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): January 14, 2019

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 8.01 Other Events.

On January 14, 2019, Kindred Biosciences, Inc. issued a press release announcing positive topline results from its pilot field effectiveness study of epoCat™ for the management of non-regenerative anemia in cats and the availability of Mirataz® at Banfield Pet Hospital. 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.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

Exhibit No.	Description
99.1	Press Release of Kindred Biosciences, Inc. issued on January 14, 2019.

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: January 14, 2019

By: /s/ Richard Chin
Richard Chin
Chief Executive Officer

Exhibit 99.1

Kindred Biosciences Announces Positive Results from Pilot Field Effectiveness Study of epoCat™ for the Management of Non-Regenerative Anemia in Cats and Availability of Mirataz® at Banfield Pet Hospital

SAN FRANCISCO, Jan. 14, 2019 /PRNewswire/ -- Kindred Biosciences, Inc. (KIN), a commercial-stage biopharmaceutical company focused on saving and improving the lives of pets, today announced positive topline results from its pilot field effectiveness study of epoCat (KIND-510a), a long-acting feline recombinant erythropoietin that is being developed for the management of anemia in cats.

In the study, which enrolled 23 cats with anemia, epoCat rapidly increased mean hematocrit (a measure of red blood cell count), with statistically significant improvement seen as early as Week 1 ($p<0.0001$). The effect was sustained, with continued statistically significant improvement at Weeks 2, 3, 4, 5, and 6 ($p<0.0001$ at each visit). Compared to baseline, the mean peak improvement in hematocrit was 55.4%.

In addition, 95.5% of the 22 evaluable patients achieved treatment success over the 6-week treatment period, defined prospectively as either a 30% increase in hematocrit value over baseline or the hematocrit value reaching normal range. Furthermore, cats treated with epoCat demonstrated statistically significant improvements over baseline ($p<0.01$ to $p<0.05$) across all three health-related quality of life (QoL) domains, Vitality, Comfort, and Emotional Wellbeing, as measured by a validated QoL instrument. Based on a preliminary review of the safety data, the drug appears to be well tolerated.

The Company plans to commence a pivotal study this year and is currently in discussions with the Food and Drug Administration (FDA) regarding study design. The FDA has agreed to accept hematocrit as the primary endpoint for the pivotal study.

epoCat is a recombinant feline erythropoietin that has been engineered by KindredBio to have a prolonged half-life. Erythropoietin is an endogenous protein that regulates and stimulates production of red blood cells.

Anemia is a common condition that is estimated to afflict millions of older cats. It is often associated with chronic kidney disease, because kidneys produce erythropoietin and chronic kidney disease leads to decreased levels of endogenous erythropoietin. Chronic kidney disease affects approximately half of older cats, making it a leading cause of feline mortality. Human erythropoietins, which are multi-billion dollar products in the human market, are immunogenic in cats.

“Feline anemia is an important unmet medical need. Currently, there are no approved treatment options for this disease and we are impressed with these results,” stated Richard Chin, CEO of KindredBio. “We look forward to helping patients, and we believe epoCat has the potential to be a major commercial success. This is our third consecutive positive efficacy study in our biologics pipeline, following positive efficacy results in the IL31 antibody study in canine atopic dermatitis and in the TNF antibody study in septic foals. This reinforces our position as a market leader in the veterinary biologics space.”

In addition, KindredBio announced that Mirataz® (mirtazapine transdermal ointment) is now available for order at Banfield Pet Hospital. Furthermore, the Company has established a partnership with the American Animal Hospital Association to provide ongoing education efforts to its more than 43,000 members.

“The inclusion of Mirataz in the two largest U.S. corporately owned veterinary groups of pet hospitals within six months of launch is a testament to our commercial team,” said Denise Bevers, President and COO of KindredBio. “We are pleased to have achieved our 2018 goal of having Mirataz in one third of veterinary clinics, and to have delivered strong revenue growth quarter-over-quarter. We are likewise encouraged by healthy reorder trends by both clinics and distributors, and positive customer feedback to date. We look forward to presenting a comprehensive financial overview and more detail on these positive study results in our year-end call.”

KindredBio will hold its fourth quarter 2018 financial call on Wednesday, March 6, 2019. Details for the conference call and webcast will be forthcoming.

About Kindred Biosciences

Kindred Biosciences is a commercial-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 efficacy 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. KindredBio's first approved drug is Mirataz® (mirtazapine transdermal ointment) for the management of weight loss in cats.

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.

Important Safety Information

Mirataz® (mirtazapine transdermal ointment) is for topical use in cats only under veterinary supervision. Do not use in cats with a known hypersensitivity to mirtazapine or any of the excipients or in cats treated with monoamine oxidase inhibitors (MAOIs). Not for human use. Keep out of reach of children. Wear gloves to apply and wash hands after. Avoid contact with treated cat for 2 hours following application. The most common adverse reactions include application site reactions, behavioral abnormalities (vocalization and hyperactivity) and vomiting. Please see the full Prescribing Information.

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.

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