FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Check this box if no longer subject to
Section 16. Form 4 or Form 5
obligations may continue. See
Instruction 1(b).

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

OMB APPROVAL OMB Number: Estimated average burden hours per response: 0.5

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 Address of Reporting Person* <u>Greenleaf Peter</u>						2. Issuer Name and Ticker or Trading Symbol Mirna Therapeutics, Inc. [MIRN]							Relationship (eck all applic X Directo	cable)		o Issue % Owr	
	RNA THER	APEUTICS, IN			3. Da			Trans	action (Montl	n/Day/Year)			Officer below)	(give title		ner (sp ow)	ecify
2150 WOODWARD ST., SUITE 100						4. If Amendment, Date of Original Filed (Month/Day/Year)							Individual or Joint/Group Filing (Check Applicable Line)				
(Street) AUSTIN TX 78744												X Form filed by One Reporting Person Form filed by More than One Reporting Person				ng	
(City)	(S	tate)	(Zip)														
Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned																	
1. Title of Security (Instr. 3) 2. Transac Date (Month/Date)						A. Deeme xecution any Month/Da	Date,	Code (Ins	Transaction Disposed Code (Instr. 5)		ties Acquired (A) or I Of (D) (Instr. 3, 4 and		es ally Following	6. Ownershi Form: Direc (D) or Indire (I) (Instr. 4)	of ct B	7. Nature of Indirect Beneficial Ownership	
									Code V	Amount	(A) or (D)	r Price	Reported Transact (Instr. 3 a	ion(s)		"	Instr. 4)
Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)																	
1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Da if any (Month/Day/Y	Co	Transaction Code (Ins				6. Date Exercisable and Expiration Date (Month/Day/Year)		7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4)		8. Price of Derivative Security (Instr. 5)	9. Number derivative Securities Beneficiall Owned Following Reported Transactio (Instr. 4)	Owne Form: Direct or Ind (I) (Ins	ship (D) irect	11. Nature of Indirect Beneficial Ownership (Instr. 4)
				Co	ode V	,	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares					
Stock Option (Right to Buy)	\$4.55	03/01/2016		A	A		12,000		(1)	03/01/2026	Common Stock	12,000	\$0.00	12,000	Г		

Explanation of Responses:

1. The option vests with respect to 1/3 of the shares subject thereto on each yearly anniversary of March 1, 2016, subject to the Reporting Person continuing to provide services to the Issuer through each such vesting date.

Remarks:

/s/ Alan Fuhrman, Attorney-in-Fact for Peter Greenleaf

03/02/2016

** 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 4 (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.