Taysha Gene Therapies, Inc. 3000 Pegasus Park Drive, Suite 1430 Dallas, Texas 75247

September 7, 2023

Via Edgar

United States Securities and Exchange Commission Division of Corporation Finance 100 F Street, N.E. Washington, D.C. 20549 Attn: Doris Stacey Gama

RE: Taysha Gene Therapies, Inc. Registration Statement on Form S-3 File No. 333-274264

Acceleration Request Requested Date: September 8, 2023 Requested Time: 4:00 p.m. Eastern Time

Ladies and Gentlemen:

Pursuant to Rule 461 under the Securities Exchange Act of 1933, as amended, the undersigned registrant hereby requests that the Securities and Exchange Commission take appropriate action to cause the above-referenced Registration Statement on Form S-3 (File No. 333-274264) (the *"Registration Statement"*) to become effective at 4:00 p.m. Eastern Time on Friday, September 8, 2023, or as soon thereafter as is practicable.

Once the Registration Statement has been declared effective, please orally confirm that event with Madison Jones of Cooley LLP, counsel to the Registrant, at (202) 728-7087, or in her absence, Paul Alexander, at (202) 776-2118.

[Signature page follows]

Sincerely,

Taysha Gene Therapies, Inc.

By: /s/ Sean P. Nolan Sean P. Nolan Chief Executive Officer

cc: Kamran Alam, Chief Financial Officer, Taysha Gene Therapies, Inc. Madison Jones, Cooley LLP Paul Alexander, Cooley LLP