

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

SCHEDULE 13G

Under the Securities Exchange Act of 1934

(Amendment No. 6)*

ISIS PHARMACEUTICALS, INC.

(Name of Issuer)

Common Stock

(Title of Class of Securities)

464330 0 10 9

(CUSIP Number)

Check the following box if a fee is being paid with this statement . (A fee is not required only if the filing person: (1) has a previous statement on file reporting beneficial ownership of more than five percent of the class of securities described in Item 1; and (2) has filed no amendment subsequent thereto reporting beneficial ownership of five percent or less of such class.) (See Rule 13d-7).

*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 ("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).

Page 1 of 16 pages

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1	NAME OF REPORTING PERSON S.S. or I.R.S. IDENTIFICATION NO. OF ABOVE PERSON BESSEMER VENTURE PARTNERS II L.P. ("Bessemer II") 13-3174238
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP* (a) <input checked="" type="checkbox"/> (b) <input type="checkbox"/>
3	SEC USE ONLY
4	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware
5	SOLE VOTING POWER NUMBER OF SHARES 759,566 shs.

BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	6	SHARED VOTING POWER -0-
	7	SOLE DISPOSITIVE POWER 759,566 shs.
	8	SHARED DISPOSITIVE POWER -0-
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 759,566 shs.	
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES* <input type="checkbox"/>	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9 2.9%	
12	TYPE OF REPORTING PERSON* PN	

*SEE INSTRUCTIONS BEFORE FILLING OUT!

1	NAME OF REPORTING PERSON S.S. or I.R.S. IDENTIFICATION NO. OF ABOVE PERSON DEER II & CO. LLC ("Deer II")* 13-3174240
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP* (a) <input checked="" type="checkbox"/> (b) <input type="checkbox"/>
3	SEC USE ONLY
4	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware
NUMBER OF SHARES	5 SOLE VOTING POWER 759,566 shs.
BENEFICIALLY OWNED BY EACH	6 SHARED VOTING POWER -0-
REPORTING PERSON	7 SOLE DISPOSITIVE POWER 759,566 shs.
WITH	8 SHARED DISPOSITIVE POWER -0-
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 759,566 shs.
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES* <input type="checkbox"/>
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9 2.9%
12	TYPE OF REPORTING PERSON* PN

*The shares reported on this page are the same as those reported on page 2 as Deer II & Co. LLC is the General Partner of Bessemer II.

*SEE INSTRUCTIONS BEFORE FILLING OUT!

1	NAME OF REPORTING PERSON S.S. or I.R.S. IDENTIFICATION NO. OF ABOVE PERSON BESSEMER VENTURE PARTNERS III L.P. ("Bessemer III") 11-3197697
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP* (a) <input checked="" type="checkbox"/> (b) <input type="checkbox"/>
3	SEC USE ONLY
4	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware
NUMBER OF SHARES	5 SOLE VOTING POWER 770,124 shs.
BENEFICIALLY OWNED BY EACH	6 SHARED VOTING POWER -0-
REPORTING PERSON	7 SOLE DISPOSITIVE POWER 770,124 shs.
WITH	8 SHARED DISPOSITIVE POWER -0-
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 770,124 shs.
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES* <input type="checkbox"/>
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9 2.9%
12	TYPE OF REPORTING PERSON* PN

*SEE INSTRUCTIONS BEFORE FILLING OUT!

1	NAME OF REPORTING PERSON S.S. or I.R.S. IDENTIFICATION NO. OF ABOVE PERSON DEER III & CO. LLC ("Deer III")* 11-3197696
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP* (a) <input checked="" type="checkbox"/> (b) <input type="checkbox"/>
3	SEC USE ONLY
4	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware
NUMBER OF SHARES	5 SOLE VOTING POWER 770,124 shs.
BENEFICIALLY OWNED BY EACH	6 SHARED VOTING POWER -0-
REPORTING PERSON	7 SOLE DISPOSITIVE POWER 770,124 shs.
WITH	8 SHARED DISPOSITIVE POWER -0-
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 770,124 shs.
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES* <input type="checkbox"/>
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9 2.9%
12	TYPE OF REPORTING PERSON* PN

*The shares reported on this page are the same as those reported on page 4 as Deer III & Co. LLC is the General Partner of Bessemer III.

*SEE INSTRUCTIONS BEFORE FILLING OUT!

1	NAME OF REPORTING PERSON S.S. or I.R.S. IDENTIFICATION NO. OF ABOVE PERSON NEILL H. BROWNSTEIN ###-##-####	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP* (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION U.S.A.	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5	SOLE VOTING POWER 74,073 shs.
	6	SHARED VOTING POWER -0-
	7	SOLE DISPOSITIVE POWER 74,073 shs.
	8	SHARED DISPOSITIVE POWER -0-
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 74,073 shs.	
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES* <input type="checkbox"/>	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9 0.28%	
12	TYPE OF REPORTING PERSON* IN	

*SEE INSTRUCTIONS BEFORE FILLING OUT!

1	NAME OF REPORTING PERSON S.S. or I.R.S. IDENTIFICATION NO. OF ABOVE PERSON ROBERT H. BUESCHER ###-##-####
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP* (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>
3	SEC USE ONLY
4	CITIZENSHIP OR PLACE OF ORGANIZATION U.S.A.
NUMBER OF SHARES	5 SOLE VOTING POWER 9,217 shs.
BENEFICIALLY OWNED BY EACH	6 SHARED VOTING POWER -0-
REPORTING PERSON	7 SOLE DISPOSITIVE POWER 9,217 shs.
WITH	8 SHARED DISPOSITIVE POWER -0-
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 9,217 shs.
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES* <input type="checkbox"/>
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9 0.03%
12	TYPE OF REPORTING PERSON* IN

*SEE INSTRUCTIONS BEFORE FILLING OUT!

1	NAME OF REPORTING PERSON S.S. or I.R.S. IDENTIFICATION NO. OF ABOVE PERSON WILLIAM T. BURGIN ###-##-####
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP* (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>
3	SEC USE ONLY
4	CITIZENSHIP OR PLACE OF ORGANIZATION U.S.A.
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5 SOLE VOTING POWER 104,859 shs.
	6 SHARED VOTING POWER -0-
	7 SOLE DISPOSITIVE POWER 104,859 shs.
	8 SHARED DISPOSITIVE POWER -0-
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 104,859 shs.
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES* <input type="checkbox"/>
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9 0.4%
12	TYPE OF REPORTING PERSON* IN

*SEE INSTRUCTIONS BEFORE FILLING OUT!

1	NAME OF REPORTING PERSON S.S. or I.R.S. IDENTIFICATION NO. OF ABOVE PERSON G. FELDA HARDYMON ###-##-####
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP* (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>
3	SEC USE ONLY
4	CITIZENSHIP OR PLACE OF ORGANIZATION U.S.A.
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5 SOLE VOTING POWER 34,557 shs.
	6 SHARED VOTING POWER -0-
	7 SOLE DISPOSITIVE POWER 34,557 shs.
	8 SHARED DISPOSITIVE POWER -0-
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 34,557 shs.
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES* <input type="checkbox"/>
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9 0.13%
12	TYPE OF REPORTING PERSON* IN

*SEE INSTRUCTIONS BEFORE FILLING OUT!

1	NAME OF REPORTING PERSON S.S. or I.R.S. IDENTIFICATION NO. OF ABOVE PERSON CHRISTOPHER F. O. GABRIELI ###-##-####
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP* (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>
3	SEC USE ONLY
4	CITIZENSHIP OR PLACE OF ORGANIZATION U.S.A.
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5 SOLE VOTING POWER 163,062 shs.
	6 SHARED VOTING POWER -0-
	7 SOLE DISPOSITIVE POWER 163,062 shs.
	8 SHARED DISPOSITIVE POWER -0-
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 163,062 shs.
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES* <input type="checkbox"/>
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9 0.6%
12	TYPE OF REPORTING PERSON* IN

*SEE INSTRUCTIONS BEFORE FILLING OUT!

1	NAME OF REPORTING PERSON S.S. or I.R.S. IDENTIFICATION NO. OF ABOVE PERSON MICHAEL I. BARACH ###-##-####
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP* (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>
3	SEC USE ONLY
4	CITIZENSHIP OR PLACE OF ORGANIZATION U.S.A.
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5 SOLE VOTING POWER 1,449 shs.
	6 SHARED VOTING POWER -0-
	7 SOLE DISPOSITIVE POWER 1,449 shs.
	8 SHARED DISPOSITIVE POWER -0-
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 1,449 shs.
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES* <input type="checkbox"/>
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9 0.01%
12	TYPE OF REPORTING PERSON* IN

*SEE INSTRUCTIONS BEFORE FILLING OUT!

1	NAME OF REPORTING PERSON S.S. or I.R.S. IDENTIFICATION NO. OF ABOVE PERSON DAVID J. COWAN ###-##-####
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP* (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>
3	SEC USE ONLY
4	CITIZENSHIP OR PLACE OF ORGANIZATION U.S.A.
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5 SOLE VOTING POWER 1,000 shs.
	6 SHARED VOTING POWER -0-
	7 SOLE DISPOSITIVE POWER 1,000 shs.
	8 SHARED DISPOSITIVE POWER -0-
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 1,000 shs.
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES* <input type="checkbox"/>
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9 0.00%
12	TYPE OF REPORTING PERSON* IN

*SEE INSTRUCTIONS BEFORE FILLING OUT!

Item 1.

(a) Name of Issuer:

ISIS Pharmaceuticals, Inc.

(b) Address of Issuer's Principal Executive Office:

2280 B Faraday Avenue
Carlsbad, California 92008

Item 2.

(a), (b) and (c) Name of Persons Filing, Address of Principal Business

Office and Citizenship:

This statement is filed by Bessemer Venture Partners II L.P. and Bessemer Venture Partners III L.P. (collectively referred to as "Bessemer"), both Delaware limited partnerships having their principal office at 1025 Old Country Road, Suite 205, Westbury, New York, 11590. Bessemer's principal business is making venture capital investments for its own account and is carried on at its principal office.

This statement is also filed by Deer II & Co. LLC, a Delaware limited liability company whose members are Neill H. Brownstein*, Robert H. Buescher, William T. Burgin, G. Felda Hardymon and Christopher F. O. Gabrieli, and by Deer III & Co. LLC, a Delaware limited liability company whose members are Neill H. Brownstein*, Robert H. Buescher, William T. Burgin, G. Felda Hardymon, Christopher F. O. Gabrieli, Michael I. Barach** and David J. Cowan. All of such individuals are United States citizens. This statement is also filed by each of such individuals. Deer II & Co. LLC and Deer III & Co. LLC are, respectively, the General Partners of Bessemer Venture Partners II L.P. and Bessemer Venture Partners III L.P. and have their principal offices at the same address as Bessemer. The principal business of Deer II & Co. LLC and Deer III & Co. LLC is making venture capital investments for the account of Bessemer and is carried on at their principal offices, at 535 Middlefield Road, Suite 245, Menlo Park, California 94025 and at 83 Walnut Street, Wellesley Hills, Massachusetts 02181-2101. Mr. Brownstein's and Mr. Cowan's principal business address is the Menlo Park address. Mr. Buescher's principal business address is the principal office of Bessemer. Mr. Burgin's, Mr. Hardymon's, Mr. Gabrieli's and Mr. Barach's principal business address is the Wellesley Hills address.

*As of January 1, 1995 Mr. Brownstein became a special member of Deer II and Deer III with no power to participate in the management of their affairs.

**As of August 1, 1996, Mr. Barach became a special member of Deer III with no power to participate in the management of its affairs.

(d) Title of Class of Securities:

Common Stock

(e) CUSIP Number:

464330 0 10 9

Item 3. If this statement is filed pursuant to Rule 13d-1(b), or 13d-2(b), check whether the person filing is a:

Not applicable.

Item 4. Ownership as of December 31, 1995

Items 5 through 9 of Pages 2 through 12 of this Statement incorporated herein by reference.

Item 5. Ownership of Five Percent or Less of a Class

Not applicable.

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

Not applicable.

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

Not applicable.

Item 8. Identification and Classification of Members of the Group

See the answer to Item 2(a), (b) and (c).

Item 9. Notice of Dissolution of Group

Not applicable.

Item 10. Certification

Not applicable.

SIGNATURES

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

Dated: February 12, 1998

BESSEMER VENTURE PARTNERS II L.P.

By: Deer II & Co. LLC, General Partner

By: /s/ Robert H. Buescher

Robert H. Buescher, Manager

DEER II & CO. LLC

By: /s/ Robert H. Buescher

Robert H. Buescher, Manager

BESSEMER VENTURE PARTNERS III L.P.

By: Deer III & Co. LLC, General Partner

By: /s/ Robert H. Buescher

Robert H. Buescher, Manager

DEER III & CO. LLC

By: /s/ Robert H. Buescher

Robert H. Buescher, Manager

NEILL H. BROWNSTEIN

By: *

Robert H. Buescher, Attorney-in-Fact

WILLIAM T. BURGIN

By: *

Robert H. Buescher, Attorney-in-Fact

G. FELDA HARDYMON

By: *

Robert H. Buescher, Attorney-in-Fact

CHRISTOPHER F.O. GABRIELI

By: *

Robert H. Buescher, Attorney-in-Fact

MICHAEL I. BARACH

By: *

Robert H. Buescher, Attorney-in-Fact

DAVID J. COWAN

By: *

Robert H. Buescher, Attorney-in-Fact

/s/ Robert H. Buescher

Robert H. Buescher for himself and as
Attorney-in-Fact for the above parties
having an asterisk (*) above their
signature line