

INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES

OMB APPROVAL	
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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>Sofinnova Venture Partners VIII, L.P.</u> (Last) (First) (Middle) SOFINNOVA VENTURES 3000 SAND HILL ROAD, 4-250 (Street) MENLO PARK CA 94025 (City) (State) (Zip)	2. Date of Event Requiring Statement (Month/Day/Year) 09/30/2015	3. Issuer Name and Ticker or Trading Symbol <u>Mirna Therapeutics, Inc. [MIRN]</u>	
		4. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director <input checked="" type="checkbox"/> 10% Owner Officer (give title below) Other (specify below)	5. If Amendment, Date of Original Filed (Month/Day/Year) 6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person <input type="checkbox"/> Form filed by More than One Reporting Person

Table I - Non-Derivative Securities Beneficially Owned

1. Title of Security (Instr. 4)	2. Amount of Securities Beneficially Owned (Instr. 4)	3. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	4. Nature of Indirect Beneficial Ownership (Instr. 5)
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Table II - Derivative Securities Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 4)	2. Date Exercisable and Expiration Date (Month/Day/Year)		3. Title and Amount of Securities Underlying Derivative Security (Instr. 4)		4. Conversion or Exercise Price of Derivative Security	5. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	6. Nature of Indirect Beneficial Ownership (Instr. 5)
	Date Exercisable	Expiration Date	Title	Amount or Number of Shares			
Series C Preferred Stock ⁽¹⁾	(2)	(3)	Common Stock	1,244,268	0	D ⁽⁴⁾	
Series D Preferred Stock ⁽¹⁾	(2)	(3)	Common Stock	583,559	0	D ⁽⁴⁾	

1. Name and Address of Reporting Person*
Sofinnova Venture Partners VIII, L.P.
 (Last) (First) (Middle)
 SOFINNOVA VENTURES
 3000 SAND HILL ROAD, 4-250
 (Street)
 MENLO PARK CA 94025
 (City) (State) (Zip)

1. Name and Address of Reporting Person*
Sofinnova Management VIII, L.L.C.
 (Last) (First) (Middle)
 3000 SAND HILL ROAD, 4-250
 (Street)
 MENLO PARK CA 94025
 (City) (State) (Zip)

1. Name and Address of Reporting Person*
HEALY JAMES
 (Last) (First) (Middle)
 3000 SAND HILL ROAD, 4-250
 (Street)
 MENLO PARK CA 94025

(City)	(State)	(Zip)
1. Name and Address of Reporting Person*		
AKKARAJU SRINIVAS		
(Last)	(First)	(Middle)
3000 SAND HILL ROAD, 4-250		
(Street)		
MENLO PARK	CA	94025
(City)	(State)	(Zip)
1. Name and Address of Reporting Person*		
Mehra Anand		
(Last)	(First)	(Middle)
3000 SAND HILL ROAD, 4-250		
(Street)		
MENLO PARK	CA	94025
(City)	(State)	(Zip)

Explanation of Responses:

- Each share of Series C and Series D Preferred Stock will automatically convert on a one-to-one basis into Common Stock immediately prior to the consummation of the Issuer's initial public offering.
- The securities are immediately convertible.
- The expiration date is not relevant to the conversion of these securities.
- The shares are held by Sofinnova Venture Partners VIII, L.P. ("SVP VIII"). Sofinnova Management VIII, L.L.C. ("SM VIII") is the general partner of SVP VIII. The individual Managers, or the Managing Members, of SVP VIII are Michael Powell, James Healy, Srinivas Akkaraju and Anand Mehra. The Managers share voting and dispositive power with regard to the shares held directly by SVP VIII. Such persons and entities disclaim beneficial ownership over the shares owned by SVP VIII except to the extent of any pecuniary interest therein.

[/s/ Nathalie Auber, Attorney-in-Fact for Sofinnova Venture Partners VIII, L.P.](#) [09/30/2015](#)

[/s/ Nathalie Auber, Attorney-in-Fact for Sofinnova Management VIII, L.L.C.](#) [09/30/2015](#)

[/s/ Nathalie Auber, Attorney-in-Fact for James Healy](#) [09/30/2015](#)

[/s/ Nathalie Auber, Attorney-in-Fact for Srinivas Akkaraju](#) [09/30/2015](#)

[/s/ Nathalie Auber, Attorney-in-Fact for Anand Mehra](#) [09/30/2015](#)

** 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.