FORM 3

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

1. Name and A	oorting Person*	2. Date of Requiring (Month/Da 05/07/20	Statement ay/Year)	3. Issuer Name and Ticker or Trading Symbol Ayala Pharmaceuticals, Inc. [AYLA]						
(Last) OPPENHEI	(First)	(Middle)			4. Relationship of Reporting Issuer (Check all applicable)	, (,	Fil		If Amendment, Date of Original led (Month/Day/Year)	
(Street) REHOVOT		7670104 (Zip)	_		Director X Officer (give title below) CFO	10% O Other (below)	specify (Ch	Person	by One Reporting by More than One	
Table I - Non-Derivative Securities Beneficially Owned										
1. Title of Security (Instr. 4)					2. Amount of Securities Beneficially Owned (Instr. 4)	3. Owner Form: D (D) or Ir (I) (Instr	Direct C	I. Nature of Indire Ownership (Instr.	ature of Indirect Beneficial nership (Instr. 5)	
Table II - Derivative Securities Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)										
			2. Date Exercisable and Expiration Date (Month/Day/Year)		3. Title and Amount of Securities Underlying Derivative Security (Instr. 4)		4. Convers or Exerc	ise Form:	6. Nature of Indirect Beneficial Ownership (Instr.	
			Date Exercisable	Expiration Date	Title	Amount or Number of Shares	Price of Derivativ Security		5)	
Stock Option	1		(1)	03/15/2029	Common Stock	70,500	5.16	D		
Stock Option		(2)	12/24/2029	Common Stock	9,460	6.5	D			

Explanation of Responses:

- 1. The option vests and becomes exercisable as to 25% on March 15, 2020 and as to the remainder of the shares in 12 equal quarterly installments thereafter.
- 2. The option vests and becomes exercisable in 16 equal quarterly installments beginning on December 24, 2019.

Remarks:

Exhibit 24 - Power of Attorney.

/s/ Roni Mamluk, Ph.D.,

Attorney-in-Fact for Yossi 05/07/2020

Maimon, CPA, MBA

** Signature of Reporting

Person

Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

- * If the form is filed by more than one reporting person, see Instruction 5 (b)(v).
- ** Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.

POWER OF ATTORNEY

With respect to holdings of and transactions in securities issued by Ayala Pharmaceuticals, Inc. (the "Company"), the undersigned hereby constitutes and appoints the individuals named on Schedule A attached hereto and as may be amended from time to time, or any of them signing singly, with full power of substitution and resubstitution, to act as the undersigned's true and lawful attorney-in-fact to:

- 1. prepare, execute in the undersigned's name and on the undersigned's behalf, and submit to the United States Securities and Exchange Commission (the "SEC") a Form ID, including amendments thereto, and any other documents necessary or appropriate to obtain and/or regenerate codes and passwords enabling the undersigned to make electronic filings with the SEC of reports required by Section 16(a) of the Securities Exchange Act of 1934, as amended, or any rule or regulation of the SEC;
- 2. execute for and on behalf of the undersigned, Forms 3, 4, and 5 in accordance with Section 16 of the Securities Exchange Act of 1934, as amended, and the rules thereunder;
- 3. do and perform any and all acts for and on behalf of the undersigned which may be necessary or desirable to complete and execute any such Form 3, 4, or 5, complete and execute any amendment or amendments thereto, and timely file such form with the SEC and any stock exchange or similar authority; and
- 4. take any other action of any type whatsoever in connection with the foregoing which, in the opinion of such attorney-in-fact, may be of benefit to, in the best interest of, or legally required by, the undersigned, it being understood that the documents executed by such attorney-in-fact on behalf of the undersigned pursuant to this Power of Attorney shall be in such form and shall contain such terms and conditions as such attorney-in-fact may approve in such attorney-in-fact's discretion.

The undersigned hereby grants to each such attorney-in-fact full power and authority to do and perform any and every act and thing whatsoever requisite, necessary, or proper to be done in the exercise of any of the rights and powers herein granted, as fully to all intents and purposes as the undersigned might or could do if personally present, with full power of substitution and resubstitution or revocation, hereby ratifying and confirming all that such attorney-in-fact, or such attorneys-in-fact substitute or substitutes, shall lawfully do or cause to be done by virtue of this Power of Attorney and the rights and powers herein granted.

The undersigned acknowledges that the foregoing attorneys-in-fact, in serving in such capacity at the request of the undersigned, are not assuming, nor is the Company assuming, any of the undersigned's responsibilities to comply with Section 16 of the Securities Exchange Act of 1934, as amended.

This Power of Attorney shall remain in full force and effect until the undersigned is no longer required to file Forms 3, 4, and 5 with respect to the undersigned's holdings of and transactions in securities issued by the Company, unless earlier revoked by the undersigned in a signed writing delivered to the foregoing attorneys-in-fact.

IN WITNESS WHEREOF, the undersigned has caused this Power of Attorney to be executed as of this 4th day of May, 2020.

Signature: /s/ Yossi Maimon

Print Name: Yossi Maimon

Schedule A

Substitution and Resubstitution Roni Mamluk, Ph.D.