agents, representatives of, and each Person, if any, who controls any Investor within the meaning of the 1933 Act or the 1934 Act (each, an "INDEMNIFIED PERSON"), against any losses, claims, damages, liabilities, judgments, fines, penalties, charges, costs, reasonable attorneys' fees, amounts paid in settlement or expenses, joint or several (collectively, "CLAIMS"), incurred in investigating, preparing or defending any action, claim, suit, inquiry, proceeding, investigation or appeal taken from the foregoing by or before any court or governmental, administrative or other regulatory agency, body or the SEC, whether pending or threatened, whether or not an indemnified party is or may be a party thereto ("INDEMNIFIED DAMAGES"), to which any of them may become subject insofar as such Claims (or actions or proceedings, whether commenced or threatened, in respect thereof) arise out of or are based upon: (i) any untrue statement or alleged untrue statement of a material fact in a Registration Statement or any post-effective amendment thereto or in any filing made in connection with the qualification of the offering under the securities or other "blue sky" laws of any jurisdiction in which Registrable Securities are offered ("BLUE SKY FILING"), or the omission or alleged omission to state a material fact required to be stated therein or necessary to make the statements therein not misleading, (ii) any untrue statement or alleged untrue statement of a material fact contained in any preliminary prospectus if used prior to the effective date of such Registration Statement, or contained in the final prospectus (as amended or supplemented, if the Company files any amendment thereof or supplement thereto with the SEC) or the omission or alleged omission to state therein any material fact necessary to make the statements made therein, in the light of the circumstances under which the statements therein were made, not misleading, (iii) any violation or alleged violation by the Company of the 1933 Act, the 1934 Act, any other law, including, without limitation, any state securities law, or any rule or regulation thereunder relating to the offer or sale of the Registrable Securities pursuant to a Registration Statement or (iv) any material violation of this Agreement (the matters in the foregoing clauses (i) through (iv) being, collectively, "VIOLATIONS"). Subject to Section 6(c), the Company shall reimburse the Indemnified Persons, promptly as such expenses are incurred and are due and payable, for any legal fees or other reasonable expenses incurred by them in connection with investigating or defending any such Claim. Notwithstanding anything to the contrary contained herein, the indemnification agreement contained in this Section 6(a): (i) shall not apply to a Claim by an

Indemnified Person arising out of or based upon a Violation which occurs in reliance upon and in conformity with information furnished in writing to the Company by such Indemnified Person for such Indemnified Person expressly for use in connection with the preparation of the Registration Statement or any such amendment thereof or supplement thereto, if such prospectus was timely made available by the Company pursuant to Section 3(d); (ii) with respect to any preliminary prospectus, shall not inure to the benefit of any such Indemnified Person from whom the Person asserting any such Claim purchased the Registrable Securities that are the subject thereof (or to the benefit of any Person controlling such Person) if the untrue statement or omission of material fact contained in the preliminary prospectus was corrected in the prospectus, as then amended or supplemented, and if such prospectus was timely made available by the Company pursuant to Section 3(d), and the Indemnified Person was promptly advised in writing not to use the incorrect prospectus prior to the use giving rise to a violation and such Indemnified Person, notwithstanding such advice, used it or failed to deliver the correct prospectus as required by the 1933 Act and such correct prospectus was timely made available pursuant to Section 3(d); (iii) shall not be available to the extent such Claim is based on a failure of the Investor to deliver or to cause to be delivered the prospectus made available by the Company, including a corrected prospectus, if such prospectus or corrected prospectus was timely made available by the Company pursuant to Section 3(d); and (iv) shall not apply to amounts paid in settlement of any Claim if such settlement is effected without the prior written consent of the Company, which consent shall not be unreasonably withheld or delayed. Such indemnity shall remain in full force and effect regardless of any investigation made by or on behalf of the Indemnified Person and shall survive the transfer of the Registrable Securities by the Investors pursuant to Section 9.

b. In connection with any Registration Statement in which an Investor is participating, each such Investor agrees to severally and not jointly indemnify, hold harmless and defend, to the same extent and in the same manner as is set forth in Section 6(a), the Company, each of its directors, each of its officers who signs the Registration Statement and each Person, if any, who controls the Company within the meaning of the 1933 Act or the 1934 Act (each, an "INDEMNIFIED PARTY"), against any Claim or Indemnified Damages to which any of them may become subject, under the 1933 Act, the 1934 Act or otherwise, insofar as such Claim or Indemnified Damages arise out of or are based upon any Violation, in each case to the extent, and only to the extent, that such Violation occurs in reliance upon and in conformity with written information furnished to the Company by such Investor expressly for use in connection with such Registration Statement or any post-effective amendment thereof or any prospectus contained therein; and, subject to Section 6(c), such Investor will reimburse any legal or other expenses reasonably incurred by an Indemnified Party in connection with investigating or defending any such Claim as promptly as such expenses are incurred and are due and payable; provided, however, that the indemnity agreement contained in this Section 6(b) and the agreement with respect to contribution contained in Section 7 shall not apply to amounts paid in settlement of any Claim if such settlement is effected without the prior written consent of such Investor, which consent shall not be unreasonably withheld or delayed; provided, further, however, that an Investor shall be liable under this Section 6(b) for only that amount of a Claim or Indemnified Damages as does not exceed the net proceeds to such Investor as a result of the sale of Registrable Securities pursuant to such Registration Statement. Such indemnity shall remain in full force and effect regardless of any investigation made by or on behalf of such

Indemnified Party and shall survive the transfer of the Registrable Securities by the Investors pursuant to Section 9. Notwithstanding anything to the contrary contained herein, the indemnification agreement contained in this Section 6(b) with respect to any preliminary prospectus shall not inure to the benefit of any Indemnified Party if the untrue statement or omission of material fact contained in the preliminary prospectus was corrected on a timely basis in the prospectus, as then amended or supplemented.

c. Promptly after receipt by an Indemnified Person or Indemnified Party under this Section 6 of notice of the commencement of any action or proceeding (including any governmental action or proceeding) involving a Claim, such Indemnified Person or Indemnified Party shall, if a Claim in respect thereof is to be made against any indemnifying party under this Section 6, deliver to the indemnifying party a written notice of the commencement thereof, and the indemnifying party shall have the right to participate in, and, to the extent the indemnifying party so desires, jointly with any other indemnifying party similarly noticed, to assume control of the defense thereof with counsel mutually satisfactory to the indemnifying party and the Indemnified Person or the Indemnified Party, as the case may be; provided, however, that an Indemnified Person or Indemnified Party shall have the right to retain its own counsel with the fees and expenses of not more than one counsel for such Indemnified Person or Indemnified Party to be paid by the indemnifying party, if, in the reasonable opinion of the Indemnified Person or the Indemnified Party, as the case may be, the representation by such counsel of the Indemnified Person or Indemnified Party and the indemnifying party would be inappropriate due to actual or potential differing interests between such Indemnified Person or Indemnified Party and any other party represented by such counsel in such proceeding. In the case of an Indemnified Person, legal counsel referred to in the immediately preceding sentence shall be selected by the Investors holding at least a majority in interest of the Registrable Securities included in the Registration Statement to which the Claim relates. The Indemnified Party or Indemnified Person shall cooperate fully with the indemnifying party in connection with any negotiation or defense of any such action or Claim by the indemnifying party and shall furnish to the indemnifying party all information reasonably available to the Indemnified Party or Indemnified Person which relates to such action or Claim. The indemnifying party shall keep the Indemnified Party or Indemnified Person reasonably apprised at all times as to the status of the defense or any settlement negotiations with respect thereto. No indemnifying party shall be liable for any settlement of any action, claim or proceeding effected without its prior written consent, provided, however, that the indemnifying party shall not unreasonably withhold, delay or condition its consent. No indemnifying party shall, without the prior written consent of the Indemnified Party or Indemnified Person, consent to entry of any judgment or enter into any settlement or other compromise which does not include as an unconditional term thereof the giving by the claimant or plaintiff to such Indemnified Party or Indemnified Person of a release from all liability in respect to such Claim or litigation. Following indemnification as provided for hereunder, the indemnifying party shall be subrogated to all rights of the Indemnified Party or Indemnified Person with respect to all third parties, firms or corporations relating to the matter for which indemnification has been made. The failure to deliver written notice to the indemnifying party within a reasonable time of the commencement of any such action shall not relieve such indemnifying party of any liability to the Indemnified Person or Indemnified Party under this Section 6, except to the extent that the indemnifying party is prejudiced in its ability to defend such action.

d. The indemnification required by this Section 6 shall be made by periodic payments of the amount thereof during the course of the investigation or defense, as and when bills are received or Indemnified Damages are incurred.

e. The indemnity agreements contained herein shall be in addition to (i) any cause of action or similar right of the Indemnified Party or Indemnified Person against the indemnifying party or others, and (ii) any liabilities the indemnifying party may be subject to pursuant to the law.

7. Contribution.

To the extent any indemnification by an indemnifying party is prohibited or limited by law, the indemnifying party agrees to make the maximum contribution with respect to any amounts for which it would otherwise be liable under Section 6 to the fullest extent permitted by law; provided, however, that: (i) no contribution shall be made under circumstances the maker would not have been liable for indemnification under the fault standards set forth in Section 6, (ii) no Person involved in the sale of Registrable Securities which Person is guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the 1933 Act) in connection with such sale shall be entitled to contribution from any Person involved in such sale of Registrable Securities who was not guilty of fraudulent misrepresentation; and (iii) contribution by any seller of Registrable Securities shall be limited in amount to the net amount of proceeds received by such seller from the sale of such Registrable Securities pursuant to such Registration Statement.

8. Reports Under The 1934 Act.

With a view to making available to the Investors the benefits of Rule 144 promulgated under the 1933 Act or any other similar rule or regulation of the SEC that may at any time permit the Investors to sell securities of the Company to the public without registration ("RULE 144"), the Company agrees to:

a. make and keep public information available, as those terms are understood and defined in Rule 144;

b. file with the SEC in a timely manner all reports and other documents required of the Company under the 1933 Act and the 1934 Act so long as the Company remains subject to such requirements (it being understood that nothing herein shall limit the Company's obligations under Section 4(c) of the Securities Purchase Agreement) and the filing of such reports and other documents is required for the applicable provisions of Rule 144; and

c. furnish to each Investor so long as such Investor owns Registrable Securities, promptly upon request, (i) a written statement by the Company, if true, that it has complied with the reporting requirements of Rule 144, the 1933 Act and the 1934 Act, (ii) a copy of the most recent annual or quarterly report of the Company and such other reports and documents so filed by the Company, and (iii) such other information as may be reasonably requested to permit the Investors to sell such securities pursuant to Rule 144 without registration.

9. Assignment of Registration Rights.

The rights under this Agreement shall be automatically assignable by the Investors to any transferee of all or any portion of such Investor's Registrable Securities if: (i) the Investor agrees in writing with the transferee or assignee to assign such rights, and a copy of such agreement is furnished to the Company within a reasonable time after such assignment; (ii) the Company is, within a reasonable time after such transfer or assignment, furnished with written notice of (a) the name and address of such transferee or assignee, and (b) the securities with respect to which such registration rights are being transferred or assigned; (iii) immediately following such transfer or assignment the further disposition of such securities by the transferee or assignee is restricted under the 1933 Act and applicable state securities laws; (iv) at or before the time the Company receives the written notice contemplated by clause (ii) of this sentence the transferee or assignee agrees in writing with the Company to be bound by all of the provisions contained herein; and (v) such transfer shall have been made in accordance with the applicable requirements of the Securities Purchase Agreement.

10. Amendment of Registration Rights.

Provisions of this Agreement may be amended and the observance thereof may be waived (either generally or in a particular instance and either retroactively or prospectively), only with the written consent of the Company and Investors who then hold at least a majority of the Registrable Securities. Any amendment or waiver effected in accordance with this Section 10 shall be binding upon each Investor and the Company. No such amendment shall be effective to the extent that it applies to less than all of the holders of the Registrable Securities. No consideration shall be offered or paid to any Person to amend or consent to a waiver or modification of any provision of any of this Agreement unless the same consideration also is offered to all of the parties to this Agreement.

11. Miscellaneous.

a. A Person is deemed to be a holder of Registrable Securities whenever such Person owns or is deemed to own of record such Registrable Securities. If the Company receives conflicting instructions, notices or elections from two or more Persons with respect to the same Registrable Securities, the Company shall act upon the basis of instructions, notice or election received from the such record owner of such Registrable Securities.

b. Any notices, consents, waivers or other communications required or permitted to be given under the terms of this Agreement must be in writing and will be deemed to have been delivered: (i) upon receipt, when delivered personally; (ii) upon receipt, when sent by facsimile (provided confirmation of transmission is mechanically or electronically generated and kept on file by the sending party); or (iii) one Business Day after deposit with a nationally recognized overnight delivery service, in each case properly addressed to the party to receive the same. The addresses and facsimile numbers for such communications shall be:

If to the Company:

StemCells, Inc.
3155 Porter Drive
Palo Alto, California 94304
Telephone: (650) 475-3100
Facsimile: (650) [_____]
Attention: Martin McGlynn

with a copy to:

Ropes & Gray LLP
One International Place
Boston, Massachusetts 02110
Telephone: (617) 951-7000
Facsimile: (617) 951-7050
Attention: Geoffrey Davis

If to Legal Counsel:

Schulte Roth & Zabel LLP

919 Third Avenue

New York, New York 10022

Telephone: (212) 756-2000

Facsimile: (212) 593-5955

Attention: Eleazer Klein, Esq.

If to a Buyer, to its address and facsimile number set forth on the Schedule of Buyers attached hereto, with copies to such Buyer's representatives as set forth on the Schedule of Buyers, or to such other address and/or facsimile number and/or to the attention of such other Person as the recipient party has specified by written notice given to each other party five (5) days prior to the effectiveness of such change. Written confirmation of receipt (A) given by the recipient of such notice, consent, waiver or other communication, (B) mechanically or electronically generated by the sender's facsimile machine containing the time, date, recipient facsimile number and an image of the first page of such transmission or (C) provided by a courier or overnight courier service shall be rebuttable evidence of personal service, receipt by facsimile or receipt from a nationally recognized overnight delivery service in accordance with clause (i), (ii) or (iii) above, respectively.

c. Failure of any party to exercise any right or remedy under this Agreement or otherwise, or delay by a party in exercising such right or remedy, shall not operate as a waiver thereof.

d. All questions concerning the construction, validity, enforcement and interpretation of this Agreement shall be governed by the internal laws of the State of New York, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of New York or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of New York. Each party hereby irrevocably submits to the non-exclusive jurisdiction of the state and federal courts sitting The City of New York, Borough of Manhattan, for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper. Each party hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by mailing a copy thereof to such party at the address for such notices to it under this Agreement and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. If any provision of this Agreement shall be invalid or unenforceable in any jurisdiction, such invalidity or unenforceability shall not affect the validity or enforceability of the remainder of this Agreement in that jurisdiction or the validity or enforceability of any provision of this Agreement in any other jurisdiction. EACH PARTY HEREBY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE, AND AGREES NOT TO REQUEST, A JURY TRIAL FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION HERewith OR ARISING OUT OF THIS AGREEMENT OR ANY TRANSACTION CONTEMPLATED HEREBY.

e. This Agreement, the Securities Purchase Agreement, the Warrants and the instruments referenced herein and therein constitute the entire agreement among the parties hereto with respect to the subject matter hereof and thereof. There are no restrictions, promises, warranties or undertakings, other than those set forth or referred to herein and therein. This Agreement, the Securities Purchase Agreement, the Warrants and the instruments referenced herein and therein supersede all prior agreements and understandings among the parties hereto with respect to the subject matter hereof and thereof.

f. Subject to the requirements of Section 9, this Agreement shall inure to the benefit of and be binding upon the permitted successors and assigns of each of the parties hereto.

g. The headings in this Agreement are for convenience of reference only and shall not limit or otherwise affect the meaning hereof.

h. This Agreement may be executed in identical counterparts, each of which shall be deemed an original but all of which shall constitute one and the same agreement. This Agreement, once executed by a party, may be delivered to the other party hereto by facsimile transmission of a copy of this Agreement bearing the signature of the party so delivering this Agreement.

i. Each party shall do and perform, or cause to be done and performed, all such further acts and things, and shall execute and deliver all such other agreements, certificates, instruments and documents, as any other party may reasonably request in order to carry out the intent and accomplish the purposes of this Agreement and the consummation of the transactions contemplated hereby.

j. All consents and other determinations required to be made by the Investors pursuant to this Agreement shall be made, unless otherwise specified in this Agreement, by Investors holding at least a majority of the Registrable Securities, determined as if all the Warrants then outstanding have been exercised for Registrable Securities without regard to any limitations on exercises of the Warrants.

k. The language used in this Agreement will be deemed to be the language chosen by the parties to express their mutual intent and no rules of strict construction will be applied against any party.

l. This Agreement is intended for the benefit of the parties hereto and their respective permitted successors and assigns, and is not for the benefit of, nor may any provision hereof be enforced by, any other Person.

* * * * *

IN WITNESS WHEREOF, the parties have caused this Registration Rights Agreement to be duly executed as of day and year first above written.

COMPANY:

STEMCELLS, INC.

BUYERS:

THE RIVERVIEW GROUP, LLC

By: _____

Name: Iris Brest

Title: General Counsel

By: _____

Name:

Title:

SCHEDULE OF BUYERS

ARTICLE I. Investor

INVESTOR ADDRESS
AND FACSIMILE NUMBER

INVESTOR'S REPRESENTATIVE'S
ADDRESS
AND FACSIMILE NUMBER

THE RIVERVIEW GROUP, LLC

666 Fifth Avenue, 8th floor
New York, New York 10103
Attention: Manager
Facsimile: (212) 841-4141
Telephone: (212) 841-4100
Residence: New York

Schulte Roth & Zabel LLP
919 Third Avenue
New York, NY 10022
Attn: Eleazer Klein, Esq.
Facsimile: (212) 593-5955
Telephone: (212) 756-2000

EXHIBIT A

FORM OF NOTICE OF EFFECTIVENESS
OF REGISTRATION STATEMENT

EquiServe Trust Company, L.P.
150 Royall Street
Canton, MA 02021

Attn: [_____]

Re: StemCells, Inc.

Ladies and Gentlemen:

We are counsel to StemCells, Inc., a Delaware corporation (the "Company"), and have represented the Company in connection with that certain Securities Purchase Agreement, dated as of May __, 2003 (the "Purchase Agreement"), entered into by and among the Company and the buyers named therein (collectively, the "Holders") pursuant to which the Company issued to the Holders its shares of the Company's Common Stock, par value \$.01 per share (the "Common Stock") and warrants exercisable for shares of Company Common Stock (the "Warrants"). Pursuant to the Securities Purchase Agreement, the Company also has entered into a Registration Rights Agreement with the Holders (the "Registration Rights Agreement") pursuant to which the Company agreed, among other things, to register the resale of the Registrable Securities (as defined in the Registration Rights Agreement), including the Common Shares and the shares of Company Common Stock issuable upon exercise of the Warrants under the Securities Act of 1933, as amended (the "1933 Act"). In connection with the Company's obligations under the Registration Rights Agreement, on _____, 2003, the Company filed a Registration Statement on Form S-3 (File No. 333-_____) (the "Registration Statement") with the Securities and Exchange Commission (the "SEC") relating to the Registrable Securities which names each of the Holders as a selling stockholder thereunder.

In connection with the foregoing, we advise you that a member of the SEC's staff has advised us by telephone that the SEC has entered an order declaring the Registration Statement effective under the 1933 Act at [ENTER TIME OF EFFECTIVENESS] on [ENTER DATE OF EFFECTIVENESS] and we have no knowledge, after telephonic inquiry of a member of the SEC's staff, that any stop order suspending its effectiveness has been issued or that any proceedings for that purpose are pending before, or threatened by, the SEC and the Registrable Securities are available for resale under the 1933 Act pursuant to the Registration Statement.

Very truly yours,

[ISSUER'S COUNSEL]

By:_____

CC: [LIST NAMES OF HOLDERS]