

**PROSPECTUS SUPPLEMENT**  
**(To Prospectus dated July 1, 2022)**



**533,333 Shares of Common Stock and  
Accompanying Series A-1 Warrants to Purchase 533,348 Shares of Common Stock and  
Series A-2 Warrants to Purchase 533,348 Shares of Common Stock  
or  
53,333 Pre-funded Warrants to Purchase 533,333 Shares of Common Stock and  
Accompanying Series A-1 Warrants to Purchase 533,348 Shares of Common Stock and  
Series A-2 Warrants to Purchase 533,348 Shares of Common Stock  
Placement Agent Warrants to purchase 26,668 Shares of Common Stock**

This prospectus supplement updates, supersedes and amends certain information contained in the prospectus, dated July 1, 2022 (the “Prospectus”), relating to the offering of (i) 533,333 shares of common stock, and (ii) Series A-1 and Series A-2 warrants to purchase up to 533,348 shares of common stock, with an exercise price of \$45.00 per share (the “Existing Warrants”), as well as Placement Agent Warrants to purchase 26,668 shares of common stock, with an exercise price of \$56.25 per share. The Existing Warrants have been amended as described below under “Amendments to Existing Warrants.”

This prospectus supplement should be read in conjunction with the Prospectus, and is qualified by reference thereto, except to the extent that the information herein amends or supersedes the information contained in the Prospectus. This prospectus supplement is not complete without, and may only be delivered or utilized in connection with, the Prospectus and any future amendments or supplements thereto. All information included in this prospectus supplement has been adjusted to reflect a 1-for-50 reverse stock split of our common stock effective on April 11, 2023.

Our common stock is listed on The Nasdaq Capital Market under the symbol “AGRX.” The last reported sale price of our common stock on the Nasdaq Capital Market on May 24, 2023 was \$3.94 per share.

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Investing in our securities involves significant risks. Please see “Risk Factors” beginning on page S-5 of the Prospectus and in the documents incorporated by reference into the Prospectus and in our most recent Annual Report on Form 10-K and in our most recent Quarterly Reports on Form 10-Q, and any amendments thereto, which are incorporated by reference into the Prospectus, and under similar headings in the other documents that are filed after the date hereof and incorporated by reference into this prospectus supplement and the Prospectus for a discussion of the factors you should carefully consider before deciding to purchase our common stock.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of the Prospectus, this prospectus supplement or the accompanying prospectus. Any representation to the contrary is a criminal offense.

#### AMENDMENTS TO EXISTING WARRANTS

This Supplement is being filed to disclose the following:

On May 22, 2023, we entered into a securities purchase agreement with an institutional investor (the “Registered Direct Offering”), and the accompanying base prospectus under our registration statement on Form S-1 (Registration No. 333-271249). In connection with the Registered Direct Offering, the Company entered into a warrant amendment agreement (the “Warrant Amendment Agreement”) with the purchaser in the Registered Direct Offering under which the Company agreed to amend certain outstanding warrants to purchase up to an aggregate of 229,669 shares of common stock that were previously issued in October 2021, March 2022, April 2022 and July 2022 to the purchaser, with exercise prices ranging from \$45.00 to \$1,700.00 per share (the “Existing Warrants”), in consideration for their purchase of approximately \$7.5 million of securities in the Registered Direct Offering.

Under the Warrant Amendment Agreement, with respect to Existing Warrants to purchase up to an aggregate of 229,669 shares of common stock held by the institutional investor in the Registered Direct Offering and covered by the Warrant Amendment Agreement, the Company agreed to (i) lower the exercise price of such Existing Warrants to \$3.69 per share and (ii) extend the original expiration date of such Existing Warrants to five years following the closing of the Registered Direct Offering. These amendments will become effective on the closing of the Registered Direct Offering, when each investor has satisfied its purchase commitment to the Company, which is expected to occur on May 25, 2023.

**Prospectus supplement dated May 25, 2023**

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