UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 13D

Under the Securities Exchange Act of 1934 (Amendment No. 6)*

ROCKET PHARMACEUTICALS, INC.

(Name of Issuer)

COMMON STOCK
(Title of Class of Securities)

77313F 106 (CUSIP Number)

RTW Investments, LP Attn: Roderick Wong 40 10th Avenue, Floor 7 New York, New York 10014

Copies to:

Ryan A. Murr Gibson, Dunn & Crutcher LLP 555 Mission Street, Suite 3000 San Francisco, California 94105 (415) 393-8200

(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of § 240.13d-1(e), 240.13d-1(g), check the following box \Box .

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See § 240.13d-7(b) for other parties to whom copies are to be sent.

* 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 disclosures provided in a prior cover page.

The information required on 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).

SCHEDULE 13D

CUSIP No. 77313F 106

1	NAME OF REPORTING PERSONS				
	RTW Investments, LP				
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (See Instructions)				
	(a) 🗆	(b) E			
3	SEC LISE	ONLY	7		
3	SEC USE ONLY				
4	SOURCE OF FUNDS (See Instructions)				
	SC				
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)				
6	CITIZENSHIP OR PLACE OF ORGANIZATION				
	Delaware				
		7	SOLE VOTING POWER		
NUMBER OF SHARES					
		8	SHARED VOTING POWER		
	BENEFICIALLY OWNED BY EACH REPORTING		46.050.005 #		
			16,272,635 * SOLE DISPOSITIVE POWER		
			SOLE DISPOSITIVE POWER		
	PERSON WITH		0		
		10	SHARED DISPOSITIVE POWER		
			16,272,635 *		
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON				
	16 272 625 *				
12	16,272,635 * CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (See Instructions)				
	OTTE OTTE	01111	1112 110 0112 0111 11 110 11 (12) 2110 20 02111 111 (011 11120 (000 1101110))		
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)				
	25.3%*				
14	TYPE OF REPORTING PERSON (See Instructions)				
	PN. IA. OO				

CUSIP No. 77313F 106

1	NAME OF REPORTING PERSONS				
	Roderick Wong				
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (See Instructions) (a) □ (b) ⊠				
	(a) □ (U) 🖾			
3	SEC USE ONLY				
4	SOURCE OF FUNDS (See Instructions)				
	SC				
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)				
6	CITIZENSHIP OR PLACE OF ORGANIZATION				
	United States of America				
		7 SOLE VOTING POWER			
NU	UMBER OF	0			
	SHARES NEFICIALLY	8 SHARED VOTING POWER			
	WNED BY	16,272,635 *			
RI	EACH EPORTING	9 SOLE DISPOSITIVE POWER			
	PERSON				
	WITH	10 SHARED DISPOSITIVE POWER			
		16,272,635 *			
11	AGGREGA	TE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON			
	16,272,635	*			
12					
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)				
	25.3%*				
14	TYPE OF REPORTING PERSON (See Instructions)				
	HC. IN				

^{*} The above-referenced shares of common stock, par value \$0.01 per share (the "Common Stock") of Rocket Pharmaceuticals, Inc. (the "Issuer"), reported hereunder are held by one or more funds (together the "Funds") managed by RTW Investments, LP (the "Adviser"). The Adviser, in its capacity as the investment manager of the Funds, has the power to vote and the power to direct the disposition of all such shares of Common Stock held by the Funds. Roderick Wong, M.D., is the Managing Partner and Chief Investment Officer of the Adviser. The percentage of common stock held is based on 64,428,201 shares of common stock issued and outstanding as of August 30, 2021, which represents 63,615,685 shares outstanding as of August 2, 2021, as reported in the Issuer's Quarterly Report on Form 10-Q, filed on August 9, 2021, plus 812,516 shares of common stock issued on August 30, 2021, as reported in the Issuer's Current Report on Form 8-K, filed on August 30, 2021.

SCHEDULE 13D

Explanatory Note: This Amendment No. 6 relates to and amends the Statement of Beneficial Ownership on Schedule 13D of RTW Investments, LP and Roderick Wong (each, a "Reporting Person" and collectively, the "Reporting Persons"), initially filed jointly by the Reporting Persons with the U.S. Securities and Exchange Commission ("SEC") on January 16, 2018, and amended on November 29, 2018, April 16, 2019, December 13, 2019, January 8, 2021 and March 29, 2021 (as amended, the "Schedule 13D"), with respect to the Common Stock of the Issuer.

Items 3 and 5 of the Statement are hereby amended to the extent hereinafter expressly set forth. Except as amended hereby, the original disclosure set forth in the Schedule 13D shall remain unchanged. All capitalized terms used and not expressly defined herein have the respective meanings ascribed to such terms in the Schedule 13D.

This Amendment is filed pursuant to the Joint Filing Agreement as executed by the Reporting Persons listed on the cover pages to this Amendment. The Joint Filing Agreement, filed as Exhibit 2 to the Schedule 13D filed on January 16, 2018, is incorporated by reference herein.

Item 3. Source and Amount of Funds or Other Consideration

Item 3 of the Schedule 13D is hereby amended to add the following:

Since the date of the Schedule 13D, the Reporting Persons made the following transactions:

As previously reported on a Statement of Beneficial Ownership on Form 4, on May 11, 2021, an investment fund managed by RTW Investments, LP sold a total of 725,000 shares of the Issuer's Common Stock in an open-market transaction. Also on May 11, 2021, another investment fund managed by RTW Investments, LP entered into an equity swap agreement with a third party. The reported equity swap was on 1,000,000 shares of Common Stock of the Issuer. Under the equity swap, the investment fund will be obligated to pay to the third party any depreciation of the reference shares between the trade date and maturity, plus an accruing funding charge, and the third party will be obligated to pay to the investment fund any appreciation of the reference shares between the trade date and maturity, minus an accruing funding charge. For beneficial ownership reporting purposes, the 1,000,000 shares of Common Stock underlying this equity swap are not included in the Reporting Persons' beneficial ownership on this Schedule 13D.

On August 27, 2021, an investment fund managed by RTW Investments, LP (the "Purchaser") purchased directly from the Issuer a total of 812,516 shares of Common Stock at a price of \$32.48 per share. Also on August 27, 2021, the Issuer entered into a registration rights agreement (the "Registration Rights Agreement") with the Purchaser, pursuant to which the Issuer agreed, following demand by the Purchaser, to file with the Securities and Exchange Commission a Registration Statement on Form S-3 covering the resale of shares of Common Stock held by the Purchaser as promptly as reasonably practicable following such demand, and in any event within 60 days of such demand.

Item 5. Interest in Securities of the Issuer

Item 5 of the Schedule 13D is hereby amended and restated in its entirety as follows:

(a) - (b)

Items 7 through 11 and 13 of the cover pages of this Amendment and the footnote thereto are incorporated herein by reference.

(c)

Except as described herein, none of the Reporting Persons has acquired or disposed of any shares of Common Stock during the past 60 days.

(d) - (e)

Not applicable.

SIGNATURE

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

Dated: August 31, 2021

RTW INVESTMENTS, LP

By: /s/ Alice Lee

Alice Lee, as attorney-in-fact

RODERICK WONG, M.D.

By: /s/ Alice Lee

Alice Lee, as attorney-in-fact

The original statement shall be signed by each person on whose behalf the statement is filed or his authorized representative. If the statement is signed on behalf of a person by his authorized representative other than an executive officer or general partner of the filing person, evidence of the representative's authority to sign on behalf of such person shall be filed with the statement, provided, however, that a power of attorney for this purpose which is already on file with the Commission may be incorporated by reference. The name and any title of each person who signs the statement shall be typed or printed beneath his signature.

Note. Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See s.240.13d-7 for other parties for whom copies are to be sent.

Attention. Intentional misstatements or omissions of fact constitute Federal criminal violations (see 18 U.S.C. 1001).