

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

SCHEDULE 13G

Under the Securities Exchange Act of 1934

ISIS PHARMACEUTICALS, INC.  
(Name of Issuer)

Common Stock, \$0.001 Par Value  
(Title of Class of Securities)

4643300109  
(CUSIP Number)

Wayne P. Merkelson, Esq.  
Novartis Corporation  
564 Morris Avenue  
Summit, NJ 07901-1398  
Telephone: (908) 522-6777  
(Name, Address and Telephone Number of  
Person Authorized to Receive Notices and  
Communications)

Copy to:

Spencer D. Klein, Esq.  
Shearman & Sterling  
599 Lexington Avenue  
New York, New York 10022  
Telephone: (212) 848-4000

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)

CUSIP No. 4643300109

(1) Name of Reporting Person  
S.S. or I.R.S. Identification No. of Above Person  
Novartis AG

(2) Check the Appropriate Box if a Member of Group (See Instructions)

(a)

(b)

(3) SEC Use Only

(4) Citizenship or Place of Organization Switzerland

Number of (5) Sole Voting Power 0

Shares

Beneficially (6) Shared Voting Power 2,354,150

Owned by

Each (7) Sole Dispositive Power 0

Reporting

Person (8) Shared Dispositive Power 2,354,150  
-----  
-----

With  
-----  
-----

(9) Aggregate Amount Beneficially Owned by Each Reporting Person 2,354,150  
-----

(10) Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)

(11) Percent of Class Represented by Amount in Row (9)  
8.75%

(12) Type of Reporting Person (See Instructions) CO

CUSIP No. 4643300109

(1) Name of Reporting Person  
S.S. or I.R.S. Identification No. of Above Person  
Novartis Pharma AG

(2) Check the Appropriate Box if a Member of Group (See Instructions)

(a)

(b)

(3) SEC Use Only

(4) Citizenship or Place of Organization Switzerland

Number of	(5)	Sole Voting Power	0
Shares			-----
Beneficially	(6)	Shared Voting Power	2,219,000
Owned by			-----
Each	(7)	Sole Dispositive Power	0
Reporting			-----
Person	(8)	Shared Dispositive Power	2,219,000
With			-----
-			-----

(9) Aggregate Amount Beneficially Owned by Each Reporting Person 2,219,000  
-----

(10) Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)

(11) Percent of Class Represented by Amount in Row (9)  
8.25%

(12) Type of Reporting Person (See Instructions) CO

CUSIP No. 4643300109

(1) Name of Reporting Person  
S.S. or I.R.S. Identification No. of Above Person  
Novartis Pharmaceuticals Corporation

(2) Check the Appropriate Box if a Member of Group (See Instructions)

(a)

(b)

(3) SEC Use Only

(4) Citizenship or Place of Organization Delaware

Number of	(5)	Sole Voting Power	0
Shares			-----
Beneficially	(6)	Shared Voting Power	38,053
Owned by			-----
Each	(7)	Sole Dispositive Power	0
Reporting			-----
Person	(8)	Shared Dispositive Power	38,053
With			-----
-----			-----

(9) Aggregate Amount Beneficially Owned by Each Reporting Person 38,053  
-----

(10) Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)

(11) Percent of Class Represented by Amount in Row (9)  
0.14%

(12) Type of Reporting Person (See Instructions) CO

CUSIP No. 4643300109

(1) Name of Reporting Person  
S.S. or I.R.S. Identification No. of Above Person  
Genetic Therapy, Inc.

(2) Check the Appropriate Box if a Member of Group (See Instructions)

(a)

(b)

(3) SEC Use Only

(4) Citizenship or Place of Organization Delaware

Number of (5) Sole Voting Power 0  
-----

Shares -----

Beneficially (6) Shared Voting Power 97,097  
-----

Owned by -----

Each (7) Sole Dispositive Power 0  
-----

Reporting -----

Person (8) Shared Dispositive Power 97,097  
-----

With -----  
-----

(9) Aggregate Amount Beneficially Owned by Each Reporting Person 97,097  
-----

(10) Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)

(11) Percent of Class Represented by Amount in Row (9)  
0.36%

(12) Type of Reporting Person (See Instructions) CO

Item 1. Issuer

- (a) Isis Pharmaceuticals, Inc.
- (b) 2292 Faraday Avenue  
Carlsbad, California 92008

Item 2. Persons Filing

- (a) Name of Person Filing: Novartis AG ("Novartis"), Novartis Pharma AG, Novartis Pharmaceuticals Corporation and Genetic Therapy, Inc.
- (b) Address of Principal Offices:
  - (i) The principal offices of Novartis are located at Schwarzwaldallee 215, CH-4002, Basel, Switzerland.
  - (ii) The principal offices of Novartis Pharma AG are located at Lichtstrasse 35, CH-4002, Basel, Switzerland.
  - (iii) The principal offices of Novartis Pharmaceuticals Corporation are located at 59 Route 10, East Hanover, New Jersey 07936.
  - (iv) The principal offices of Genetic Therapy, Inc. are located at 938 Clopper Road, Gaithersburg, Maryland 20878.
- (c) Citizenship: Novartis and Novartis Pharma AG are Swiss corporations. Novartis Pharmaceuticals Corporation and Genetic Therapy, Inc. are Delaware corporations.
- (d) Title of Class of Securities: Common Stock, \$0.001 par value.
- (e) CUSIP Number: 464300109

Item 3. This statement is filed pursuant to ss.240.13d-1(c).

Item 4. Ownership

- (a) Novartis Pharma AG owns 2,219,000 shares of Common Stock, Novartis Pharmaceuticals Corporation owns 38,053 shares of Common Stock and Genetic Therapy, Inc. owns 97,097 shares of Common Stock. By virtue of the shares held by Novartis Pharma AG, Novartis Pharmaceuticals Corporation and Genetic Therapy, Inc., Novartis, as the ultimate parent entity, beneficially owns 2,354,150 shares of Common Stock.
- (b) Together the shares of Common Stock held by Novartis Pharma AG, Novartis Pharmaceuticals Corporation and Genetic Therapy, Inc. constitute approximately 8.75% of the outstanding Common Stock of the Issuer.

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

Not Applicable.

Item 9. Notice of Dissolution of Group

Not Applicable.

Item 10. Certification if Statement Filed Pursuant to Rule 13d-1(c)

(a) Not applicable.

(b) 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.

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.

Date: February 13, 1999

NOVARTIS AG

By: /s/ Dr. Urs Baerlocher  
Name: Dr. Urs Baerlocher  
Title: General Counsel

By: /s/ Martin Henrich  
Name: Martin Henrich  
Title: Associate General Counsel

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.

Date: February 10, 1999

NOVARTIS PHARMA AG

By: /s/ Joseph Mamie  
Name: Joseph Mamie  
Title: Pharma Finance, Financial Investment

By: /s/ Olivier Bassi  
Name: Olivier Bassi  
Title: Senior Legal Counsel

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.

Date: February 11, 1999

NOVARTIS PHARMACEUTICALS  
CORPORATION

By: /s/ Kenneth P. Schuster  
Name: Kenneth P. Schuster  
Title: Vice President and Controller

By: /s/ Urs A. Naegelin  
Name: Urs A. Naegelin  
Title: Senior Vice President and CFO  
Finance and Administration

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.

Date: February 10, 1999

GENETIC THERAPY, INC.

By: /s/ James T. DePalma  
Name: James T. DePalma  
Title: Vice President and Chief Financial  
Officer  
Finance and Information Technology