Registration Statement No. 333-

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-3

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

ATOSSA THERAPEUTICS, INC.

(Exact name of registrant as specified in its charter)

Delaware

26-4753208

(State or other Jurisdiction of incorporation or organization)

(I.R.S. Employer Identification No.)

107 Spring Street Seattle, Washington 98104 Telephone: (866) 893-4927

(Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

Steven C. Quay Chairman, Chief Executive Officer and President 107 Spring Street Seattle, Washington 98104 Telephone: (866) 893-4927

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copy to:

Ryan A. Murr Gibson, Dunn & Crutcher LLP 555 Mission Street San Francisco, California 94105 Telephone: (415) 393-8373 Kyle Guse Chief Financial Officer and General Counsel 107 Spring Street Seattle, Washington 98104 (866) 893-4927

Smaller reporting company

|X|

determined by the registrant.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box.

If this Form is used to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act Registration Statement number of the earlier effective registration statement for the same offering.

Registration Statement No. 333-248555

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing

Registration Statement number of the earlier effective registration statement for the same offering. \Box

with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box. \Box

|X|

Non-accelerated filer

Approximate Date of Commencement of Proposed Sale to the Public: From time to time after this Registration Statement becomes effective, as

-	U	on statement filed pursuant to General Instruction I.D. filed to register additional order the Securities Act, check the following box. \Box	nal securities or	
Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer", "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act. (Check one):				
Large accelerated filer		Accelerated filer		

Emerging	growth	company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended	transition period for complying with any
new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.	

CALCULATION OF REGISTRATION FEE

Title of each class of securities to be registered(1)	Amount to be registered(2)	Proposed maximum offering price per unit(3)	Proposed maximum aggregate offering price(3)	Amount of registration fee(4)
Common stock, \$0.18 per share	-	-	-	-
Preferred stock, \$0.001 per share	-	_	_	-
Debt Securities -	_	_	-	-
Warrants -	_	_	_	_
Units -	_	_	_	_
Total -	_	_	\$8,365,470	\$912.67

- (1) Securities registered hereunder may be sold separately, together or as units with other securities registered hereunder.
- (2) These are being registered hereunder such indeterminate number of shares of common stock and preferred stock, such indeterminate principal amount of debt securities, such indeterminate number of warrants to purchase common stock, preferred stock or debt securities, and such indeterminate number of units consisting of such securities. The registrant previously registered securities, including common stock, preferred stock, debt securities, warrants and units comprised of same, with an aggregate offering price of \$100,000,000 on a Registration Statement on Form S-3 (File No. 333-248555) originally filed on September 2, 2020 and declared effective on September 10, 2020 (the "Prior Registration Statement"). In accordance with Rule 462(b) under the Securities Act of 1933, as amended (the "Securities Act") an additional amount of securities, including common stock, preferred stock, warrants, debt securities and units comprised of same having a proposed maximum aggregate offering price of \$8,365,470 is hereby registered, representing no more than 20% of the maximum aggregate offering price of securities available for issuance under the Prior Registration Statement. In no event will the maximum aggregate offering price of all securities issued pursuant to this Registration Statement exceed that registered under such registration statement. The securities registered also include such indeterminate number of shares of common stock and preferred stock and amount of debt securities as may be issued upon conversion of or exchange for preferred stock or debt securities that provide for conversion or exchange, upon exercise of warrants or pursuant to the anti-dilution provisions of any such securities.
- (3) The proposed maximum aggregate offering price per class of security will be determined from time to time by the registrant in connection with the issuance by the registrant of the securities registered hereunder and is not specified as to each class of security pursuant to General Instruction II.D. of Form S-3 under the Securities Act.
- (4) Calculated pursuant to Rule 457(o) under the Securities Act.

EXPLANATORY NOTE AND INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

This Registration Statement is being filed with the Securities and Exchange Commission (the "Commission") pursuant to Rule 462(b) of the Securities Act of 1933, as amended (the "Securities Act"). This Registration Statement relates to the Registration Statement on Form S-3 (File No. 333-248555), originally filed with the Commission by Atossa Therapeutics, Inc. (the "Registrant") on September 2, 2020 and declared effective on September 10, 2020 (the "Prior Registration Statement"). This Registration Statement is being filed for the sole purpose of registering additional securities by a proposed aggregate offering price of \$8,365,470, which represents no more than 20% of the maximum aggregate offering price of the unsold securities remaining under the Prior Registration Statement. The contents of the Prior Registration Statement, including each of the documents filed by the Registrant with the Commission and incorporated or deemed to be incorporated by reference therein and all exhibits thereto, are hereby incorporated by reference. The required opinions and consents are listed on the exhibit index hereto and filed herewith.

PART II INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 16. Exhibit Index.

Exhibits. All exhibits filed with or incorporated by reference in the Registration Statement on Form S-3 (SEC File No. 333-248555) are incorporated by reference into, and shall be deemed a part of, this Registration Statement. The following additional exhibits are filed herewith as part of this Registration Statement:

Exhibit No.	Description	Form	Date
5.1 23.1 23.2	Opinion of Gibson, Dunn & Crutcher LLP Consent of BDO USA LLP Consent of Gibson, Dunn & Crutcher LLP	Filed herewith Filed herewith Filed as part of Exhibit 5.1 to this Registration Statement on Form S-3	March 22, 2021 March 22, 2021 March 22, 2021

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Company certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in Seattle, Washington, on March 22, 2021.

Atossa Therapeutics, Inc. By: /s/ Steven C. Quay

Steven C. Quay, M.D., Ph.D.

Chairman, Chief Executive Officer and President

Signature	Office(s)	Date
/s/ Steven C. Quay Steven C. Quay, M.D., Ph.D.	Chairman, Chief Executive Officer and President (Principal Executive Officer)	March 22, 2021
/s/ Kyle Guse Kyle Guse	Chief Financial Officer, General Counsel and Secretary (Principal Financial and Accounting Officer)	March 22, 2021
* Shu-Chih Chen, Ph.D.	Director	March 22, 2021
* Richard Steinhart	Director	March 22, 2021
* Stephen J. Galli, M.D.	Director	March 22, 2021
* H. Lawrence Remmel	Director	March 22, 2021
* Gregory L. Weaver	Director	March 22, 2021
*By: /s/ Kyle Guse Kyle Guse, Attorney-in-Fact		

GIBSON DUNN

Gibson, Dunn & Crutcher LLP

555 Mission Street San Francisco, CA 94105-0921 Tel 415.393.8200 www.gibsondunn.com

March 22, 2021

Atossa Therapeutics, Inc. 107 Spring Street Seattle, Washington 98104

Re: Atossa Therapeutics, Inc.

Registration Statement on Form S-3 Pursuant to Rule 462(b)

To Whom it May Concern:

We have acted as counsel to Atossa Therapeutics, Inc. a Delaware corporation (the "Company"), in connection with the preparation and filing with the Securities and Exchange Commission (the "Commission") pursuant to Rule 462(b) under the Securities Act of 1933, as amended (the "Securities Act") of a Registration Statement on Form S-3 (the "Registration Statement") relating to the Company's earlier effective Registration Statement on Form S-3 (No. 333-24588) in connection with the offering by the Company of up to an additional \$8,365,470 aggregate offering price of shares of the Company's common stock, par value \$0.18 per share, (the "Shares").

In arriving at the opinion expressed below, we have examined originals, or copies certified or otherwise identified to our satisfaction as being true and complete copies of the originals, of specimen common stock certificates and such other documents, corporate records, certificates of officers of the Company and of public officials and other instruments as we have deemed necessary or advisable to enable us to render the opinions set forth below. In our examination, we have assumed without independent investigation the genuineness of all signatures, the legal capacity and competency of all natural persons, the authenticity of all documents submitted to us as originals and the conformity to original documents of all documents submitted to us as copies.

Based upon the foregoing, and subject to the assumptions, exceptions, qualifications and limitations set forth herein, we are of the opinion that the Shares, when issued against payment therefor as set forth in the Registration Statement, will be validly issued, fully paid and non-assessable.

We consent to the filing of this opinion as an exhibit to the Registration Statement, and we further consent to the use of our name under the caption "<u>Legal Matters</u>" in the Registration Statement and the prospectus that forms a part thereof. In giving these consents, we do not thereby admit that we are within the category of persons whose consent is required under Section 7 of the Securities Act or the Rules and Regulations of the Commission.

Very truly yours,

/s/ Gibson, Dunn & Crutcher LLP

Beijing • Brussels • Century City • Dallas • Denver • Dubai • Frankfurt • Hong Kong • Houston • London • Los Angeles • Munich New York • Orange County • Palo Alto • Paris • San Francisco • São Paulo • Singapore • Washington, D.C.

Consent of Independent Registered Public Accounting Firm

Atossa Therapeutics, Inc. Seattle, Washington

We hereby consent to the use in the Prospectus constituting a part of this Registration Statement of our report dated March 26, 2020, relating to the consolidated financial statements of Atossa Therapeutics, Inc., which is incorporated by reference in the Registration Statement on Form S-3 (No. 333-248555) incorporated by reference in this Registration Statement. Our report contains an explanatory paragraph regarding the Company's ability to continue as a going concern.

We also consent to the reference to us under the caption "Experts" in the Registration Statement on Form S-3 (No. 333-248555) incorporated by reference in this Registration Statement.

/s/ BDO USA, LLP Seattle, Washington

March 22, 2021