EXECUTE SUCCESS℠

CBOE Research Circular #RS13-580

Date: October 25, 2013

To: Permit Holders
From: Scott Speer
RE: Harvard Bioscience, Inc. ("HBIO")
Distribution of Shares of
Harvard Apparatus Regenerative Technology, Inc. ("HART")
Ex-Distribution Date: November 4, 2013

Harvard Bioscience, Inc. ("HBIO") has announced a distribution of shares of Harvard Apparatus Regenerative Technology, Inc. Common Stock. The distribution ratio will be **one-quarter (0.25)** of a share of Harvard Apparatus Regenerative Technology, Inc. ("HART") Common Stock for every **one (1)** share of Harvard Bioscience, Inc. ("HBIO") Common Stock held of record October 21, 2013. The mail date for the distribution will be November 1, 2013. Harvard Apparatus Regenerative Technology, Inc. was admitted to "when issued" trading under the symbol HARTV on the NASDAQ Capital Market on Monday, October 21, 2013. Beginning on October 21, 2013 through November 1, 2013, Harvard Bioscience, Inc. will be trading on the NASDAQ Global Market on a "regular way" basis under the symbol HBIO, and on an "ex-distribution"-"when issued" basis under the symbol HBIOV. Harvard Apparatus Regenerative Technology, Inc. "when issued" trading and Harvard Bioscience, Inc. "ex-distribution"-"when issued" trading will be suspended as of the opening on November 4, 2013. **The ex-date for the distribution will be Monday, November 4, 2013.**

Contract Adjustment

Pursuant to Article VI, Section 11 and 11A of OCC's By-Laws, all HBIO options outstanding as of Monday, November 4, 2013, shall be adjusted to require the per-contract delivery or receipt of the following: **(A) 100 shares of Harvard Bioscience, Inc. ("HBIO") Common Stock; plus (B) 25 shares of Harvard Apparatus Regenerative Technology, Inc. ("HART") Common Stock.** The HBIO option symbol will change to **HBIO1**. Premiums and strike-price amounts for the adjusted HBIO1 options will continue to be calculated on the basis of a multiplier of 100, *i.e.,* for premium and strike-price extensions, 1.00 will equal $100. Strike prices will remain the same. [Any FLEX series that may exist will be adjusted in a similar manner to the standardized option.]

Adjusted Option Symbols

On Monday, November 4, 2013, trading in HBIO series will be on an adjusted basis. At 8:30 A.M., Chicago time, an opening rotation will be effected with the following adjustments:

EXISTING SERIES					ADJUSTED SERIES*			
HBIO	2.50	2013-11-16	C/P	=>	HBIO1	2.50	2013-11-16	C/P
HBIO	5.00	2013-11-16	C/P	=>	HBIO1	5.00	2013-11-16	C/P
HBIO	7.50	2013-11-16	C/P	=>	HBIO1	7.50	2013-11-16	C/P
HBIO	10.00	2013-11-16	C/P	=>	HBIO1	10.00	2013-11-16	C/P
HBIO	2.50	2013-12-21	C/P	=>	HBIO1	2.50	2013-12-21	C/P
HBIO	5.00	2013-12-21	C/P	=>	HBIO1	5.00	2013-12-21	C/P
HBIO	7.50	2013-12-21	C/P	=>	HBIO1	7.50	2013-12-21	C/P
HBIO	10.00	2013-12-21	C/P	=>	HBIO1	10.00	2013-12-21	C/P

EXISTING SERIES					ADJUSTED SERIES*			
HBIO	2.50	2014-02-22	C/P	=>	HBIO1	2.50	2014-02-22	C/P
HBIO	5.00	2014-02-22	C/P	=>	HBIO1	5.00	2014-02-22	C/P
HBIO	7.50	2014-02-22	C/P	=>	HBIO1	7.50	2014-02-22	C/P
HBIO	10.00	2014-02-22	C/P	=>	HBIO1	10.00	2014-02-22	C/P
HBIO	2.50	2014-05-17	C/P	=>	HBIO1	2.50	2014-05-17	C/P
HBIO	5.00	2014-05-17	C/P	=>	HBIO1	5.00	2014-05-17	C/P
HBIO	7.50	2014-05-17	C/P	=>	HBIO1	7.50	2014-05-17	C/P
HBIO	10.00	2014-05-17	C/P	=>	HBIO1	10.00	2014-05-17	C/P

***Any additional HBIO series that are added prior to the ex-date will also be adjusted in the manner described above.**

New Unadjusted Series

To facilitate the maintenance of a fair and orderly market in Harvard Bioscience, Inc. options, new HBIO series with a contract unit of 100 shares will be introduced on Tuesday, November 5, 2013. The HBIO series will be added for November, December, February, and May expirations at exercise prices nearest the money.

Settlement Procedures

The OCC will delay settlement of HBIO1 exercise and assignment activity until the end of "when issued" trading in Harvard Apparatus Regenerative Technology, Inc.

GTC Order Conversion

On Friday, November 1, 2013, immediately after the CBOE close, the system will convert or cancel all resting orders in the HBIO order book. If your firm has requested, all booked orders (phone, wire, and electronic) and all ORS orders residing outside the book (booth or crowd routed) will be converted reflecting the adjustment. If your firm has requested, all booked orders and ORS orders residing outside of the book will be canceled. If your firm receives CXL drops, the CXL confirms will print at your booth at 3:15 p.m. ORS CXLs will also be transmitted electronically to your branches.

A report will be available at the Help Desk listing the orders that are converted or canceled. If converted, this list will also show how the new orders will be adjusted. This report will be available on request anytime during the day prior to the night of the adjustment.

Order Entry After Adjustment

In entering orders, it is essential for member firms to identify trades in old (adjusted) series with the option symbol HBIO1; trades in the new (unadjusted) Harvard Bioscience, Inc. series must have the standard option symbol HBIO. Brokers should make certain that customers entering closing transactions describe the option series with the correct symbol. Negligence in this matter could lead customers to establish new positions in unadjusted series rather than closing out existing positions in adjusted series.

Position and Exercise Limits

The CBOE Department of Market Regulation has determined that: "The position and exercise limits following this stock distribution will remain the same."

Questions regarding this memo can be addressed to Options Industry Services at 1-888-OPTIONS (1-888-678-4667). CBOE contract adjustment memos can also be accessed from CBOE.com at the following web address:

http://www.cboe.com/ContractAdjustments