

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): May 20, 2020

DIFFUSION PHARMACEUTICALS INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of incorporation)

000-24477
(Commission File
Number)

30-0645032
(I.R.S. Employer
Identification No.)

1317 Carlton Avenue, Suite 200
Charlottesville, Virginia
(Address of principal executive offices)

22902
(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	DIFFN	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 8.01 Other Events

On May 20, 2020, Diffusion Pharmaceuticals Inc. (the “Company”) issued a press release announcing that the Company has expanded its clinical trial program of trans sodium crocetinate (TSC) for the treatment of COVID-19 patients to include the Romanian National Institute of Infectious Diseases. A copy of the press release is attached hereto as Exhibit 99.1 to this Current Report on Form 8-K and is incorporated by reference herein.

Item 9.01 – Financial Statements and Exhibits**(d) Exhibits**

99.1 [Press release issued May 20, 2020](#)

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: May 20, 2020

DIFFUSION PHARMACEUTICALS INC.

By: /s/ David G. Kalergis

Name: David G. Kalergis

Title: Chief Executive Officer



Diffusion Pharmaceuticals Expands Clinical Trial Program of TSC for the Treatment of COVID-19 Patients to Include the Romanian National Institute of Infectious Diseases

Planned study features noted principal investigator, regulatory flexibility, and immediate availability of patients

CHARLOTTESVILLE, Va. (May 20, 2020) – Diffusion Pharmaceuticals Inc. (NASDAQ: DFFN) (“Diffusion” or “the Company”), a cutting-edge biotechnology company developing new treatments for life-threatening medical conditions by improving the body’s ability to deliver oxygen to the areas where it is needed most, today announced that it has entered into an agreement with the Romanian National Institute of Infectious Diseases (NIID) to begin a clinical trial program to test Diffusion’s lead drug trans sodium crocetinolate (TSC) for the treatment of hospitalized COVID-19 patients presenting with lowered blood oxygen levels, a condition known as hypoxemia. Noted infectious disease researcher Prof. Adrian Streinu-Cercel, M.D., Ph.D., General Manager of the NIID, will serve as Principal Investigator.

Conduct of this clinical trial in Romania will be facilitated by ARENSIA Exploratory Medicine GmbH, a Germany-based contract research organization with dedicated state-of-the-art clinical research facilities located throughout Eastern Europe, including within the NIID.

Patients with COVID-19 and other severe respiratory tract infections often present with hypoxemia. Diffusion and its affiliated researchers believe the oxygen-enhancing mechanism of action of TSC could benefit COVID-19 patients by mitigating the multiple organ failure that often results from hypoxemia associated with Acute Respiratory Distress Syndrome (ARDS), a leading cause of death in COVID-19 patients.

The NIID trial is planned to be conducted in two phases, with a possible third to follow. The first trial, which is fully funded by existing Diffusion resources, is a Phase 1 open-label, pharmacokinetic/ pharmacodynamic, ascending-dose safety lead-in trial in 24 hospitalized hypoxemic COVID-19 patients. In addition to collecting safety and tolerability data, study endpoints will include arterial blood gas analysis and pulse oximetry measurement. This trial is expected to be completed in the third quarter of 2020. These data are intended to provide proof-of-concept for the use of TSC in enhancing oxygenation of hypoxemic patients with severe respiratory infections, like COVID-19. Assuming positive results, Diffusion intends to promptly commence a follow-on trial, also fully funded by existing Diffusion resources, in approximately 100 patients at an expanded number of study sites in Europe. This follow-on trial will be a placebo-controlled, double-blinded, safety and efficacy study of TSC in hypoxemic COVID-19 patients. Depending upon the results, a third phase, designed with a view to regulatory approval in Europe, may then be conducted.

Commencement of the NIID program is expected to be facilitated by a special Romanian regulatory authority initiative for COVID-19 clinical trials that reduces regulatory approval times from 60 days down to seven days from the time of program submission, which is targeted for the end of May 2020. NIID is the largest provider of treatment for COVID-19 patients in Romania. NIID sources report that about 500 patients with COVID-19 are currently hospitalized in its facility, with about 50 in intensive care.

As previously reported, Diffusion also is preparing for U.S.-based clinical trials of TSC for the treatment of hypoxemia in patients with severe respiratory infections, including COVID-19, which will be conducted largely in parallel to NIID trials. This arm of the Company’s respiratory distress-related hypoxemia program is being pursued in partnership with the University of Virginia and other leading U.S.-based research centers. A pre-IND submission is currently under review by the U.S. Food and Drug Administration with a response expected before the end of this month.

“We at the National Institute of Infectious Diseases are expediting our collaboration with Diffusion Pharmaceuticals to test TSC’s novel oxygenation-enhancing mechanism of action to treat ARDS in patients with COVID-19,” said Prof. Streinu-Cercel. “Given the shortened response times for regulatory approvals and the immediate availability of patients, we expect timely enrollment and prompt completion of the first phase of this study.”

“We welcome the addition of Prof. Streinu-Cercel and the NIID to the growing ranks of researchers seeking to investigate TSC for use in COVID-19 patients,” said David Kalergis, chief executive officer of Diffusion. “We believe that the combination of high-quality research facilities, streamlined regulatory policies and a large patient pool will expedite the assessment of TSC’s effect in treating hypoxemia related to severe respiratory infections, including COVID-19. We are also hopeful to soon get the go-ahead from the U.S. FDA to submit an IND to allow the commencement of clinical development in the United States.”

TSC is in clinical development by the Company for the treatment of other conditions related to low-oxygen levels including the treatment of acute stroke and glioblastoma multiforme (GBM) brain cancer. Preclinical data indicate TSC increases oxygen availability and provides a functional benefit in animal models of acute lung injury and hemorrhagic shock. Clinical data from 150 patients receiving TSC for other indications demonstrate that the drug has an acceptable human safety profile in both healthy and critically ill patients.

About Diffusion Pharmaceuticals Inc.

Diffusion Pharmaceuticals Inc. is an innovative biotechnology company developing new treatments that improve the body’s ability to deliver oxygen to the areas where it is needed most, offering new hope for the treatment of life-threatening medical conditions. Diffusion’s lead drug trans sodium crocetininate (TSC) was originally developed in conjunction with the Office of Naval Research, which was seeking a way to treat multiple organ failure and its resulting mortality caused by hypoxemia from blood loss on the battlefield. Evolutions in research have led to Diffusion’s focus today: Fueling Life by taking on some of medicine’s most intractable and difficult-to-treat diseases, including multiple organ failure, stroke and glioblastoma multiforme (GBM) brain cancer. In each of these diseases, lack of available oxygen presents a significant obstacle for medical providers and is the target for TSC’s novel mechanism.

In July 2019 the Company reported favorable safety data in a 19-patient dose-escalation run-in study to its Phase 3 INTACT program, using TSC to target inoperable GBM. Diffusion’s in-ambulance PHAST-TSC trial for acute stroke began enrolling patients last year. Given the heightened responsibilities of the Company’s emergency medical services providers, enrollment in this trial is expected to be minimal until the COVID-19 pandemic abates. The Company is also currently partnering with both U.S. and European-based institutions in its research program to develop TSC as a treatment for the hypoxemia associated with COVID-19, specifically targeting enhanced blood gas oxygenation.

Preclinical data supports the potential for TSC as a treatment for other conditions where low oxygen availability plays a major role, such as myocardial infarction, peripheral artery disease, and neurodegenerative conditions such as Alzheimer’s and Parkinson’s disease. In addition to the development of TSC, RES-529, the Company’s PI3K/AKT/mTOR pathway inhibitor that dissociates the mTORC1 and mTORC2 complexes, is in preclinical testing for GBM.

Diffusion is headquartered in Charlottesville, Virginia – a hub of advancement in the life science and biopharmaceutical industries – and is led by CEO David Kalergis, a 30-year industry veteran and company co-founder.

Forward-Looking Statements

To the extent any statements made in this news release deal with information that is not historical, these are forward-looking statements under the Private Securities Litigation Reform Act of 1995. Such statements include, but are not limited to, statements about the company's plans, objectives, expectations and intentions with respect to future operations and products, the potential of the company's technology and product candidates, and other statements that are not historical in nature, particularly those that utilize terminology such as "would," "will," "plans," "possibility," "potential," "future," "expects," "anticipates," "believes," "intends," "continue," "expects," other words of similar meaning, derivations of such words and the use of future dates. Forward-looking statements by their nature address matters that are, to different degrees, uncertain. Uncertainties and risks may cause the Diffusion's actual results to be materially different than those expressed in or implied by such forward-looking statements. Particular uncertainties and risks include: the uncertainty as to whether the protocol described above for the Romanian trial, will be ultimately acceptable to the Romanian healthcare regulatory authorities or that such regulators will not require significant changes that might take significant time to implement, if at all, or that any such required changes will be financially feasible; moreover, if this or a revised protocol is acceptable to the Romanian regulators, there can be no assurance as to when they might provide such guidance or when the program might be able to commence, if at all; the uncertainty that as of yet the Romanian regulators has not approved a trial evaluating TSC for the treatment of ARDS, or if approved, such a trial possibly entailing significant additional time, effort and expense, particularly in light of the difficulty of doing business during the COVID-19 pandemic; the uncertainty as to whether the FDA will ever approve an IND submission for commencement of a trial in the U.S.; or that the FDA will not require significant changes that might take significant time to implement, if at all, or that any such required changes will be financially feasible; moreover, if protocol that has been submitted to the FDA on a pre-IND basis or a revised protocol is acceptable to the FDA, there can be no assurance as to when the FDA might provide such guidance or when the program in the U.S. might be able to commence, if at all; the uncertainty that as of yet the FDA has not approved a trial evaluating TSC for the treatment of ARDS, or if approved, such a trial possibly entailing significant additional time, effort and expense, particularly in light of the difficulty of doing business during the COVID-19 pandemic; Diffusion's ability to maintain its Nasdaq listing, market conditions, the difficulty of developing pharmaceutical products, obtaining regulatory and other approvals and achieving market acceptance; general business and economic conditions; the sufficiency of the company's cash, the company's need for and ability to obtain additional financing or partnering arrangements; and the various risk factors (many of which are beyond Diffusion's control) as described under the heading "Risk Factors" in Diffusion's filings with the United States Securities and Exchange Commission. All forward-looking statements in this news release speak only as of the date of this news release and are based on management's current beliefs and expectations. Diffusion undertakes no obligation to update or revise any forward-looking statement, whether as a result of new information, future events or otherwise.

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