

June 11, 2021

Via EDGAR Transmission

United States Securities and Exchange Commission
Division of Corporation Finance
Office of Life Sciences
100 F Street, N.E.
Washington, D.C. 20549

Attention: Jeffrey Gabor

**Re: Ayala Pharmaceuticals, Inc.
Registration Statement on Form S-3
Filed June 4, 2021
Registration No. 333-256792**

Ladies and Gentlemen:

In accordance with Rule 461 of Regulation C of the General Rules and Regulations under the Securities Act of 1933, as amended, we hereby request the acceleration of the effective date of the above-referenced Registration Statement so that it will become effective on June 15, 2021, at 4:00 p.m., Eastern Time, or as soon thereafter as practicable, or at such later time as Ayala Pharmaceuticals, Inc. (the “Company”) or its counsel may request via telephone call to the staff. Please contact Keith Halverstam of Latham & Watkins LLP, counsel to the Company, at (212) 906-1761, or in his absence, Jennifer Yoon at (617) 880-4540, to provide notice of effectiveness, or if you have any other questions or concerns regarding this matter.

Sincerely yours,

Ayala Pharmaceuticals, Inc.

By: /s/ Yossi Maimon

Yossi Maimon
Chief Financial Officer

cc: Peter Handrinos
Keith Halverstam