

May 3, 2018

VIA EDGARU.S. Securities and Exchange Commission
Division of Corporation Finance
100 F. Street, N.E.
Washington, D.C. 20549
Attention: Ada D. Sarmento**Re: Atossa Genetics Inc.****Amendment No. 1 to Registration Statement on Form S-1
Filed April 23, 2018
File No. 333-223949**

Dear Ms. Sarmento:

This letter is being submitted on behalf of Atossa Genetics Inc. (the “Company”) to describe the changes to Registration Statement on Form S-1, File No. 333-223949 (the “Registration Statement”), as amended by Amendment No. 1 thereto filed with the Securities and Exchange Commission (the “Commission”) on April 23, 2018, that will be made in Amendment No. 2 to the Registration Statement, and information or materials being provided, in response to the comments of the staff of the Division of Corporation Finance (the “Staff”) of the Commission in a letter to the Company dated April 25, 2018 addressed to Steven Quay.

For your convenience, each of the Staff’s numbered comments has been set forth in italics, and the response to each comment appears immediately after the comment.

Registration Statement on Form S-1
Material U.S. Federal Income Tax Consequences, page 35

- 1. It appears that you intend to use a short-form tax opinion. Please revise your disclosure in this section to state that it is the opinion of counsel, to clearly identify and articulate the opinion being rendered and to remove the language stating that this section is a summary. Please ensure that you provide a firm opinion for each material tax consequence or explain why such an opinion cannot be given. If the opinion is subject to uncertainty, please provide an opinion that reflects the degree of uncertainty (ex: “should” or “more likely than not”). Please also have counsel revise the tax opinion filed as Exhibit 8.1 to clearly state that the disclosure under the heading “Material U.S. Federal Income Tax Consequences” in the prospectus is the opinion of counsel. For guidance, refer to Section III.B.2 of Staff Legal Bulletin No. 19 (October 2011).*

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May 3, 2018

Page 2

RESPONSE:

We have updated the tax disclosure and tax opinion filed as Exhibit 8.1 accordingly. Specifically, we now characterize the disclosure as our opinion instead of referring to it as a summary, and have clearly stated, subject to the qualifications set forth therein, that the statements set forth in “MATERIAL U.S. FEDERAL INCOME TAX CONSEQUENCES” in the Registration Statement constitute our opinion as to the material United States federal income tax consequences of the rights offering to holders of the Company’s common stock and participating warrants identified in the Registration Statement.

If you have any questions concerning anything that is said above or about anything else relating to the Registration Statement, please contact the undersigned by phone at 415-393-8373 or by email at rmurr@gibsondunn.com.

Sincerely,

/s/ Ryan A. Murr

Ryan A. Murr

Enclosures

cc: Erin Jaskot