

DISCOVERY LABORATORIES, INC.
SUPPLEMENT DATED April 16, 2004
TO PROSPECTUS DATED AUGUST 11, 2003

This Supplement should be read in conjunction with the Prospectus dated August 11, 2003, contained in Registration Statement No. 333-107836 of Discovery Laboratories, Inc., as amended and supplemented by the Registration Statement and Prospectus on Form S-3/A filed by us on August 21, 2003, and including the exhibits thereto. The Selling Stockholder table contained in such Prospectus, as amended, is supplemented, as set forth below, by (i) adding Kane & Co., as a new Selling Stockholder and (ii) replacing the entries for OppenheimerFunds plc U.S. Emerging Growth Fund, PharmaBio Development Inc., and Qfinance, Inc., with the updated and additional information in the Selling Stockholders table set forth in this Supplement. In connection with its rights under such warrants, OppenheimerFunds has transferred all of its warrants to Kane. PharmaBio Development has exercised its warrant and transferred the underlying shares of common stock to its wholly-owned subsidiary, Qfinance.

Our common stock, par value \$.001 per share, is listed on the Nasdaq SmallCap Market under the symbol "DSCO". On April 14, 2004, the closing sale price for the common stock, as reported on the Nasdaq SmallCap Market, was \$12.02. We advise you to obtain a current market quotation for the common stock.

Neither the SEC nor any state securities commission has approved or disapproved of these securities or determined if this prospectus supplement is truthful or complete. Any representation to the contrary is a criminal offense.

The Selling Stockholders may offer and sell a total of 8,288,369 shares of common stock under the Prospectus. The shares being offered under the Prospectus were acquired by the Selling Stockholders upon the transfer of securities issued in connection with a private placement consummated by us in June 2003. In connection with such private placement, we agreed to register the shares sold in the private placement, including all shares issuable upon warrants issued in the private placement, for the Selling Stockholders and their assignees under the Securities Act of 1933.

The following table sets forth, to our knowledge, based on information provided to us by the Selling Stockholders: the number of shares of common stock owned by the Selling Stockholders; and the number of shares being offered by the Selling Stockholders under the Prospectus.

All information with respect to share ownership in this Supplement has been provided by the Selling Stockholders as of a recent date. Because the Selling Stockholders may have sold, transferred or otherwise disposed of all or a portion of the shares of common stock owned by the Selling Stockholders since the date on which they provided us with the information regarding their respective share ownership in transactions exempt from the registration requirements of the Securities Act, no estimate can be given as to the number of shares of common stock that will be held by the Selling Stockholders after the offering.

The information appearing in the following table supplements or supersedes in part the information in the table under the heading "Selling Stockholders" in the Prospectus and was provided by or on behalf of the entity named below, as of August 21, 2003.

SELLING STOCKHOLDERS

NAME	NUMBER OF SHARES OF COMMON STOCK, NOT INCLUDING WARRANTS, BENEFICIALLY OWNED	NUMBER OF SHARES REPRESENTED BY WARRANTS BENEFICIALLY OWNED	TOTAL NUMBER OF SHARES OF COMMON STOCK OWNED BENEFICIALLY	PERCENTAGE BENEFICIALLY OWNED BEFORE OFFERING	NUMBER OF SHARES TO BE OFFERED FOR THE ACCOUNT OF THE SELLING STOCKHOLDER	NUMBER OF SHARES TO BE OWNED AFTER THIS OFFERING	PERCENTAGE TO BE BENEFICIALLY OWNED AFTER THIS OFFERING
Kane and Co.	0	880	880	0	880	0	*
OppenheimerFunds plc US Emerging Growth Fund	4,400	0	4,400	0	4,400	0	*
Qfinance, Inc. (as nominee for PharmaBio Development Inc.)(1)	1,276,210	840,566	2,116,776	5.43%	938,814	386,057	*
PharmaBio Development Inc. (piggy-back)(1)	1,276,210	840,566	2,116,776	5.43%	791,705	386,057	*

* Less than 1%

(1) The Company has entered into a strategic alliance with Quintiles Transnational Corp, and its affiliate, PharmaBio Development Inc. to develop a sales & marketing capability to commercialize Surfaxin for neonatal indications in the United States.

The information contained in this table reflects "beneficial" ownership of our securities within the meaning of Rule 13d-3 under the Securities Exchange Act of 1934. On March 31, 2004, we had 43,914,649 (not including treasury shares) shares of common stock outstanding. Beneficial ownership information reflected in the table includes shares of common stock issuable upon the exercise of outstanding warrants.

Please keep this supplement with your Prospectus.