

Avinger Inc  
Form SC 13G/A  
April 10, 2015

**UNITED STATES**  
**SECURITIES AND EXCHANGE COMMISSION**

**Washington, D.C. 20549**

**SCHEDULE 13G**

**Under the Securities Exchange Act of 1934**

**Avinger, Inc.**

(Name of Issuer)

**Common Stock**

(Title of Class of Securities)

**053734109**

(CUSIP Number)

**March 31, 2015**

(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 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).

CUSIP No. 053734109

13G

**1. NAME OF REPORTING PERSON (S.S. or I.R.S. Identification No. of Above Person)**

Ivy Investment Management Company Tax ID No. 03-0481447

**2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP:**

(a)

(b)

**3. SEC USE ONLY**

**4. CITIZENSHIP OR PLACE OF ORGANIZATION:** Delaware

**NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:**

**5. SOLE VOTING POWER** 1,387,953 (See Item 4)

**6. SHARED VOTING POWER** 0

**7. SOLE DISPOSITIVE POWER** 1,387,953 (See Item 4)

**8. SHARED DISPOSITIVE POWER** 0

**9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON:**

1,387,953 (See Item 4)

**10. CHECK IF THE AGGREGATE AMOUNT IN ROW 9 EXCLUDES CERTAIN SHARES:**

**11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9:** 11.4

**12. TYPE OF PERSON REPORTING:** IA

CUSIP No. 053734109

13G

**1. NAME OF REPORTING PERSON (S.S. or I.R.S. Identification No. of Above Person)**

Waddell & Reed Investment Management Company Tax ID No. 48-1106973

**2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP:**

(a)

(b)

**3. SEC USE ONLY**

**4. CITIZENSHIP OR PLACE OF ORGANIZATION:** Kansas

**NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:**

**5. SOLE VOTING POWER** 986,247 (See Item 4)

**6. SHARED VOTING POWER** 0

**7. SOLE DISPOSITIVE POWER** 986,247 (See Item 4)

**8. SHARED DISPOSITIVE POWER** 0

**9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON:**

986,247 (See Item 4)

**10. CHECK IF THE AGGREGATE AMOUNT IN ROW 9 EXCLUDES CERTAIN SHARES:**

**11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9:** 8.1

**12. TYPE OF PERSON REPORTING:** IA

CUSIP No. 053734109

13G

**1. NAME OF REPORTING PERSON (S.S. or I.R.S. Identification No. of Above Person)**

Waddell & Reed, Inc. Tax ID No. 43-1235675

**2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP:**

(a)

(b)

**3. SEC USE ONLY**

**4. CITIZENSHIP OR PLACE OF ORGANIZATION:** Delaware

**NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:**

**5. SOLE VOTING POWER** 986,247 (See Item 4)

**6. SHARED VOTING POWER** 0

**7. SOLE DISPOSITIVE POWER** 986,247 (See Item 4)

**8. SHARED DISPOSITIVE POWER** 0

**9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON:**

986,247 (See Item 4)

**10. CHECK IF THE AGGREGATE AMOUNT IN ROW 9 EXCLUDES CERTAIN SHARES:**

**11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9:** 8.1

**12. TYPE OF PERSON REPORTING:** BD

CUSIP No. 053734109

13G

**1. NAME OF REPORTING PERSON (S.S. or I.R.S. Identification No. of Above Person)**

Waddell & Reed Financial Services, Inc. Tax ID No. 43-1414157

**2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP:**

(a)

(b)

**3. SEC USE ONLY**

**4. CITIZENSHIP OR PLACE OF ORGANIZATION:** Missouri

**NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:**

**5. SOLE VOTING POWER** 986,247 (See Item 4)

**6. SHARED VOTING POWER** 0

**7. SOLE DISPOSITIVE POWER** 986,247 (See Item 4)

**8. SHARED DISPOSITIVE POWER** 0

**9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON:**

986,247 (See Item 4)

**10. CHECK IF THE AGGREGATE AMOUNT IN ROW 9 EXCLUDES CERTAIN SHARES:**

**11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9:** 8.1

**12. TYPE OF PERSON REPORTING:** HC

CUSIP No. 053734109

13G

**1. NAME OF REPORTING PERSON (S.S. or I.R.S. Identification No. of Above Person)**

Waddell & Reed Financial, Inc. Tax ID No. 51-0261715

**2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP:**

(a)

(b)

**3. SEC USE ONLY**

**4. CITIZENSHIP OR PLACE OF ORGANIZATION:** Delaware

**NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:**

**5. SOLE VOTING POWER** 2,374,200 (See Item 4)

**6. SHARED VOTING POWER** 0

**7. SOLE DISPOSITIVE POWER** 2,374,200 (See Item 4)

**8. SHARED DISPOSITIVE POWER** 0

**9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON:**

2,374,200 (See Item 4)

**10. CHECK IF THE AGGREGATE AMOUNT IN ROW 9 EXCLUDES CERTAIN SHARES:**

**11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9:** 19.4

**12. TYPE OF PERSON REPORTING:** HC

Item 1(a):     Name of Issuer: Marrone Bio Innovations, Inc.

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

400 Chesapeake Drive  
Redwood City, CA 94063

Item 2(a):     Name of Person Filing:

- (i)     Waddell & Reed Financial, Inc.
- (ii)    Waddell & Reed Financial Services, Inc.
- (iii)   Waddell & Reed, Inc.
- (iv)    Waddell & Reed Investment Management Company
- (v)     Ivy Investment Management Company

Item 2(b):     Address of Principal Business Office:

(i)-(v): 6300 Lamar Avenue  
Overland Park, KS 66202

Item 2(c):     Citizenship:

- (i), (iii) and (v): Delaware
- (ii): Missouri
- (iv): Kansas

Item 2(d):     Title of Class of Securities: Common Stock

Item 2(e):     CUSIP Number: 053734109

Item 3:        The reporting person is:

- (i)     Waddell & Reed Financial, Inc., a parent holding company in accordance with Reg. 240.13d-1(b)(1)(ii)(G);
- (ii)    Waddell & Reed Financial Services, Inc., a parent holding company in accordance with Reg. 240.13d-1(b)(1)(ii)(G);
- (iii)   Waddell & Reed, Inc., a broker-dealer registered under section 15 of the Act (15 U.S.C. 78o);  
and
- (iv)    Waddell & Reed Investment Management Company, an investment advisor in accordance with Reg. 240.13d-1(b)(1)(ii)(E).
- (v)     Ivy Investment Management Company, an investment advisor in accordance with Reg. 240.13d-1(b)(1)(ii)(E).

Item 4: Ownership

The securities reported on herein are beneficially owned by one or more open-end investment companies or other managed accounts which are advised or sub-advised by Ivy Investment Management Company ( IICO ), an investment advisory subsidiary of Waddell & Reed Financial, Inc. ( WDR ) or Waddell & Reed Investment Management Company ( WRIMCO ), an investment advisory subsidiary of Waddell & Reed, Inc. ( WRI ). WRI is a broker-dealer and underwriting subsidiary of Waddell & Reed Financial Services, Inc., a parent holding company ( WRFSI ). In turn, WRFSI is a subsidiary of WDR, a publicly traded company. The investment advisory contracts grant IICO and WRIMCO all investment and/or voting power over securities owned by such advisory clients. The investment sub-advisory contracts grant IICO and WRIMCO investment power over securities owned by such sub-advisory clients and, in most cases, voting power. Any investment restriction of a sub-advisory contract does not restrict investment discretion or power in a material manner. Therefore, IICO and/or WRIMCO may be deemed the beneficial owner of the securities covered by this statement under Rule 13d-3 of the Securities Exchange Act of 1934 (the 1934 Act ).

IICO, WRIMCO, WRI, WRFSI and WDR are of the view that they are not acting as a group for purposes of Section 13(d) under the 1934 Act. Indirect beneficial ownership is attributed to the respective parent companies solely because of the parent companies control relationship to WRIMCO and IICO.

(a) Amount beneficially owned: 2,374,200

(b) Percent of class: 19.4

(c) Number of shares as to which the person has:

(i) Sole voting power to vote or to direct the vote:

WDR: 2,374,200 (indirect)

WRFSI: 986,247 (indirect)

WRI: 986,247 (indirect)

WRIMCO: 986,247 (direct)

IICO: 1,387,953 (direct)

(ii) Shared power to vote or to direct the vote: 0

(iii) Sole power to dispose or to direct the disposition of:

WDR: 2,374,200 (indirect)

WRFSI: 986,247 (indirect)



WRI: 986,247 (indirect)

WRIMCO: 986,247 (direct)

IICO: 1,387,953 (direct)

(iv) Shared power to dispose or to direct the disposition of: 0

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 person has ceased to be the beneficial owner of more than 5 percent of the class of securities, check the following:

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

The clients of IICO and WRIMCO, including investment companies registered under the Investment Company Act of 1940 and other managed accounts, have the right to receive dividends from, as well as the proceeds from the sale of, such securities. Ivy Science & Technology Fund and Waddell & Reed Advisors Science & Technology Fund, companies registered under the Investment Company Act of 1940, have an interest in more than 5% of the class of securities reported herein.

Item 7: Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on By the Parent Holding Company:

See Attached Exhibit 2.

Item 8: Identification and Classification of Members of the Group:

Not Applicable.

Item 9: Notice of Dissolution of Group:

Not Applicable.

**Item 10: Certification:**

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were acquired and are held in the ordinary course of business and were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect.

**SIGNATURE**

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Dated: April 10, 2015

Waddell & Reed Financial, Inc.

Waddell & Reed Financial Services, Inc.

By: /s/ Kristen A. Richards

Name: Kristen A. Richards

Title: Attorney-In-Fact

By: /s/ Kristen A. Richards

Name: Kristen A. Richards

Title: Attorney-In-Fact

Waddell & Reed, Inc.

Waddell & Reed Investment Management Company

By: /s/ Kristen A. Richards

Name: Kristen A. Richards

Title: Attorney-In-Fact

By: /s/ Kristen A. Richards

Name: Kristen A. Richards

Title: Attorney-In-Fact

Ivy Investment Management Company

By: /s/ Kristen A. Richards

Name: Kristen A. Richards

Title: Attorney-In-Fact

EXHIBIT INDEX

Exhibit No.	Description
1	Joint Filing Agreement
2	Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on by the Parent Holding Company
3	Power of Attorney