

AMENDED AND RESTATED NOTICE OF GUARANTEED DELIVERY

**Pursuant to the Offer to Exchange Shares of Common Stock and Cash for
up to \$89,207,250 Aggregate Principal Amount of Outstanding Convertible Notes
Described in the Table Below (collectively, the “Notes”)
of**

CELL THERAPEUTICS, INC.

**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.**

As set forth in Section 6 of the Offer to Exchange, dated May 12, 2009 (as amended or supplemented from time to time, the “Offer to Exchange”), and the related Letter of Transmittal (as amended or supplemented from time to time, the “Letter of Transmittal”) and the other related offering documents (as amended or supplemented from time to time and which, together with the Offer to Exchange and the Letter of Transmittal, as they may be amended or supplemented from time to time, constitute the “Exchange Offer”), this Amended and Restated Notice of Guaranteed Delivery (this “Notice of Guaranteed Delivery”), or a form substantially equivalent hereto, must be used to accept the Exchange Offer if you want to tender your Notes but:

- your certificates for the Notes are not immediately available or cannot be delivered to U.S. Bank National Association (the “Depository”) by the Expiration Date;
- your other required documents cannot be delivered to the Depository by the Expiration Date; or
- you cannot comply with the procedure for The Depository Trust Company (“DTC”) transfer by the Expiration Date.

This Notice of Guaranteed Delivery, properly completed and duly executed, may be delivered to the Depository by hand, mail, overnight courier or by facsimile transmission prior to the Expiration Date. See Section 6 of the Offer to Exchange.

Capitalized terms used herein and not defined herein shall have the meanings ascribed to them in the Offer to Exchange.

Deliver to:

U.S. BANK NATIONAL ASSOCIATION

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

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

*By Facsimile
(for Eligible Institutions only):*

(651) 495-8158
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) 495-3520*

For this notice to be validly delivered, it must be received by the Depository at the address listed above on or before the Expiration Date. Delivery of this instrument to an address other than as set forth above will not constitute a valid delivery. Deliveries to Cell Therapeutics, Inc., Piper Jaffray & Co. or Georgeson Inc. will not be forwarded to the Depository and therefore will not constitute valid delivery.

This Notice of Guaranteed Delivery is not to be used to guarantee signatures. If a signature on the Letter of Transmittal is required to be guaranteed by an Eligible Institution (as defined in the Offer to Exchange) under the instructions to the Letter of Transmittal, the signature guarantee must appear in the applicable space provided in the signature box on the Letter of Transmittal.

Ladies and Gentlemen:

The undersigned hereby tenders to Cell Therapeutics, Inc., a Washington corporation (the "Company"), upon the terms and subject to the conditions set forth in the Offer to Exchange, dated as of May 12, 2009 (as amended or supplemented from time to time, the "Offer to Exchange"), and the related Letter of Transmittal (as amended or supplemented from time to time, the "Letter of Transmittal") and the other related offering documents (as amended or supplemented from time to time and which, together with the Offer to Exchange and the Letter of Transmittal, as they may be amended and supplemented from time to time, constitute the "Exchange Offer"), receipt of which is hereby acknowledged, the principal amount of the Company's Notes specified below pursuant to the guaranteed delivery procedures set forth in the Offer to Exchange under Section 6, "Procedures for Tendering Notes—Guaranteed Delivery." The undersigned hereby authorizes the Depository to deliver this Amended and Restated Notice of Guaranteed Delivery (this "Notice of Guaranteed Delivery") to the Company with respect to the Notes tendered pursuant to the Exchange Offer.

The undersigned understands that the Company will accept for exchange Notes validly tendered on or prior to the Expiration Date. This Notice of Guaranteed Delivery may only be utilized on or prior to the Expiration Date. The undersigned also understands that tenders of Notes may be withdrawn at any time on or prior to the Expiration Date but the Exchange Consideration determined by the Company shall not be deliverable in respect of the Notes so withdrawn. For a valid withdrawal of a tender of Notes to be effective, it must be made in accordance with the procedures set forth in Section 7 of the Offer to Exchange, "Withdrawal of Tenders."

The undersigned understands that delivery of the Exchange Consideration for Notes exchanged will be made only after timely receipt by the Depository of (i) certificates representing such Notes and a Letter of Transmittal with respect to certificated Notes properly completed and duly executed, with any signature guarantees and any other documents required by the Letter of Transmittal, or (ii) an Agent's Message confirming the transfer of such Notes into the Depository's account at DTC, within three business days after the execution hereof. The undersigned also understands that under no circumstances will interest be paid by the Company by reason of any delay in exchanging the Notes.

All authority conferred or agreed to be conferred by this Notice of Guaranteed Delivery shall not be affected by, and shall survive, the death or incapacity of the undersigned, and every obligation of the undersigned under this Notice of Guaranteed Delivery shall be binding upon the heirs, executors, administrators, trustees in bankruptcy, personal and legal representatives, successors and assigns of the undersigned.

PLEASE SIGN AND COMPLETE*

Series of Notes*	Certificate Number (if available) or Name of DTC Participant and Participant's DTC Account Number in which Notes are Held**	Principal Amount of Notes Tendered***	Value of Exchange Consideration per \$1,000 Principal Amount in Increments of \$5 (not greater than \$600 or less than \$550)****

Indicate in this box the order (by certificate number) in which Notes are to be exchanged in the event of proration. If you do not designate an order, in the event less than all Notes tendered are exchanged due to proration, Notes will be selected for exchange by the Depository. Attach additional signed list if necessary.

1st: _____ 2nd: _____ 3rd: _____
 4th: _____ 5th: _____

- * Enter the Series of Notes being tendered.
- ** If the space provided is inadequate, list the certificate numbers, principal amounts and value of Exchange Consideration (if any) in respect of Notes being tendered on a separated executed schedule and affix the schedule hereto
- *** Unless otherwise indicated, it will be assumed that the entire aggregate principal amount represented by the Notes specified above is being tendered.
- **** The value of Exchange Consideration must be in multiples of \$5 per \$1,000 principal amount, and not greater than \$600 nor less than \$550 per \$1,000 principal amount in accordance with the terms of the Exchange Offer. Alternatively, if the Holder wishes to maximize the chance that the Company will exchange such Holder's Notes, the Holder should refrain from specifying the value of Exchange Consideration at which the Holder is tendering, in which case, the Holder will accept the value of Exchange Consideration within the Consideration Range selected by the Company in the Exchange Offer. Each Holder of Notes should understand that not specifying the value at which the Notes are being tendered may have the effect of lowering the value of Exchange Consideration for Notes in the Exchange Offer and could result in such Holder's Notes being exchanged at the minimum value of \$550 per \$1,000 principal amount.

Signature(s) of Registered holder(s) or Authorized Signatory: _____

Name(s) of Registered holder(s): _____

Address: _____

Zip Code: _____

Area Code and Telephone No: _____

Date: _____

Check this box if Notes will be delivered by DTC transfer.

Name of Tendering Institution _____

Depository Account No. _____

GUARANTEE

(NOT TO BE USED FOR SIGNATURE GUARANTEE)

The undersigned, a bank, broker, dealer, credit union, savings association or other entity which is a member in good standing of the Securities Transfer Association Medallion Signature Guarantee Program, or an "eligible guarantor institution," (as such term is defined in Rule 17Ad-15 under the Securities Exchange Act of 1934, as amended (the "Exchange Act")), hereby guarantees (i) that the above-named person(s) has a net long position in the Notes being tendered within the meaning of Exchange Act Rule 14e-4, (ii) that such tender of Notes complies with Exchange Act Rule 14e-4 and (iii) to deliver to the Depository at one of its addresses set forth above certificate(s) for the Notes tendered hereby, in proper form for transfer, or a confirmation of the book-entry transfer of the Notes into the Depository's account at The Depository Trust Company, together with a properly completed and duly executed Letter of Transmittal (or a manually signed facsimile thereof) and any other required documents, within three business days after the date of receipt by the Depository.

_____	_____
Name of Eligible Institution Guaranteeing Delivery Address	Authorized Signature
_____	_____
Address	Name (Print Name)
_____	_____
Zip Code	Title
_____	Dated: _____
(Area Code) Telephone No.	

This form is not to be used to guarantee signatures. If a signature on a Letter of Transmittal is required to be guaranteed by an Eligible Institution under the Instructions thereto, such signature guarantee must appear in the applicable space provided in the signature box on the Letter of Transmittal.

NOTE: DO NOT SEND CERTIFICATES FOR NOTES WITH THIS FORM. YOUR CERTIFICATES FOR NOTES MUST BE SENT WITH THE LETTER OF TRANSMITTAL.