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 17, 2021

DIFFUSION PHARMACEUTICALS INC.

(Exact name of registrant as specified in its charter)

Delaware	**000-24477**	**30-0645032**
(State or other jurisdiction of incorporation)	(Commission File Number)	(I.R.S. Employer Identification No.)

1317 Carlton Avenue, Suite 200 **Charlottesville, Virginia**	**22902**
(Address of principal executive offices)	(Zip Code)

(434) 220-0718
(Registrant's telephone number, including area code)

Not applicable
(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(s)	Name of each exchange on which registered
Common Stock, par value $0.001 per share	DFFN	NASDAQ Capital Market

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 17, 2021, Diffusion Pharmaceuticals Inc. (the "Company") issued a press release announcing financial results for its fourth quarter and fiscal year ended December 31, 2020. A copy of that press release is attached hereto as Exhibit 99.1 and incorporated herein by reference.

The information included in or incorporated by reference into this Item 2.02 (including Exhibit 99.1) is being furnished pursuant to Item 2.02 of Form 8-K and shall not be deemed to be "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to the liabilities of that section, nor shall it be deemed to be incorporated by reference in any filing under the Securities Act of 1933, as amended, or the Exchange Act.

Item 9.01 – Financial Statements and Exhibits

(d) Exhibits

Exhibit Number	Description
99.1	Press Release, issued March 17, 2021, announcing financial results for the fourth quarter ended December 31, 2020 and business update

SIGNATURES

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

Dated: March 17, 2021

DIFFUSION PHARMACEUTICALS INC.

By: /s/ William Elder
Name: William Elder
Title: General Counsel

Diffusion Pharmaceuticals Reports 2020 Financial Results and Provides Business Update

CHARLOTTESVILLE, Va., March 17, 2021 -- **Diffusion Pharmaceuticals Inc. (NASDAQ: DFFN)** ("Diffusion" or the "Company"), an innovative biopharmaceutical company developing novel therapies that enhance the body's ability to deliver oxygen to areas where it is needed most, today announced financial results for 2020 and provided a business update.

Business and financial highlights during 2020 and 2021 year-to-date include:

- **Strengthened management team**: Appointed Robert Cobuzzi, Jr., Ph.D., President and Chief Executive Officer and director, Christopher Galloway, M.D., Chief Medical Officer, and William Elder, General Counsel. Also added Jane H. Hollingsworth to the Company's Board of Directors
- **Advanced development of trans sodium crocetinate ("TSC"):** During 2020, the Company initiated its Phase 1b lead-in trial of 24 hospitalized COVID-19 patients. The trial was designed to evaluate the safety and tolerability of TSC when administered every six hours for up to 15 days, a previously untested dosing regimen. The company completed dosing and reported topline results from the study in February 2021. Results indicated that no dose-limiting toxicities or serious adverse events were observed in the trial
    - The Phase 1b represents the first major step towards solidifying a redefined TSC development strategy that the company announced in November 2020
    - In 2021, the company will execute three oxygenation studies, described below
- **Enhanced Financial Stability:** As of December 31, 2020, the Company had $18.5 million in cash and cash equivalents. As of March 16, 2021, approximately $36.7 million in additional, aggregate gross proceeds have been received by the Company during the first quarter of 2021 through a common stock offering in February 2021 and the cash exercise of certain previously outstanding warrants

"There is no doubt that 2020 was a challenging year, but it was also a transformational year for Diffusion. We formed a new executive team, initiated and advanced our Phase 1b study of TSC in hospitalized COVID-19 patients, and concurrently redefined the clinical development pathway for TSC in an effort to maximize the probability of clinical and regulatory success," said Robert Cobuzzi, President and Chief Executive Officer of Diffusion. "The momentum we gained exiting 2020 has continued into 2021. We have completed the study of TSC in hospitalized COVID-19 patients, designed a series of three clinical trials to be conducted during 2021 to evaluate the effects of TSC on oxygenation, and secured the company's financial position by completing our $34.5 million equity raise."

Near Term Strategy

In an effort to support further, robust clinical development of TSC, the Company intends to undertake a prospective exploration of the relationship between the level of TSC exposure (dose) and response (change in oxygenation) by conducting three short-term clinical trials in the United States during 2021, all of which the Company expects to be able to fund with cash-on-hand.

The Company believes positive data from any one or more of these three Oxygenation Trials will provide evidence of a definitive effect of TSC on oxygenation, whether through increased uptake in the lungs, enhanced delivery, increased utilization at the tissue level, or some combination thereof.

- **TCOM Trial:** The first of the three Oxygenation Trials, which we expect to initiate imminently, will evaluate the effects of TSC on peripheral tissue oxygenation using a transcutaneous oxygen monitoring ("TCOM") device. The TCOM device directly measures the release of oxygen from the blood vessels through the skin and is commonly used to predict the likelihood of wound healing, the potential for success with hyperbaric therapy, and to map the appropriate location for limb amputation.

  The TCOM Trial is designed to evaluate single, ascending, randomized doses of TSC to establish the exposure-response relationship between TSC and enhanced oxygen delivery. We anticipate this study will be completed in the second quarter of 2021, with top line results available within two months of study completion.

- **Hypoxia Trial:** The second planned trial is the Hypoxia Trial, which we expect to initiate in the third quarter of 2021. This trial will evaluate the effects of TSC on maximal oxygen consumption (VO2), and partial pressure of blood oxygen (PaO2), in normal healthy volunteers exposed to conditions that induce hypoxia.

  Trial participants will engage in incremental levels of physical exertion while exposed to hypoxic and hypobaric conditions. The primary endpoints will be change from baseline in VO2 and PaO2 after receiving a single intravenous dose of TSC. We anticipate this study will be completed in the second half of 2021, with topline results available within two months of study completion.

- **DLCO Trial:** The third trial is designed to evaluate the effects of TSC on the diffusion of carbon monoxide through the lungs ("DLCO") in patients with previously diagnosed interstitial lung disease who have a baseline DLCO test result that is abnormal. We expect to initiate the DLCO Trial in the third quarter of 2021. DLCO testing is commonly performed as part of standard pulmonary function testing and aids in the diagnosis of dyspnea, also known as shortness of breath, as well as to track improvement or progression over time on prescribed treatments.

Diffusion Pharmaceuticals Inc.

In this trial, DLCO will act as a surrogate measure of oxygen transfer efficiency, or uptake, from the alveoli of the lungs, through the plasma, and onto hemoglobin within red blood cells. The DLCO Trial will test single, ascending doses of TSC in an attempt to establish the exposure-response relationship between TSC and oxygen transfer efficiency. We anticipate this study will be completed in the second half of 2021, with top line results available within two months of study completion.

Outcomes from one or each of these Oxygenation Trials will inform the company's go-forward TSC clinical development path, focusing on the demonstration of clinical and therapeutic benefits of TSC in relevant patient populations across the hypoxia continuum. Assuming success in one or more of the three Oxygenation Trials, the Company expects to identify and announce the specific, hypoxia-related indication it will target, in the fourth quarter of 2021. The Company then plans to initiate a Phase 2, controlled, clinical outcome study evaluating TSC in one or more appropriate hypoxia-related indications in the first half of 2022.

2020 Financial Results

As of December 31, 2020, Diffusion had cash and cash equivalents of $18.5 million as compared to $14.2 million as of December 31, 2019. Net cash used in operating activities during 2020 was $13.6 million, compared to $9.9 million used during 2019. During 2020, the Company raised $12.0 million in gross proceeds through its May 2020 offering of common stock and an additional $8.0 million in gross proceeds through the exercise of certain previously outstanding warrants.

An additional $36.7 million in aggregate gross proceeds have been received by the company thus far during the first quarter of 2021, through its common stock offering in February 2021 and the exercise of certain previously outstanding warrants. As of March 16, 2021, the Company believes it has adequate cash resources to continue operations through 2023, including expenditures related to the three Oxygenation Trials and its planned Phase 2 trial in a hypoxia-related indication.

Research and development expenses were $9.4 million for 2020, compared to $6.6 million for 2019. The increase was primarily attributable to the company's clinical trial evaluating TSC in hospitalized COVID-19 patients, which resulted in a $1.1 million uptick in manufacturing costs and a $2.2 million increase in clinical trial and other R&D related expenses.

General and administrative expenses were $6.4 million for 2020, compared to $4.8 million for 2019. The Increase was largely driven by a $0.7 million increase in professional fees and a $0.9 million increase in salaries, wages, and stock-based compensation, including certain non-recurring expenses related to the retirement and separation of Diffusion's former executives during 2020. Diffusion reported a net loss of $14.2 million in 2020, compared to a net loss of $11.8 million in 2019.

Additional information and financial statements can be found in the 10K filed with the SEC on March 17, 2021, which can be found on the Diffusion website at: https://investors.diffusionpharma.com/sec-filings/,
or on Edgar at: https://www.sec.gov/edgar/browse/?CIK=1053691&owner=exclude

About Diffusion Pharmaceuticals Inc.
Diffusion Pharmaceuticals Inc. is an innovative biopharmaceutical company developing novel therapies that enhance the body's ability to deliver oxygen to areas where it is needed most. Diffusion's lead product candidate, TSC, is being developed to enhance the diffusion of oxygen to tissues with low oxygen levels, also known as hypoxia, a serious complication of many of medicine's most intractable and difficult-to-treat conditions. In addition to TSC, Diffusion's product candidate DFN-529, a novel, allosteric PI3K/Akt/mTOR Pathway inhibitor, is in early-stage development. For more information, please visit us at www.diffusionpharma.com.

Forward-Looking Statements
This press release includes express and implied forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, as amended, including regarding the Company's anticipated cash runway, its near-term strategic priorities, and anticipated timelines for the initiation, completion, and announcement of data from the Company's [ongoing and] planned oxygenation trials. The Company may, in some cases, use terms such as "believes," "estimates," "anticipates," "expects," "plans," "intends," "may," "could," "might," "will," "should," "approximately," or other words that convey uncertainty of future events or outcomes to identify these forward-looking statements. Although the Company believes that it has a reasonable basis for each forward-looking statement contained herein, forward-looking statements by their nature involve risks and uncertainties, known and unknown, many of which are beyond the Company's control, and as a result the Company's actual results could differ materially from those expressed or implied in any forward-looking statement. Particular risk and uncertainties include, among other things, those related to: the Company's ability to design, initiate, enroll, execute, and complete its ongoing and planned studies evaluating TSC; general economic, political, business, industry, and market conditions, including the ongoing COVID-19 pandemic; and the other factors discussed under the heading "Risk Factors" in the Company's filings most recent Annual Report on Form 10-K and other filings with the U.S. Securities and Exchange Commission. Any forward-looking statements in this press release speak only as of the date hereof (or such earlier date as may be identified) and, except as required by applicable law, rule, or regulation, the Company undertakes no obligation to update any such statements after the date hereof.

Diffusio$_2$n Pharmaceuticals Inc.

Contacts
Investors:
Tiberend Strategic Advisors, Inc.
Maureen McEnroe, CFA/Miriam Weber Miller
(212) 375-2664 / (212) 375-2694
mmcenroe@tiberend.com / mmiller@tiberend.com

Media:
Jeffrey Freedman
RooneyPartners
(646) 432-0191
jfreedman@rooneyco.com