

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

SCHEDULE 13G

Under the Securities Exchange Act of 1934

(Amendment No. 7)*

ISIS PHARMACEUTICALS, INC.

(Name of Issuer)

Common Stock

(Title of Class of Securities)

4643300109

(CUSIP Number)

December 31, 1998

(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 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

CUSIP No. 464330109 13G Page 2 of 16 Pages

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)
(b)

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware

5 SOLE VOTING POWER

759,566 shs.

NUMBER OF
SHARES
BENEFICIALLY
OWNED BY
EACH
REPORTING
PERSON
WITH

6 SHARED VOTING POWER

-0- shs.

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*

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9

2.80%

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) [X]
(b) []

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware

5 SOLE VOTING POWER

759,566 shs.

NUMBER OF
SHARES
BENEFICIALLY
OWNED BY
EACH
REPORTING
PERSON
WITH

6 SHARED VOTING POWER

-0- shs.

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*

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9

2.80%

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

BESSEMER VENTURE PARTNERS III L.P. ("Bessemer III")
11-3197697

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP*
(a) [X]
(b) []

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware

5 SOLE VOTING POWER

770,124 shs.

NUMBER OF
SHARES
BENEFICIALLY
OWNED BY
EACH
REPORTING
PERSON
WITH

6 SHARED VOTING POWER

-0- shs.

7 SOLE DISPOSITIVE POWER

770,124 shs.

8 SHARED DISPOSITIVE POWER

-0- shs.

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*

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9

2.90%

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) [X]
(b) []

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware

5 SOLE VOTING POWER

770,124 shs.

NUMBER OF
SHARES
BENEFICIALLY
OWNED BY
EACH
REPORTING
PERSON
WITH

6 SHARED VOTING POWER

-0- shs.

7 SOLE DISPOSITIVE POWER

770,124 shs.

8 SHARED DISPOSITIVE POWER

-0- shs.

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*

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9

2.90%

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

NEILL H. BROWNSTEIN
###-##-####

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

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION

U.S.A.

	5	SOLE VOTING POWER
		74,073 shs.
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	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*

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9

0.27%

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)
(b)

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION

U.S.A.

	5	SOLE VOTING POWER
		9,217 shs.
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	6	SHARED VOTING POWER
		-0-
	7	SOLE DISPOSITIVE POWER
		9,217 shs.
	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*

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)
(b)

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION

U.S.A.

5 SOLE VOTING POWER

105,059 shs.

NUMBER OF
SHARES
BENEFICIALLY
OWNED BY
EACH
REPORTING
PERSON
WITH

6 SHARED VOTING POWER

-0-

7 SOLE DISPOSITIVE POWER

105,059 shs.

8 SHARED DISPOSITIVE POWER

-0-

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

105,059 shs.

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

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9

0.40%

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)
(b)

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION

U.S.A.

	5	SOLE VOTING POWER
		34,545 shs.
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	6	SHARED VOTING POWER
		-0-
	7	SOLE DISPOSITIVE POWER
		34,545 shs.
	8	SHARED DISPOSITIVE POWER
		-0-

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

34,545 shs.

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

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)
(b)

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION

U.S.A.

5 SOLE VOTING POWER

157,546 shs.

NUMBER OF
SHARES
BENEFICIALLY
OWNED BY
EACH
REPORTING
PERSON
WITH

6 SHARED VOTING POWER

-0-

7 SOLE DISPOSITIVE POWER

157,546 shs.

8 SHARED DISPOSITIVE POWER

-0-

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

157,546 shs.

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

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9

0.60%

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)
(b)

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION

U.S.A.

5 SOLE VOTING POWER

589 shs.

NUMBER OF
SHARES
BENEFICIALLY
OWNED BY
EACH
REPORTING
PERSON
WITH

6 SHARED VOTING POWER

-0-

7 SOLE DISPOSITIVE POWER

589 shs.

8 SHARED DISPOSITIVE POWER

-0-

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

589 shs.

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

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9

0.002%

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)
(b)

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION

U.S.A.

5 SOLE VOTING POWER

1,147 shs.

NUMBER OF
SHARES
BENEFICIALLY
OWNED BY
EACH
REPORTING
PERSON
WITH

6 SHARED VOTING POWER

-0-

7 SOLE DISPOSITIVE POWER

1,147 shs.

8 SHARED DISPOSITIVE POWER

-0-

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

1,147 shs.

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

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9

0.004%

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 1400 Old Country Road, Suite 407, 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 Gabrieli, and by Deer III & Co. LLC, a Delaware limited liability company whose members are Neill 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 its 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:

4643300109

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:

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 10, 1999

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

/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