Gentium S.p.A. Form SC 13D/A February 14, 2014

SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

SCHEDULE 13D/A

(Amendment No. 5)

Under the Securities Exchange Act of 1934

Gentium S.p.A.

(Name of Issuer)

Ordinary Shares/American Depositary Shares

(Title of Class of Securities)

37250B104

CUSIP Number)

Brian B. Margolis, Esq.

Orrick, Herrington & Sutcliffe LLP

51 West 52nd Street

New York, NY 10019-6142

(212) 506-5000

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

January 22, 2014

(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. o

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See Rule 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. 37250B104

| (1) | Name of Reporting Persons Paolo Cavazza | | |
|---|---|--|----------------------------------|
| (2) | Check the Appropriate Box if a Member of a Group (See Instructions) (a) o (b) o | | |
| (3) | SEC Use Only | | |
| (4) | Source of Funds (See Instructions) PF | | |
| (5) | Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e) o | | |
| (6) | Citizenship or Place of Organization Italy | | |
| Number of Shares Beneficially Owned by Each Reporting Person With | (7) | | Sole Voting Power 0 |
| | (8) | | Shared Voting Power 301,004 |
| | (9) | | Sole Dispositive Power 0 |
| | (10) | | Shared Dispositive Power 301,004 |
| (11) | Aggregate Amount Beneficially Owned by Each Reporting Person 301,004 | | |
| (12) | Check if the Aggregate Amount in Row (11) Excludes Certain Shares o | | |
| (13) | Percent of Class Represented by Amount in Row (11) 2.0% (based on 15,038,483 Ordinary Shares outstanding as of December 31, 2012, as reported in the Issuer s annual report on Form 20-F filed with the Securities and Exchange Commission on April 1, 2013). | | |
| (14) | Type of Reporting Person (See Instructions) IN | | |

Item 1.

Security and Issuer.

Item 1 of the Schedule 13D is hereby amended and restated in its entirety as follows:

This Amendment No. 5 by Paolo Cavazza, an Italian citizen, amends the Schedule 13D filed with the Securities and Exchange Commission (the SEC) on October 24, 2005 as amended by Amendment No. 1 filed with the SEC on February 20, 2007, Amendment No. 2 filed with the SEC on June 25, 2007, Amendment No. 3 filed with the SEC on February 12, 2013 and Amendment No. 4 filed with the SEC on December 24, 2013 (the Schedule 13D) with respect to the ordinary shares, par value 1.00 per share (the Ordinary Shares), of Gentium S.p.A. (the Issuer), an Italian corporation whose principal offices are located at Piazza XX Settembre 2, 22079 Villa Guardia (Como), Italy. The Ordinary Shares are listed for trading on the NASDAQ National Market System (NASDAQ) in the form of American Depositary Shares (ADSs), evidenced by American Depositary Receipts. Each ADS represents one Ordinary Share.

This Amendment No. 5 is being filed to amend Items 5(a) and 5(e) of the statements on Schedule 13D as previously filed.

This is the final amendment to this Schedule 13D, and an exit filing for the Reporting Person.

Item 5.

Interest in Securities of the Issuer.

Item 5 of the Schedule 13D is hereby amended to add the following at the end of items (a) and (e) thereof, respectively:

- (a) 2,310,991 of the Ordinary Shares of the Issuer over which the Reporting Person shared voting power, were tendered to Jazz Pharmaceuticals S.r.l. (Jazz) as part of the initial tender offer by Jazz for all outstanding shares of ordinary stock and all outstanding ADSs of the Issuer at a purchase price of \$57.00 per ordinary share.
- (e) The Reporting Person ceased to be a beneficial owner of 5% of the securities of the Issuer on January 22, 2014.

3

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 14, 2014

PAOLO CAVAZZA

By: /s/ Fabio Poma Name: Fabio Poma Title: Attorney-in-fact

The original statement shall be signed by each person on whose behalf the statement is filed or his authorized representative. If the statement is signed on behalf of a person by his authorized representative (other than an executive officer or general partner of the filing persons, evidence of the representative s authority to sign on behalf of such persons shall be filed with the statement: provided, however, that a power of attorney for this purpose which is already on file with the Commission may be incorporated by reference. The name and any title of each person who signs the statement shall be typed or printed beneath his signature.

Attention:

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

4

EXHIBIT INDEX

1. Power of Attorney(1)

(1) Incorporated by reference to the Reporting Person s Schedule 13D/A filed with the SEC on December 24, 2013.

5