

PROSPECTUS SUPPLEMENT

(To Prospectus Dated May 2, 2017 and  
Prospectus Supplement Dated August 3, 2017)

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9,090,909 Shares



**Common Stock**

Pursuant to the Sales Agreement dated August 3, 2017 between us and Cowen and Company, LLC, or Cowen, which was filed as an exhibit to our current report on Form 8-K with the Securities and Exchange Commission on August 3, 2017, we sold 9,090,909 shares of our common stock, \$0.001 par value per share, through Cowen acting as our agent, on August 10, 2017, for aggregate gross proceeds of approximately \$30.0 million. Our aggregate net proceeds from such sales were approximately \$28.7 million, after deducting related expenses, including commissions to Cowen of approximately \$0.7 million.

Our common stock is listed on The NASDAQ Global Select Market under the symbol “FLDM.” On August 9, 2017, the last reported sale price of our common stock was \$3.19 per share.

This prospectus supplement should be read in conjunction with, and may not be delivered or utilized without, the prospectus dated May 2, 2017 and the prospectus supplement dated August 3, 2017.

**Our business and an investment in our common stock involve significant risks. These risks are described under the caption “Risk Factors” beginning on page S-6 of the prospectus supplement dated August 3, 2017 and on page 5 of the accompanying prospectus dated May 2, 2017, and in the section captioned “Item 1A—Risk Factors” in our most recently filed annual report on Form 10-K and quarterly report on Form 10-Q.**

**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 this prospectus supplement, the prospectus supplement dated August 3, 2017, or the accompanying prospectus. Any representation to the contrary is a criminal offense.**

**Cowen**

**The date of this prospectus supplement is August 10, 2017.**

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