ICAD INC Form SC 13G/A February 14, 2014

SECURITIES AND EXCHANGE COMMISSION WASHINGTON, DC 20549

SCHEDULE 13G (Rule 13d-102)

INFORMATION TO BE INCLUDED IN STATEMENTS FILED PURSUANT TO RULES 13d-1(b)(c), AND (d) AND AMENDMENTS THERETO FILED PURSUANT TO RULE 13d-2(b)

(Amendment No. 2) *

iCAD, Inc.

(Name of Issuer)

Common Stock

(Title of Class of Securities)

44934S206

(CUSIP Number)

December 31, 2013

(Date of Event Which Requires Filing of this Statement)

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

o Rule 13d-1(b)

x Rule 13d-1(c)

o Rule 13d-1(d)

⁽Page 1 of 14 Pages)

^{*} 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 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).

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NAME OF REPORTING PERSONS
 I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (ENTITIES ONLY)

Deerfield Mgmt, L.P.

2. CHECK THE APPROPRIATE BOX IF A (a) o MEMBER OF A GROUP* (b) x

3. SEC USE ONLY

4. CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware

5. SOLE VOTING POWER

NUMBER OF
SHARES
BENEFICIALLY
ONLY DE DY

6. SHARED VOTING POWER

OWNED BY
EACH

450,000 (1)

REPORTING 7. SOLE DISPOSITIVE POWER

PERSON WITH

0

0

8. SHARED DISPOSITIVE POWER

450,000 (1)

9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

450,000 (1)

10. CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES*

11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9

3.98%

12. TYPE OF REPORTING PERSON*

PN

(1) Comprised of warrants to purchase an aggregate of 450,000 shares of common stock held by Deerfield Special Situations Fund, L.P., Deerfield Special Situations International Master Fund, L.P., Deerfield Private Design Fund II, L.P. and Deerfield Private Design International II, L.P., of which Deerfield Mgmt, L.P. is the general partner.

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NAME OF REPORTING PERSONS
 I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (ENTITIES ONLY)

Deerfield Management Company, L.P.

2. CHECK THE APPROPRIATE BOX IF A

(a) o

MEMBER OF A GROUP* (b) x

3. SEC USE ONLY

4. CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware

6.

5. SOLE VOTING POWER

NUMBER OF SHARES BENEFICIALLY OWNED BY 0

450,000 (2)

0

EACH REPORTING PERSON WITH

7. SOLE DISPOSITIVE POWER

8. SHARED DISPOSITIVE POWER

SHARED VOTING POWER

450,000 (2)

9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

450,000 (2)

10. CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES*

11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9

3.98%

12. TYPE OF REPORTING PERSON*

PN

(2) Comprised of warrants to purchase an aggregate of 450,000 shares of common stock held by Deerfield Special Situations Fund, L.P., Deerfield Special Situations International Master Fund, L.P., Deerfield Private Design Fund II, L.P. and Deerfield Private Design International II, L.P., of which Deerfield Management Company, L.P. is the investment advisor.

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1.	NAME OF REPORTING PERSONS I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (ENTITIES ONLY)							
2.	-	ial Situations Fund, L.P. APPROPRIATE BOX IF A A GROUP*	(a) o (b) x					
3.	SEC USE ONI	Y						
4.	CITIZENSHIP OR PLACE OF ORGANIZATION							
	Delaware							
	5.	SOLE VOTING POWER						
NUMBER OF SHARES BENEFICIALLY	6.	0 SHARED VOTING POWER						
OWNED BY EACH REPORTING	7.	35,100 (3) SOLE DISPOSITIVE POWER						
PERSON WITH	8.	0 SHARED DISPOSITIVE POWER						
9.	AGGREGATE PERSON	35,100 (3) AMOUNT BENEFICIALLY OWN	ED BY EACH REPORTING					
10.	35,100 (3) CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES*							
11.	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9							
12.	0.32% TYPE OF REPORTING PERSON*							
	PN							
(3) Comprised of warrants to purchase 35,100 shares of common stock.								

CUSIP No. 44934S206 13G Page 5 of 14 Pages 1. NAME OF REPORTING PERSONS I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (ENTITIES ONLY) Deerfield Special Situations International Master Fund, L.P. 2. CHECK THE APPROPRIATE BOX IF A (a) o MEMBER OF A GROUP* (b) x SEC USE ONLY 3. 4. CITIZENSHIP OR PLACE OF ORGANIZATION British Virgin Islands 5. SOLE VOTING POWER NUMBER OF 0 **SHARES** SHARED VOTING POWER 6. **BENEFICIALLY** OWNED BY 54,900 (4) **EACH** 7. SOLE DISPOSITIVE POWER REPORTING PERSON WITH 0 8. SHARED DISPOSITIVE POWER 54,900 (4) AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING 9. **PERSON** 54,900 (4) CHECK BOX IF THE AGGREGATE AMOUNT 10. IN ROW (9) EXCLUDES CERTAIN SHARES* PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9 11. 0.50% TYPE OF REPORTING PERSON* 12. PN

(4) Comprised of warrants to purchase 54,900 shares of common stock.

8

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1.	NAME OF REPORTING PERSONS I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (ENTITIES ONLY)						
2.	CHECK THE A		(a) o (b) x				
3.	SEC USE ONLY						
4.	CITIZENSHIP OR PLACE OF ORGANIZATION						
	Delaware						
	5.	SOLE VOTING POWER					
NUMBER OF SHARES BENEFICIALLY	6.	0 SHARED VOTING POWER					
OWNED BY EACH REPORTING	7.	167,760 (5) SOLE DISPOSITIVE POWER					
PERSON WITH	8.	0 SHARED DISPOSITIVE POWER					
9.	AGGREGATE PERSON	167,760 (5) AMOUNT BENEFICIALLY OWN	ED BY EACH REPORTING				
10.	167,760 (5) CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES*						
11.	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9						
12.	1.52% TYPE OF REPORTING PERSON*						
	PN						
(5) Comprised of warrants to purchase 167,760 shares of common stock.							

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CUSIP No. 44934S206

1. NAME OF REPORTING PERSONS I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (ENTITIES ONLY) Deerfield Private Design International II, L.P. 2. CHECK THE APPROPRIATE BOX IF A (a) o MEMBER OF A GROUP* (b) x SEC USE ONLY 3. 4. CITIZENSHIP OR PLACE OF ORGANIZATION British Virgin Islands 5. **SOLE VOTING POWER** NUMBER OF 0 **SHARES** 6. SHARED VOTING POWER **BENEFICIALLY** OWNED BY 192,240 (6) **EACH** 7. SOLE DISPOSITIVE POWER REPORTING PERSON WITH 0 8. SHARED DISPOSITIVE POWER 192,240 (6) 9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING **PERSON** 192,240 (6) CHECK BOX IF THE AGGREGATE AMOUNT 10. IN ROW (9) EXCLUDES CERTAIN SHARES* 11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9 1.74% TYPE OF REPORTING PERSON* 12. PN (6) Comprised of warrants to purchase 192,240 shares of common stock.

(a) o

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NAME OF REPORTING PERSONS
 I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (ENTITIES ONLY)

James E. Flynn

2. CHECK THE APPROPRIATE BOX IF A

MEMBER OF A GROUP* (b) x

3. SEC USE ONLY

4. CITIZENSHIP OR PLACE OF ORGANIZATION

United States

5. SOLE VOTING POWER

NUMBER OF 0 SHARES 6 S

6. SHARED VOTING POWER

BENEFICIALLY
OWNED BY
450,000 (7)
EACH

REPORTING 7. SOLE DISPOSITIVE POWER

PERSON WITH 0

8. SHARED DISPOSITIVE POWER

450,000 (7)

9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

450,000 (7)

10. CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES*

11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9

3.98%

12. TYPE OF REPORTING PERSON*

IN

(7) Comprised of warrants to purchase an aggregate of 450,000 shares of common stock held by Deerfield Special Situations Fund, L.P., Deerfield Special Situations International Master Fund, L.P., Deerfield Private Design Fund II, L.P. and Deerfield Private Design International II, L.P.

CUSIP No. 44934S206 13G Page 9 of 14 Pages Item Name of Issuer: 1(a). iCAD, Inc. Item Address of Issuer's Principal Executive Offices: 1(b). 98 Spit Brook Road, Suite 100, Nashua, NH 03062 Item Name of Person Filing: 2(a). James E. Flynn, Deerfield Mgmt, L.P., Deerfield Management Company, L.P., Deerfield Special Situations Fund, L.P., Deerfield Special Situations International Master Fund, L.P., Deerfield Private Design Fund II, L.P., Deerfield Private Design International II, L.P. Item Address of Principal Business Office, or if None, Residence: 2(b). 780 Third Avenue, 37th Floor, New York, NY 10017 Item Citizenship: 2(c). Deerfield Mgmt, L.P., Deerfield Management Company, L.P., Deerfield Special Situations Fund, L.P., Deerfield Private Design Fund II, L.P. - Delaware limited partnerships Deerfield Special Situations International Master Fund, L.P., Deerfield Private Design International II, L.P. – British Virgin Islands limited partnerships James E. Flynn - United States citizen Item Title of Class of Securities: 2(d). Common Stock Item **CUSIP** Number: 2(e). 44934S206

Item 3.

If This Statement is Filed Pursuant to Rule 13d-1(b), or 13d-2(b) or (c), Check Whether the Person Filing is a:

- (a) o Broker or dealer registered under Section 15 of the Exchange Act.
- (b) o Bank as defined in Section 3(a)(6) of the Exchange Act
- (c) o Insurance company as defined in Section 3(a)(19) of the Exchange Act.
- (d) o Investment company registered under Section 8 of the Investment Company Act.
- (e) o An investment adviser in accordance with Rule 13d-1(b)(1)(ii)(E);

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	(f)	o	An employee ben	efit plan or endowmen	t fund in accordance	with Rule 13d-1(b)(1)(ii)(F);	
	(g)	o A parent holding company or control person in accordance with Rule 13d-1(b)(1)(ii)(G);					
	(h)	o	A savings association as defined in Section 3(b) of the Federal Deposit Insurance Act;				
	(i)	0	_	at is excluded from the definition of an investment company under Section evestment Company Act;			
	(j)	o	A non-U.S. institu	ntion in accordance with	th Rule 13d-1(b)(1)(i	ii)(J);	
	(k)	o	Group, in accorda	nce with Rule 13d-1(b	o)(1)(ii)(K).		
	If filing as a non-U.S. institution in accordance with Rule 13d-1(b)(1)(ii)(J), please specify the type of institution						
	Item 4.	Ov	vnership.				
Provide the following information regarding the aggregate number and percentage of the class of securities of t issuer identified in Item 1.							
	(a)	Amount beneficially owned**:					
		De De De De	eerfield Special Situerfield Special Situerfield Private Des	nt Company, L.P. – 45 nations Fund, L.P. – 35 nations International M sign Fund II, L.P. – 16 sign International II, L.	5,100 shares Master Fund, L.P 54 7,760 shares	4,900 shares	
	(b)	Pe	rcent of class**:				
Deerfield Mgmt, L.P. – 3.98% Deerfield Management Company, L.P. – 3.98% Deerfield Special Situations Fund, L.P. – 0.32% Deerfield Special Situations International Master Fund, L.P 0.50% Deerfield Private Design Fund II, L.P. – 1.52% Deerfield Private Design International II, L.P. – 1.74% James E. Flynn – 3.98%						50%	
	(c)	Number of shares as to which such person has**:					
		(i)		Sole power to vote or	to direct the vote	All Reporting Persons - 0	
		(ii)		Shared power to vote	or to direct the vote	Deerfield Mgmt, L.P. – 450,000	

Deerfield Management Company, L.P. – 450,000

Deerfield Special Situations Fund, L.P. – 35,100

Deerfield Special Situations

International Master Fund, L.P. – 54,900 Deerfield Private Design Fund II, L.P. –

167,760

Deerfield Private Design International

II, L.P. – 192,240

James E. Flynn - 450,000

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

All Reporting Persons - 0

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

Deerfield Mgmt, L.P. – 450,000 Deerfield Management Company, L.P. –

450,000

Deerfield Special Situations Fund, L.P. –

35,100

Deerfield Special Situations International

Master Fund, L.P. – 54,900

Deerfield Private Design Fund II, L.P. –

167,760

Deerfield Private Design International II,

L.P. - 192,240

James E. Flynn - 450,000

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 five percent of the class of securities check the followingx.

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

If any other person is known to have the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, such securities, a statement to that effect should be included in response to this item and, if such interest relates to more than five percent of the class, such person should be identified. A listing of the shareholders of an investment company registered under the Investment Company Act of 1940 or the beneficiaries of employee benefit plan, pension fund or endowment fund is not required.

N/A

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

If a parent holding company or Control person has filed this schedule, pursuant to Rule 13d-1(b)(1)(ii)(G), so indicate under Item 3(g) and attach an exhibit stating the identity and the Item 3 classification of the relevant subsidiary. If a parent holding company or control person has filed this schedule pursuant to Rule 13d-1(c) or Rule 13d-1(d), attach an exhibit stating the identification of the relevant subsidiary.

N/A

^{**}See footnotes on cover pages which are incorporated by reference herein.

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Item 8.

Identification and Classification of Members of the Group.

If a group has filed this schedule pursuant to ss.240.13d-1(b)(1)(ii)(J), so indicate under Item 3(j) and attach an exhibit stating the identity and Item 3 classification of each member of the group. If a group has filed this schedule pursuant to ss.240.13d-1(c) or ss.240.13d-1(d), attach an exhibit stating the identity of each member of the group.

See Exhibit B

Item 9.

Notice of Dissolution of Group.

Notice of dissolution of a group may be furnished as an exhibit stating the date of the dissolution and that all further filings with respect to transactions in the security reported on will be filed, if required, by members of the group, in their individual capacity. See Item 5.

N/A

Item 10.

Certifications.

"By signing below I certify that, to the best of my knowledge and belief, the securities referred to above 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, other than activities solely in connection with a nomination under § 240.14a-11."

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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.

DEERFIELD MGMT, L.P.

By: J.E. Flynn Capital LLC, General Partner

By: /s/ Jonathan Isler

Jonathan Isler, Attorney-In-Fact

DEERFIELD MANAGEMENT COMPANY, L.P.

By: Flynn Management LLC, General Partner

By: /s/ Jonathan Isler

Jonathan Isler, Attorney-In-Fact

DEERFIELD SPECIAL SITUATIONS FUND, L.P.

By: Deerfield Mgmt, L.P., General Partner

By: J.E. Flynn Capital LLC, General Partner

By: /s/ Jonathan Isler

Jonathan Isler, Attorney-In-Fact

DEERFIELD SPECIAL SITUATIONS INTERNATIONAL MASTER FUND, L.P.

By: Deerfield Mgmt, L.P., General Partner

By: J.E. Flynn Capital LLC, General Partner

By: /s/ Jonathan Isler

Jonathan Isler, Attorney-In-Fact

DEERFIELD PRIVATE DESIGN FUND II, L.P.

By: Deerfield Mgmt, L.P., General Partner

By: J.E. Flynn Capital LLC, General Partner

By: /s/ Jonathan Isler

Jonathan Isler, Attorney-In-Fact

DEERFIELD PRIVATE DESIGN INTERNATIONAL II, L.P.

By: Deerfield Mgmt, L.P., General Partner

By: J.E. Flynn Capital LLC, General Partner

By: /s/ Jonathan Isler

Jonathan Isler, Attorney-In-Fact

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JAMES E. FLYNN

/s/ Jonathan Isler Jonathan Isler, Attorney-In-Fact

Date: February 14, 2014

Exhibit List

Exhibit A. Joint Filing Agreement.

Exhibit B. Item 8 Statement.

Exhibit C (1). Power of Attorney.

(1) Power of Attorney previously filed as Exhibit 24 to a Form 4 with regard to Talon Therapeutics, Inc. filed with the Securities and Exchange Commission on August 21, 2012 by Deerfield Mgmt L.P., Deerfield Management Company, L.P., Deerfield Special Situations Fund, L.P., Deerfield Special Situations Fund International, Limited, Deerfield Private Design Fund, L.P., Deerfield Private Design International, L.P. and James E. Flynn.

Exhibit A Agreement

The undersigned agree that this Schedule 13G, and all amendments thereto, relating to the Common Stock of iCAD, Inc. shall be filed on behalf of the undersigned.

DEERFIELD MGMT, L.P.

By: J.E. Flynn Capital LLC, General Partner

By: /s/ Jonathan Isler

Jonathan Isler, Attorney-In-Fact

DEERFIELD MANAGEMENT COMPANY, L.P.

By: Flynn Management LLC, General Partner

By: /s/ Jonathan Isler

Jonathan Isler, Attorney-In-Fact

DEERFIELD SPECIAL SITUATIONS FUND, L.P.

By: Deerfield Mgmt, L.P., General Partner

By: J.E. Flynn Capital LLC, General Partner

By: /s/ Jonathan Isler

Jonathan Isler, Attorney-In-Fact

DEERFIELD SPECIAL SITUATIONS INTERNATIONAL MASTER FUND, L.P.

By: Deerfield Mgmt, L.P., General Partner

By: J.E. Flynn Capital LLC, General Partner

By: /s/ Jonathan Isler

Jonathan Isler, Attorney-In-Fact

DEERFIELD PRIVATE DESIGN FUND II, L.P.

By: Deerfield Mgmt, L.P., General Partner

By: J.E. Flynn Capital LLC, General Partner

By: /s/ Jonathan Isler

Jonathan Isler, Attorney-In-Fact

DEERFIELD PRIVATE DESIGN INTERNATIONAL II, L.P.

By: Deerfield Mgmt, L.P., General Partner

By: J.E. Flynn Capital LLC, General Partner

By: /s/ Jonathan Isler

Jonathan Isler, Attorney-In-Fact

JAMES E. FLYNN

/s/ Jonathan Isler Jonathan Isler, Attorney-In-Fact

Exhibit B

Due to the relationships between them, the reporting persons hereunder may be deemed to constitute a "group" with one another for purposes of Section 13(d)(3) of the Securities Exchange Act of 1934.