

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

SCHEDULE 13G

UNDER THE SECURITIES EXCHANGE ACT OF 1934
(Amendment No.)*

Sunesis Pharmaceuticals, Inc.

(Name of Issuer)

Common Stock, par value \$0.0001 per share

(Title of Class of Securities)

867328 50 2

(CUSIP Number)

December 31, 2005

(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 (the "Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act.

CUSIP NO. 867328 50 2

1 NAME(S) OF REPORTING PERSON(S)
S.S. OR I.R.S. IDENTIFICATION NO(S). OF ABOVE PERSON(S)

Biogen Idec Inc.
33-0112644

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

0

6 SHARED VOTING POWER

2,912,022

7 SOLE DISPOSITIVE POWER

0

8 SHARED DISPOSITIVE POWER

2,912,022

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

2,912,022

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

Not applicable

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9

13.6%

12 TYPE OF REPORTING PERSON

CO

CUSIP NO. 867328 50 2

1 NAME(S) OF REPORTING PERSON(S)
S.S. OR I.R.S. IDENTIFICATION NO(S). OF ABOVE PERSON(S)

Biogen Idec MA Inc.
04-3002117

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

(a) []
(b) []

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION

Massachusetts

5 SOLE VOTING POWER

0

6 SHARED VOTING POWER

2,912,022

7 SOLE DISPOSITIVE POWER

0

8 SHARED DISPOSITIVE POWER

2,912,022

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

2,912,022

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

Not applicable

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9

13.6%

12 TYPE OF REPORTING PERSON

CO

- Item 1(a) Name of Issuer
Sunesis Pharmaceuticals, Inc.
- Item 1(b) Address of Issuer's Principal Executive Offices
341 Oyster Point Blvd.
South San Francisco, California 94080
- Item 2(a) Names of Persons Filing
(i) Biogen Idec Inc.
(ii) Biogen Idec MA Inc.
- Item 2(b) Address of Principal Business Office or, if none, Residence
(i) 14 Cambridge Center, Cambridge, Massachusetts 02142
(ii) 14 Cambridge Center, Cambridge, Massachusetts 02142
- Item 2(c) Citizenship
(i) Delaware
(ii) Massachusetts
- Item 2(d) Title of Class of Securities
Common Stock, par value \$0.0001 per share
- Item 2(e) CUSIP Number
867328 50 2
- Item 3 If this statement is filed pursuant to Rules 13d-1(b) or 13d-2(b) or (c), check whether the person filing is a:
Not Applicable
- (a) Broker or dealer registered under Section 15 of the Act;
- (b) Bank as defined in section 3(a)(6) of the Act;
- (c) Insurance company as defined in Section 3(a)(19) of the Act;
- (d) Investment company registered under Section 8 of the Investment Company Act;
- (e) An investment adviser in accordance with Rule 13d-1(b)(1)(ii)(E);

- (f) [] An employee benefit plan or endowment fund in accordance with Rule 13d-1(b)(1)(ii)(F);
- (g) [] A parent holding company or control person in accordance with Rule 13d-1(b)(1)(ii)(G);
- (h) [] A savings associations as defined in Section 3(b) of the Federal Deposit Insurance Act;
- (i) [] A church plan that is excluded from the definition of an investment company under section 3(c)(14) of the Investment Company Act;
- (j) [] Group, in accordance with Rule 13d-1(b)(1)(ii)(J).

Item 4 Ownership

(a) Amount Beneficially Owned:

2,912,022

Shares of Sunesis Common Stock are owned directly by Biogen Idec MA Inc., a wholly owned subsidiary of Biogen Idec Inc., and indirectly by Biogen Idec Inc.

(b) Percent of Class:

13.6%.

This percentage was calculated based on disclosure in the Issuer's Quarterly Report on Form 10-Q filed November 14, 2005, that on November 10, 1005, there were 21,460,214 shares of Common Stock outstanding.

(c) Number of shares as to which such persons have:

(i) sole power to vote or to direct the vote:

0

(ii) shared power to vote or to direct the vote:

2,912,022

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

0

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

2,912,022

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 following [].

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

Not applicable

INDEX TO EXHIBITS

Exhibit Number -----	Exhibit -----
99.1	Joint Filing Agreement

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: February 14, 2006

BIOGEN IDEC INC.

By: /s/ Michael F. Phelps

Name: Michael F. Phelps

Title: Vice President, Treasurer

BIOGEN IDEC MA INC.

By: /s/ Michael F. Phelps

Name: Michael F. Phelps

Title: Vice President, Treasurer

JOINT FILING AGREEMENT

The undersigned, the Reporting Persons named in this Schedule 13G, hereby agree that this Schedule 13G is filed on a combined basis on behalf of each of them and that each Reporting Person is individually responsible for the timely filing of any amendments to this Schedule 13G. Each Reporting Person further agrees that it is responsible for the completeness and accuracy of the information concerning such Reporting Persons, respectively, contained in this Schedule 13G and that it is not responsible for the completeness or accuracy of the information concerning the other Reporting Persons.

IN WITNESS WHEREOF, the undersigned have executed this Joint Filing Agreement as of the 14th day of February, 2006.

BIOGEN IDEC INC.

By: /s/ Michael F. Phelps

Name: Michael F. Phelps
Title: Vice President, Treasurer

BIOGEN IDEC MA INC.

By: /s/ Michael F. Phelps

Name: Michael F. Phelps
Title: Vice President, Treasurer