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

**SCHEDULE 13D**

Under the Securities Exchange Act of 1934

**Gracell Biotechnologies Inc.**

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(Name of Issuer)

**Ordinary Shares, par value \$0.0001 per share**  
**American Depository Shares, each of which represents five Ordinary Shares, par value \$0.0001 per share**

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(Title of Class of Securities)

**38406L103\*\***

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(CUSIP Number)

**OrbiMed Advisors LLC**  
**OrbiMed Asia GP III, L.P.**  
**OrbiMed Advisors III Limited**  
**OrbiMed Genesis GP LLC**  
**OrbiMed New Horizons GP LLC**  
**OrbiMed Capital LLC**

**601 Lexington Avenue, 54th Floor**  
**New York, NY 10022**  
**Telephone: (212) 739-6400**

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

**March 29, 2023**

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(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(b) 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.

\*\***38406L103** is the CUSIP number for the American Depository Shares traded on the Nasdaq Stock Market.

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).

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CUSIP No. 38406L103

1	Names of Reporting Persons. OrbiMed Advisors LLC	
2	Check the Appropriate Box if a Member of a Group (See Instructions). (a) <input type="radio"/> (b) <input type="radio"/>	
3	SEC Use Only	
4	Source of Funds (See Instructions) AF	
5	Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e) <input type="radio"/>	
6	Citizenship or Place of Organization Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	Sole Voting Power 0
	8	Shared Voting Power 7,583,576 (1)
	9	Sole Dispositive Power 0
	10	Shared Dispositive Power 7,583,576 (1)
11	Aggregate Amount Beneficially Owned by Each Reporting Person 7,583,576 (1)	
12	Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) <input type="radio"/>	
13	Percent of Class Represented by Amount in Row (11) 11.2% (2)	
14	Type of Reporting Person (See Instructions) IA	

- (1) Evidenced by American Depositary Shares (“ADSs”). Each ADS represents five ordinary shares, par value \$0.0001 per share (“Ordinary Shares”), of Gracell Biotechnologies Inc. (the “Issuer”).
- (2) This percentage is calculated based upon 338,498,819 Ordinary Shares outstanding (which if all held in ADS form would be represented by 67,699,764 ADSs) as set forth in Exhibit 99.1 to the Issuer’s Current Report on Form 6-K, filed with the Securities and Exchange Commission on March 14, 2023.

CUSIP No. 38406L103

1	Names of Reporting Persons. OrbiMed Asia GP III, L.P.	
2	Check the Appropriate Box if a Member of a Group (See Instructions). (a) <input type="radio"/> (b) <input type="radio"/>	
3	SEC Use Only	
4	Source of Funds (See Instructions) AF	
5	Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e) <span style="float: right;">0</span>	
6	Citizenship or Place of Organization Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	Sole Voting Power 0
	8	Shared Voting Power 6,972,080 (1)
	9	Sole Dispositive Power 0
	10	Shared Dispositive Power 6,972,080 (1)
11	Aggregate Amount Beneficially Owned by Each Reporting Person 6,972,080 (1)	
12	Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) <span style="float: right;">0</span>	
13	Percent of Class Represented by Amount in Row (11) 10.3% (2)	
14	Type of Reporting Person (See Instructions) OO	

- (1) Evidenced by American Depositary Shares (“ADSs”). Each ADS represents five ordinary shares, par value \$0.0001 per share (“Ordinary Shares”), of Gracell Biotechnologies Inc. (the “Issuer”).
- (2) This percentage is calculated based upon 338,498,819 Ordinary Shares outstanding (which if all held in ADS form would be represented by 67,699,764 ADSs) as set forth in Exhibit 99.1 to the Issuer’s Current Report on Form 6-K, filed with the Securities and Exchange Commission on March 14, 2023.
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CUSIP No. 38406L103

1	Names of Reporting Persons. OrbiMed Advisors III Limited	
2	Check the Appropriate Box if a Member of a Group (See Instructions). (a) <input type="radio"/> (b) <input type="radio"/>	
3	SEC Use Only	
4	Source of Funds (See Instructions) AF	
5	Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e) <input type="radio"/>	
6	Citizenship or Place of Organization Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	Sole Voting Power 0
	8	Shared Voting Power 6,972,080 (1)
	9	Sole Dispositive Power 0
	10	Shared Dispositive Power 6,972,080 (1)
11	Aggregate Amount Beneficially Owned by Each Reporting Person 6,972,080 (1)	
12	Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) <input type="radio"/>	
13	Percent of Class Represented by Amount in Row (11) 10.3 (2)	
14	Type of Reporting Person (See Instructions) OO	

- (1) Evidenced by American Depositary Shares (“ADSs”). Each ADS represents five ordinary shares, par value \$0.0001 per share (“Ordinary Shares”), of Gracell Biotechnologies Inc. (the “Issuer”).
- (2) This percentage is calculated based upon 338,498,819 Ordinary Shares outstanding (which if all held in ADS form would be represented by 67,699,764 ADSs) as set forth in Exhibit 99.1 to the Issuer’s Current Report on Form 6-K, filed with the Securities and Exchange Commission on March 14, 2023.
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CUSIP No. 38406L103

1	Names of Reporting Persons. OrbiMed Genesis GP LLC	
2	Check the Appropriate Box if a Member of a Group (See Instructions). (a) <input type="radio"/> (b) <input type="radio"/>	
3	SEC Use Only	
4	Source of Funds (See Instructions) AF	
5	Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e) <input type="radio"/>	
6	Citizenship or Place of Organization Cayman Islands	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	Sole Voting Power 305,748 (1)
	8	Shared Voting Power 0
	9	Sole Dispositive Power 305,748 (1)
	10	Shared Dispositive Power 0
11	Aggregate Amount Beneficially Owned by Each Reporting Person 305,748 (1)	
12	Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) <input type="radio"/>	
13	Percent of Class Represented by Amount in Row (11) 0.5% (2)	
14	Type of Reporting Person (See Instructions) IA	

- (1) Evidenced by American Depositary Shares (“ADSs”). Each ADS represents five ordinary shares, par value \$0.0001 per share (“Ordinary Shares”), of Gracell Biotechnologies Inc. (the “Issuer”).
- (2) This percentage is calculated based upon 338,498,819 Ordinary Shares outstanding (which if all held in ADS form would be represented by 67,699,764 ADSs) as set forth in Exhibit 99.1 to the Issuer’s Current Report on Form 6-K, filed with the Securities and Exchange Commission on March 14, 2023.

CUSIP No. 38406L103

1	Names of Reporting Persons. OrbiMed New Horizons GP LLC	
2	Check the Appropriate Box if a Member of a Group (See Instructions). (a) <input type="radio"/> (b) <input type="radio"/>	
3	SEC Use Only	
4	Source of Funds (See Instructions) AF	
5	Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e) <input type="radio"/>	
6	Citizenship or Place of Organization Cayman Islands	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	Sole Voting Power 0
	8	Shared Voting Power 305,748 (1)
	9	Sole Dispositive Power 0
	10	Shared Dispositive Power 305,748 (1)
11	Aggregate Amount Beneficially Owned by Each Reporting Person 305,748 (1)	
12	Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) <input type="radio"/>	
13	Percent of Class Represented by Amount in Row (11) 0.5% (2)	
14	Type of Reporting Person (See Instructions) OO	

- (1) Evidenced by American Depository Shares (“ADSs”). Each ADS represents five ordinary shares, par value \$0.0001 per share (“Ordinary Shares”), of Gracell Biotechnologies Inc. (the “Issuer”).
- (2) This percentage is calculated based upon 338,498,819 Ordinary Shares outstanding (which if all held in ADS form would be represented by 67,699,764 ADSs) as set forth in Exhibit 99.1 to the Issuer’s Current Report on Form 6-K, filed with the Securities and Exchange Commission on March 14, 2023.

CUSIP No. 38406L103

1	Names of Reporting Persons. OrbiMed Capital LLC	
2	Check the Appropriate Box if a Member of a Group (See Instructions). (a) <input type="radio"/> (b) <input type="radio"/>	
3	SEC Use Only	
4	Source of Funds (See Instructions) AF	
5	Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e) <input type="radio"/>	
6	Citizenship or Place of Organization Cayman Islands	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	Sole Voting Power 1,914,198 (1)
	8	Shared Voting Power 0
	9	Sole Dispositive Power 1,914,198 (1)
	10	Shared Dispositive Power 0
11	Aggregate Amount Beneficially Owned by Each Reporting Person 1,914,198 (1)	
12	Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) <input type="radio"/>	
13	Percent of Class Represented by Amount in Row (11) 2.8% (2)	
14	Type of Reporting Person (See Instructions) OO	

- (1) Evidenced by American Depositary Shares (“ADSs”). Each ADS represents five ordinary shares, par value \$0.0001 per share (“Ordinary Shares”), of Gracell Biotechnologies Inc. (the “Issuer”).
- (2) This percentage is calculated based upon 338,498,819 Ordinary Shares outstanding (which if all held in ADS form would be represented by 67,699,764 ADSs) as set forth in Exhibit 99.1 to the Issuer’s Current Report on Form 6-K, filed with the Securities and Exchange Commission on March 14, 2023.

## Item 1. Security and Issuer

This Statement on Schedule 13D (the “Statement”) relates to the ordinary shares, par value \$0.0001 per share (the “Ordinary Shares”), of Gracell Biotechnologies Inc., an exempted company incorporated in the Cayman Islands (the “Issuer”), with its principal executive offices located at Building 12, Block B, Phase II, Biobay Industrial Park, 218 Sangtian St., Suzhou Industrial Park, 215123, People’s Republic of China. Certain Ordinary Shares are represented by American Depositary Shares (“ADSs”), with each ADS representing five Ordinary Shares. The ADSs are listed on the NASDAQ Global Select Market under the ticker symbol “GRCL”. Information given in response to each item shall be deemed incorporated by reference in all other items, as applicable.

This Statement is being filed to report that as a result of the transaction described in Item 3 below, the Reporting Persons (as defined below) acquired beneficial ownership of more than 2% of the outstanding Ordinary Shares (as represented by ADSs).

## Item 2. Identity and Background

(a) This Schedule 13D is being filed by OrbiMed Advisors LLC (“OrbiMed Advisors”), OrbiMed Asia GP III, L.P. (“OAP GP III”), OrbiMed Advisors III Limited (“Advisors III”), OrbiMed Genesis GP LLC (“Genesis GP”), OrbiMed New Horizons GP LLC (“ONH GP”), and OrbiMed Capital LLC (“OrbiMed Capital”) (collectively, the “Reporting Persons”).

(b) — (c), (f) OAP GP III, a Cayman Islands exempted limited partnership, is the general partner of a limited partnership, as more particularly described in Item 6 below. OAP GP III has its principal offices at 601 Lexington Avenue, 54th Floor, New York, New York 10022.

Advisors III, a Cayman Islands exempted company, is the general partner of OAP GP III, as more particularly described in Item 6 below. Advisors III has its principal offices at 601 Lexington Avenue, 54th Floor, New York, New York 10022.

Genesis GP, a limited liability company organized under the laws of Delaware, is the general partner of a limited partnership, as more particularly described in Item 6 below. Genesis GP has its principal offices at 601 Lexington Avenue, 54th Floor, New York, New York 10022.

ONH GP, a limited liability company organized under the laws of Delaware, is the general partner of a limited partnership, as more particularly described in Item 6 below. ONH GP has its principal offices at 601 Lexington Avenue, 54th Floor, New York, New York 10022.

OrbiMed Advisors, a limited liability company organized under the laws of Delaware and a registered investment adviser under the Investment Advisers Act of 1940, as amended, is the investment manager of a limited partnership, as more particularly described in Item 6 below and is the managing member of Genesis GP and ONH GP, as more particularly described in Item 6 below. OrbiMed Advisors has its principal offices at 601 Lexington Avenue, 54th Floor, New York, New York 10022.

OrbiMed Capital, a limited liability company organized under the laws of Delaware and a registered investment adviser under the Investment Advisers Act of 1940, as amended, is the portfolio manager and investment advisor of certain entities as more particularly described in Item 6 below. OrbiMed Capital has its principal offices at 601 Lexington Avenue, 54th Floor, New York, New York 10022.

The directors and executive officers of OrbiMed Advisors, OrbiMed Capital, OAP GP III, Advisors III, Genesis GP, and ONH GP are set forth on Schedules I, II, III, IV, V, and VI, respectively, attached hereto. Schedules I, II, III, IV, V, and VI set forth the following information with respect to each such person:

- (i) name;
  - (ii) business address;
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(iii) present principal occupation of employment and the name, principal business and address of any corporation or other organization in which such employment is conducted; and

(iv) citizenship.

(d) — (e) During the last five years, neither the Reporting Persons nor any Person named in Schedules I through VI has been (i) convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors) or (ii) 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.

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

On March 29, 2023, OrbiMed Advisors, OAP GP III, and Advisors III, pursuant to their authority under the limited partnership agreement of OrbiMed Asia Partners III, L.P. ("OAP III"), as more particularly referred to in Item 6 below, caused OAP III to purchase 1,612,904 ADSs (representing 8,064,520 Ordinary Shares) in a private transaction at a price of \$1.55 per ADS.

The source of funds for such a purchase was the working capital of OAP III.

As a result of the transaction described in this Item 3, OAP GP III, as the general partner of OAP III, and Advisors III, as the general partner of OAP GP III, may each be deemed to be the beneficial owner of approximately 10.3% of the outstanding Ordinary Shares. Genesis GP, as the general partner of OrbiMed Genesis Master Fund, L.P. ("Genesis"), may be deemed to be the beneficial owner of 0.5% of the outstanding Ordinary Shares. ONH GP, as the general partner of OrbiMed New Horizons Master Fund, L.P. ("New Horizons"), may be deemed to be the beneficial owner of 0.5% of the outstanding Ordinary Shares. OrbiMed Advisors, as the investment manager of OAP III and as the managing member of Genesis GP and ONH GP, may be deemed to be the beneficial owner of approximately 11.2% of the outstanding Ordinary Shares. OrbiMed Capital, as the portfolio manager to The Biotech Growth Trust PLC ("BIOG") and the investment advisor to OrbiMed Partners Master Fund Limited ("OPM"), as more particularly referred to in Item 6 below, may be deemed to be the beneficial owner of 2.8% of the outstanding Ordinary Shares. Except as described in this Item 3, none of the Reporting Persons have acquired or disposed of any additional Ordinary Shares or ADSs since January 12, 2021.

### **Item 4. Purpose of Transaction**

This statement relates to the acquisition of ADSs (representing Ordinary Shares) by the Reporting Persons. The ADSs acquired by the Reporting Persons were acquired for the purpose of making an investment in the Issuer and not with the intention of acquiring control of the Issuer's business on behalf of the Reporting Persons' respective advisory clients.

The Reporting Persons from time to time intend to review their investment in the Issuer on the basis of various factors, including the Issuer's business, financial condition, results of operations and prospects, general economic and industry conditions, the securities markets in general and those for the Issuer's shares in particular, as well as other developments and other investment opportunities. Based upon such review, the Reporting Persons will take such actions in the future as the Reporting Persons may deem appropriate in light of the circumstances existing from time to time. If the Reporting Persons believe that further investment in the Issuer is attractive, whether because of the market price of shares or otherwise, they may acquire shares or other securities of the Issuer either in the open market or in privately negotiated transactions. Similarly, depending on market and other factors, the Reporting Persons may determine to dispose of some or all of the shares currently owned by the Reporting Persons or otherwise acquired by the Reporting Persons either in the open market or in privately negotiated transactions.

Except as set forth in this Schedule 13D, the Reporting Persons have not formulated any plans or proposals which relate to or would result in: (a) the acquisition by any person of additional securities of the Issuer or the disposition of securities of the Issuer, (b) an extraordinary corporate transaction, such as a merger, reorganization or liquidation, involving the Issuer or any of its subsidiaries, (c) a sale or transfer of a material amount of the assets of the Issuer or any of its subsidiaries,

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(d) 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, (e) any material change in the Issuer's capitalization or dividend policy of the Issuer, (f) any other material change in the Issuer's business or corporate structure, (g) any change in the Issuer's charter or bylaws or other instrument corresponding thereto or other action which may impede the acquisition of control of the Issuer by any person, (h) causing a class of the Issuer's securities to be deregistered or 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, (i) a class of equity securities of the Issuer becoming eligible for termination of registration pursuant to Section 12(g)(4) of the Act or (j) any action similar to any of those enumerated above.

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

(a) — (b) The following disclosure is based upon 338,498,819 Ordinary Shares outstanding (which if all held in ADS form would be represented by 67,699,764 ADSs) as set forth in Exhibit 99.1 to the Issuer's Current Report on Form 6-K, filed with the SEC on March 14, 2023.

As of the date of this filing, OAP III, a limited partnership organized under the laws of the Cayman Islands, holds 6,972,080 ADSs, constituting approximately 10.3% of the issued and outstanding Ordinary Shares. OAP GP III is the general partner of OAP III pursuant to the terms of the limited partnership agreement of OAP III, Advisors III is the general partner of OAP GP III pursuant to the terms of the limited partnership agreement of Advisors III, and OrbiMed Advisors is the investment manager of OAP III pursuant to the terms of the limited partnership agreement of OAP III. As a result, OAP GP III, Advisors III, and OrbiMed Advisors share power to direct the vote and disposition of the ADSs held by OAP III and may be deemed directly or indirectly, including by reason of their mutual affiliation, to be the beneficial owners of the ADSs held by OAP III. OrbiMed Advisors exercises this investment and voting power through a management committee comprised of Carl L. Gordon, Sven H. Borho, and W. Carter Neild, each of whom disclaims beneficial ownership of the ADSs held by OAP III.

As of the date of this filing, Genesis, a limited partnership organized under the laws of the Cayman Islands, holds 305,748 ADSs, constituting approximately 0.5% of the issued and outstanding Ordinary Shares. Genesis GP is the general partner of Genesis, pursuant to the terms of the limited partnership agreement of Genesis, and OrbiMed Advisors is the managing member of Genesis GP, pursuant to the terms of the limited liability company agreement of Genesis GP. As a result, OrbiMed Advisors and OrbiMed Genesis share power to direct the vote and disposition of the ADSs held by Genesis and may be deemed, directly or indirectly, including by reason of their mutual affiliation, to be the beneficial owners of the ADSs held by Genesis. OrbiMed Advisors exercises this investment and voting power through a management committee comprised of Carl L. Gordon, Sven H. Borho, and W. Carter Neild, each of whom disclaims beneficial ownership of the ADSs held by Genesis.

As of the date of this filing, New Horizons, a limited partnership organized under the laws of the Cayman Islands, holds 305,748 ADSs, constituting approximately 0.5% of the issued and outstanding Ordinary Shares. ONH GP is the general partner of New Horizons, pursuant to the terms of the limited partnership agreement of New Horizons, and OrbiMed Advisors is the managing member of ONH GP, pursuant to the terms of the limited liability company agreement of ONH GP. As a result, OrbiMed Advisors and ONH GP share power to direct the vote and disposition of the ADSs held by New Horizons and may be deemed, directly or indirectly, including by reason of their mutual affiliation, to be the beneficial owners of the ADSs held by New Horizons. OrbiMed Advisors exercises this investment and voting power through a management committee comprised of Carl L. Gordon, Sven H. Borho, and W. Carter Neild, each of whom disclaims beneficial ownership of the ADSs held by New Horizons.

In addition, OrbiMed Advisors, OAP GP III, Advisors III, Genesis GP, and ONH GP, pursuant to their authority under the limited partnership agreements of OAP III, Genesis, and New Horizons, caused OAP III, Genesis, and New Horizons to enter into the agreements referred to in Item 6 below.

As of the date of this filing, BIOG, a publicly-listed investment trust organized under the laws of England, holds 813,504 ADSs, constituting approximately 1.2% of the issued and outstanding Ordinary Shares and OPM, an exempted company under the laws of Bermuda, holds 1,100,694 ADSs, constituting 1.6% of the issued and outstanding Ordinary Shares. OrbiMed Capital is the portfolio manager of BIOG and the investment advisor of OPM. As a result, OrbiMed Capital has the power to direct the vote and disposition of the ADSs held by BIOG and OPM and may be deemed directly or indirectly, including by reason of mutual affiliation, to be the beneficial owner of the ADSs held by BIOG and OPM.

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OrbiMed Capital disclaims any beneficial ownership over the ADSs of the other Reporting Persons. OrbiMed Capital exercises this investment and voting power through a management committee comprised of Carl L. Gordon, Sven H. Borho, and W. Carter Neild, each of whom disclaims beneficial ownership of the ADSs held by BIOG and OPM.

(c) Except as disclosed in Item 3, the Reporting Persons have not effected any transactions during the past sixty (60) days in any ADSs or Ordinary Shares.

(d) Not applicable.

(e) Not applicable.

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

In addition to the relationships between the Reporting Persons described in Items 2 and 5 above, OAP GP III is the general partner of OAP III, pursuant to the terms of the limited partnership agreement of OAP III and Advisors III is the general partner of OAP GP III pursuant to the terms of the limited partnership agreement of OAP GP III. Pursuant to this agreement and relationship, OAP GP III and Advisors III have discretionary investment management authority with respect to the assets of OAP III. Such authority includes the power to vote and otherwise dispose of securities held by OAP III. The number of outstanding ADSs of the Issuer attributable to OAP III is 6,972,080 ADSs. OAP GP III and Advisors III, pursuant to their authority under the limited partnership agreements of OAP III and Advisors III, respectively, may be considered to hold indirectly 6,972,080 ADSs.

In addition to the relationships between the Reporting Persons described in Items 2 and 5 above, Genesis GP is the general partner of Genesis, pursuant to the terms of the limited partnership agreement of Genesis. Pursuant to this agreement and relationship, Genesis GP has discretionary investment management authority with respect to the assets of Genesis. Such authority includes the power to vote and otherwise dispose of securities held by Genesis. The number of outstanding ADSs of the Issuer attributable to Genesis is 305,748 ADSs. Genesis GP, pursuant to its authority under the limited partnership agreement of Genesis, may be considered to hold indirectly 305,748 ADSs.

In addition to the relationships between the Reporting Persons described in Items 2 and 5 above, ONH GP is the general partner of New Horizons, pursuant to the terms of the limited partnership agreement of New Horizons. Pursuant to this agreement and relationship, ONH GP has discretionary investment management authority with respect to the assets of New Horizons. Such authority includes the power to vote and otherwise dispose of securities held by New Horizons. The number of outstanding ADSs of the Issuer attributable to New Horizons is 305,748 ADSs. ONH GP, pursuant to its authority under the limited partnership agreement of New Horizons, may be considered to hold indirectly 305,748 ADSs.

In addition to the relationships between the Reporting Persons described in Items 2 and 5 above, OrbiMed Advisors is the managing member of ONH GP and Genesis GP, pursuant to the terms of the limited liability company agreements of ONH GP and Genesis GP, and OrbiMed Advisors is the investment manager of OAP III, pursuant to the terms of the limited partnership agreement of OAP III. Pursuant to these agreements and relationships, OrbiMed Advisors, OAP GP III, and Advisors III have discretionary investment management authority with respect to the assets of OAP III. OrbiMed Advisors and Genesis GP have discretionary investment management authority with respect to the assets of Genesis and OrbiMed Advisors and ONH GP have discretionary management authority with respect to the assets of New Horizons. Such authority includes the power of OAP GP III and Advisors III to vote and otherwise dispose of securities held by OAP III, the power of Genesis GP to vote and otherwise dispose of the securities held by Genesis, and the power of ONH GP to vote and otherwise dispose of the securities held by New Horizons. The number of outstanding ADSs attributable to OAP III is 6,972,080 ADSs, the number of ADSs attributed to Genesis is 305,748 ADSs, and the number of ADSs attributed to New Horizons is 305,748 ADSs. OrbiMed Advisors, pursuant to its authority under the terms of the limited liability company agreements of Genesis GP and ONH GP, as well as the limited partnership agreement of OAP III, may also be considered to hold indirectly 7,583,576 ADSs.

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OrbiMed Capital is the portfolio manager to BIOG and the investment advisor to OPM. OrbiMed Capital may be deemed to have voting and investment power over the securities held by BIOG and OPM. Such authority includes the power of OrbiMed Capital to vote and otherwise dispose of securities held by BIOG and OPM. The number of outstanding ADSs attributable to BIOG is 813,504 ADSs and number of outstanding ADSs attributable to OPM is 1,100,694 ADSs. OrbiMed Capital, as the investment advisor to BIOG and OPM may also be considered to hold indirectly 1,914,198 ADSs.

David Guowei Wang (“Wang”), an employee of OrbiMed Advisors, is a member of the Board of Directors of the Issuer and, accordingly, OrbiMed Advisors, OAP GP III, and Advisors III may have the ability to affect and influence control of the Issuer. From time to time, Wang may receive stock options or other awards of equity-based compensation pursuant to the Issuer’s compensation arrangements for non-employee directors. Pursuant to an agreement with OrbiMed Advisors, OAP GP III, and Advisors III, Wang is obligated to transfer any securities issued under any such stock options or other awards, or the economic benefit thereof, to OrbiMed Advisors, OAP GP III, and Advisors III, which will in turn ensure that such securities or economic benefits are provided to OAP III.

### ***Shareholders Agreement***

In addition, OAP III, Genesis, New Horizons, BIOG, OPM, and certain other stockholders of the Issuer entered into a Second Amended and Restated Shareholders Agreement with the Issuer (the “Shareholders Agreement”), dated as of October 20, 2020. Pursuant to the Shareholders Agreement and subject to the terms and conditions therein, the parties agreed that:

#### ***Demand Registration Rights***

At any time beginning six months following the date of the effective date of the registration statement of the Issuer’s initial public offering, the holders of at least 20% of the registrable securities then outstanding of the Issuer may make a written request that the Issuer register some or all of their registrable securities, subject to certain specified conditions and exceptions, including that the aggregated gross offering price of such offering must exceed \$25 million. The Issuer is required to use commercially reasonable efforts to effect the registration and will pay all registration expenses, other than underwriting discounts and commissions, related to any demand registration. The Issuer is not obligated to effect more than two of these registrations.

#### ***Piggyback Registration Rights***

Whenever the Issuer proposes to file a registration statement under the Securities Act, other than with respect to certain excluded registrations, OAP III, Genesis, New Horizons, BIOG, and OPM will be entitled to notice of the registration and have the right, subject to limitations that the underwriters may impose on the number of Ordinary Shares included in the registration, to include the Ordinary Shares held by them in the registration.

#### ***Form F-3 or Form S-3 Registration Rights***

At any time after the Issuer is qualified to file a registration statement on Form F-3 or Form S-3 under the Securities Act, and subject to limitations and conditions specified in the Shareholders Agreement, holders of at least 5% of the registrable securities then outstanding may make a written request that the Issuer prepare and file a registration statement on Form S-3 covering their Ordinary Shares, so long as the aggregate price to the public equal or exceeds \$2.5 million. The Issuer is not obligated to effect more than one of these Form F-3 or Form S-3 registrations in any 6-month period.

The foregoing description of the Shareholders Agreement does not purport to be complete and is qualified in its entirety by reference to the full text of the Shareholders Agreement, which is filed as Exhibits 2 and incorporated herein by reference.

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

<b>Exhibit</b>	<b>Description</b>
1.	Joint Filing Agreement among OrbiMed Advisors LLC, OrbiMed Asia GP III, L.P., OrbiMed Advisors III Limited, OrbiMed Genesis GP LLC, OrbiMed New Horizons GP LLC, and OrbiMed Capital LLC.
2.	Second Amended and Restated Shareholders Agreement by and among the Issuer and each of the signatories thereto, dated as of October 20, 2020 (incorporated by reference to Exhibit 4.4 to the Issuer's Registration Statement on Form F-1 (SEC 333-251494), filed with the SEC on December 18, 2020).

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**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: March 31, 2023

ORBIMED ADVISORS LLC

By: /s/ Carl L. Gordon  
Name: Carl L. Gordon  
Title: Member

ORBIMED ASIA GP III, L.P.

By: ORBIMED ADVISORS III LIMITED, its general partner

By: /s/ Carl L. Gordon  
Name: Carl L. Gordon  
Title: Director

ORBIMED ADVISORS III LIMITED

By: /s/ Carl L. Gordon  
Name: Carl L. Gordon  
Title: Director

ORBIMED GENESIS GP LLC

By: ORBIMED ADVISORS LLC, its managing member

By: s/ Carl L. Gordon  
Name: Carl L. Gordon  
Title: Member of OrbiMed Advisors LLC

ORBIMED NEW HORIZONS GP LLC

By: ORBIMED ADVISORS LLC, its managing member

By: s/ Carl L. Gordon  
Name: Carl L. Gordon  
Title: Member of OrbiMed Advisors LLC

ORBIMED CAPITAL LLC

By: s/ Carl L. Gordon  
Name: Carl L. Gordon  
Title: Member

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## SCHEDULE I

The names and present principal occupations of each of the executive officers and directors of OrbiMed Advisors LLC are set forth below. Unless otherwise noted, each of these persons is a United States citizen and has a business address of 601 Lexington Avenue, 54th Floor, New York, NY 10022.

<u>Name</u>	<u>Position with Reporting Person</u>	<u>Principal Occupation</u>
Carl L. Gordon	Member	Member OrbiMed Advisors LLC
Sven H. Borho German and Swedish Citizen	Member	Member OrbiMed Advisors LLC
W. Carter Neild	Member	Member OrbiMed Advisors LLC
Geoffrey C. Hsu	Member	Member OrbiMed Advisors LLC
C. Scotland Stevens	Member	Member OrbiMed Advisors LLC
David P. Bonita	Member	Member OrbiMed Advisors LLC
Peter A. Thompson	Member	Member OrbiMed Advisors LLC
Matthew S. Rizzo	Member	Member OrbiMed Advisors LLC
Trey Block	Chief Financial Officer	Chief Financial Officer OrbiMed Advisors LLC

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## SCHEDULE II

The names and present principal occupations of each of the executive officers and directors of OrbiMed Capital LLC are set forth below. Unless otherwise noted, each of these persons is a United States citizen and has a business address of 601 Lexington Avenue, 54th Floor, New York, NY 10022.

<u>Name</u>	<u>Position with Reporting Person</u>	<u>Principal Occupation</u>
Carl L. Gordon	Member	Member OrbiMed Capital LLC
Sven H. Borho German and Swedish Citizen	Member	Member OrbiMed Capital LLC
W. Carter Neild	Member	Member OrbiMed Capital LLC
Geoffrey C. Hsu	Member	Member OrbiMed Capital LLC
C. Scotland Stevens	Member	Member OrbiMed Capital LLC
David P. Bonita	Member	Member OrbiMed Capital LLC
Peter A. Thompson	Member	Member OrbiMed Capital LLC
Matthew S. Rizzo	Member	Member OrbiMed Capital LLC
Trey Block	Chief Financial Officer	Chief Financial Officer OrbiMed Capital LLC

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### **SCHEDULE III**

The business and operations of OrbiMed Asia GP III, L.P. are managed by the executive officers and directors of OrbiMed Advisors III Limited, set forth in Schedule IV attached hereto.

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#### SCHEDULE IV

The names and present principal occupations of each of the executive officers and directors of OrbiMed Advisors III Limited are set forth below. Unless otherwise noted, each of these persons is a United States citizen and has a business address of 601 Lexington Avenue, 54th Floor, New York, NY 10022.

<u>Name</u>	<u>Position with Reporting Person</u>	<u>Principal Occupation</u>
Carl L. Gordon	Director	Director OrbiMed Advisors III Limited
Sven H. Borho German and Swedish Citizen	Director	Director OrbiMed Advisors III Limited
W. Carter Neild	Director	Director OrbiMed Advisors III Limited
Geoffrey C. Hsu	Director	Director OrbiMed Advisors III Limited
David P. Bonita	Director	Director OrbiMed Advisors III Limited
Sunny Sharma Indian Citizen	Director	Director OrbiMed Advisors III Limited
David G. Wang	Director	Director OrbiMed Advisors III Limited
Trey Block	Chief Financial Officer	Chief Financial Officer OrbiMed Advisors III Limited

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## SCHEDULE V

The business and operations of OrbiMed Genesis GP LLC are managed by the executive officers and directors of its managing member, OrbiMed Advisors LLC, set forth on Schedule I attached.

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## SCHEDULE VI

The business and operations of OrbiMed New Horizons GP LLC are managed by the executive officers and directors of its managing member, OrbiMed Advisors LLC, set forth on Schedule I attached.

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**EXHIBIT INDEX**

<b>Exhibit</b>	<b>Description</b>
1.	Joint Filing Agreement among OrbiMed Advisors LLC, OrbiMed Asia GP III, L.P., OrbiMed Advisors III Limited, OrbiMed Genesis GP LLC, OrbiMed New Horizons GP LLC, and OrbiMed Capital LLC.
2.	Second Amended and Restated Shareholders Agreement by and among the Issuer and each of the signatories thereto, dated as of October 20, 2020 (incorporated by reference to Exhibit 4.4 to the Issuer's Registration Statement on Form F-1 (SEC 333-251494), filed with the SEC on December 18, 2020).

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JOINT FILING AGREEMENT

The undersigned hereby agree that the Statement on Schedule 13D, dated March 29, 2023, with respect to the ordinary shares of Gracell Biotechnologies Inc. is filed on behalf of each of us pursuant to and in accordance with the provisions of Rule 13d-1(k) under the Securities Exchange Act of 1934, as amended. Each of the undersigned agrees to be responsible for the timely filing of this Statement, and for the completeness and accuracy of the information concerning itself contained therein. This Agreement may be executed in any number of counterparts, all of which taken together shall constitute one and the same instrument.

IN WITNESS WHEREOF, the undersigned have executed this Agreement as of the 31<sup>st</sup> day of March 2023.

ORBIMED ADVISORS LLC

By: /s/ Carl L. Gordon  
Name: Carl L. Gordon  
Title: Member

ORBIMED ASIA GP III, L.P.

By: ORBIMED ADVISORS III LIMITED, its general partner

By: /s/ Carl L. Gordon  
Name: Carl L. Gordon  
Title: Director

ORBIMED ADVISORS III LIMITED

By: /s/ Carl L. Gordon  
Name: Carl L. Gordon  
Title: Director

ORBIMED GENESIS GP LLC

By: ORBIMED ADVISORS LLC, its managing member

By: s/ Carl L. Gordon  
Name: Carl L. Gordon  
Title: Member of OrbiMed Advisors LLC

ORBIMED NEW HORIZONS GP LLC

By: ORBIMED ADVISORS LLC, its managing member

By: s/ Carl L. Gordon  
Name: Carl L. Gordon  
Title: Member of OrbiMed Advisors LLC

ORBIMED CAPITAL LLC

By: s/ Carl L. Gordon  
Name: Carl L. Gordon  
Title: Member

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