

**Supplement No. 1 to Offer to Exchange Shares of Common Stock and Cash
by**

CELL THERAPEUTICS, INC.

for
Up to \$89,207,250 Aggregate Principal Amount of its Outstanding
Convertible Notes Described in the Table Below
for Exchange Consideration Not Greater than \$600
Nor Less than \$550
Per \$1,000 Principal Amount of Notes,
Plus Accrued and Unpaid Interest Thereon to Be Paid in Common Stock

Outstanding Principal Amount	Title of Securities	CUSIP	Maturity
\$55,150,000	4% Convertible Senior Subordinated Notes due 2010	150934AF4	07/01/2010
\$23,000,000	5.75% Convertible Senior Notes due 2011	150934AL1 & 150934AM9	12/15/2011
\$7,000,000	6.75% Convertible Senior Notes due 2010	150934AH0 & 150934AG2	10/31/2010
\$33,458,000	7.5% Convertible Senior Notes due 2011	150934AK3 & 150934AJ6	04/30/2011
\$335,000	9.0% Convertible Senior Notes due 2012	150934AN7	03/04/2012

**THE EXCHANGE OFFER HAS BEEN AMENDED.
THE EXCHANGE OFFER AND WITHDRAWAL RIGHTS WILL EXPIRE AT 5:00 P.M.,
NEW YORK CITY TIME, ON WEDNESDAY, JUNE 10, 2009,
UNLESS THE EXCHANGE OFFER IS EXTENDED.**

This Supplement No. 1 (this “Supplement”) supplements and amends the Offer to Exchange, dated May 12, 2009 (as amended by Amendment No. 1 to Schedule TO filed on May 12, 2009, Amendment No. 2 to Schedule TO filed on May 15, 2009, and hereby and as it may be further supplemented or amended from time to time, the “Offer to Exchange”), and the related Letter of Transmittal (as amended and restated by Amendment No. 3 to Schedule TO filed on the date hereof (“Amendment No. 3 to Schedule TO”) and as it may be further supplemented or amended from time to time, the “Letter of Transmittal”) of Cell Therapeutics, Inc., a Washington corporation (the “Company”). Unless otherwise indicated, capitalized terms used in this Supplement have the same meanings given to them in the Offer to Exchange.

The Company is amending its previously announced offer to exchange (the “Exchange Offer”) shares of the Company’s common stock, no par value (the “Common Stock”), and cash for an aggregate of up to \$89,207,250 principal amount of the Company’s outstanding 4% Convertible Senior Subordinated Notes due 2010, 5.75% Convertible Senior Notes due 2011, 6.75% Convertible Senior Notes due 2010, 7.5% Convertible Senior Notes due 2011, and 9.0% Convertible Senior Notes due 2012 (collectively, the “Notes”), plus accrued and unpaid interest to, but excluding, the settlement date payable in shares of Common Stock, upon the terms and subject to the conditions set forth in the Offer to Exchange and in the accompanying Letter of Transmittal and the other related offering materials. As amended by this Supplement, the Company is offering to exchange the Notes for consideration with a value not greater than \$600 nor less than \$550 for each \$1,000 principal amount of Notes validly tendered and not withdrawn, with such value determined by the “Modified Dutch Auction” procedure described in the Offer to Exchange.

The term “Exchange Consideration” is hereby amended to mean consideration with a value not greater than \$600 nor less than \$550 for each \$1,000 principal amount of Notes validly tendered and not withdrawn. The amount of cash that you will receive upon exchange of your Notes will remain \$200 for each \$1,000 principal amount of Notes validly tendered and not withdrawn. The term “Consideration Range” is hereby amended to mean a value not greater than \$600 nor less than \$550 per \$1,000 principal amount. The term “Common Stock Limit” is hereby amended to mean 30.63 million shares of Common Stock. All references in the Exchange Offer to the minimum Exchange Consideration for Notes validly tendered and not withdrawn pursuant to the Exchange

Offer (originally \$250 for each \$1,000 principal amount of Notes validly tendered and not withdrawn) are hereby amended to mean \$550 for each \$1,000 principal amount of Notes validly tendered and not withdrawn.

The second sentence on page 4 of the Offer to Exchange under the heading “What will the ownership of the Company be if the Exchange Offer is consummated?” in the section entitled “Summary Term Sheet” is hereby amended and restated in its entirety to read as follows: “However, assuming (i) the full \$89,207,250 aggregate principal amount of outstanding Notes is tendered in the Exchange Offer, (ii) the Exchange Consideration is determined to be the maximum of \$600 per \$1,000 principal amount of Notes, and (iii) a 10-day VWAP of \$1.62 (which was the closing sale price of our Common Stock on May 11, 2009), we will issue 22,026,420 shares of Common Stock in connection with the portion of the Exchange Consideration consisting of shares of Common Stock, or approximately 4.6% of our outstanding Common Stock as of May 11, 2009, when the Exchange Offer is consummated.”

All references in the Offer to Exchange to the section of the Letter of Transmittal captioned “Description of Notes Tendered—Value of Exchange Consideration per \$1,000 Principal Amount in Increments of \$5 (not greater than \$300 nor less than \$250)” are hereby amended and restated in their entirety to read as follows: “Description of Notes Tendered—Value of Exchange Consideration per \$1,000 Principal Amount in Increments of \$5 (not greater than \$600 nor less than \$550).”

The Expiration Date of the Exchange Offer has not been extended.

Amendment to the Offer to Exchange

The first full paragraph on page v of the Offer to Exchange is hereby amended and restated in its entirety as follows: “We are making the Exchange Offer to all Holders. However, if we become aware of any jurisdiction in which the making of the Exchange Offer or the tender of Notes pursuant to the Exchange Offer would not be in compliance with the laws of such jurisdiction, and after making a good faith effort we cannot comply with any such law, the Exchange Offer will not be made to the Holders residing in that jurisdiction. The delivery of this Offer to Exchange shall not under any circumstances create any implication that the information contained herein, or incorporated herein by reference, is correct as of any time subsequent to the date hereof or, in the case of information incorporated herein by reference, subsequent to the date thereof, or that there has been no change in the information set forth herein, or incorporated herein by reference, or in our affairs or any of our subsidiaries since the date hereof.”

Amended and Restated Letter of Transmittal

Holders wishing to tender Notes may continue to use the Letter of Transmittal originally provided by the Company on May 12, 2009, or may use the Amended and Restated Letter of Transmittal filed as an exhibit to Amendment No. 3 to Schedule TO.

Holders that have previously validly tendered (and not withdrawn) their Notes pursuant to the Exchange Offer are not required to take any further action to receive the Exchange Consideration for any such Notes exchanged pursuant to the Exchange Offer, unless they wish to withdraw their Notes or they wish to change the specified consideration for which their Notes are being tendered. Holders that wish to withdraw their Notes must follow the procedures set forth in Section 7 of the Offer to Exchange, “Withdrawal of Tenders.” Holders that wish to change the specified consideration for which their Notes are being tendered must withdraw their Notes following the procedures set forth in Section 7 of the Offer to Exchange, “Withdrawal of Tenders,” and re-tender their Notes following the procedures set forth in Section 6 of the Offer to Exchange, “Procedures for Tendering Notes.”

Except as set forth in this Supplement, the terms and conditions of the Exchange Offer remain as set forth in the Offer to Exchange and the Letter of Transmittal. This Supplement should be read in connection with the Offer to Exchange and the Letter of Transmittal.

CELL THERAPEUTICS, INC.

May 19, 2009

The Depository for the Exchange Offer is:
U.S. BANK NATIONAL ASSOCIATION

*By Regular, Registered or Certified Mail; Hand or Overnight
Delivery:*

U.S. Bank National Association
West Side Flats Operations Center
60 Livingston Avenue
St. Paul, MN 55107
Attn: Lori Buckles, Specialized Finance
(Cell Therapeutics, Inc.)

By Facsimile for Eligible (Institutions only):

(651) 495-3520
Attn: Lori Buckles, Specialized Finance
Fax cover sheets should provide a call back
phone number and request a call back, upon receipt.
Confirm Receipt by Calling: (651) 495-3520

For Information Call:
(651) 495-4738

Any questions or requests for assistance may be directed to the Information Agent or the Financial Advisor at their respective telephone numbers and addresses set forth below. Requests for additional copies of the Offer to Exchange, this Letter of Transmittal or related documents may be directed to the Information Agent at its telephone number or address set forth below. You may also contact your broker, dealer, commercial bank, trust company or other nominee for assistance concerning the Exchange Offer.

The Information Agent for the Exchange Offer is:

GEORGESON INC.

199 Water Street, 26th Floor
New York, NY 10038

Please call toll-free (800) 457-0759
or (212) 440-9800 (collect)

The Financial Advisor for the Exchange Offer is:

PIPER JAFFRAY & CO.

345 California Street, Suite 2400
San Francisco, California 94104
Attn: Sarah Horn
(877) 371-5212 (toll free) or (415) 984-5118 (collect)