

17,500,000 Shares of Common Stock and Warrants to Purchase 49,132,654 of Common Stock

Issuer:

Idera Pharmaceuticals, Inc.

Common stock offered by us:

17,500,000 shares of our common stock. Each share of common stock being sold together with a warrant to purchase one share of common stock.

Warrants offered by us:

Warrants to purchase up to 33,316,327 shares of our common stock. Each warrant will have an exercise price of \$0.47 per share, will be exercisable upon issuance and will expire five years from the date of issuance. In addition, at any time after the second anniversary of the original date of issuance, we may redeem the warrants for \$0.01 per share of common stock issuable on exercise of the warrants following notice to the holder thereof if the closing price of our common stock for 20 or more trading days in a period of 30 consecutive trading days is greater than or equal to \$2.80 (subject to adjustment).

Pre-funded warrants offered by us:

Pre-funded warrants to purchase up to 15,816,327 shares of our common stock. Each pre-funded warrant will have an exercise price of \$0.01 per share, will be exercisable upon issuance and will expire seven years from the date of issuance. In addition, at any time after the second anniversary of the original date of issuance, we may redeem the pre-funded warrants for \$0.01 per share of common stock issuable on exercise of the pre-funded warrants following notice to the holder thereof if the closing price of our common stock for 20 or more trading days in a period of 30 consecutive trading days is greater than or equal to \$2.80 (subject to adjustment).

Pre-funded warrants are being offered to those purchasers, whose purchase of shares of common stock in this offering would result in the purchaser, together with its affiliates and certain related parties, beneficially owning more than 9.9% of our outstanding common stock following the consummation of this offering. In lieu of the shares of our common stock that would result in ownership in excess of 9.9%, such purchasers are purchasing warrants to purchase such excess shares of our common stock.

Public offering price:

\$0.49 per share of our common stock, \$0.01 per share of common stock subject to the warrants to purchase up to 33,316,327 shares of our common stock, and \$0.48 per share of common stock subject to the pre-funded warrants to purchase up to 15,816,327 shares of our common stock.

Underwriting discounts and

commissions:

6.5%

Net proceeds:

We estimate that we will receive net proceeds of approximately \$14.7 million from the sale of the common stock, warrants and pre-funded warrants, after deducting the underwriting discounts and commissions and estimated offering costs payable by us and excluding the proceeds, if any, from the exercise of the pre-funded warrants and warrants issued pursuant to this offering.

Common stock to be outstanding after this offering:

45,142,969 shares of common stock, which is based on 27,642,969 shares outstanding as of December 31, 2012, and excludes:

- 5,657,256 shares of common stock issuable upon exercise of stock options outstanding as of December 31, 2012, at a weighted-average exercise price of \$4.96 per share;
- 2,413,469 shares of common stock reserved as of December 31, 2012 for future issuance under our
 equity incentive plans;
- 1,926 shares of common stock reserved as of December 31, 2012 for issuance upon any conversion
 of our outstanding Series A convertible preferred stock, or Series A preferred stock;
- 6,266,175 shares of common stock reserved as of December 31, 2012 for issuance upon any
 conversion of our outstanding Series D redeemable convertible preferred stock, or Series D preferred
 stock.
- 8,484,840 shares of common stock reserved as of December 31, 2012 for issuance upon any
 conversion of our outstanding Series E convertible preferred stock, or Series E preferred stock; and
- 12,923,892 shares of common stock issuable upon exercise of warrants outstanding as of December 31, 2012, at a weighted average exercise price of \$1.24 per share.

Potential purchases by existing stockholders:

Pillar Pharmaceuticals I, L.P. and Pillar Pharmaceuticals II, L.P., each of which is a current stockholder, or certain of their affiliated funds, have indicated an interest in purchasing an aggregate of 5,000,000 shares of our common stock and warrants to purchase up to 5,000,000 shares of our common stock in this offering at the public offering price. Although we anticipate that these stockholders will purchase, and that the underwriter will sell to these stockholders, all of these shares of common stock and warrants, indications of interest are not binding agreements or commitments to purchase and such stockholders may determine to purchase fewer or no shares of common stock and warrants in this offering and the underwriter may determine to sell fewer or no shares of common stock and warrants in this offering to such stockholders.

Listing:

The shares of Common Stock are listed on the Nasdaq Capital Market under the symbol "IDRA." We do not intend to list the warrants or pre-funded warrants on the Nasdaq Capital Market, any other nationally

recognized securities exchange or any other nationally recognized trading system.

Trade Date: May 2, 2013

Settlement Date: May 7, 2013

Underwriter Piper Jaffray & Co.

We have filed a registration statement (including a prospectus) with the U.S. Securities and Exchange Commission (the "SEC") for the offering to which this communication relates. Before you invest, you should read the prospectus in that registration statement, and other documents that we have filed with the SEC. You may get these documents for free by visiting EDGAR on the SEC website at www.sec.gov. Alternatively, copies of the prospectus may be obtained from Piper Jaffray & Co., Attention: Prospectus Department, 800 Nicollet Mall, J12S03, Minneapolis, MN 55402, via telephone at 800-747-3924 or email at prospectus@pjc.com.