UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

SCHEDULE 13G

Under the Securities Exchange Act of 1934
(Amendment No.)*

Rocket Pharmaceuticals, Inc.

(Name of Issuer)

<u>Common Stock, \$0.01 par value per share</u> (Title of Class of Securities)

> 77313F 106 (CUSIP Number)

<u>December 31, 2020</u>
(Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

☐ Rule 13d-1(b)

☐ Rule 13d-1(c)

☒ Rule 13d-1(d)

*The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.

The information required in the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

Perceptive Advisors LLC (2) CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (3) SEC USE ONLY (4) CITIZENSHIP OR PLACE OF ORGANIZATION Delaware (5) SOLE VOTING POWER 0 SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH: (8) SHARED DISPOSITIVE POWER 3,396,867 (9) AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 3,396,867 (10) CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) [11] PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 5.6% (12) TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) IA	(1)	NAMES OF REPORTING PERSONS LIP S. IDENTIFICATION NOS. OF A DOVE PERSONS (ENTIFIES ONLY)						
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(1)	NAMES OF REPORTING PERSONS						
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	Joseph Edelman						
(2)			APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)				
	(a) □	(b)					
(3)	SEC USE ONLY						
(4)	CITIZENSHIP OR PLACE OF ORGANIZATION						
	United States of America						
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(1)	NAMES OF REPORTING PERSONS						
	I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)						
	Perceptive Life Sciences Master Fund, Ltd.						
(2)	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) (b) (c) (d) (e) (f) (f) (f) (g) (g)						
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(4)	CITIZENSHIP OR PLACE OF ORGANIZATION						
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		(5)	SOLE VOTING POWER				
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	5.6%						
(12)	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)						
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Item 1(a). Name of Issuer:

Rocket Pharmaceuticals, Inc. (the "Issuer")

Item 1(b). Address of Issuer's Principal Executive Offices:

9 Cedarbrook Drive, Cranbury, NJ 08512

Item 2(a). Names of Persons Filing:

The names of the persons filing this report (collectively, the "Reporting Persons") are:

Perceptive Advisors LLC ("Perceptive Advisors") Joseph Edelman ("Mr. Edelman") Perceptive Life Sciences Master Fund, Ltd. (the "Master Fund")

Item 2(b). Address of Principal Business Office or, if None, Residence:

The address of the principal business office of each of the Reporting Persons is:

51 Astor Place, 10th Floor New York, NY 10003

Item 2(c). <u>Citizenship</u>:

Perceptive Advisors is a Delaware limited liability company Mr. Edelman is a United States citizen The Master Fund is a Cayman Islands corporation

Item 2(d). <u>Title of Class of Securities</u>:

Common Stock, \$0. 01 par value per share ("Common Stock")

Item 2(e). <u>CUSIP Number</u>:

77313F 106

Item 3. If this statement is filed pursuant to §§ 240.13d-1(b) or 240.13d-2(b) or (c), check whether the person filing is a:

Not applicable.

Item 4. Ownership.

The information required by this item with respect to each Reporting Person is set forth in Rows 5 through 9 and 11 of the cover page to this Schedule 13G. The ownership percentages reported are based on 60,540,392 outstanding shares of Common Stock, as reported in the Issuer's prospectus supplement filed on December 11, 2020.

The Master Fund directly holds 3,396,867 shares of Common Stock. Perceptive Advisors serves as the investment manager to the Master Fund and may be deemed to beneficially own

such shares. Mr. Edelman is the managing member of Perceptive Advisors and may be deemed to beneficially own such shares.

Item 5. Ownership of Five Percent or Less of a Class.

If this statement is being filed to report the fact that as of the date hereof the Reporting Persons have ceased to be the beneficial owner of more than five percent of the class of securities, check the following \Box .

Item 6. Ownership of More than Five Percent on Behalf of Another Person.

Not applicable.

Item 7. <u>Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on by the Parent Holding Company or Control Person.</u>

Not applicable.

Item 8. <u>Identification and Classification of Members of the Group.</u>

Not applicable.

Item 9. <u>Notice of Dissolution of Group.</u>

Not applicable.

Item 10. <u>Certification</u>.

Not applicable.

SIGNATURE

After reasonable inquiry and to the best of its knowledge and belief, each of the undersigned certifies that the information set forth in this statement is true, complete and correct.

Date: February 16, 2021

PERCEPTIVE ADVISORS LLC

By: /s/ Joseph Edelman

Name: Joseph Edelman Title: Managing Member

/s/ Joseph Edelman

JOSEPH EDELMAN

PERCEPTIVE LIFE SCIENCES MASTER FUND, LTD.

By: Perceptive Advisors LLC

By: /s/ Joseph Edelman

Name: Joseph Edelman Title: Managing Member

AGREEMENT

The persons below hereby agree that the Schedule 13G to which this agreement is attached as an exhibit, as well as all future amendments to such Schedule 13G, shall be filed on behalf of each of them. This agreement is intended to satisfy the requirements of Rule 13d-1(k)(1)(iii) under the Securities Exchange Act of 1934.

Date: February 16, 2021

PERCEPTIVE ADVISORS LLC

By: /s/ Joseph Edelman

Name: Joseph Edelman Title: Managing Member

/s/ Joseph Edelman

JOSEPH EDELMAN

PERCEPTIVE LIFE SCIENCES MASTER FUND, LTD.

By: Perceptive Advisors LLC

By: /s/ Joseph Edelman

Name: Joseph Edelman Title: Managing Member