

REPOS THERAPEUTICS INC.  
Form SC 13D/A  
December 31, 2009  
United States  
Securities and Exchange Commission  
Washington, D.C. 20549

## Schedule 13D

Under the Securities Exchange Act of 1934  
(Amendment No. 5)\*

**OMB Number**

3235-0145

REPOS THERAPEUTICS INC

(Name of Issuer)

Common Stock

(Title of Class of Securities)

76028 H-10-0

(CUSIP Number)

Mark Lappe

Efficacy Capital, Ltd.

11622 EL CAMINO REAL, SUITE 100

SAN DEIGO, CA 92130

(858) 759-1499

(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)

December 11, 2009

(Date of Event which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of §§240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box.

**Note:** Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See §240.13d-7 for other parties to whom copies are to be sent.

\* 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 disclosures provided in a prior cover page.

The information required on 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).

CUSIP No.

1. Names of Reporting Persons.

I.R.S. Identification Nos. of above persons (entities only).

Efficacy Capital, Ltd.

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

1.

2.

3. SEC Use Only

4. Source of Funds (See Instructions)

WC

5. Check if Disclosure of Legal Proceedings is Required Pursuant to Items 2(d) or 2(e)

6. Citizenship or Place of Organization

Bermuda

Number of Shares Beneficially Owned by Each Reporting Person With:

7. Sole Voting Power

0

8. Shared Voting Power

2,552,233 shares\*

9. Sole Dispositive Power

0

10. Shared Dispositive Power

2,552,233 shares\*

11. Aggregate Amount Beneficially Owned by Each Reporting Person

2,552,233 shares\*

12. Check if the Aggregate Amount in *Row 11* Excludes Certain Shares (See Instructions)

13. Percent of Class Represented by Amount in *Row 11*

9.99%

14. Type of Reporting Person (See Instructions)

OO

**Footnotes:**

\*See Item 5.

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CUSIP No.

1. Names of Reporting Persons.

I.R.S. Identification Nos. of above persons (entities only).

Efficacy Biotech Fund, L.P.

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

- 1.
- 2.

3. SEC Use Only

4. Source of Funds (See Instructions)

WC

5. Check if Disclosure of Legal Proceedings is Required Pursuant to Items 2(d) or 2(e)

6. Citizenship or Place of Organization

Delaware, USA

Number of Shares Beneficially Owned by Each Reporting Person With:

7. Sole Voting Power

0

8. Shared Voting Power

2,552,233 shares\*

9. Sole Dispositive Power

0

10. Shared Dispositive Power

2,552,233 shares\*

11. Aggregate Amount Beneficially Owned by Each Reporting Person

2,552,233 shares\*

12. Check if the Aggregate Amount in *Row 11* Excludes Certain Shares (See Instructions)

13. Percent of Class Represented by Amount in *Row 11*

9.99%

14. Type of Reporting Person (See Instructions)

PN

**Footnotes:**

\*See Item 5.

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CUSIP No.

1. Names of Reporting Persons.

I.R.S. Identification Nos. of above persons (entities only).

Efficacy Biotech Fund Limited

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

1.

2.

3. SEC Use Only

4. Source of Funds (See Instructions)

WC

5. Check if Disclosure of Legal Proceedings is Required Pursuant to Items 2(d) or 2(e)

6. Citizenship or Place of Organization

Bermuda

Number of Shares Beneficially Owned by Each Reporting Person With:

7. Sole Voting Power

0

8. Shared Voting Power

2,552,233 shares\*

9. Sole Dispositive Power

0

10. Shared Dispositive Power

2,552,233 shares\*

11. Aggregate Amount Beneficially Owned by Each Reporting Person

2,552,233 shares\*

12. Check if the Aggregate Amount in *Row 11* Excludes Certain Shares (See Instructions)

13. Percent of Class Represented by Amount in *Row 11*

9.99%

14. Type of Reporting Person (See Instructions)

OO

**Footnotes:**

\*See Item 5.

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CUSIP No.

1. Names of Reporting Persons.

I.R.S. Identification Nos. of above persons (entities only).

Efficacy Biotech Master Fund Ltd.

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

1.

2.

3. SEC Use Only

4. Source of Funds (See Instructions)

WC

5. Check if Disclosure of Legal Proceedings is Required Pursuant to Items 2(d) or 2(e)

6. Citizenship or Place of Organization

Bermuda

Number of Shares Beneficially Owned by Each Reporting Person With:

7. Sole Voting Power

0

8. Shared Voting Power

2,552,233 shares\*

9. Sole Dispositive Power

0

10. Shared Dispositive Power

2,552,233 shares\*

11. Aggregate Amount Beneficially Owned by Each Reporting Person

2,552,233 shares\*

12. Check if the Aggregate Amount in *Row 11* Excludes Certain Shares (See Instructions)

13. Percent of Class Represented by Amount in *Row 11*

9.99%

14. Type of Reporting Person (See Instructions)

OO

**Footnotes:**

\*See Item 5.

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CUSIP No.

1. Names of Reporting Persons.

I.R.S. Identification Nos. of above persons (entities only).

Mark Lappe

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

1.

2.

3. SEC Use Only

4. Source of Funds (See Instructions)

OO

5. Check if Disclosure of Legal Proceedings is Required Pursuant to Items 2(d) or 2(e)

6. Citizenship or Place of Organization

USA

Number of Shares Beneficially Owned by Each Reporting Person With:

7. Sole Voting Power

2,552,233 shares\*

8. Shared Voting Power

0

9. Sole Dispositive Power

2,552,233 shares\*

10. Shared Dispositive Power

0

11. Aggregate Amount Beneficially Owned by Each Reporting Person

2,552,233 shares\*

12. Check if the Aggregate Amount in *Row 11* Excludes Certain Shares (See Instructions)

13. Percent of Class Represented by Amount in *Row 11*

9.99%

14. Type of Reporting Person (See Instructions)

IN

**Footnotes:**

\*See Item 5.

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## Item 1. Security and Issuer

(a) Name of Issuer: REPROS THERAPEUTICS, INC.

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

2408 Timberloch Place Suite B-7  
The Woodlands, TX 77380

(c) Title of Class of Securities: Common Stock

## Item 2. Identity and Background

### 1. Name

(a) Name of Person Filing:

See Item 1 of each cover page.

Pursuant to Rule 13d-1(a) of General Rules and Regulations under the Securities Exchange Act of 1934, as amended (the "Act"), the undersigned hereby file this Schedule 13D Statement (this "Schedule 13D") on behalf of (i) Mark Lappe, (ii) Efficacy Capital Ltd., a Bermuda limited liability company ("Efficacy Capital"), (iii) Efficacy Biotech Fund, L.P., a Delaware limited partnership ("EBF"), (iv) Efficacy Biotech Fund Limited, a Bermuda Exempted Mutual Fund Company ("EBFL"), and (v) Efficacy Biotech Master Fund Ltd., a Bermuda Exempted Mutual Fund Company ("EBMFL") (collectively, the "Reporting Persons").

### 2. Residence or Business Address

11622 El Camino Real, Suite 100  
San Diego, CA 92130

### 3. Present principal occupation or employment and the name, principal business and address of any corporation or other organization in which such employment is conducted:

Mark Lappe is the Managing Partner of Efficacy Capital Ltd., the Investment Manager for the Reporting Persons.

### 4. Whether or not, during the last five years, such person has been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors) and, if so, give the dates, nature of conviction, name and location of court, and penalty imposed, or other disposition of the case:

None of the Reporting Persons have, during the last five years, been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors).

### 5. Whether or not, during the last five years, such person was a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws; and, if so, identify and describe such proceedings and summarize the terms of such judgment, decree or final order:

The Reporting Persons have not, during the last five years, been a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and have not been subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, Federal or State securities laws or finding any violation with respect to such laws.

## 6. Citizenship

See Item 6 of each cover page.

## Item 3. Source and Amount of Funds or Other Consideration

All of the funds used to purchase the Common Stock were from the working capital of one or more of the Reporting Persons.

## Item 4. Purpose of Transaction

The acquisitions described in Item 5 were made for investment purposes. The Reporting Persons do not presently have any plans or proposals which relate to or would result in any of the transactions described in Item 4 of Schedule 13D.

1. The acquisition by any person of additional securities of the issuer, or the disposition of securities of the issuer;

N/A

2. An extraordinary corporate transaction, such as a merger, reorganization or liquidation, involving the issuer or any of its subsidiaries;

N/A

3. A sale or transfer of a material amount of assets of the issuer or any of its subsidiaries;

N/A

4. Any change in the present board of directors or management of the issuer, including any plans or proposals to change the number or term of directors or to fill any existing vacancies on the board;

N/A

5. Any material change in the present capitalization or dividend policy of the issuer;

N/A

6. Any other material change in the issuer's business or corporate structure including but not limited to, if the issuer is a registered closed-end investment company, any plans or proposals to make any changes in its investment policy for which a vote is required by section 13 of the Investment Company Act of 1940;

N/A

7. Changes in the issuer's charter, bylaws or instruments corresponding thereto or other actions which may impede the acquisition of control of the issuer by any person;

N/A

8. Causing a class of securities of the issuer to be delisted from a national securities exchange or to cease to be authorized to be quoted in an inter-dealer quotation system of a registered national securities association;

N/A

9. A class of equity securities of the issuer becoming eligible for termination of registration pursuant to Section 12(g)(4) of the Act; or

N/A

10. Any action similar to any of those enumerated above.



N/A

**Item 5. Interest in Securities of the Issuer**

1. State the aggregate number and percentage of the class of securities identified pursuant to Item 1 (which may be based on the number of securities outstanding as contained in the most recently available filing with the Commission by the issuer unless the filing person has reason to believe such information is not current) beneficially owned (identifying those shares which there is a right to acquire) by each person named in Item 2. The above mentioned information should also be furnished with respect to persons who, together with any of the persons named in Item 2, comprise a group within the meaning of Section 13(d)(3) of the Act;

The Reporting Persons collectively own 2,552,233 shares of the Issuer's Common Stock comprising 9.99% of the Issuer's outstanding Common Stock.

2. For each person named in response to paragraph (a), indicate the number of shares as to which there is sole power to vote or to direct the vote, shared power to vote or to direct the vote, sole power to dispose or to direct the disposition, or shared power to dispose or to direct the disposition. Provide the applicable information required by Item 2 with respect to each person with whom the power to vote or to direct the vote or to dispose or direct the disposition is shared;

Each of the Reporting Persons has sole voting power and sole dispositive power of zero shares of the Issuer's Common Stock, except that Mark Lappe has sole voting power and sole dispositive power of 2,552,233 shares. The Reporting Persons collectively have shared voting power of 2,552,233 shares of the Issuer's Common Stock and shared dispositive power of 2,552,233 shares of the Issuer's Common Stock.

3. Describe any transactions in the class of securities reported on that were effected during the past sixty days or since the most recent filing of Schedule 13D (§240.13d-191), whichever is less, by the persons named in response to paragraph (a).

The following transactions were effected during the past sixty days:

Transaction Date	Shares or Units Purchased (Sold)	Price Per Share or Unit
Dec. 19, 2009	(76,703)	\$.6545
Dec. 18, 2009	(30,000)	\$.676
Dec. 17, 2009	(50,100)	\$.703
Dec. 15, 2009	(181,700)	\$.67
Dec. 14, 2009	(77,900)	\$.699
Dec. 11, 2009	(126,500)	\$.696
Dec. 2, 2009	(262,000)	\$.6957
Dec. 1, 2009	(131,000)	\$.7084
Nov. 30, 2009	(148,000)	\$.7127
Nov. 23, 2009	(227,000)	\$.7013
Nov. 20, 2009	(215,000)	\$.7069
Nov. 19, 2009	(214,000)	\$.7487

4. 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 an employee benefit plan, pension fund or endowment fund is not required.

No person other than the Reporting Persons has rights with respect to the economic or voting interests associated with the Shares.

5. If applicable, state the date on which the reporting person ceased to be the beneficial owner of more than five percent of the class of securities.

Not applicable.

## **Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer**

In connection with the purchase of 1,846,154 shares of the Issuer's Common Stock, Efficacy Capital entered into a Common Stock Purchase Agreement, dated as of September 29, 2008, by and between Efficacy Capital and the Issuer (the "Purchase Agreement"). The Purchase Agreement provides that the Reporting Persons shall have a right of first refusal with respect to any equity securities sold by Issuer from September 29, 2008 through September 29, 2010, up to the Reporting Persons' pro rata share.

The Reporting Person and the Issuer are parties to a Standstill Agreement dated January 9, 2008, as amended by the First Amendment to Standstill Agreement, dated as of July 28, 2008 (the "First Amendment") and the Second Amendment to Standstill Agreement, dated as of October 2, 2008 (the "Second Amendment"), pursuant to which the Reporting Person agreed, among other things, that it would not (i) acquire shares of the Issuer's common stock that would result in its aggregate beneficial ownership exceeding 40% of the outstanding shares of the Issuer's common stock, (ii) participate in a "solicitation" or request for "proxies" to vote any securities of the Issuer, (iii) demand a meeting of the shareholders of the Issuer or nominate any person for election to the Board of Directors of the Issuer, subject to certain limited exceptions described below, (iv) communicate with any person or entity with respect to the voting of any the Issuer's common stock, other than in accordance with the recommendations of a majority of the Issuer's Board of Directors, (v) vote shares of the Issuer's common stock in any manner other than in accordance with the recommendations of a majority of the Issuer's Board of Directors who are not also officers or employees of the Issuer and not the director designated by Efficacy, or, if no such recommendation is made, in the same proportion as the votes cast by other holders of the Issuer's common stock, (vi) make an offer to acquire the Issuer or cause such an offer to be made, with certain limited exceptions, (vii) otherwise seek to control the management or policies of the Issuer, (viii) for, join or in any way participate in a "group" with respect to any securities of the Issuer in connection with any action or matter otherwise prohibited under the Standstill Agreement, and (ix) transfer beneficial ownership of any shares of the Issuer's common stock directly, or, knowingly, indirectly, to any person or group of persons who would after such sale beneficially or of record own more than 5% of the total outstanding shares of the Issuer's common stock, with certain limited qualifications and exceptions.

Under the terms of the Standstill Agreement, as amended, the foregoing obligations terminate on the date Efficacy Capital Ltd.'s aggregate beneficial ownership of the Issuer's Common Stock is collectively less than fifteen percent (15%) of the then outstanding Common Stock of the Issuer.

The Standstill Agreement is filed as an Exhibit to the original Schedule 13D filed by the Reporting Persons on March 12, 2008. Each of the Purchase Agreement, the First Amendment, and the Second Amendment is filed as an Exhibit to Amendment No. 2 to the original Schedule 13D filed by the Reporting Persons on October 7, 2008.

## **Item 7. Material to Be Filed as Exhibits**

None.

## 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.

December 30, 2009

Date

**Efficacy Capital Ltd., a Bermuda limited liability company**

/s/ Mark Lappe

Signature

Mark Lappe

Managing Partner

Name / Title

**Efficacy Biotech Fund, L.P., a Delaware limited partnership**

/s/ Mark Lappe

Signature

Mark Lappe

Managing Partner of Efficacy Capital, Ltd., its General Partner

Name / Title

**Efficacy Biotech Fund Limited, a Bermuda Exempted Mutual Fund Company**

/s/ Mark Lappe

Signature

Mark Lappe

Managing Partner of Efficacy Capital, Ltd., its Manager

Name / Title

**Efficacy Biotech Master Fund Ltd., a Bermuda Exempted Mutual Fund Company**

/s/ Mark Lappe

Signature

Mark Lappe

Managing Partner of Efficacy Capital, Ltd., its Manager

Name / Title

/s/ Mark Lappe

Signature

Mark Lappe

Name / Title

## Footnotes:

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Attention: Intentional misstatements or omissions of fact constitute Federal criminal violations (See 18 U.S.C. 1001)