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): June 2, 2021

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, including 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))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol	Name of each exchange on which registered
Common Stock, $0.0001 par value	KIN	The NASDAQ Stock Market LLC
Preferred Stock Purchase Rights	KIN	The NASDAQ Stock Market LLC

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. o

Item 8.01 Other Events.

On June 2, 2021, Kindred Biosciences, Inc. issued a press release announcing positive results from a pivotal efficacy study of its parvovirus monoclonal antibody (KIND-030) in dogs infected by parvovirus. 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.

Exhibit No.	Description
99.1	Press Release of Kindred Biosciences, Inc. issued on June 2, 2021
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

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: June 2, 2021

By: /s/ Richard Chin
Richard Chin, M.D.
Chief Executive Officer

Exhibit 99.1

Kindred Biosciences Announces Positive Results from Pivotal Efficacy Study of Parvovirus Monoclonal Antibody for the Prevention of Deaths in Dogs Infected by Parvovirus

- Study demonstrated 100% survival in dogs treated with KIND-030, even in the absence of any supportive care, versus 43% survival in dogs treated with placebo

San Francisco, California (June 2, 2021) - Kindred Biosciences, Inc. (NASDAQ: KIN), a biopharmaceutical company focused on saving and improving the lives of pets, today announced positive results from a pivotal efficacy study of KIND-030 in dogs infected by parvovirus. The primary endpoint was survival and the results showed 100% survival in the treated group versus 43% survival in the placebo group.

KIND-030, a monoclonal antibody targeting canine parvovirus (CPV), is partnered with Elanco Animal Health (NYSE: ELAN).

In this randomized, blinded, placebo-controlled study, KIND-030 was administered to dogs after they tested positive for CPV infection. The primary endpoint of the study was met. The parvovirus challenge resulted in 57% mortality rate in the control dogs compared to 0% mortality rate in the KIND-030 treated dogs. The dogs did not receive any supportive care or other treatments.

"Parvovirus is a devastating disease currently without any available treatment," said KindredBio's Chief Executive Officer, Richard Chin, M.D. "With 100% efficacy, we believe KIND-030 has the potential to revolutionize the care of these dogs. Instead of a lengthy and expensive hospitalization that is frequently ineffective and can leave the dog with permanent disabilities, the infected dogs can now be treated with a single injection without need for additional supportive care or hospitalization."

“We are excited to partner with KindredBio on this revolutionary treatment that can significantly improve the health and well-being of dogs," said Jeff Simmons, president and CEO of Elanco Animal Health, "With our significant global reach and access to veterinarians and pet owners around the world, Elanco looks forward to leveraging our capabilities and skilled team of experts to advance and commercialize this novel treatment for pets globally.”

With this positive study, KIND-030 has now demonstrated efficacy in both indications being pursued: prophylactic therapy to prevent clinical signs of canine parvovirus infection, and treatment of established parvovirus infection. Results from the pivotal efficacy study for the therapeutic claim are expected to be submitted to the United States Department of Agriculture (USDA) in June, with possible approval by year-end 2021.

CPV is the most significant and contagious viral cause of enteritis in dogs, especially puppies, with mortality rates as high as 91% if untreated. There are currently no Food and Drug Administration or USDA approved treatments for CPV, nor any other available treatment. Veterinary intervention is limited to supportive care, which can cost owners up to thousands of dollars per puppy, with an average cost of $1,200.

Canine parvovirus is most often seen in puppies less than 6 months of age, but can occur in unvaccinated dogs of any age. Clinical signs often include depression, not eating, vomiting, and profuse diarrhea which is often blood tinged[1]. Banfield estimates that there are approximately 250,000 parvo cases in the U.S. each year, excluding emergency hospitals, shelters, specialty hospitals, or undiagnosed cases[2].

KIND-030 binds to critical portions of the virus, preventing the virus from entering into cells.

On April 28, 2021 KindredBio announced acceptance of the parvovirus antibody prophylaxis study data and approval of the efficacy indication by the USDA Center for Veterinary Biologics. The

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[1] American Kennel Club Canine Health Foundation. Canine Parvovirus Information for Dog Owners. June 2018. Available from: http://www.akcchf.org/canine-health/top-health-concerns/current-topics-in-infectious-disease/AKC-CHF-Canine-Parvovirus-Fact-Sheet.pdf [Access Date: Sept. 14, 2020].

[2] 2014 Banfield State of Pet Health report compiled from the medical data of 2.3 million dogs treated at Banfield Pet Hospitals 2013.

pivotal efficacy data for the prophylactic indication demonstrated that 0% of the KIND-030 treated dogs developed parvovirus infection while 100% of the placebo-control dogs developed the disease, and also showed 100% survival rate in KIND-030.

Regulatory approval and review timeline are subject to the typical risks inherent in such a process. The results of the pivotal efficacy study for the therapeutic claim stated in this press release have not been reviewed by the USDA Center for Veterinary Biologics.

About Kindred Biosciences

Kindred Biosciences is a biopharmaceutical company developing innovative biologics 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 targets that have already demonstrated safety and efficacy in humans and to develop therapeutics based on these validated targets for dogs and cats. KindredBio has a deep pipeline of novel biologics in development across many therapeutic classes, alongside state-of-the-art biologics manufacturing capabilities and a broad intellectual property portfolio.

For more information, visit: www.kindredbio.com

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 products and our product candidates for the foreseeable future; the likelihood that our revenue will vary from quarter to quarter; our potential inability to obtain any necessary additional financing; our substantial dependence on the success of our products and 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 related to our products and our product candidates and the potential inability of these manufacturers to deliver a sufficient amount of supplies on a timely basis; the uncertain effect of the COVID-19 pandemic on our business, results of operations and financial condition; 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 enter into satisfactory agreements with third-party licensees of our biologic products and uncertainty about the amount of revenue that we will receive from such agreements; our significant costs of operating as a public company; potential cyber-attacks on our information technology systems or on our third-party providers' information technology systems, which could disrupt our operations; our potential inability to repay the secured indebtedness that we have incurred from third-party lenders, and the restrictions on our business activities that are contained in our loan agreement with these lenders; the risk that our 2020 strategic realignment and restructuring plans will result in unanticipated costs or revenue shortfalls; uncertainty about the amount of royalties that we will receive from the sale of Mirataz® to Dechra Pharmaceuticals PLC; the risk that the revenue from our delivery of services or products under any contract may be less than we anticipate if the other party to the contract exercises its right to terminate the contract prior to the completion of the contract or if such party is unable or unwilling to satisfy its payment obligations under the contract; our potential inability to obtain and maintain patent protection

and other intellectual property protection for our products and 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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