



DIVISION OF  
CORPORATION FINANCE

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

December 28, 2010

Kenneth B. Stratton  
General Counsel  
StemCells, Inc.  
3155 Porter Drive  
Palo Alto, CA 94304

**Re: StemCells, Inc.  
Form 10-K for the Fiscal Year Ended December 31, 2009  
Definitive Proxy Statement filed April 13, 2010  
File No. 000-19871**

Dear Mr. Stratton:

We have completed our review of your filings and do not have any further comments at this time.

Sincerely,

Jeffrey Riedler  
Assistant Director