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

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of report (Date of earliest event reported): March 1, 2018

KINDRED BIOSCIENCES, INC.
(Exact name of registrant as specified in its charter)

Delaware	001-36225	46-1160142
(State or other jurisdiction of incorporation or organization)	(Commission File Number)	(I.R.S. Employer Identification No.)

1555 Bayshore Highway, Suite 200, Burlingame, California 94010
(Address of principal executive offices) (Zip Code)

(650) 701-7901
(Registrant's telephone number, include area code)

N/A
(Former Name or Former Address, if Changed Since Last Report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933(§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company ☒

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☒

Item 2.02 Results of Operations and Financial Condition.

On March 1, 2018, Kindred Biosciences, Inc. (the "Company") issued a press release announcing its financial results for the fiscal year ended December 31, 2017 and recent business developments. A copy of the press release is attached to this Current Report on Form 8-K as Exhibit 99.1 and is incorporated herein by reference.

The information furnished under this Item 2.02, including the accompanying Exhibit 99.1, shall not be deemed to be "filed" for the purposes of Section 18 of the Securities Exchange Act of 1934 (the "Exchange Act"), or otherwise subject to the liability of such section, nor shall such information be deemed to be incorporated by reference in any subsequent filing by the Company under the Securities Act of 1933 or the Exchange Act, regardless of the general incorporation language of such filing, except as specifically stated in such filing.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

Exhibit No.	Description
99.1	Press Release of Kindred Biosciences, Inc. issued on March 1, 2018.

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

KINDRED BIOSCIENCES, INC.

Date: March 1, 2018

By: /s/ Wendy Wee
Wendy Wee
Chief Financial Officer

EXHIBIT INDEX

Exhibit No.	Description
99.1	Press Release of Kindred Biosciences, Inc. issued on March 1, 2018.

Kindred Biosciences Announces Fourth Quarter and Full Year 2017 Financial Results

San Francisco, CA (March 1, 2018) Kindred Biosciences, Inc. (NASDAQ: KIN), a biopharmaceutical company focused on saving and improving the lives of pets, today announced financial results for the fourth quarter and full year ended December 31, 2017 and provided updates on its programs.

"We continue to look forward to the upcoming approval of our lead product candidates, Mirataz and Zimeta, as we build an exceptional commercial organization," stated Richard Chin, M.D., President and CEO of KindredBio. "2017 was marked by our third consecutive positive pivotal study, highlighting the strength of our team and our business model. We are also pleased with the continued progress of our biologics portfolio and of our biologics manufacturing capabilities."

Development and Corporate Updates

- Based on regulatory feedback to date, KindredBio continues to expect approval of Mirataz™ (mirtazapine transdermal ointment). The Company has received the technical section complete letter for effectiveness from the FDA and the agency does not have any additional safety-related questions, indicating that the section is effectively complete. KindredBio has responded to the one remaining question from the FDA regarding Chemistry, Manufacturing and Controls (CMC) and continues to expect approval in the first or possibly second quarter of 2018. Regulatory approval is subject to the typical risks inherent in such a process. Preparations for the commercial launch remain on track.

- In December 2017, the Company submitted the European Marketing Authorization application for Mirataz to the European Medicines Agency (EMA). The EMA officially accepted the submission for review on December 21, 2017.

  Mirataz is expected to be the first FDA-approved product for the management of weight loss in cats, a serious and potentially fatal condition that is the leading cause of visits to the veterinarian for cats.

- KindredBio continues to expect approval of Zimeta™ (dipyrone injection) for the control of pyrexia (fever) in horses in the first or second quarter of 2018. KindredBio has received the technical section complete letters for effectiveness and safety from the FDA and responded to additional comments regarding the CMC technical section. Regulatory approval is subject to the typical risks inherent in such a process. Preparations for the commercial launch remain on track.
  The Company has executed a commercial manufacturing agreement with Corden Pharma SPA for the manufacture of Zimeta, that provides for production to supply initial launch and future commercial campaigns with capabilities to meet excess demand.

  Zimeta is expected to be the first FDA-approved product for the control of fever in horses, a significant unmet medical condition that affects millions of horses each year.

- The pivotal field effectiveness study for Zimeta Oral is completed and KindredBio announced positive topline results in December 2017.

  KindredBio has completed the in-life portion of the Target Animal Safety Study and is analyzing the data. The Company anticipates submitting the effectiveness and safety technical sections of the NADA in the first half of 2018, and the CMC technical section by the end of 2018, assuming the data are supportive of approval.

Zimeta Oral, which is an oral gel, is expected to expand use of the drug and build upon the success of Zimeta IV.

- The pilot field effectiveness study of KIND-011, an anti-TNF monoclonal antibody targeting sick or septic foals, has been completed, with positive results. The Company plans to discuss the development plan with the FDA and pursue additional development of the indication.
  Sepsis in foals can cause up to 50% mortality and is an important unmet medical need. There is currently no FDA-approved therapy.

- The pilot field effectiveness study of the enhanced version of epoCat™ (long-acting feline recombinant erythropoietin) for the control of non-regenerative anemia in cats has been initiated and enrollment is ongoing. epoCat is a recombinant protein that has been specially engineered by KindredBio with a prolonged half-life compared to endogenous feline erythropoietin. The PK data suggest that the molecule may have a sufficiently long half-life to allow for once-monthly dosing.
  Anemia is a common condition in older cats which is often associated with chronic kidney disease, resulting in decreased levels of endogenous erythropoietin. Chronic kidney disease can affect approximately half of older cats.

- Based on the positive results of previous pilot studies, KindredBio has initiated or is in the process of initiating pilot field effectiveness studies for several molecules for atopic dermatitis, including fully caninized anti-IL31 antibody, fully-caninized anti-IL17 antibody and canine anti-IL4/IL13 SINK molecule. KindredBio is pursuing a multi-pronged approach toward atopic dermatitis, with a portfolio of promising biologics.
  Atopic dermatitis is an immune-mediated inflammatory skin condition in dogs. It is one of the most common skin diseases in dogs and represents a significant unmet medical need, with the two lead products in the market expected to reach combined sales of over $500 million per year.

- The pilot field safety study of KIND-014 for the treatment of equine gastric ulcers has been completed and KIND-014 was well-tolerated. KindredBio has completed dose-range finding and palatability studies and, based on the study results, the Company has advanced two formulations into pilot field studies. The pilot studies have been initiated and the Company expects to complete the review of data by the end of the second quarter to determine which formulation will move into a pivotal field study, assuming the data support further development.
- A pilot field study assessing oral tolerability and palatability of KIND-015 for the management of clinical signs associated with equine metabolic syndrome has been completed. The Company has optimized the formulation for KIND-015 and has initiated a pilot field effectiveness study.
- KindredBio's GMP manufacturing capabilities in Burlingame, California is fully commissioned and has commenced GMP manufacturing of epoCat. The Company has also completed the design and construction plans for biologics manufacturing lines in the Elwood, Kansas facility it acquired in August 2017. The facility includes approximately 180,000 square feet with clean rooms, utility, equipment, and related quality documentation suitable for small molecule and biologics manufacturing. Construction is expected to start shortly.

Fourth Quarter and Full Year 2017 Financial Results

For the quarter ended December 31, 2017, KindredBio reported a net loss of $9.7 million, or $0.35 per share, compared to a net loss of $5.8 million, or $0.29 per share, for the same period in 2016. Research and development expenses for the fourth quarter of 2017 totaled $5.1 million, compared to $3.5 million for the same period in 2016. General and administrative expenses for the fourth quarter of 2017 were $4.8 million, compared to $2.4 million for the same period in 2016.

For the year ended December 31, 2017, KindredBio reported a net loss of $30.9 million, or $1.23 per share, versus a net loss of $22.5 million, or $1.13 per share, for the same period in 2016.

Research and development expenses for the year ended December 31, 2017 were $17.7 million, compared to $13.9 million in 2016. Stock-based compensation expense related to research and development was $1.7 million, versus $1.5 million in 2016. The $3.8 million year-over-year increase in research and development expenses was primarily due to higher headcount and related expenses as the Company advances its biologics programs. In addition, increased clinical trial costs related to the pivotal field effectiveness study of Zimeta Oral, and higher biologics manufacturing as well as lab supplies expenses (including other operations expenses) drove research and development expenses higher.

General and administrative expenses for the year ended December 31, 2017 were $14.0 million, compared to $8.3 million in 2016. General and administrative stock-based compensation expense was $3.6 million in 2017, versus $2.2 million in 2016. The $5.7 million increase in general and administrative expenses was related to increased headcount, including higher marketing and corporate expenses as KindredBio initiated pre-launch activities and the build-out of a small commercial team. In addition, higher stock-based compensation and corporate infrastructure costs also contributed to the increase in expenses.

As of December 31, 2017, KindredBio had $82.5 million in cash, cash equivalents and investments. Net cash used in operating activities for 2017 was approximately $21.9 million. The Company also invested approximately $5.9 million in capital expenditures for the purchase of its Elwood, Kansas facility and the build-out of its GMP biologics manufacturing facility in Burlingame, CA.

With respect to spending in 2018, the Company is preparing for the commercial launches of Mirataz and Zimeta including the scale up of a commercial team, and will continue to spend on its core pipeline and programs. For 2018 the Company expects operating expenses of between $44 million and $48 million, excluding the impact of stock-based compensation expense and the impact of acquisitions, if any. The revenues for Mirataz and Zimeta will have a substantial impact on cash utilization and expenses.

Webcast and Conference Call

KindredBio will host a conference call and webcast today at 4:30 p.m. Eastern Time / 1:30 p.m. Pacific Time. Interested parties may access the call by dialing toll-free (855) 433-0927 from the US, or (484) 756-4262 internationally, and using conference ID 8962269. The call will be webcast live at https://edge.media-server.com/m6/p/w3hyojgg. A replay will also be available at that link for 30 days.

About Kindred Biosciences

Kindred Biosciences is a pre-commercialization stage biopharmaceutical company focused on saving and improving the lives of pets. Its mission is to bring to pets the same kinds of safe and effective medicines that human family members enjoy. The Company's strategy is to identify compounds and targets that have already demonstrated safety and effectiveness in humans and to develop therapeutics based on these validated compounds and targets for dogs, cats and horses. The Company has a deep pipeline of novel drugs and biologics in development across many therapeutic classes.

For more information or to download the corporate presentation, visit www.KindredBio.com/LearnMore. Stay connected with KindredBio on Facebook at www.Facebook.com/KindredBio.

Forward-Looking Statements

This press release contains forward-looking statements within the meaning of the U.S. Private Securities Litigation Reform Act of 1995. All statements contained in this press release that do not relate to matters of historical fact should be considered forward-looking statements, including, but not limited to, statements regarding our expectations about the trials, regulatory approval, manufacturing, distribution

and commercialization of our current and future product candidates, and statements regarding our anticipated revenues, expenses, margins, profits and use of cash.

These forward-looking statements are based on our current expectations. These statements are not promises or guarantees, but involve known and unknown risks, uncertainties and other important factors that may cause our actual results to be materially different from any future results expressed or implied by the forward-looking statements. These risks include, but are not limited to, the following: our limited operating history and expectations of losses for the foreseeable future; the absence of significant revenue from our product candidates for the foreseeable future; our potential inability to obtain any necessary additional financing; our substantial dependence on the success of our lead product candidates, which may not be successfully commercialized even if they are approved for marketing; the effect of competition; our potential inability to obtain regulatory approval for our existing or future product candidates; our dependence on third parties to conduct some of our development activities; our dependence upon third-party manufacturers for supplies of our product candidates; uncertainties regarding the outcomes of trials regarding our product candidates; our potential failure to attract and retain senior management and key scientific personnel; uncertainty about our ability to develop a satisfactory sales organization; our significant costs of operating as a public company; our potential inability to obtain patent protection and other intellectual property protection for our product candidates; potential claims by third parties alleging our infringement of their patents and other intellectual property rights; our potential failure to comply with regulatory requirements, which are subject to change on an ongoing basis; the potential volatility of our stock price; and the significant control over our business by our principal stockholders and management.

For a further description of these risks and other risks that we face, please see the risk factors described in our filings with the U.S. Securities and Exchange Commission (the SEC), including the risk factors discussed under the caption "Risk Factors" in our Annual Report on Form 10-K and any subsequent updates that may be contained in our Quarterly Reports on Form 10-Q filed with the SEC. As a result of the risks described above and in our filings with the SEC, actual results may differ materially from those indicated by the forward-looking statements made in this press release. Forward-looking statements contained in this press release speak only as of the date of this press release and we undertake no obligation to update or revise these statements, except as may be required by law.

Contact

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Kindred Biosciences, Inc.
Statements of Operations
(In thousands, except per share amounts)

	Three Months Ended December 31,		Twelve Months Ended December 31,	
	2017	2016	2017	2016
	(Unaudited)			
Operating costs and expenses:				
Research and development	5,142	3,509	17,665	13,861
General and administrative	4,820	2,401	13,988	8,308
Restructuring costs	-	-	-	655
Total operating costs and expenses	9,962	5,910	31,653	22,824
Loss from operations	(9,962)	(5,910)	(31,653)	(22,824)
Interest and other income, net	232	101	774	325
Net loss	$ (9,730)	$ (5,809)	$ (30,879)	$ (22,499)
Basic and diluted net loss per common share	$ (0.35)	$ (0.29)	$ (1.23)	$ (1.13)
Shares used to calculate basic and diluted net loss per common share	27,915	19,900	25,084	19,873

Selected Balance Sheet Data
(In thousands)
(Unaudited)

	December 31,	
	2017	2016
Cash, cash equivalents and investments	$ 82,519	$ 57,807
Total assets	90,822	61,576
Stockholders' equity	84,680	57,680