ORBIMED ADVISORS LLC Form SC 13G May 12, 2003

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

SCHEDULE 13G Under the Securities Exchange Act of 1934

Gen-Probe Incorporated
 (Name of Issuer)

Common Stock (Title of Class of Securities)

36766T103 (CUSIP Number)

April 3, 2003

(Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

[x] 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).

CUSIP No. 36766T103

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

OrbiMed Advisors LLC

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

[] (a)

[] (b)

- 3. SEC Use Only
- 4. Citizenship or Place of Organization

Delaware

5. Sole Voting Power: 0

Number of

Shares 6. Shared Voting Power: 1,227,867

Beneficially

Owned by 7. Sole Dispositive Power: 0

Each Reporting

Person With 8. Shared Dispositive Power: 1,227,867

- 9. Aggregate Amount Beneficially Owned by Each Reporting Person: 1,227,867
- 10. Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)
- 11. Percent of Class Represented by Amount in Row (9) 5.16%
- 12. Type of Reporting Person (See Instructions) IA

CUSIP No. 36766T103

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

OrbiMed Capital LLC

- 2. Check the Appropriate Box if a Member of a Group (See Instructions)
 - [] (a)
 - [] (b)
- 3. SEC Use Only
- 4. Citizenship or Place of Organization

Delaware

5. Sole Voting Power: 0

Number of

Shares 6. Shared Voting Power: 1,227,867

Beneficially

Owned by 7. Sole Dispositive Power: 0

Each Reporting

Person With 8. Shared Dispositive Power: 1,227,867

- Aggregate Amount Beneficially Owned by Each Reporting Person: 1,227,867
- 10. Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)
- 11. Percent of Class Represented by Amount in Row (9) 5.16%
- 12. Type of Reporting Person (See Instructions) IA

CUSIP No. 36766T103

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

Samuel D. Isaly

- 2. Check the Appropriate Box if a Member of a Group (See Instructions)
 - [] (a)
 - [] (b)
- 3. SEC Use Only
- 4. Citizenship or Place of Organization

United States

5. Sole Voting Power: 0

Number of

Shares 6. Shared Voting Power: 1,227,867

Beneficially

Owned by

7. Sole Dispositive Power: 0

Each Reporting

Person With 8. Shared Dispositive Power: 1,227,867

- Aggregate Amount Beneficially Owned by Each Reporting Person: 1,227,867
- 10. Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)
- 11. Percent of Class Represented by Amount in Row (9) 5.16%
- 12. Type of Reporting Person (See Instructions) HC
- Item 1. (a) Issuer: Gen-Probe Incorporated
 - (b) Address:

10210 Genetic Center Drive San Diego, CA 92121-4362

- - (b) Address of Principal Business Offices:

767 Third Avenue, 30th Floor New York, New York 10017

- (c) Citizenship: Please refer to Item 4 on each cover sheet for each filing person
- (d) Title of Class of Securities

Common stock

- (e) CUSIP Number: 36766T103
- Item 3. OrbiMed Advisors LLC and OrbiMed Capital LLC are investment advisors In accordance with ss.240.13d-1(b)(1)(ii)(E). Samuel D. Isaly is a control Person in accordance with ss.240.13d-1(b)(1)(ii)(G)
- Item 4. Ownership

Please see Items 5 - 9 and 11 for each cover sheet for each filing separately

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.

Reporting persons are holding 5.16% of the securities on behalf of other persons who have the right to receive or the power to direct the receipt of dividends from or proceeds from sole of, such securities.

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

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: May 9, 2003

OrbiMed Advisors LLC

By: /s/ Samuel D. Isaly

Name: Samuel D. Isaly Title: Managing Member

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were acquired and held in the ordinary course of business and 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: May 9, 2003

OrbiMed Capital LLC

By: /s/ Samuel D. Isaly

Name: Samuel D. Isaly Title: Managing Member

By: /s/ Samuel D. Isaly

Name: Samuel D. Isaly