PROSPECTUS SUPPLEMENT (To Prospectus dated November 23, 2020)

500,000 Shares

TFF PHARMACEUTICALS, INC.

Common Stock

This prospectus supplement and the accompanying base prospectus relates to the resale of up to 500,000 shares of our common stock held by the selling stockholder named herein to one or more institutional and accredited investors under one or more securities purchase agreements between the selling stockholder and each of the investors. The offering price is \$13.85 per share.

We are not selling any shares of common stock and will not receive any proceeds from the sale of the shares by the selling stockholder under this prospectus supplement. The selling stockholder will pay all expenses incurred in connection with the sale of the offered shares, including the placement agent's commissions and all legal and accounting expenses. We provide more information about the selling stockholder's sale of the offered shares in the section titled "Plan of Distribution" on page S-12.

Our common stock is listed on the NASDAQ Global Market under the symbol "TFFP." On December 3, 2020, the last reported sale price of our common stock on the NASDAQ Global Market was \$15.39 per share.

Neither the Securities and Exchange Commission nor any other regulatory body has approved or disapproved these securities or passed upon the accuracy or adequacy of this prospectus supplement. Any representation to the contrary is a criminal offense.

Investing in our securities involves a high degree of risk. See the section entitled "Risk Factors" appearing on page S-8 of this prospectus supplement and elsewhere in this prospectus supplement and the accompanying base prospectus for a discussion of information that should be considered in connection with an investment in our securities.

	Pe	r Share	Total
Public offering price	\$	13.85	\$ 6,925,000
Placement agent commissions (1)	\$	0.554	\$ 277,000
Proceeds, before expenses, to selling stockholder	\$	13.296	\$ 6,648,000

(1) See "Plan of Distribution" beginning on page S-12 of this prospectus supplement for a description of the compensation payable to the placement agent, including reimbursement of certain expenses.

Delivery of the shares of common stock to the purchasers is expected to be made on or about December 8, 2020, against payment for such shares to be received by the selling stockholder on the same date.

Roth Capital Partners

The date of this prospectus supplement is December 4, 2020

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ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement and the accompanying base prospectus are part of a registration statement that we filed with the Securities and Exchange Commission, or the SEC, utilizing a "shelf" registration process. From time to time, we or the selling stockholder may conduct an offering to sell securities under the accompanying base prospectus and a related prospectus supplement that will contain specific information about the terms of that offering, including the price, the amount of securities being offered and the plan of distribution. This prospectus supplement describes the specific details regarding this offering and may add, update or change information contained in the accompanying base prospectus. The base prospectus, dated November 23, 2020, including the documents incorporated by reference therein, provides general information about us and our securities, some of which, such as the section entitled "Plan of Distribution," may not apply to this offering. This prospectus supplement and the accompanying base prospectus are an offer to sell only the securities offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. Neither we nor the selling stockholder are making offers to sell or solicitations to buy our common stock in any jurisdiction in which an offer or solicitation is not authorized or in which the person making that offer or solicitation is not qualified to do so or to anyone to whom it is unlawful to make an offer or solicitation.

If information in this prospectus supplement is inconsistent with the accompanying base prospectus or the information incorporated by reference with an earlier date, you should rely on this prospectus supplement. This prospectus supplement, together with the base prospectus, the documents incorporated by reference into this prospectus supplement and the accompanying base prospectus and any free writing prospectus we have provided for use in connection with this offering, include all material information relating to this offering. Neither we, the placement agent nor the selling stockholder has authorized anyone to provide you with different or additional information and you must not rely on any unauthorized information or representations. You should assume that the information appearing in this prospectus supplement, the accompanying base prospectus, the documents incorporated by reference in this prospectus supplement and the accompanying base prospectus and any free writing prospectus we have provided for use in connection with this offering is accurate only as of the respective dates of those documents. Our business, financial condition, results of operations and prospects may have changed since those dates. You should carefully read this prospectus supplement, the accompanying base prospectus and the information and documents incorporated herein by reference herein and therein, as well as any free writing prospectus we have provided for use in connection with this offering, before making an investment decision. See "Incorporation of Certain Documents by Reference" and "Where You Can Find More Information" in this prospectus supplement and in the accompanying base prospectus.

This prospectus supplement and the accompanying base prospectus contain summaries of certain provisions contained in some of the documents described herein, but reference is made to the actual documents for complete information. All of the summaries are qualified in their entirety by the full text of the actual documents, some of which have been filed or will be filed and incorporated by reference herein. See "Where You Can Find More Information" in this prospectus supplement. We further note that the representations, warranties and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference into this prospectus supplement or the accompanying base prospectus were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreements, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties or covenants were accurate only as of the date when made. Accordingly, such representations, warranties and covenants should not be relied on as accurately representing the current state of our affairs.

This prospectus supplement and the accompanying base prospectus contain and incorporate by reference certain market data and industry statistics and forecasts that are based on Company-sponsored studies, independent industry publications and other publicly available information. Although we believe these sources are reliable, estimates as they relate to projections involve numerous assumptions, are subject to risks and uncertainties, and are subject to change based on various factors, including those discussed under "Risk Factors" in

this prospectus supplement and the accompanying base prospectus and under similar headings in the documents incorporated by reference herein and therein. Accordingly, investors should not place undue reliance on this information.

Unless the context otherwise indicates, references in this prospectus supplement to "we," "our" and "us" refer, collectively, to TFF Pharmaceuticals, Inc., a Delaware corporation, and its subsidiaries. We own unregistered trademarks, including our company name. All other trademarks, trade names and service marks included or incorporated by reference into this prospectus supplement, the accompanying base prospectus and any applicable free writing prospectus are the property of their respective owners.

PROSPECTUS SUPPLEMENT SUMMARY

This prospectus summary highlights information contained elsewhere in this prospectus supplement, the accompanying base prospectus and the documents incorporated by reference herein and therein. This summary does not contain all of the information that you should consider before deciding to invest in our securities. You should read this entire prospectus supplement and the accompanying base prospectus carefully, including the section entitled "Risk Factors" beginning on page S-8 and our consolidated financial statements and the related notes and the other information incorporated by reference into this prospectus supplement and the accompanying base prospectus, before making an investment decision.

Our Company

TFF Pharmaceuticals, Inc. (NASDAQ: TFFP) is a clinical-stage biopharmaceutical company focused on developing and commercializing innovative drug products based on our patented Thin Film Freezing, or TFF, technology platform. We believe, and early testing confirms, that our TFF platform can significantly improve the solubility of poorly water-soluble drugs, a class of drugs that makes up approximately 33% of the major pharmaceuticals worldwide, thereby improving the pharmacokinetic effect of those drugs. We believe that in the case of some new drugs that cannot be developed due to poor water-solubility, our TFF platform has the potential to improve the pharmacokinetic effect of the drug to a level allowing for its development and commercialization. In November 2019, we initiated Phase I human clinical trials of our lead product, TFF Vori, and completed the clinical portion of the Phase 1 trial in July 2020 and progressed to the Phase 2 clinical trial in November 2020. In June 2020, we commenced Phase I human clinical trials of our TFF Tac-Lac product in Melbourne, Victoria, Australia, but in July 2020, the Phase I trials of our TFF Tac-Lac product were delayed due to a resurgence of COVID-19 in the Melbourne area. A second clinical trial site in Brisbane, Queensland, Australia was opened and we resumed dosing in the Phase 1 clinical trials in Australia during the third quarter 2020. As of the date of this prospectus supplement, we have not progressed the development of any other of our drug candidates to human clinical trials and our efforts have focused on the formulation, early stage animal testing and formal toxicology studies of our initial drug candidates in preparation for our first clinical trials.

We intend to initially focus on the development of inhaled dry powder drugs for the treatment of pulmonary diseases and conditions. While our TFF platform was designed to improve solubility of poorly water-soluble drugs generally, we have found that the technology is particularly useful in generating dry powder particles with properties that allow for superior inhalation delivery, especially to the deep lung, which is an area of extreme interest in respiratory medicine. We believe that our TFF platform can significantly increase the number of pulmonary drug products that can be delivered by way of breath-actuated inhalers, which are generally considered to be the most effective and patient-friendly means of delivering medication directly to the lungs. Our dry powder drug products will be designed for use with dry powder inhalers, which are generally considered to be the most effective of all breath-actuated inhalers. We plan to focus on developing inhaled dry powder formulations of existing off-patent drugs intended for lung diseases and conditions, which we believe includes dozens of potential drug candidates, many of which have a potential market ranging from \$100 million to over \$500 million.

We intend to initially focus on the development of the following product candidates:

TFF Vori is an inhaled dry powder version of Voriconazole, generally considered to be the best antifungal drug used to treat invasive pulmonary aspergillosis, or IPA, a severe fungal pulmonary disease with a mortality rate that can reach 90% in some patient populations. In October 2019, we submitted to the U.S. Food and Drug Administration, or FDA, an Investigational New Drug Application, or IND, for our TFF Vori and initiated our Phase I human clinical trials in November 2019. In July 2020, we completed the clinical portion of the Phase I trial with both single ascending and multiple ascending dose phases with 32 healthy subjects enrolled in each part to evaluate the safety, tolerability and pharmacokinetic profile of TFF Vori. We believe, and our clinical testing to date

confirms, that our TFF platform can be used to formulate a dry powder version of Voriconazole, which is no longer subject to patent protection. Voriconazole is currently marketed in Australia, Europe and the U.S. as Vfend. As of the date of this prospectus supplement, the Clinical Practice Guidelines released by the Infectious Diseases Society of America recommend Voriconazole as first-line monotherapy for IPA. However, since the registration of Vfend in Europe and the U.S. in 2002, several studies have examined the exposure-response relationship with Voriconazole, identifying a relationship between low Voriconazole exposure and higher rates of treatment failure, as well as a higher propensity for neurotoxicity at higher exposures. We believe a TFF prepared dry powder formulation of Voriconazole administered directly to the lungs can maximize both the prophylactic value for immunocompromised patients susceptible to IPA and the treatment value of patients suffering from chronic IPA. We also believe our dry powder drug formulation would benefit patients by providing the drug at the "port of entry" of invasive fungal infections, while also reducing or eliminating the unpleasant and potentially fatal side effects associated with Voriconazole and other last line antifungals.

TFF Tac-Lac is an inhaled dry powder version of tacrolimus, an immunosuppressive drug used in transplant medicine. Prograf tacrolimus is currently the second most commonly administered immunosuppressive drug used in solid organ transplants, despite what we believe to be the many challenges for patients and physicians when used for extended periods. Prograf tacrolimus can cause toxicity in the kidneys, particularly when used in high doses. Tacrolimus is no longer under patent protection, and we intend to develop a dry powder version suitable for use with a dry powder inhaler. Because our dry powder version would provide for a high local lung concentration without the typical systemic toxicity frequently experienced with oral dosage form immunosuppressants, we believe our drug candidate should have a high likelihood of success in competing in the immunosuppressant market for lung and heart/lung transplants. On September 26, 2019, we participated in a pre-IND meeting with the FDA for purposes of discussing our proposed regulatory pathway for TFF Tac-Lac and obtaining guidance from the FDA on the pre-clinical plan leading to the filing and acceptance of an IND application for TFF Tac-Lac. We were successful in gaining agreement that a 505(b)(2) approach would be appropriate for TFF Tac-Lac. We are conducting Phase I clinical trials for our TFF formulation of Tacrolimus in Australia, which we consider to be a highly desirable site to conduct human clinical trials. On March 13, 2020, we had received the approval of the Alfred Hospital Human Research Ethics Committee to commence Phase I trials in Melbourne, Victoria, Australia. However, later in March 2020, our contract research organization partner in Australia informed us that because of the spread of the COVID-19 virus in Australia, there would be a delay in initiating the trials. One contributing factor is that Tacrolimus is an immunosuppressant drug and, given the threat of the COVID-19 virus, concern exists that even though we would be dosing healthy volunteers the inhalation of an immunosuppressant could increase the risk of severe complications if a volunteer was to contract COVID-19. In June 2020, we were able to begin dosing in the Phase I trial our TFF Tac-Lac in Melbourne, however, in July 2020, due to the resurgence of COVID-19 in the Melbourne area, the Phase I trials were delayed. With the flaring of COVID-19 in the Melbourne area and in order to remain dynamic, a second clinical trial site in Brisbane, Queensland, Australia was opened and we resumed dosing in the Phase I clinical trials during the third quarter of 2020. As of the date of this prospectus supplement, we intend to submit to the FDA an IND for TFF Tac-Lac upon completion of the Phase I clinical trials.

TFF Niclosamide is an inhaled dry powder formulation of Niclosamide. Niclosamide has been used to treat tapeworm infections in humans since the 1960s and was recently reported to be one of the most potent approved drugs in screens for antiviral activity against the SARS-CoV2 virus that causes the COVID-19 disease. Early testing confirmed that our TFF platform can be used to formulate a dry powder version of Niclosamide, which is no longer subject to patent protection. We believe a TFF prepared dry powder formulation of Niclosamide administered directly to the lungs can maximize both the prophylactic value for persons exposed to COVID-19 and for the treatment of patients with COVID-19 infections at risk for serious disease complications. TFF has also obtained the rights to a novel formulation that may enhance the bioavailability of Niclosamide through oral delivery under our license from the University of Texas. Systemically delivered Niclosamide has shown promise for the treatment of COVID -19 and various forms of cancer.

We have identified a number of additional drug candidates that show promise upon initial evaluation, including dry powder formulations of:

Cannabidiol, or CBD, a controlled substance as defined in the federal Controlled Substances Act of 1970 that is reported to be used by some for the treatment of various epilepsy syndromes as well as anxiety, insomnia, and different types of pain. We are in the early stages of developing an inhaled dry powder form of CBD that could be used to support or to treat a variety of health issues that may benefit from CBD administration.

Vaccines containing aluminum salts, which make up approximately 35% of all vaccines. Aluminum salts are incorporated into many vaccine formulations as an adjuvant, which is a substance added to vaccines to enhance the immune response of vaccinated individuals. A major limitation with these vaccines is that they are fragile and to maintain their efficacy they must be formulated as liquid suspensions and kept in a cold chain $(2 - 8^{\circ}C)$ during transport and storage, which is burdensome and expensive. We have conducted drug and performance characterization activities of certain TFF formulated salt containing vaccines, which suggest that the salt containing vaccines can be successfully converted from liquid suspension into dry powder, and then later be reconstituted at the time of use without causing a decrease in efficacy.

As of the date of this prospectus supplement, we intend to develop our dry powder formulations of CBD and salt containing vaccines with a pharmaceutical company active in the space and we do not intend to pursue the development of our dry powder formulation of CBD or salt containing vaccines beyond performance characterization and efficacy data through early animal testing until such time, if ever, as we obtain a development partner.

We are also focused on the joint development of dry powder formulations of proprietary drugs owned or licensed by other pharmaceutical companies. As of the date of this prospectus supplement, we are at various stages of different feasibility studies of new chemical entities owned by international pharmaceutical companies. In addition, we recently commenced preliminary analysis and testing of dry powder formulations of certain drugs and vaccines through topical, ocular and nasal applications in connection with our participation in submissions made to certain government agencies for government contracts. Also, in May 2020, we authorized a third-party to conduct feasibility studies and market testing of dry powder formulations of cannabis and cannabis-derived products.

Our business model is to develop proprietary innovative drug product candidates that offer commercial or functional advantages, or both, to currently available alternatives. In our initial evaluation of the market, we have identified a number of potential drug candidates that show promise upon initial assessment. In most cases, these are off-patent drugs for which we would directly pursue the development of a dry powder formulation, however, we do not expect any dry powder formulation of a CBD drug product to be off-patent and our dry powder formulation of aluminum salt vaccines may not be off-patent. In those cases where our initial dry powder drug candidate will be established drugs that are off-patent, such as TFF Vori and TFF Tac-Lac, we believe that our drug product candidates may qualify for approval by the FDA through the FDA's 505(b)(2) regulatory pathway and in corresponding regulatory paths in other foreign jurisdictions. The 505(b)(2) pathway sometimes does not require clinical trials other than a bioequivalence trial. Our dry powder formulation of a CBD drug candidate will likely require a full NDA through the FDA's 505(b)(1) regulatory pathway, however, a non-pharmaceutical CBD dry formulation, such as a dietary supplement, may not require FDA approval. We expect that our dry powder formulation of aluminum salt vaccines will require a biological license application, or BLA, which is very similar to a full NDA through the FDA's 505(b)(1) regulatory pathway. In addition, to the extent we claim that any of our offpatent drug product candidates target a new indication or offer improved safety compared to the existing approved products, and it is our present expectation that we will in many cases, it is likely that we will be required to conduct additional clinical trials in order to obtain marketing approval. For example, based on separate pre-IND meetings with the FDA concerning TFF Vori and TFF Tac-Lac, we believe we will need to conduct Phase I and Phase II studies prior to filing for marketing approval for TFF Vori and Phase I and Phase IIb/IIIa studies prior to filing for marketing approval for TFF Tac-Lac. However, there can be no assurance that the FDA will not ask for additional clinical data for either TFF Vori or TFF Tac-Lac.

We also believe that in some cases our dry powder drug products may qualify for the FDA's orphan drug status. Upon and subject to receipt of the requisite approvals, we intend to commercialize our drug products through a combination of our internal direct sales and third-party marketing and distribution partnerships. In some cases, such as the development of combination drugs or the development of dry powder formulations of patented drugs, we intend to pursue the licensing of our TFF platform or a joint development arrangement.

Recent Developments

On August 10, 2020, we entered into a Securities Purchase Agreement, or the Purchase Agreement, and a Registration Rights Agreement with certain institutional and other accredited investors, or the selling stockholders, pursuant to which we agreed to issue and sell, and the selling stockholders agreed to buy, 3,048,654 shares of our common stock at a price of \$8.50 per share for the approximate gross proceeds of \$25.91 million, before deducting placement agent and other offering expenses. The Purchase Agreement includes customary representations, warranties, and covenants by the selling stockholders and us, and an indemnity from us in favor of the selling stockholders. Pursuant to the terms of the Registration Rights Agreement, we filed a resale registration statement with the SEC on September 9, 2020. The Registration Rights Agreement also provides that we must make certain payments as liquidated damages to the selling stockholders if the registration statement should become unavailable for the resale of the common shares, subject to certain exceptions.

On August 12, 2020, we entered into a licensing and collaboration agreement, or the License Agreement, with UNION therapeutics A/S, or UNION, pursuant to which UNION acquired an option to obtain a worldwide exclusive license for our TFF technology in combination with niclosamide. Pursuant to the terms of the License Agreement, UNION can exercise its option to obtain the license within 45 days after the complete data has been received by UNION from investigator-initiated trials. Upon exercise of the option, UNION shall be responsible to pay all expenses incurred in the development of any licensed products. We will be eligible to receive certain milestone payments based on the development the licensed products, sales-based payments based on sales of the licensed products and a single-digit tiered royalty on net sales.

Corporate Information

We were incorporated under the laws of the state of Delaware on January 24, 2018. Our principal executive offices are located at 2600 Via Fortuna, Suite 360, Austin, Texas 78746, and our telephone number is (737) 802-1973. Our website address is www.tffpharma.com. The information contained in, or accessible through, our website is not incorporated by reference into this prospectus supplement, and you should not consider any information contained in, or that can be accessed through, our website as part of this prospectus supplement or in deciding whether to purchase our common stock.

We own unregistered trademarks, including our company name. All other trademarks or trade names referred to in this prospectus supplement are the property of their respective owners. Solely for convenience, the trademarks and trade names in this prospectus supplement are referred to without the symbols $\mathbb R$ and $\mathbb T$, but such references should not be construed as any indication that their respective owners will not assert, to the fullest extent under applicable law, their rights thereto.

Emerging Growth Company

The Jumpstart Our Business Startups Act, or the JOBS Act, was enacted in April 2012 with the intention of encouraging capital formation in the United States and reducing the regulatory burden on newly public companies that qualify as "emerging growth companies." We are an emerging growth company within the meaning of the JOBS Act. As an emerging growth company, we may take advantage of certain exemptions from various public reporting requirements, including:

the requirement that our internal control over financial reporting be attested to by our independent registered public accounting firm pursuant to Section 404 of the Sarbanes-Oxley Act of 2002;

certain requirements related to the disclosure of executive compensation in this prospectus supplement and in our periodic reports and proxy statements;

the requirement that we hold a nonbinding advisory vote on executive compensation and any golden

parachute payments; and

the ability to delay compliance with new or revised financial accounting standards until private companies are required to comply with the new or revised financial accounting standard.

We may take advantage of the exemptions under the JOBS Act discussed above until we are no longer an emerging growth company. We will remain an emerging growth company until the earliest to occur of (1) the last day of the fiscal year in which we have \$1.07 billion or more in annual revenue; (2) the date we qualify as a "large accelerated filer," with at least \$700 million of equity securities held by non-affiliates; (3) the date on which we have issued, in any three-year period, more than \$1.0 billion in non-convertible debt securities; or (4) the last day of the fiscal year ending after the fifth anniversary of our initial public offering.

We may choose to take advantage of some, but not all, of the available benefits under the JOBS Act. We have chosen to take advantage of all of the exemptions discussed above. Accordingly, the information contained herein and in our subsequent filing with the SEC may be different than the information you receive from other public companies in which you hold stock.

For certain risks related to our status as an emerging growth company, see the disclosure in our Annual Report on Form 10-K for the year ended December 31, 2019 under "Risk Factors—Risks Related to this Offering and Owning Our Common Stock - We are an 'emerging growth company' under the JOBS Act of 2012 and we cannot be certain if the reduced disclosure requirements applicable to emerging growth companies will make our common stock less attractive to investors."

Additional Information

For additional information related to our business and operations, please refer to the reports incorporated herein by reference, including our Annual Report on Form 10-K for the year ended December 31, 2019 as filed with the SEC on March 27, 2020, or the 2019 Form 10-K, our Quarterly Reports on Form 10-Q for the quarterly periods ended March 31, 2020, June 30, 2020 and September 30, 2020 as filed with the SEC on May 14, 2020, August 13, 2020 and November 5, 2020, respectively, and our Current Reports on Form 8-K as filed with the SEC, as described in the section entitled "*Incorporation of Certain Documents by Reference*" in this prospectus supplement.

The Offering

Common stock offered by the selling stockholders 500,000 shares

Common stock to be outstanding prior to this offering 22,226,284 shares

Terms of the offering The selling stockholder named herein is selling up to

500,000 shares of our common stock held by the selling stockholder to one or more institutional and accredited investors under one or more securities purchase agreements between the selling stockholder and each of the investors. The offering price is \$13.85 per share. The selling stockholder will pay all expenses incurred in connection with the sale of the offered shares, including the placement agent's commissions and all legal and

accounting expenses. See "Plan of Distribution."

NASDAQ symbol "TFFP"

Risk factors Investment in our securities involves a high degree of

risk and could result in a loss of your entire investment. See "Risk Factors" beginning on page S-8 and the similarly entitled sections in the documents incorporated by reference into this prospectus

supplement.

Use of proceeds We will not receive any proceeds from the sale of the

shares by the selling stockholder under this prospectus

supplement.

The number of shares of our common stock to be outstanding after this offering is based on 22,226,284 shares of common stock outstanding as of September 30, 2020, and excludes:

2,871,123 shares of our common stock issuable upon exercise of outstanding options as of September 30, 2020, with a weighted average exercise price of \$5.19 per share, granted pursuant to our 2018 Equity Incentive Plan, or the 2018 Plan;

approximately 860,526 shares of our common stock issuable upon exercise of outstanding warrants as of September 30, 2020, with a weighted average exercise price of \$2.86 per share; and

413,357 shares of our common stock reserved for future grants under our 2018 Plan as of September 30, 2020.

RISK FACTORS

Investing in our securities involves a high degree of risk. Before investing in our securities, you should carefully consider the risks, uncertainties and assumptions contained in this prospectus supplement and discussed under the heading "Risk Factors" included in the 2019 Form 10-K, as revised or supplemented by subsequent filings, which are on file with the SEC and are incorporated herein by reference, and which may be amended, supplemented or superseded from time to time by other reports we file with the SEC in the future. Our business, financial condition, results of operations and future growth prospects could be materially and adversely affected by any of these risks. In these circumstances, the market price of our common stock could decline, and you may lose all or part of your investment.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement, the accompanying base prospectus and the reports incorporated by reference herein and therein contain forward-looking statements. The words "believe," "may," "will," "potentially," "estimate," "continue," "anticipate," "intend," "could," "would," "project," "plan," "expect" and similar expressions that convey uncertainty of future events or outcomes are intended to identify forward-looking statements. These forward-looking statements include, but are not limited to, statements concerning the following:

our future financial and operating results;

our intentions, expectations and beliefs regarding anticipated growth, market penetration and trends in our business;

the timing and success of our plan of commercialization;

our ability to successfully develop and clinically test our product candidates;

our ability to file for FDA approval of our product candidates through the 505(b)(2) regulatory pathway;

our ability to obtain FDA approval for any of our product candidates;

our ability to comply with all U.S. and foreign regulations concerning the development, manufacture and sale of our product candidates;

our ability to raise additional capital as and when needed;

the effects of market conditions on our stock price and operating results;

our ability to maintain, protect and enhance our intellectual property;

the effects of increased competition in our market and our ability to compete effectively;

costs associated with initiating and defending intellectual property infringement and other claims;

the attraction and retention of qualified employees and key personnel;

future acquisitions of or investments in complementary companies or technologies; and

our ability to comply with evolving legal standards and regulations, particularly concerning requirements for being a public company.

These forward-looking statements are subject to a number of risks, uncertainties and assumptions, including those described under the heading "Risk Factors" included in the 2019 Form 10-K and elsewhere in this prospectus supplement, the accompanying base prospectus and the reports incorporated by reference herein and therein. Moreover, we operate in a very competitive and rapidly changing environment, and new risks emerge from time to time. It is not possible for us to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. In light of these risks, uncertainties and assumptions, the forward-looking events and circumstances discussed in this prospectus supplement, the accompanying base prospectus and the reports incorporated by reference herein and therein may not occur and actual results could differ materially and adversely from those anticipated or implied in our forward-looking statements.

You should not rely upon forward-looking statements as predictions of future events. Although we believe

that the expectations reflected in our forward-looking statements are reasonable, we cannot guarantee that the future results, levels of activity, performance or events and circumstances described in the forward-looking statements will be achieved or occur. Moreover, neither we nor any other person assumes responsibility for the accuracy and completeness of the forward-looking statements. We undertake no obligation to update publicly any forward-looking statements for any reason after the date of this prospectus supplement to conform these statements to actual results or to changes in our expectations, except as required by law.

You should read this prospectus supplement, the accompanying base prospectus and the reports incorporated by reference herein and therein with the understanding that our actual future results, levels of activity, performance and events and circumstances may be materially different from what we expect.

SELLING STOCKHOLDER

All of the 500,000 shares of common stock offered for sale by the selling stockholder pursuant to this prospectus supplement are owned by the Lung Therapeutics, Inc., or LTI, a Texas corporation. We were incorporated under the laws of the state of Delaware on January 24, 2018 by LTI. In March 2018, we completed a Series A preferred stock financing with third-party investors, at which time we acquired certain of LTI's non-core intellectual property rights and other assets, all of which relate to our Thin Film Freezing technology, in exchange for 4,000,000 shares of our common stock. LTI is an early stage biotechnology company focused on the development of certain technologies in the pulmonary field. We are no longer a subsidiary of LTI; however, LTI currently provides us with office space and certain administrative services and equipment for no charge, from time to time on an as-needed basis, and three of our directors, Aaron Fletcher, Robert Mills and Brian Windsor, are also members of the board of directors of LTI and Mr. Windsor is the Chief Executive Officer of LTI and our Chief Science Officer.

The following table sets forth information with respect to the selling stockholder and the shares of common stock beneficially owned by the selling stockholder, including shares that may be offered under this prospectus supplement. The information is based on information provided by or on behalf of the selling stockholder to us as of the date of this prospectus supplement. For purposes of the table below, we have assumed the sale of all of the offered 500,000 shares of our common stock by the selling stockholder.

	Shares of Common Stock	Percent of Shares	Maximum Number of Shares That May Be Sold	Shares of Common Stock	Percent of Shares
Name of Selling		Owned Before	Pursuant to this Prospectus	Beneficially Owned After	Owned After
Stockholder	to Offering	Offering	Supplement	Offering	Offering
Lung Therapeutics, Inc.	4,000,000	17.8%	500,000	3,500,000	15.7%

USE OF PROCEEDS

We will not receive any proceeds upon the sale of the shares by the selling stockholders in this offering.

PLAN OF DISTRIBUTION

Roth Capital Partners, LLC, which we refer to as the placement agent, has agreed to act as the exclusive placement agent for the selling stockholder in connection with the selling stockholder's sale of the 500,000 shares of our common stock, subject to the terms and conditions of a placement agent agreement dated December 4, 2020 between the placement agent and the selling stockholder. The placement agent is not purchasing or selling any shares of our common stock offered by this prospectus supplement and the accompanying base prospectus, nor is it required to arrange the purchase or sale of any specific number or dollar amount of the shares of our common stock held by the selling stockholder, but has agreed to use its commercially reasonable "best efforts" to arrange for the sale of up to 500,000 shares of our common stock offered hereby by the selling stockholder.

TFF Pharmaceuticals is not selling any shares of common stock and will not receive any proceeds from the sale of the shares by the selling stockholder under this prospectus supplement. The selling stockholder will enter into securities purchase agreements directly with investors in connection with this offering and may not sell the entire amount of shares offered pursuant to this prospectus supplement and the accompanying base prospectus. The public offering price of the shares offered hereby has been determined based upon arm's-length negotiations between the purchasers and the selling stockholder.

Commissions and Expenses

The selling stockholder has agreed to pay the placement agent an aggregate cash placement fee equal to four percent (4%) of the gross proceeds in this offering.

The following table shows the per share and total cash placement agent's fees the selling stockholder will pay to the placement agent in connection with the sale of the shares of our common stock offered by the selling stockholder pursuant to this prospectus supplement and the accompanying base prospectus assuming the purchase of all of the shares offered hereby:

Per Share	\$ 0.554
Total	\$ 277.000

Because there is no minimum offering amount required as a condition to closing in this offering, the actual total placement agent fees, if any, are not presently determinable and may be substantially less than the maximum amount set forth above. Pursuant to a Registration Rights Agreement between the selling stockholder and TFF Pharmaceuticals, the selling stockholder has agreed to reimburse TFF Pharmaceuticals for all of its legal, accounting and other out-of-pocket expenses incurred in connection with this offering.

The placement agent anticipates that the sale of the shares of our common stock offered by this prospectus supplement and the accompanying base prospectus will be completed on or about December 8, 2020. At the closing, The Depository Trust Company will credit the shares of common stock sold by the selling stockholder to the respective accounts of the purchasers.

Indemnification

The selling stockholder has agreed to indemnify the placement agent against liabilities under the Securities Act of 1933, as amended. The selling stockholder has also agreed to contribute to payments the placement agent may be required to make in respect of such liabilities.

Lock-up Agreement

The selling stockholder has agreed, subject to certain exceptions, for a period ending on December 31, 2020, not to offer, sell, contract to sell, pledge, grant any option to purchase, make any short sale or otherwise dispose of, directly or indirectly any shares of our common stock or any securities convertible into or exchangeable

for shares of our common stock beneficially owned by the selling stockholder at a price equal to or less than \$13.85 per share without the prior written consent of the purchasers of the shares in this offering.

This prospectus supplement and the accompanying base prospectus may be made available in electronic format on websites or through other online services maintained by the placement agent, or by an affiliate. Other than this prospectus supplement and the accompanying base prospectus, the information on the placement agent's website and any information contained in any other website maintained by the placement agent is not part of this prospectus supplement and the accompanying base prospectus or the registration statement of which this prospectus supplement and the accompanying base prospectus form a part, has not been approved and/or endorsed by us or the placement agent, and should not be relied upon by investors.

Regulation M Restrictions

The placement agent may be deemed to be an underwriter within the meaning of Section 2(a)(11) of the Securities Act, and any commissions received by it and any profit realized on the resale of the shares of our common stock sold by it while acting as a principal might be deemed to be underwriting discounts or commissions under the Securities Act. As an underwriter, the placement agent would be required to comply with the requirements of the Securities Act and the Securities Exchange Act of 1934, as amended, including, without limitation, Rule 415(a)(4) under the Securities Act and Rule 10b-5 and Regulation M under the Exchange Act. These rules and regulations may limit the timing of purchases and sales of shares of our common stock by the placement agent acting as a principal. Under these rules and regulations, the placement agent:

must not engage in any stabilization activity in connection with our common stock; and

must not bid for or purchase any of our securities or attempt to induce any person to purchase any of our common stock, other than as permitted under the Exchange Act, until it has completed its participation in the distribution.

Passive Market Making

In connection with this offering, the placement agent and any selling group members may engage in passive market making transactions in our common stock on The NASDAQ Stock Market in accordance with Rule 103 of Regulation M under the Securities Exchange Act of 1934, as amended, during a period before the commencement of offers or sales of common stock and extending through the completion of the distribution. A passive market maker must display its bid at a price not in excess of the highest independent bid of that security. However, if all independent bids are lowered below the passive market maker's bid, that bid must then be lowered when specified purchase limits are exceeded.

Other

From time to time, the placement agent and its affiliates have provided, and may in the future provide, various investment banking, financial advisory and other services to us and our affiliates for which services they have received, and may in the future receive, customary fees. In the course of their businesses, the placement agent and its affiliates may actively trade our securities or loans for their own account or for the accounts of customers, and, accordingly, the placement agent and its affiliates may at any time hold long or short positions in such securities or loans.

LEGAL MATTERS

The validity of the securities offered by this prospectus supplement will be passed upon for us by Greenberg Traurig, LLP, Irvine, California. Ellenoff Grossman & Schole LLP, New York, New York, is acting as counsel for the placement agent in connection with this offering.

EXPERTS

The consolidated financial statements as of and for the fiscal years ended December 31, 2019 and 2018, incorporated by reference into this prospectus supplement from the Company's Annual Report on Form 10-K for the year ended December 31, 2019, have been so incorporated in reliance on the report of Marcum, LLP, an independent registered public accounting firm, as stated in their report which is incorporated by reference herein, and has been so incorporated in reliance upon such report and upon the authority of such firm as experts in accounting and auditing.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC allows us to incorporate by reference the information we file with it, which means that we can disclose important information to you by referring you to another document that we have filed separately with the SEC. You should read the information incorporated by reference because it is an important part of this prospectus supplement. Information in this prospectus supplement supersedes information incorporated by reference that we filed with the SEC prior to the date of this prospectus supplement, while information that we file later with the SEC will automatically update and supersede the information in this prospectus supplement. We incorporate by reference into this prospectus supplement and the registration statement of which this prospectus supplement is a part the information or documents listed below that we have filed with the SEC (Commission File No. 001-39102):

Our Annual Report on <u>Form 10-K</u> for the fiscal year ended December 31, 2019 filed with the SEC on March 27, 2020;

Our Annual Report on <u>Form 10-K/A</u> for the fiscal year ended December 31, 2019 filed with the SEC on April 29, 2020;

Our Quarterly Report on Form 10-Q for the quarter ended March 31, 2020 filed with the SEC on May 14, 2020;

Our Quarterly Report on Form 10-Q for the quarter ended June 30, 2020 filed with the SEC on August 13, 2020;

Our Quarterly Report on <u>Form 10-Q</u> for the quarter ended September 30, 2020 filed with the SEC on November 5, 2020;

Our Current Reports on Form 8-K filed with the SEC on <u>January 31, 2020</u>, <u>August 11, 2020</u>, <u>September 30, 2020</u>, <u>October 1, 2020</u>, and <u>December 4, 2020</u>.

Our definitive Proxy Statement on Schedule 14A filed with the SEC on August 28, 2020; and

The description of our common stock set forth in our registration statement on <u>Form 8-A12B</u> filed with the SEC on October 22, 2019.

We also incorporate by reference any future filings (other than current reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits filed on such form that are related to such items unless such Form 8-K expressly provides to the contrary) made with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act made after the effective date of this registration statement of which this prospectus supplement is a part and until we terminate this offering. Information in such future filings updates and supplements the information provided in this prospectus supplement. Any statements in any such future filings will automatically be deemed to modify and supersede any information in any document we previously filed with the SEC that is incorporated or deemed to be incorporated herein by reference to the extent that statements in the later filed document modify or replace such earlier statements.

We will furnish without charge to each person, including any beneficial owner, to whom a prospectus supplement is delivered, upon written or oral request, a copy of any or all of the reports or documents incorporated by reference into this prospectus supplement but not delivered with the prospectus supplement, including exhibits that are specifically incorporated by reference into such documents. You can access the reports and documents incorporated by reference into this prospectus supplement at https://ir.tffpharma.com/financial-information/sec-filings. You may also direct any requests for reports or documents to:

Austin, Texas 78746 Attention: Corporate Secretary Telephone: (737) 802-1973

Email: investorinfo@tffpharma.com

You should rely only on information contained in, or incorporated by reference into, this prospectus supplement and accompanying base prospectus. We have not authorized anyone to provide you with information different from that contained in this prospectus supplement, the accompanying base prospectus and the reports incorporated by reference herein and therein. We are not making offers to sell the securities in any jurisdiction in which such an offer or solicitation is not authorized or in which the person making such offer or solicitation is not qualified to do so or to anyone to whom it is unlawful to make such offer or solicitation.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-3 under the Securities Act that registers the common shares to be sold in this offering. In addition, we file annual, quarterly and current reports and proxy statements and other information with the SEC. Our SEC filings are and will become available to the public over the Internet at the SEC's website at www.sec.gov. You may also read and copy any document we file with the SEC at its public reference facilities at 100 F Street N.E., Washington, D.C. 20549. You can also obtain copies of the documents upon the payment of a duplicating fee to the SEC. Please call the SEC at 1-800-SEC-0330 for further information on the operation of the public reference facilities. Copies of certain information filed by us with the SEC are also available on our website at https://ir.tffpharma.com/financial-information/sec-filings. We have not incorporated by reference into this prospectus supplement the information on our website and it is not a part of this document.

This prospectus supplement and the base prospectus does not contain all of the information set forth in the registration statement and the exhibits and schedules thereto. Some items are omitted in accordance with the rules and regulations of the SEC. You should review the information and exhibits included in the registration statement for further information about us and the securities we are offering. Statements in this prospectus supplement concerning any document we filed as an exhibit to the registration statement or that we otherwise filed with the SEC are not intended to be comprehensive and are qualified by reference to these filings You should review the complete document to evaluate these statements.

\$100,000,000

TFF Pharmaceuticals, Inc.

Common Stock
Debt Securities
Warrants
Subscription Rights
Units

4,000,000 Shares of Common Stock Offered by a Selling Stockholder

We may issue securities from time to time in one or more offerings of up to \$100,000,000 in aggregate offering price. This prospectus describes the general terms of these securities and the general manner in which these securities will be offered. We will provide the specific terms of these securities in supplements to this prospectus. The prospectus supplements will also describe the specific manner in which these securities will be offered and may also supplement, update or amend information contained in this document. You should read this prospectus and any applicable prospectus supplement before you invest.

We may offer these securities in amounts, at prices and on terms determined at the time of offering. The securities may be sold directly to you, through agents, or through underwriters and dealers. If agents, underwriters or dealers are used to sell the securities, we will name them and describe their compensation in a prospectus supplement.

In addition, the selling stockholder identified in this prospectus or any of its pledges, donees, transferees or other successors-in-interests may offer to sell, from time to time, in amounts at prices and on terms determined at the time of the offering, up to 4,000,000 shares of our common stock under this prospectus. These sales may occur through ordinary brokerage transactions, directly to market makers of our shares or through any other means described in the section of this prospectus entitled "Plan of Distribution" beginning on page 16 or by any applicable prospectus supplement. We will not receive any proceeds from the sale of common stock by the selling stockholder, but we will incur expenses in connection with the sale of those shares. We and the selling stockholder may offer securities at the same time or in separate transactions.

Our common stock is listed on The NASDAQ Capital Market under the symbol "TFFP". On November 3, 2020, the last reported sale price of our common stock on The NASDAQ Capital Market was \$14.06 per share.

Investing in these securities involves significant risks. See "Risk Factors" included in any accompanying prospectus supplement and in the documents incorporated by reference in this prospectus for a discussion of the factors you should carefully consider before deciding to purchase these securities.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is November 23, 2020

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission, which we refer to as the "SEC," utilizing a "shelf" registration process. Under this shelf registration process, we may from time to time sell any combination of the securities described in this prospectus in one or more offerings for an aggregate initial offering price of up to \$100,000,000.

This prospectus provides you with a general description of the securities we may offer. From time to time, we may provide one or more prospectus supplements that will contain specific information about the terms of the offering. The prospectus supplement may also add, update or change information contained in this prospectus. You should read both this prospectus and any accompanying prospectus supplement together with the additional information described under the heading "Where You Can Find More Information" beginning on page 18 of this prospectus.

The selling stockholder also may use the shelf registration statement to sell an aggregate amount of 4,000,000 shares of our common stock from time to time in the public market. We will not receive any proceeds from the sale of common stock by the selling stockholder. The selling stockholder will deliver a supplement with this prospectus, if required, to update the information contained in this prospectus. The selling stockholder may sell its shares of common stock through any means described in the section entitled "Plan of Distribution" or in an accompanying prospectus supplement. As used herein, the term "selling stockholder" includes the selling stockholder and its pledges, donees, transferees or other successors-in-interest.

We and the selling stockholder have not authorized anyone to provide you with information different from that contained in or incorporated by reference in this prospectus, any accompanying prospectus supplement or in any related free writing prospectus filed by us with the SEC. We do not take any responsibility for, and cannot provide any assurance as to the reliability of, any information other than the information contained or incorporated by reference in this prospectus, any accompanying prospectus supplement or in any related free writing prospectus filed by us with the SEC. Neither this prospectus nor any accompanying prospectus supplement constitutes an offer to sell or the solicitation of an offer to buy any securities other than the securities described in the accompanying prospectus supplement or an offer to sell or the solicitation of an offer to buy such securities in any circumstances in which such offer or solicitation is unlawful. You should assume that the information appearing in this prospectus, any prospectus supplement, the documents incorporated by reference and any related free writing prospectus is accurate only as of their respective dates. Our business, financial condition, results of operations and prospects may have changed materially since those dates.

Unless the context otherwise indicates, references in this prospectus to "we," "our" and "us" refer, collectively, to TFF Pharmaceuticals, Inc., a Delaware corporation, and its subsidiaries.

ABOUT TFF PHARMACEUTICALS, INC.

TFF Pharmaceuticals, Inc. (NASDAQ: TFFP) is a clinical-stage biopharmaceutical company focused on developing and commercializing innovative drug products based on our patented Thin Film Freezing, or TFF, technology platform. We believe, and early testing confirms, that our TFF platform can significantly improve the solubility of poorly water-soluble drugs, a class of drugs that makes up approximately 33% of the major pharmaceuticals worldwide, thereby improving the pharmacokinetic effect of those drugs. We believe that in the case of some new drugs that cannot be developed due to poor water-solubility, our TFF platform has the potential to improve the pharmacokinetic effect of the drug to a level allowing for its development and commercialization. In November 2019, we initiated Phase I human clinical trials of our lead product, TFF Vori, and in June 2020 we commenced Phase I human clinical trials of our TFF Tac-Lac product in Melbourne, Victoria, Australia, but in July 2020, the Phase I trials of our TFF Tac-Lac product were delayed due to a resurgence of COVID-19 in the Melbourne area. A second clinical trial site in Brisbane, Queensland, Australia was opened and

dosing in the Phase 1 clinical trial resumed in Australia during the third quarter 2020. We expect that dosing in this trial will be completed in the fourth quarter 2020. As of the date of this prospectus, we have not progressed the development of any other of our drug candidates to human clinical trials and our efforts have focused on the formulation, early stage animal testing and formal toxicology studies of our initial drug candidates in preparation for our first clinical trials.

We intend to initially focus on the development of inhaled dry powder drugs for the treatment of pulmonary diseases and conditions. While our TFF platform was designed to improve solubility of poorly water-soluble drugs generally, we have found that the technology is particularly useful in generating dry powder particles with properties that allow for superior inhalation delivery, especially to the deep lung, which is an area of extreme interest in respiratory medicine. We believe that our TFF platform can significantly increase the number of pulmonary drug products that can be delivered by way of breath-actuated inhalers, which are generally considered to be the most effective and patient-friendly means of delivering medication directly to the lungs. Our dry powder drug products will be designed for use with dry powder inhalers, which are generally considered to be the most effective of all breath-actuated inhalers. We plan to focus on developing inhaled dry powder formulations of existing off-patent drugs intended for lung diseases and conditions, which we believe includes dozens of potential drug candidates, many of which have a potential market ranging from \$100 million to over \$500 million.

Our principal executive offices are located at 2600 Via Fortuna, Suite 360, Austin, Texas 78746, and our telephone number is (737) 802-1973.

THE OFFERING

We may offer and sell, from time to time, in one or more offerings, any combination of debt and equity securities that we describe in this prospectus having a total initial offering price not exceeding \$100,000,000 at prices and on terms to be determined by market conditions at the time of any offering. This prospectus provides you with a general description of the securities we may offer. Each time we offer a type or series of securities under this prospectus, we will provide a prospectus supplement that will describe the specific amounts, prices and other important terms of the securities.

In addition, the selling stockholder, Lung Therapeutics, Inc., or LTI, or its donees, pledges, transferees or other successors-in-interests may offer to sell an aggregate of 4,000,000 shares of our common stock from time to time in the public market under this prospectus. We will not receive any proceeds from the sale of shares of common stock by the selling stockholder. The selling stockholder will deliver a supplement with this prospectus, if required, to update the information contained in this prospectus. The selling stockholder may sell its shares of common stock through any means described in the section entitled "Plan of Distribution" or in an accompanying prospectus supplement. See "Selling Stockholder" on page 5 for more information on the selling stockholder.

The prospectus supplement also may add, update or change information contained in this prospectus or in documents we have incorporated by reference into this prospectus. However, no prospectus supplement will fundamentally change the terms that are set forth in this prospectus or offer a security that is not registered and described in this prospectus at the time of its effectiveness.

RISK FACTORS

Investing in our securities involves significant risks. You should carefully consider the risks and uncertainties described in this prospectus and any accompanying prospectus supplement, including the risk factors in our most recent Annual Report on Form 10-K, any subsequently filed Quarterly Report on Form 10-Q or Current Report on Form 8-K, together with all of the other information appearing in or incorporated by reference into this prospectus and any applicable prospectus supplement, before making an investment decision pursuant to this prospectus and any accompanying prospectus supplement relating to a specific offering.

Our business, financial condition and results of operations could be materially and adversely affected by any or all of these risks or by additional risks and uncertainties not presently known to us or that we currently deem immaterial that may adversely affect us in the future.

NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains, and any accompanying prospectus supplement will contain, forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act, and the Private Securities Litigation Reform Act of 1993. Also, documents that we incorporate by reference into this prospectus, including documents that we subsequently file with the SEC, will contain forward-looking statements. Forward-looking statements are those that predict or describe future events or trends and that do not relate solely to historical matters. You can generally identify forward-looking statements as statements containing the words "may," "will," "could," "should," "expect," "anticipate," "intend," "estimate," "believe," "project," "plan," "assume" or other similar expressions, or negatives of those expressions, although not all forward-looking statements contain these identifying words. All statements contained or incorporated by reference in this prospectus and any prospectus supplement regarding our business strategy, future operations, projected financial position, potential strategic transactions, proposed licensing arrangements, projected sales growth, estimated future revenues, cash flows and profitability, projected costs, potential outcome of litigation, potential sources of additional capital, future prospects, future economic conditions, the future of our industry and results that might be obtained by pursuing management's current plans and objectives are forward-looking statements.

You should not place undue reliance on our forward-looking statements because the matters they describe are subject to certain risks, uncertainties and assumptions that are difficult to predict. Our forward-looking statements are based on the information currently available to us and speak only as of the date on the cover of this prospectus, the date of any prospectus supplement, or, in the case of forward-looking statements incorporated by reference, the date of the filing that includes the statement. Over time, our actual results, performance or achievements may differ from those expressed or implied by our forward-looking statements, and such difference might be significant and materially adverse to our security holders. Except as required by law, we undertake no obligation to update publicly any forward-looking statements, whether as a result of new information, future events or otherwise.

We have identified some of the important factors that could cause future events to differ from our current expectations and they are described in this prospectus and supplements to this prospectus under the caption "Risk Factors," as well as in our most recent Annual Report on Form 10-K, including under the captions "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations," and in other documents that we may file with the SEC, all of which you should review carefully. Please consider our forward-looking statements in light of those risks as you read this prospectus and any prospectus supplement.

USE OF PROCEEDS

Unless otherwise specified in the applicable prospectus supplement, we intend to use the net proceeds from the sale of the securities described in this prospectus for general corporate and operations purposes and to fund our anticipated growth. The applicable prospectus supplement will provide more details on the use of proceeds of any specific offering. We will not receive any proceeds from the sale of common stock by the selling stockholder.

SELLING STOCKHOLDER

All of the 4,000,000 shares of common stock registered for sale by the selling stockholder pursuant to this prospectus are owned by the Lung Therapeutics, Inc., or LTI, a Texas corporation. We are registering such shares to permit the selling stockholder and its pledges, donees, transferees or other successors-in-interest that receive their shares after the date of this prospectus to resell the shares in the manner contemplated under the "Plan of Distribution".

We were incorporated under the laws of the state of Delaware on January 24, 2018 by LTI. In March 2018, we completed a Series A preferred stock financing with third-party investors, at which time we acquired certain of LTI's non-core intellectual property rights and other assets, all of which relate to our Thin Film Freezing technology, in exchange for 4,000,000 shares of our common stock. LTI is an early stage biotechnology company focused on the development of certain technologies in the pulmonary field. We are no longer a subsidiary of LTI; however, LTI currently provides us with office space and certain administrative services and equipment for no charge, from time to time on an as-needed basis, and three of our directors, Aaron Fletcher, Robert Mills and Brian Windsor, are also members of the board of directors of LTI and Mr. Windsor is the Chief Executive Officer of LTI.

The following table sets forth information with respect to the selling stockholder and the shares of common stock beneficially owned by the selling stockholder, including shares that may be offered under this prospectus. The information is based on information provided by or on behalf of the selling stockholder to us as of the date of this prospectus. For purposes of the table below, we have assumed that after termination of this offering none of the shares covered by this prospectus that are currently owned by the selling stockholder will be held by the selling stockholder.

Name of Selling Stockholder	Shares of Common Stock Beneficially Owned Prior to Offering	of Shares Owned Before Offering	Maximum Number of Shares That May Be Sold Pursuant to this Prospectus	Shares of Common Stock Beneficially Owned After Offering	Percent of Shares Owned After Offering
Stockholder	toonering	Offering	tills Prospectus	Offering	Offering
Lung Therapeutics, Inc.	4,000,000	17.9%	4,000,000		

THE SECURITIES WE MAY OFFER

We may offer and sell, from time to time in one or more offerings, any combination of common stock, debt securities, warrants, subscription rights and units having an aggregate initial offering price not exceeding \$100,000,000. In this prospectus, we refer to the common stock, debt securities, warrants, subscription rights and units that we may offer collectively as "securities."

Common Stock

We are authorized to issue 45,000,000 shares of \$0.001 par value common stock. Holders of shares of common stock are entitled to one vote per share on all matters to be voted upon by the stockholders generally. Stockholders are entitled to receive such dividends as may be declared from time to time by the board of directors out of funds legally available therefor, and in the event of liquidation, dissolution or winding up of the company to share ratably in all assets remaining after payment of liabilities. The holders of shares of common stock have no preemptive, conversion, subscription or cumulative voting rights.

This prospectus provides a general description of the securities we may offer other than our common stock. Each time we sell any of our securities under this prospectus, we will, to the extent required by law, provide a prospectus supplement that will contain specific information about the terms of the offering. The prospectus supplement may also add, update or change information in this prospectus. For more information, see "About this Prospectus."

Description of Debt Securities

We may offer debt securities which may be senior or subordinated. We refer to the senior debt securities and the subordinated debt securities collectively as debt securities. The following description summarizes the general terms and provisions of the debt securities. We will describe the specific terms of the debt securities and the extent, if any, to which the general provisions summarized below apply to any series of debt securities in the prospectus supplement relating to the series and any applicable free writing prospectus that we authorize to be delivered.

We may issue senior debt securities from time to time, in one or more series, which may be issued under a senior indenture to be entered into between us and a senior trustee to be named in a prospectus supplement, which we refer to as the senior trustee. We may issue subordinated debt securities from time to time, in one or more series, which may be issued under a subordinated indenture to be entered into between us and a subordinated trustee to be named in a prospectus supplement, which we refer to as the subordinated trustee. While it is highly likely that any debt securities we issue will be issued under an indenture, we reserve the right to issue debt securities other than under an indenture pursuant to an exemption from the indenture requirement under the Trust Indenture Act of 1939. Any debt securities issued by us other than pursuant to an indenture will subject the purchasers of such debt securities to certain unique risks arising from the lack of a trustee charged with the responsibility of monitoring the debt securities and enforcing the rights of the holders of such debt securities, which will be set forth in a prospectus supplement filed with regard to such unindentured debt securities.

The forms of senior indenture and subordinated indenture are filed as exhibits to the registration statement of which this prospectus forms a part. Together, the senior indenture and the subordinated indenture are referred to as the indentures and, together, the senior trustee and the subordinated trustee are referred to as the trustees. This prospectus briefly outlines some of the provisions of the indentures. The following summary of the material provisions of the indentures is qualified in its entirety by the provisions of the indentures, including definitions of certain terms used in the indentures. Wherever we refer to particular sections or defined terms of the indentures, those sections or defined terms are incorporated by reference in this prospectus or the applicable prospectus supplement. You should review any indentures that are filed as exhibits to the registration statement of which this prospectus forms a part for additional information.

If we issue debt securities other than under an indenture, we will likely be limited to issuing a maximum of \$50 million of such debt securities and it is also likely that such debt securities will be unsecured and subordinated. Any indenture regarding debt securities issued by us will not limit the amount of debt securities that we may issue. The debt securities or applicable indenture, if any, will provide that debt securities may be issued up to an aggregate principal amount authorized from time to time by us and may be payable in any currency or currency unit designated by us or in amounts determined by reference to an index.

General

The following is a summary of the general terms of the debt securities we may issue under an indenture or otherwise, except as otherwise described in a prospectus supplement.

The senior debt securities will constitute our unsubordinated general obligations and will rank pari passu with our other unsubordinated obligations. The subordinated debt securities will constitute our subordinated general obligations and will be junior in right of payment to our senior indebtedness (including senior debt securities).

The debt securities will be our unsecured obligations unless otherwise specified in the applicable prospectus supplement. Any secured debt or other secured obligations will be effectively senior to the debt securities to the extent of the value of the assets securing such debt or other obligations.

The applicable prospectus supplement and any free writing prospectus will include any additional or different terms of the debt securities or any series being offered, including the following terms:

the title and type of the debt securities

whether the debt securities will be issued under an indenture;

whether the debt securities will be senior or subordinated debt securities, and, with respect to subordinated debt securities, the terms on which they are subordinated

the aggregate principal amount of the debt securities

the price or prices at which we will sell the debt securities

the maturity date or dates of the debt securities and the right, if any, to extend such date or dates

the rate or rates, if any, per year, at which the debt securities will bear interest, or the method of determining such rate or rates

the date or dates from which such interest will accrue, the interest payment dates on which such interest will be payable or the manner of determination of such interest payment dates and the related record dates

the right, if any, to extend the interest payment periods and the duration of that extension

the manner of paying principal and interest and the place or places where principal and interest will be payable

provisions for a sinking fund, purchase fund or other analogous fund, if any

any redemption dates, prices, obligations and restrictions on the debt securities

the currency, currencies or currency units in which the debt securities will be denominated and the currency, currencies or currency units in which principal and interest, if any, on the debt securities may be payable

any conversion or exchange features of the debt securities

whether and upon what terms the debt securities may be defeased

any events of default or covenants in addition to or in lieu of those set forth in any indenture

whether the debt securities will be issued in definitive or global form or in definitive form only upon satisfaction of certain conditions

whether the debt securities will be guaranteed as to payment or performance

if the debt securities of the series will be secured by any collateral and, if so, a general description of the collateral and the terms and provisions of such collateral security, pledge or other agreements and

any other material terms of the debt securities.

The applicable prospectus supplement will also describe any applicable material U.S. federal income tax consequences. When we refer to "principal" in this section with reference to the debt securities, we are also referring to "premium, if any."

We may from time to time, without notice to or the consent of the holders of any series of debt securities, create and issue further debt securities of any such series ranking equally with the debt securities of such series in all respects (or in all respects other than (1) the payment of interest accruing prior to the issue date of such further debt securities or (2) the first payment of interest following the issue date of such further debt securities). Such further debt securities may be consolidated and form a single series with the debt securities of such series and have the same terms as to status, redemption or otherwise as the debt securities of such series.

You may present debt securities for exchange and you may present debt securities for transfer in the manner, at the places and subject to the restrictions set forth in the debt securities and the applicable prospectus supplement. We will provide you those services without charge, although you may have to pay any tax or other governmental charge payable in connection with any exchange or transfer, as set forth in the debt securities or any indenture.

Debt securities may bear interest at a fixed rate or a floating rate. Debt securities bearing no interest or interest at a rate that at the time of issuance is below the prevailing market rate (original issue discount securities) may be sold at a discount below their stated principal amount.

We may issue debt securities with the principal amount payable on any principal payment date, or the amount of interest payable on any interest payment date, to be determined by reference to one or more currency exchange rates, securities or baskets of securities, commodity prices or indices. You may receive a payment of principal on any principal payment date, or a payment of interest on any interest payment date, that is greater than or less than the amount of principal or interest otherwise payable on such dates, depending on the value on such dates of the applicable currency, security or basket of securities, commodity or index. Information as to the methods for determining the amount of principal or interest payable on any date, the currencies, securities or baskets of securities, commodities or indices to which the amount payable on such date will be set forth in the applicable prospectus supplement.

Certain Terms of the Senior Debt Securities

The following is a summary of the general terms of the senior debt securities we may issue under a senior indenture, except as otherwise described in a prospectus supplement.

Covenants. Unless we indicate otherwise in a prospectus supplement, the senior debt securities will not contain any financial or restrictive covenants, including covenants restricting either us or any of our subsidiaries from incurring, issuing, assuming or guaranteeing any indebtedness secured by a lien on any of our or our subsidiaries' property or capital stock, or restricting either us or any of our subsidiaries from entering into sale and leaseback transactions.

Consolidation, Merger and Sale of Assets. Unless we indicate otherwise in a prospectus supplement, we may not consolidate with or merge into any other person, in a transaction in which we are not the surviving corporation, or convey, transfer or lease our properties and assets substantially as an entirety to any person, in either case, unless:

the successor entity, if any, is a U.S. corporation, limited liability company, partnership or trust (subject to certain exceptions provided for in the senior indenture)

the successor entity assumes our obligations on the senior debt securities and under the senior indenture

immediately after giving effect to the transaction, no default or event of default shall have occurred and be continuing and

certain other conditions are met.

No Protection in the Event of a Change in Control. Unless we indicate otherwise in a prospectus supplement with respect to a particular series of senior debt securities, the senior debt securities will not contain any provisions that may afford holders of the senior debt securities protection in the event we have a change in control or in the event of a highly leveraged transaction (whether or not such transaction results in a change in control).

Events of Default. Unless we indicate otherwise in a prospectus supplement with respect to a particular series of senior debt securities, the following are events of default under the senior indenture for any series of senior debt securities:

failure to pay interest on any senior debt securities of such series when due and payable, if that default continues for a period of 90 days (or such other period as may be specified for such series)

failure to pay principal on the senior debt securities of such series when due and payable whether at maturity, upon redemption, by declaration or otherwise (and, if specified for such series, the continuance of such failure for a specified period)

default in the performance of or breach of any of our covenants or agreements in the senior indenture applicable to senior debt securities of such series, other than a covenant breach which is specifically dealt with elsewhere in the senior indenture, and that default or breach continues for a period of 90 days after we receive written notice from the trustee or from the holders of 25% or more in aggregate principal amount of the senior debt securities of such series

certain events of bankruptcy or insolvency, whether or not voluntary and

any other event of default provided for in such series of senior debt securities as may be specified in the applicable prospectus supplement.

Unless we indicate otherwise in a prospectus supplement, the default by us under any other debt, including any other series of debt securities, is not a default under the senior indenture.

If an event of default other than an event of default specified in the fourth bullet point above occurs with respect to a series of senior debt securities and is continuing under the senior indenture, then, and in each such case, either the trustee or the holders of not less than 25% in aggregate principal amount of such series then outstanding under the senior indenture (each such series voting as a separate class) by written notice to us and to the trustee, if such notice is given by the holders, may, and the trustee at the request of such holders shall, declare the principal amount of and accrued interest on such series of senior debt securities to be immediately due and

payable, and upon this declaration, the same shall become immediately due and payable.

If an event of default specified in the fourth bullet point above occurs with respect to us and is continuing, the entire principal amount of and accrued interest, if any, on each series of senior debt securities then outstanding shall become immediately due and payable.

Unless otherwise specified in the prospectus supplement relating to a series of senior debt securities originally issued at a discount, the amount due upon acceleration shall include only the original issue price of the senior debt securities, the amount of original issue discount accrued to the date of acceleration and accrued interest, if any.

Upon certain conditions, declarations of acceleration may be rescinded and annulled and past defaults may be waived by the holders of a majority in aggregate principal amount of all the senior debt securities of such series affected by the default, each series voting as a separate class. Furthermore, prior to a declaration of acceleration and subject to various provisions in the senior indenture, the holders of a majority in aggregate principal amount of a series of senior debt securities, by notice to the trustee, may waive an existing default or event of default with respect to such senior debt securities and its consequences, except a default in the payment of principal of or interest on such senior debt securities or in respect of a covenant or provision of the senior indenture which cannot be modified or amended without the consent of the holders of each such senior debt security. Upon any such waiver, such default shall cease to exist, and any event of default with respect to such senior debt securities shall be deemed to have been cured, for every purpose of the senior indenture but no such waiver shall extend to any subsequent or other default or event of default or impair any right consequent thereto. For information as to the waiver of defaults, see "—Modification and Waiver."

The holders of a majority in aggregate principal amount of a series of senior debt securities may direct the time, method and place of conducting any proceeding for any remedy available to the trustee or exercising any trust or power conferred on the trustee with respect to such senior debt securities. However, the trustee may refuse to follow any direction that conflicts with law or the senior indenture, that may involve the trustee in personal liability or that the trustee determines in good faith may be unduly prejudicial to the rights of holders of such series of senior debt securities not joining in the giving of such direction and may take any other action it deems proper that is not inconsistent with any such direction received from holders of such series of senior debt securities. A holder may not pursue any remedy with respect to the senior indenture or any series of senior debt securities unless:

the holder gives the trustee written notice of a continuing event of default

the holders of at least 25% in aggregate principal amount of such series of senior debt securities make a written request to the trustee to pursue the remedy in respect of such event of default

the requesting holder or holders offer the trustee indemnity satisfactory to the trustee against any costs, liability or expense

the trustee does not comply with the request within 60 days after receipt of the request and the offer of indemnity and

during such 60-day period, the holders of a majority in aggregate principal amount of such series of senior debt securities do not give the trustee a direction that is inconsistent with the request.

These limitations, however, do not apply to the right of any holder of a senior debt security to receive payment of the principal of and interest, if any, on such senior debt security in accordance with the terms of such debt security, or to bring suit for the enforcement of any such payment in accordance with the terms of such debt security, on or after the due date for the senior debt securities, which right shall not be impaired or affected without the consent of the holder.

The senior indenture requires certain of our officers to certify, on or before a fixed date in each year in which any senior debt security is outstanding, as to their knowledge of our compliance with all covenants, agreements and conditions under the senior indenture.

Satisfaction and Discharge. We can satisfy and discharge our obligations to holders of any series of senior

debt securities if:

we pay or cause to be paid, as and when due and payable, the principal of and any interest on all senior debt securities of such series outstanding under the senior indenture or

all senior debt securities of such series have become due and payable or will become due and payable within one year (or are to be called for redemption within one year) and we deposit in trust a combination of cash and U.S. government or U.S. government agency obligations that will generate enough cash to make interest, principal and any other payments on the debt securities of that series on their various due dates.

Under current U.S. federal income tax law, the deposit and our legal release from the senior debt securities would be treated as a taxable event, and beneficial owners of such debt securities would generally recognize any gain or loss on such senior debt securities. Purchasers of the senior debt securities should consult their own advisers with respect to the tax consequences to them of such deposit and discharge, including the applicability and effect of tax laws other than the U.S. federal income tax law.

Defeasance. Unless the applicable prospectus supplement provides otherwise, the following discussion of legal defeasance and discharge and covenant defeasance will apply to any senior series of senior debt securities issued under the indentures.

Legal Defeasance. We can legally release ourselves from any payment or other obligations on the senior debt securities of any series (called "legal defeasance") if certain conditions are met, including the following:

We deposit in trust for your benefit and the benefit of all other direct holders of the senior debt securities of the same series a combination of cash and U.S. government or U.S. government agency obligations that will generate enough cash to make interest, principal and any other payments on the senior debt securities of that series on their various due dates.

There is a change in current U.S. federal income tax law or an IRS ruling that lets us make the above deposit without causing you to be taxed on the senior debt securities any differently than if we did not make the deposit and instead repaid the senior debt securities ourselves when due.

We deliver to the trustee a legal opinion of our counsel confirming the tax law change or ruling described above.

If we ever did accomplish legal defeasance, as described above, you would have to rely solely on the trust deposit for repayment of the debt securities. You could not look to us for repayment in the event of any shortfall.

Covenant Defeasance. Without any change of current U.S. federal tax law, we can make the same type of deposit described above and be released from some of the covenants in the senior debt securities (called "covenant defeasance"). In that event, you would lose the protection of those covenants but would gain the protection of having money and securities set aside in trust to repay the senior debt securities. In order to achieve covenant defeasance, we must do the following (among other things):

We must deposit in trust for your benefit and the benefit of all other direct holders of the senior debt securities of the same series a combination of cash and U.S. government or U.S. government agency obligations that will generate enough cash to make interest, principal and any other payments on the senior debt securities of that series on their various due dates.

We must deliver to the trustee a legal opinion of our counsel confirming that under current U.S. federal income tax law we may make the above deposit without causing you to be taxed on the senior debt securities any differently than if we did not make the deposit and instead repaid the senior debt securities ourselves when due.

If we accomplish covenant defeasance, you can still look to us for repayment of the senior debt securities if there were a shortfall in the trust deposit. In fact, if one of the events of default occurred (such as our bankruptcy) and the debt securities become immediately due and payable, there may be such a shortfall. Depending on the events causing the default, you may not be able to obtain payment of the shortfall.

Modification and Waiver. We and the trustee may amend or supplement the senior indenture or the senior debt securities without the consent of any holder:

to comply with the requirements of the SEC in order to effect or maintain the qualification of the indenture under the Trust Indenture Act of 1939, as amended, or the Trust Indenture Act

to convey, transfer, assign, mortgage or pledge any assets as security for the senior debt securities of one or more series

to evidence the succession of a corporation, limited liability company, partnership or trust to us, and the assumption by such successor of our covenants, agreements and obligations under the senior indenture

to add to our covenants such new covenants, restrictions, conditions or provisions for the protection of the holders, and to make the occurrence, or the occurrence and continuance, of a default in any such additional covenants, restrictions, conditions or provisions an event of default

to cure any ambiguity, defect or inconsistency in the senior indenture or in any supplemental indenture or to conform the senior indenture or the senior debt securities to the description of senior debt securities of such series set forth in this prospectus or any applicable prospectus supplement

to provide for or add guarantors with respect to the senior debt securities of any series

to establish the form or forms or terms of the senior debt securities as permitted by the senior indenture

to evidence and provide for the acceptance of appointment under the senior indenture by a successor trustee, or to make such changes as shall be necessary to provide for or facilitate the administration of the trusts in the senior indenture by more than one trustee

to add to, delete from or revise the conditions, limitations and restrictions on the authorized amount, terms, purposes of issue, authentication and delivery of any series of senior debt securities

to make any change to the senior debt securities of any series so long as no senior debt securities of such series are outstanding or

to make any change that does not adversely affect the rights of any holder in any material respect.

Other amendments and modifications of the senior indenture or the senior debt securities issued may be made, and our compliance with any provision of the senior indenture with respect to any series of senior debt securities may be waived, with the consent of the holders of a majority of the aggregate principal amount of the outstanding senior debt securities of all series affected by the amendment or modification (voting together as a single class) provided, however, that each affected holder must consent to any modification, amendment or waiver that:

extends the final maturity of any senior debt securities of such series

reduces the principal amount of any senior debt securities of such series

reduces the rate or extends the time of payment of interest on any senior debt securities of such series

reduces the amount payable upon the redemption of any senior debt securities of such series

changes the currency of payment of principal of or interest on any senior debt securities of such series

reduces the principal amount of original issue discount securities payable upon acceleration of maturity or the amount provable in bankruptcy

waives a default in the payment of principal of or interest on the senior debt securities

changes the provisions relating to the waiver of past defaults or changes or impairs the right of holders to receive payment or to institute suit for the enforcement of any payment or conversion of any senior debt securities of such series on or after the due date therefor

modifies any of the provisions of these restrictions on amendments and modifications, except to increase any required percentage or to provide that certain other provisions cannot be modified or waived without the consent of the holder of each senior debt security of such series affected by the modification or

reduces the above-stated percentage of outstanding senior debt securities of such series whose holders must consent to a supplemental indenture or to modify or amend or to waive certain provisions of or defaults under the senior indenture.

It shall not be necessary for the holders to approve the particular form of any proposed amendment, supplement or waiver, but it shall be sufficient if the holders' consent approves the substance thereof. After an amendment, supplement or waiver of the senior indenture in accordance with the provisions described in this section becomes effective, the trustee must give to the holders affected thereby certain notice briefly describing the amendment, supplement or waiver. Any failure by the trustee to give such notice, or any defect therein, shall not, however, in any way impair or affect the validity of any such amendment, supplemental indenture or waiver.

No Personal Liability of Incorporators, Stockholders, Officers, Directors. The senior indenture provides that no recourse shall be had under any obligation, covenant or agreement of ours in the senior indenture or any supplemental indenture, or in any of the senior debt securities or because of the creation of any indebtedness represented thereby, against any of our incorporators, stockholders, officers or directors, past, present or future, or of any predecessor or successor entity thereof under any law, statute or constitutional provision or by the enforcement of any assessment or by any legal or equitable proceeding or otherwise. Each holder, by accepting the senior debt securities, waives and releases all such liability.

Concerning the Trustee. The senior indenture provides that, except during the continuance of an event of default, the trustee will not be liable except for the performance of such duties as are specifically set forth in the senior indenture. If an event of default has occurred and is continuing, the trustee will exercise such rights and powers vested in it under the senior indenture and will use the same degree of care and skill in its exercise as a prudent person would exercise under the circumstances in the conduct of such person's own affairs.

The senior indenture and the provisions of the Trust Indenture Act incorporated by reference therein contain limitations on the rights of the trustee thereunder, should it become a creditor of ours or any of our subsidiaries, to obtain payment of claims in certain cases or to realize on certain property received by it in respect of any such claims, as security or otherwise. The trustee is permitted to engage in other transactions, provided that if it acquires any conflicting interest (as defined in the Trust Indenture Act), it must eliminate such conflict or resign.

We may have normal banking relationships with the senior trustee in the ordinary course of business.

Unclaimed Funds. All funds deposited with the trustee or any paying agent for the payment of principal, premium, interest or additional amounts in respect of the senior debt securities that remain unclaimed for two years after the date upon which such principal, premium or interest became due and payable will be repaid to us. Thereafter, any right of any holder of senior debt securities to such funds shall be enforceable only against us, and the trustee and paying agents will have no liability therefor.

Governing Law. The senior indenture and the senior debt securities will be governed by, and construed in accordance with, the internal laws of the State of New York.

Certain Terms of the Subordinated Debt Securities

The following is a summary of the general terms of the subordinated debt securities we may issue under a subordinated indenture, except as otherwise described in a prospectus supplement.

Other than the terms of the subordinated indenture and subordinated debt securities relating to subordination or otherwise as described in the prospectus supplement relating to a particular series of subordinated debt securities, the terms of the subordinated indenture and subordinated debt securities are identical in all material respects to the terms of the senior indenture and senior debt securities.

Additional or different subordination terms may be specified in the prospectus supplement applicable to a particular series.

Subordination. The indebtedness evidenced by the subordinated debt securities is subordinate to the prior payment in full of all of our senior indebtedness, as defined in the subordinated indenture. During the continuance beyond any applicable grace period of any default in the payment of principal, premium, interest or any other payment due on any of our senior indebtedness, we may not make any payment of principal of or interest on the subordinated debt securities (except for certain sinking fund payments). In addition, upon any payment or distribution of our assets upon any dissolution, winding-up, liquidation or reorganization, the payment of the principal of and interest on the subordinated debt securities will be subordinated to the extent provided in the subordinated indenture in right of payment to the prior payment in full of all our senior indebtedness. Because of this subordination, if we dissolve or otherwise liquidate, holders of our subordinated debt securities may receive less, ratably, than holders of our senior indebtedness. The subordination provisions do not prevent the occurrence of an event of default under the subordinated indenture.

The term "senior indebtedness" of a person means with respect to such person the principal of, premium, if any, interest on, and any other payment due pursuant to any of the following, whether outstanding on the date of the subordinated indenture or incurred by that person in the future:

all of the indebtedness of that person for money borrowed

all of the indebtedness of that person evidenced by notes, debentures, bonds or other securities sold by that person for money

all of the lease obligations that are capitalized on the books of that person in accordance with generally accepted accounting principles

all indebtedness of others of the kinds described in the first two bullet points above and all lease obligations of others of the kind described in the third bullet point above that the person, in any manner, assumes or guarantees or that the person in effect guarantees through an agreement to purchase, whether that agreement is contingent or otherwise and

all renewals, extensions or refundings of indebtedness of the kinds described in the first, second or fourth bullet point above and all renewals or extensions of leases of the kinds described in the third or fourth bullet point above

unless, in the case of any particular indebtedness, renewal, extension or refunding, the instrument creating or evidencing it or the assumption or guarantee relating to it expressly provides that such indebtedness, renewal, extension or refunding is not superior in right of payment to the subordinated debt securities. Our senior debt securities constitute senior indebtedness for purposes of the subordinated debt indenture.

Description of Warrants

We may issue warrants for the purchase of shares of common stock, debt securities, and/or units from time to time. We may issue warrants independently or together with common stock and/or debt securities, and the warrants may be attached to or separate from those securities. If we issue warrants, they will be evidenced by warrant agreements or warrant certificates issued under one or more warrant agreements, which will be contracts between us and the holders of the warrants or an agent for the holders of the warrants. We encourage you to read

the prospectus supplement that relates to any warrants we may offer, as well as the complete warrant agreement or warrant certificate that contain the terms of the warrants. If we issue warrants, the forms of warrant agreements and warrant certificates, as applicable, relating to the warrants will be filed as exhibits to the registration statement that includes this prospectus, or as an exhibit to a filing with the SEC that is incorporated by reference into this prospectus.

Description of Subscription Rights

We may issue rights to purchase our securities. The rights may or may not be transferable by the persons purchasing or receiving the rights. In connection with any rights offering, we may enter into a standby underwriting, standby purchase or other arrangement with one or more underwriters or other persons pursuant to which such underwriters or other persons would purchase any offered securities remaining unsubscribed for after such rights offering. In connection with a rights offering to holders of our capital stock a prospectus supplement will be distributed to such holders on or after the record date for receiving rights in the rights offering set by us.

We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from a current report on Form 8-K that we file with the SEC, forms of the subscription rights, standby underwriting agreement or other agreements, if any. The prospectus supplement relating to any rights that we offer will include specific terms relating to the offering, including, among other matters:

the date of determining the security holders entitled to the rights distribution;

the aggregate number of rights issued and the aggregate amount of securities purchasable upon exercise of the rights;

the exercise price;

the conditions to completion of the rights offering;

the date on which the right to exercise the rights will commence and the date on which the rights will expire; and

any applicable federal income tax considerations.

Each right would entitle the holder of the rights to purchase the principal amount of securities at the exercise price set forth in the applicable prospectus supplement. Rights may be exercised at any time up to the close of business on the expiration date for the rights provided in the applicable prospectus supplement. After the close of business on the expiration date, all unexercised rights will become void.

Holders may exercise rights as described in the applicable prospectus supplement. Upon receipt of payment and the rights certificate properly completed and duly executed at the corporate trust office of the rights agent, if any, or any other office indicated in the prospectus supplement, we will, as soon as practicable, forward the securities purchasable upon exercise of the rights. If less than all of the rights issued in any rights offering are exercised, we may offer any unsubscribed securities directly to persons other than stockholders, to or through agents, underwriters or dealers or through a combination of such methods, including pursuant to standby underwriting or purchase arrangements, as described in the applicable prospectus supplement.

Description of Units

We may issue units comprised of one or more of the other securities described in this prospectus in any combination from time to time. Each unit will be issued so that the holder of the unit is also the holder of each security included in the unit. Thus, the holder of a unit will have the rights and obligations of a holder of each included security. If we issue units, they will be evidenced by unit agreements or unit certificates issued under one or more unit agreements, which will be contracts between us and the holders of the units or an agent for the holders of the units. The unit agreement under which a unit is issued may provide that the securities included in the unit may not be held or transferred separately, at any time or at any time before a specified date. We encourage you to read the prospectus supplement that relates to any units we may offer, as well as the complete unit agreement or unit certificate that contain the terms of the units. If we issue units, the forms of unit

agreements and unit certificates, as applicable, relating to the units will be filed as exhibits to the registration statement that includes this prospectus, or as an exhibit to a filing with the SEC that is incorporated by reference into this prospectus.

PLAN OF DISTRIBUTION

We and the selling stockholder may sell our securities from time to time in any manner permitted by the Securities Act, including any one or more of the following ways:

through agents;

to or through underwriters;

to or through broker-dealers (acting as agent or principal);

in "at the market" offerings, within the meaning of Rule 415(a)(4) of the Securities Act, to or through a market maker or into an existing trading market, on an exchange or otherwise; and/or

directly to purchasers, through a specific bidding or auction process or otherwise.

The securities may be sold at a fixed price or prices, which may be changed, at market prices prevailing at the time of sale, at prices relating to the prevailing market prices or at negotiated prices.

Offers to purchase offered securities may be solicited by agents designated by us from time to time. Any agent involved in the offer or sale of the offered securities in respect of which this prospectus is delivered will be named, and any commissions payable by us will be set forth, in the applicable prospectus supplement. Unless otherwise set forth in the applicable prospectus supplement, any agent will be acting on a reasonable best efforts basis for the period of its appointment. Any agent may be deemed to be an underwriter, as that term is defined in the Securities Act, of the offered securities so offered and sold.

We and the selling stockholder will set forth in a prospectus supplement the terms of the offering of our securities, including:

the name or names of any agents, underwriters or dealers;

the purchase price of our securities being offered and the proceeds we will receive from the sale;

any over-allotment options under which underwriters may purchase additional securities from us;

any agency fees or underwriting discounts and commissions and other items constituting agents' or underwriters' compensation;

the public offering price;

any discounts or concessions allowed or reallowed or paid to dealers; and

any securities exchanges on which such securities may be listed.

If we or the selling stockholder offer securities to be sold to the public by means of an underwritten offering, either through underwriting syndicates represented by managing underwriters or directly by the managing underwriters, we or the selling stockholder will execute an underwriting agreement with an underwriter or underwriters, and the names of the specific managing underwriter or underwriters, as well as any other underwriters, will be set forth in the applicable prospectus supplement. In addition, the terms of the transaction, including commissions, discounts and any other compensation of the underwriters and dealers, if any, will be set forth in the applicable prospectus supplement, which prospectus supplement will be used by the underwriters to make resales of the offered securities. If underwriters are utilized in the sale of the offered securities, the offered securities will be acquired by the underwriters for their own account and may be resold from time to time in one or

more transactions, including:

transactions on The NASDAQ Capital Market or any other organized market where the securities may be traded;

in the over-the-counter market;

in negotiated transactions; or

under delayed delivery contracts or other contractual commitments.

We or the selling stockholder may grant to the underwriters options to purchase additional offered securities to cover over-allotments, if any, at the public offering price with additional underwriting discounts or commissions, as may be set forth in the applicable prospectus supplement. If we or the selling stockholder grant any over-allotment option, the terms of the over-allotment option will be set forth in the applicable prospectus supplement.

We or the selling stockholder may authorize agents or underwriters to solicit offers by certain types of institutional investors to purchase securities from us at the public offering price set forth in the prospectus supplement pursuant to delayed delivery contracts providing for payment and delivery on a specified date in the future. The conditions to these contracts and the commissions to be paid for solicitation of these contracts will be described in the prospectus supplement.

We or the selling stockholder may indemnify agents, underwriters and dealers against specified liabilities, including liabilities incurred under the Securities Act, or to contribution by us to payments they may be required to make in respect of such liabilities. Agents, underwriters or dealers, or their respective affiliates, may be customers of, engage in transactions with or perform services for us, the selling stockholder or our respective affiliates, in the ordinary course of business.

Unless otherwise specified in the applicable prospectus supplement, each class or series of securities will be a new issue with no established trading market, other than our common stock, which is traded on The NASDAQ Capital Market. We may elect to list any other class or series of securities on any exchange and, in the case of our common stock, on any additional exchange. However, unless otherwise specified in the applicable prospectus supplement, we will not be obligated to do so. It is possible that one or more underwriters may make a market in a class or series of securities, but the underwriters will not be obligated to do so and may discontinue any market making at any time without notice. We cannot give any assurance as to the liquidity of the trading market for any of the offered securities.

Any underwriter may engage in over-allotment, stabilizing transactions, short-covering transactions and penalty bids in accordance with Regulation M under the Exchange Act. Over-allotment involves sales in excess of the offering size, which create a short position. Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum price. Syndicate-covering or other short-covering transactions involve purchases of the securities, either through exercise of the over-allotment option or in the open market after the distribution is completed, to cover short positions. Penalty bids permit the underwriters to reclaim a selling concession from a dealer when the securities originally sold by the dealer are purchased in a stabilizing or covering transaction to cover short positions. Those activities may cause the price of the securities to be higher than it would otherwise be. If commenced, the underwriters may discontinue any of the activities at any time.

We have advised the selling stockholder that the anti-manipulation rules of Regulation M may apply to sales of shares in the market and to the activities of the selling stockholder its affiliates. This regulation may limit the timing of purchases and sales of any of the shares of common stock offered in this prospectus by the selling stockholder. The anti-manipulation rules under the Exchange Act may apply to sales of shares in the market and to the activities of the selling stockholder and its affiliates.

To comply with the securities laws of certain states, if applicable, the securities offered by this prospectus will be offered and sold in those states only through registered or licensed brokers or dealers.

LEGAL MATTERS

The validity of the issuance of the securities offered by this prospectus has been passed upon for us by Greenberg Traurig, LLP, Irvine, California.

EXPERTS

The consolidated financial statements as of and for the fiscal years ended December 31, 2019 and 2018, incorporated by reference into this prospectus supplement from the Company's Annual Report on Form 10-K for the year ended December 31, 2019 have been so incorporated in reliance on the report of Marcum, LLP, an independent registered public accounting firm, as stated in their report which is incorporated by reference herein, and has been so incorporated in reliance upon such report and upon the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-3 under the Securities Act that registers the securities to be sold in this offering. In addition, we file annual, quarterly and current reports and proxy statements and other information with the SEC. Our SEC filings are and will become available to the public over the Internet at the SEC's website at www.sec.gov. You may also read and copy any document we file with the SEC at its public reference facilities at 100 F Street N.E., Washington, D.C. 20549. You can also obtain copies of the documents upon the payment of a duplicating fee to the SEC. Please call the SEC at 1-800-SEC-0330 for further information on the operation of the public reference facilities. Copies of certain information filed by us with the SEC are also available on our website at https://ir.tffpharma.com/financial-information/sec-filings. We have not incorporated by reference into this prospectus the information on our website and it is not a part of this document.

This prospectus does not contain all of the information set forth in the registration statement and the exhibits and schedules thereto. Some items are omitted in accordance with the rules and regulations of the SEC. You should review the information and exhibits included in the registration statement for further information about us and the securities we are offering. Statements in this prospectus concerning any document we filed as an exhibit to the registration statement or that we otherwise filed with the SEC are not intended to be comprehensive and are qualified by reference to these filings. You should review the complete document to evaluate these statements.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC allows us to incorporate by reference the information we file with it, which means that we can disclose important information to you by referring you to another document that we have filed separately with the SEC. You should read the information incorporated by reference because it is an important part of this prospectus. Information in this prospectus supersedes information incorporated by reference that we filed with the SEC prior to the date of this prospectus, while information that we file later with the SEC will automatically update and supersede the information in this prospectus. We incorporate by reference into this prospectus and the registration statement of which this prospectus is a part the information or documents listed below that we have filed with the SEC (Commission File No. 001-39102):

Our Annual Report on Form 10-K for the fiscal year ended December 31, 2019 filed with the SEC on March 27, 2020;

Our Annual Report on <u>Form 10-K/A</u> for the fiscal year ended December 31, 2019 filedwith the SEC on April 29, 2020;

Our Quarterly Report on <u>Form 10-Q</u> for the quarter ended March 31, 2020 filed with the SEC on May 14, 2020;

Our Quarterly Report on <u>Form 10-Q</u> for the quarter ended June 30, 2020 filed with the SEC on August 13, 2020;

Our Quarterly Report on Form 10-Q for the quarter ended September 30, 2020 filed with the SEC on November 5, 2020;

Our Current Reports on Form 8-K filed with the SEC on January 31, 2020, August 11, 2020, September 30, 2020 and October 1, 2020;

Our definitive Proxy Statement on Schedule 14A filed with the SEC on August 28, 2020; and

The description of our common stock set forth in our registration statement on <u>Form 8-A12B</u> filed with the SEC on October 22, 2019.

We also incorporate by reference any future filings (other than current reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits filed on such form that are related to such items unless such Form 8-K expressly provides to the contrary) made with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act made after the effective date of this registration statement of which this prospectus is a part and until we terminate this offering. Information in such future filings updates and supplements the information provided in this prospectus. Any statements in any such future filings will automatically be deemed to modify and supersede any information in any document we previously filed with the SEC that is incorporated or deemed to be incorporated herein by reference to the extent that statements in the later filed document modify or replace such earlier statements.

We will furnish without charge to each person, including any beneficial owner, to whom a prospectus is delivered, upon written or oral request, a copy of any or all of the reports or documents incorporated by reference into this prospectus but not delivered with the prospectus, including exhibits that are specifically incorporated by reference into such documents. You can access the reports and documents incorporated by reference into this prospectus at https://ir.tffpharma.com/financial-information/sec-filings. You may also direct any requests for reports or documents to:

Attention: Corporate Secretary Telephone: (737) 802-1973 Email: investorinfo@tffpharma.com You should rely only on information contained in, or incorporated by reference into, this prospectus. We have not authorized anyone to provide you with information different from that contained in this prospectus or incorporated by reference into this prospectus. We are not making offers to sell the securities in any jurisdiction in which such an offer or solicitation is not authorized or in which the person making such offer or solicitation is not qualified to do so or to anyone to whom it is unlawful to make such offer or solicitation.

INDEMNIFICATION OF DIRECTORS AND OFFICERS

The Delaware General Corporation Law provides that corporations may include a provision in their certificate of incorporation relieving directors of monetary liability for breach of their fiduciary duty as directors, provided that such provision shall not eliminate or limit the liability of a director (i) for any breach of the director's duty of loyalty to the corporation or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) for unlawful payment of a dividend or unlawful stock purchase or redemption, or (iv) for any transaction from which the director derived an improper personal benefit. Our amended and restated certificate of incorporation provides that directors are not liable to us or our stockholders for monetary damages for breach of their fiduciary duty as directors to the fullest extent permitted by Delaware law. In addition to the foregoing, our amended and restated certificate of incorporation provides that we shall indemnify directors and officers to the fullest extent permitted by law and we have entered into indemnification agreements with each of our directors and executive officers.

The above provisions in our amended and restated certificate of incorporation may have the effect of reducing the likelihood of derivative litigation against directors and may discourage or deter stockholders or management from bringing a lawsuit against directors for breach of their fiduciary duty, even though such an action, if successful, might otherwise have benefited us and our stockholders. However, we believe that the foregoing provisions are necessary to attract and retain qualified persons as directors.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to our directors, officers and controlling persons pursuant to the foregoing provisions, or otherwise, we have been advised that in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable.

500,000 Shares

TFF PHARMACEUTICALS, INC.

Common Stock

PROSPECTUS SUPPLEMENT

Roth Capital Partners

December 4, 2020