

ADVANCED CELL TECHNOLOGY, INC.  
Form 424B3  
April 10, 2006

Filed Pursuant to Rule 424(b)(3)  
Registration No. 333-129019

**April 10, 2006**

**Prospectus Supplement No. 2  
To Prospectus Dated December 2, 2005**

**of**

**ADVANCED CELL TECHNOLOGY, INC.  
Relating to**

**20,397,296 SHARES OF COMMON STOCK**

This prospectus supplement supplements our prospectus dated December 2, 2005, relating to the sale by certain selling stockholders of up to 20,397,296 shares of common stock of Advanced Cell Technology, Inc. held by or issuable to the selling stockholders, as follows:

up to 9,685,326 shares of common stock underlying convertible debentures held by certain selling security holders in the aggregate original principal amount of \$22,276,750,

up to 6,004,902 shares issuable upon the exercise of common stock purchase warrants held by certain of the selling security holders, and

in accordance with our contractual obligations, up to an additional 4,707,068 shares issuable upon conversion of the debentures and upon exercise of the warrants.

You should read this supplement in conjunction with the prospectus. This supplement is qualified by reference to the prospectus, except to the extent the information in this supplement supersedes the information contained in the prospectus.

CONVERTIBLE DEBENTURES

We elected to make the monthly redemption payments due on May 1, 2006 under our convertible debentures maturing September 14, 2008, in shares of our common stock. In accordance with the terms of the convertible debentures, the deemed issue price per share will be calculated at 85% of the average of the 10 closing prices immediately prior to the monthly redemption date.

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