

**SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

**FORM S-8****REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933****Molecular Data Inc.**

(Exact name of registrant as specified in its charter)

**Cayman Islands**

(State or other jurisdiction of incorporation or organization)

**Not Applicable**

(I.R.S. Employer Identification Number)

**5/F, Building 12, 1001 North Qinzhou Road  
Xuhui District, Shanghai 201109  
People's Republic of China  
+86 21-5436-5166**

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

**2018 Share Plan****2019 Share Incentive Plan**

(Full title of the plan)

**Cogency Global Inc.**

**122 East 42nd Street, 18th Floor  
New York, NY 10168  
(800) 221-0102**

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting company Emerging growth company 

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

Copies to:

**Zheng Wang**

Chief Executive Officer

Molecular Data Inc.

5/F, Building 12, 1001 North Qinzhou Road

Xuhui District, Shanghai 201109

People's Republic of China

+86 21-5436-5166

**CALCULATION OF REGISTRATION FEE**

Title of securities to be registered <sup>(1)</sup>	Amount to be registered <sup>(2)</sup>	Proposed maximum offering price per share	Proposed maximum aggregate offering price	Amount of registration fee
Class A Ordinary Shares, par value US\$0.00005 per share	41,508,057 <sup>(3)</sup>	\$ 0.3983 <sup>(3)</sup>	\$ 16,532,659.10	\$ 2,145.94
Class A Ordinary Shares, par value US\$0.00005 per share	176,913 <sup>(4)</sup>	\$ 0.6433 <sup>(4)</sup>	\$ 113,814.03	\$ 14.77
Class A Ordinary Shares, par value US\$0.00005 per share	23,557,559 <sup>(5)</sup>	\$ 0.6433 <sup>(5)</sup>	\$ 15,155,362.96	\$ 1,967.17
<b>Total</b>	<b>65,242,529</b>	<b>—</b>	<b>\$ 31,801,836.09</b>	<b>\$ 4,127.88</b>

- (1) These shares may be represented by the Registrant's ADSs, each of which represents three Class A ordinary shares of the Registrant. The Registrant's ADSs issuable upon deposit of the Class A ordinary shares registered hereby have been registered under a separate registration statement on Form F-6 (Registration No. 333-235619).
- (2) Represents Class A ordinary shares issuable upon exercise of options and pursuant to other awards granted or to be granted under the 2018 Share Plan and 2019 Share Incentive Plan (collectively, the "Plans"). Pursuant to Rule 416(a) under the Securities Act of 1933, as amended (the "Securities Act"), this registration statement also covers an indeterminate number of additional shares which may be offered and issued to prevent dilution from share splits, share dividends or similar transactions as provided in the Plans. Any Class A ordinary shares covered by an award granted under the Plans (or portion of an award) that terminates, expires or lapses for any reason will be deemed not to have been issued for purposes of determining the maximum aggregate number of Class A ordinary shares that may be issued under the Plans.
- (3) Represents Class A ordinary shares issuable upon exercise of outstanding options granted under the Plans as of the date of this registration statement and the corresponding proposed maximum offering price per share represents the weighted average exercise price of such outstanding options.
- (4) Represents outstanding restricted shares granted under the Plans and the corresponding proposed maximum offering price per share is estimated solely for the purpose of calculating the registration fee in accordance with Rule 457(c) and Rule 457(h) of the Securities Act, based upon the average of the high and low prices of the Registrant's ADSs as quoted on the Nasdaq Capital Market on June 26, 2020, adjusted for ADS to Class A ordinary shares ratio.
- (5) These shares are reserved for future award grants under the Plans, and the proposed maximum offering price per share, which is estimated solely for the purposes of calculating the registration fee in accordance with Rule 457(c) and Rule 457(h) of the Securities Act, based upon the average of the

high and low prices for the Registrant's ADSs as quoted on Nasdaq Capital Market on June 26, 2020, adjusted for ADS to Class A ordinary shares ratio.

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## PART I

### INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

#### Item 1. Plan Information\*

#### Item 2. Registrant Information and Employee Plan Annual Information\*

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\* Information required by Part I to be contained in the Section 10(a) prospectus is omitted from this registration statement in accordance with Rule 428 under the Securities Act and the Note to Part I of Form S-8. The documents containing information specified in this Part I will be separately provided to the participants covered by the Plans, as specified by Rule 428(b)(1) under the Securities Act.

## PART II

### INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

#### Item 3. Incorporation of Documents by Reference

The following documents previously filed by Molecular Data Inc. (the "Registrant") with the Securities and Exchange Commission (the "Commission") are incorporated by reference herein:

- (a) [The Registrant's annual report on Form 20-F \(File No. 001-39167\) filed with the Commission on June 30, 2020.](#)
- (b) [The description of the Registrant's Class A ordinary shares incorporated by reference in the Registrant's registration statement on Form 8-A \(File No. 001-39167\) filed with the Commission on December 20, 2019, including any amendment and report subsequently filed for the purpose of updating that description.](#)

All documents subsequently filed by the Registrant pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934 (the "Exchange Act"), after the date of this registration statement and prior to the filing of a post-effective amendment to this registration statement which indicates that all securities offered have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference in this registration statement and to be part hereof from the date of filing of such documents. Any statement in a document incorporated or deemed to be incorporated by reference in this registration statement will be deemed to be modified or superseded to the extent that a statement contained in this registration statement or in any other later filed document that also is or is deemed to be incorporated by reference modifies or supersedes such statement. Any such statement so modified or superseded will not be deemed, except as so modified or superseded, to be a part of this registration statement.

#### Item 4. Description of Securities

Not applicable.

#### Item 5. Interests of Named Experts and Counsel

Not applicable.

#### Item 6. Indemnification of Directors and Officers

Cayman Islands law does not limit the extent to which a company's memorandum and articles of association may provide for indemnification of directors and officers, except to the extent any such provision may be held by the Cayman Islands courts to be contrary to public policy, such as to provide indemnification against civil fraud or the consequences of committing a crime. The Registrant's amended and restated articles of association, adopted by its shareholders on October 8, 2019, provide that the Registrant shall indemnify each of its directors and officers against all actions, proceedings, costs, charges, expenses, losses, damages or liabilities incurred or sustained by such indemnified person, other than by reason of such person's own dishonesty, willful default or fraud, in or about the conduct of the Registrant's business or affairs (including as a result of any mistake of judgment) or in the execution or discharge of his duties, powers, authorities or discretions, including without prejudice to the generality of the foregoing, any costs, expenses, losses or liabilities incurred by such indemnified person in defending (whether successfully or otherwise) any civil proceedings concerning the Registrant or its affairs in any court whether in the Cayman Islands or elsewhere.

Pursuant to the indemnification agreements between the Registrant and its directors and executive officers, the form of which was filed as Exhibit 10.3 to the Registrant's registration statement on Form F-1, as amended (File No. 333-235398), the Registrant has agreed to indemnify its directors and executive officers against certain liabilities and expenses incurred by such persons in connection with claims made by reason of their being such a director or officer of the Registrant.

The underwriting agreement, the form of which was filed as Exhibit 1.1 to the Registrant's registration statement on Form F-1, as amended (File No. 333-235398), also provides for indemnification by the underwriters of the Registrant and its directors and officers for certain liabilities, including liabilities arising under the Securities Act, but only to the extent that such liabilities are caused by information relating to the underwriters furnished to the Registrant in writing expressly for use in such registration statement and certain other disclosure documents.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers or persons controlling the Registrant pursuant to the foregoing provisions, the Registrant has been informed that in the opinion of the Commission such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

The Registrant also maintains a directors and officers liability insurance policy for its directors and officers.

**Item 7. Exemption From Registration Claimed**

Not applicable.

**Item 8. Exhibits**

See the Index to Exhibits attached hereto.

**Item 9. Undertakings**

(a) The undersigned Registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) to include any prospectus required by Section 10(a)(3) of the Securities Act;

(ii) to reflect in the prospectus any facts or events arising after the effective date of this registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in this registration statement; and

(iii) to include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to that information in the registration statement;

*provided, however*, that paragraphs (a)(1)(i) and (a)(1)(ii) above do not apply if information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the Registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in this registration statement;

- (2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.
  - (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (b) The undersigned Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the Registrant's annual report pursuant to Section 13(a) or 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in this registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.
- (c) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

EXHIBIT INDEX

<u>Exhibit Number</u>	<u>Description</u>
4.1	<a href="#"><u>Amended and Restated Memorandum and Articles of Association of the Registrant (incorporated herein by reference to Exhibit 3.2 to the registration statement on Form F-1, as amended (File No. 333-235398))</u></a>
4.2	<a href="#"><u>Registrant's Specimen Certificate for Class A Ordinary Shares (incorporated herein by reference to Exhibit 4.2 to the registration statement on Form F-1, as amended (File No. 333-235398))</u></a>
4.3	<a href="#"><u>Form of Deposit Agreement among the Registrant, JPMORGAN CHASE BANK, N.A., as depositary and the holders and beneficial owners of American Depositary Shares issued thereunder (incorporated herein by reference to Exhibit 4.3 to the registration statement on Form F-1, as amended (File No. 333-235398))</u></a>
5.1*	<a href="#"><u>Opinion of Maples and Calder (Hong Kong) LLP regarding the validity of the ordinary shares being registered</u></a>
10.1	<a href="#"><u>2018 Share Plan (incorporated herein by reference to Exhibit 10.1 to the registration statement on Form F-1, as amended (File No. 333-235398))</u></a>
10.2	<a href="#"><u>2019 Share Incentive Plan (incorporated herein by reference to Exhibit 10.2 to the registration statement on Form F-1, as amended (File No. 333-235398))</u></a>
23.1*	<a href="#"><u>Consent of Ernst &amp; Young Hua Ming LLP, an independent registered public accounting firm</u></a>
23.2*	<a href="#"><u>Consent of Maples and Calder (Hong Kong) LLP (included in Exhibit 5.1)</u></a>
24.1*	<a href="#"><u>Powers of Attorney (included on signature page hereto)</u></a>

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\* Filed herewith.

## SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in Shanghai, China, on July 2, 2020.

### **Molecular Data Inc.**

By: /s/ Zheng Wang

Name: Zheng Wang

Title: Director and Chief Executive Officer

## POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints, severally and not jointly, each of Dr. Dongliang Chang and Dr. Zheng Wang, with full power to act alone, as his true and lawful attorney-in-fact, with the power of substitution, for and in such person's name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this registration statement, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto each said attorney-in-fact full power and authority to do and perform each and every act and thing requisite and necessary to be done as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that each said attorney-in-fact may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Dongliang Chang</u> Dongliang Chang	Chairman of the Board of Directors	July 2, 2020
<u>/s/ Zheng Wang</u> Zheng Wang	Director and Chief Executive Officer (Principal Executive Officer)	July 2, 2020
<u>/s/ Dawei Ma</u> Dawei Ma	Director	July 2, 2020
<u>/s/ Ning Zhu</u> Ning Zhu	Director	July 2, 2020
<u>/s/ Yanbin Wang</u> Yanbin Wang	Director	July 2, 2020
<u>/s/ Zhaohong Li</u> Zhaohong Li	Chief Financial Officer (Principal Financial and Accounting Officer)	July 2, 2020
<u>/s/ Qiaoqiao Sun</u> Qiaoqiao Sun	Co-Chief Financial Officer	July 2, 2020

**SIGNATURE OF AUTHORIZED REPRESENTATIVE IN THE UNITED STATES**

Pursuant to the Securities Act of 1933, as amended, the undersigned, the duly authorized representative in the United States of Molecular Data Inc. has signed this registration statement or amendment thereto in New York, United States on July 2, 2020.

**Authorized U.S. Representative**

**Cogency Global Inc.**

By: /s/ Colleen A. De Vries  
Name: Colleen A. De Vries  
Title: Senior Vice President

Our ref  
Direct tel  
Email

**Molecular Data Inc.**

5/F, Building 12, 1001 North Qinzhou Road  
Xuhui District, Shanghai 201109  
People's Republic of China

2 July 2020

**Molecular Data Inc.**

We have been asked to render this opinion in our capacity as counsel as to Cayman Islands law to Molecular Data Inc. (the "**Company**") in connection with the Registration Statement on Form S-8 to be filed by the Company with the Securities and Exchange Commission (the "**Commission**") on or about 2 July 2020 (the "**Registration Statement**") relating to the registration under the Securities Act of 1933, as amended (the "**Act**") of an aggregate amount of 65,242,529 Class A ordinary shares of par value US\$0.00005 each in the share capital of the Company (the "**Shares**") for issuance pursuant to the Company's 2018 Share Plan and 2019 Share Incentive Plan (the "**Plans**").

For the purposes of giving this opinion, we have examined copies of the Registration Statement and the Plans. We have also reviewed copies of the amended and restated memorandum and articles of association of the Company as adopted by a special resolution passed on 8 October 2019 and became effective on 2 January 2020 (the "**Memorandum and Articles**"), and the corporate authorisations of the Company in connection with the Plans and the issue of the Shares by the Company (the "**Resolutions**") and have assumed that the Shares will be issued in accordance with the Plans and the resolutions authorising their issue.

Based upon, and subject to, the assumptions and qualifications set out below, and having regard to such legal considerations as we deem relevant, we are of the opinion that:

1. The Shares to be issued by the Company and registered under the Registration Statement have been duly and validly authorised.
2. When issued and paid for in accordance with the terms of the Plan and in accordance with the Resolutions, and appropriate entries are made in the register of members (shareholders) of the Company, the Shares will be validly issued, fully paid and non-assessable.

In this opinion letter, the phrase "non-assessable" means, with respect to the issuance of Shares, that a shareholder shall not, in respect of the relevant Shares, have any obligation to make further contributions to the Company's assets (except in exceptional circumstances, such as involving fraud, the establishment of an agency relationship or an illegal or improper purpose or other circumstances in which a court may be prepared to pierce or lift the corporate veil).

These opinions are subject to the qualification that under the Companies Law (2020 Revision) of the Cayman Islands, the register of members of a Cayman Islands company is by statute regarded as *prima facie* evidence of any matters which the Companies Law (2020 Revision) directs or authorises to be inserted therein. A third party interest in the shares in question would not appear. An entry in the register of members may yield to a court order for rectification (for example, in the event of fraud or manifest error).

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These opinions are given only as to, and based on, circumstances and matters of fact existing and known to us on the date of this opinion letter. These opinions only relate to the laws of the Cayman Islands which are in force on the date of this opinion letter. We express no opinion as to the meaning, validity or effect of any references to foreign (i.e. non-Cayman Islands) statutes, rules, regulations, codes, judicial authority or any other promulgations.

We have also relied upon the assumptions, which we have not independently verified, that (a) all signatures, initials and seals are genuine, (b) copies of documents, conformed copies or drafts of documents provided to us are true and complete copies of, or in the final forms of, the originals, (c) where a document has been provided to us in draft or undated form, it will be duly executed, dated and unconditionally delivered in the same form as the last version provided to us, (d) the Memorandum and Articles remain in full force and effect and are unamended, (e) the Resolutions were duly passed in the manner prescribed in the memorandum and articles of association of the Company effective at the relevant time (including, without limitation, with respect to the disclosure of interests (if any) by directors of the Company) and have not been amended, varied or revoked in any respect, (f) there is nothing under any law (other than the laws of the Cayman Islands) which would or might affect the opinions set out below, (g) upon the issue of any Shares, the consideration received by the Company shall be equal to at least the par value of such Shares.

We consent to the use of this opinion as an exhibit to the Registration Statement and further consent to all references to us in the Registration Statement and any amendments thereto. In giving such consent, we do not consider that we are “experts” within the meaning of such term as used in the Act or the rules and regulations of the Securities and Exchange Commission issued thereunder, with respect to any part of the Registration Statement, including this opinion as an exhibit or otherwise.

Yours faithfully

/s/ Maples and Calder (Hong Kong) LLP  
Maples and Calder (Hong Kong) LLP

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statement on Form S-8 pertaining to the 2018 Share Plan and 2019 Share Incentive Plan of Molecular Data Inc. of our report dated June 30, 2020, with respect to the consolidated financial statements of Molecular Data Inc. included in its Annual Report (Form 20-F) for the year ended December 31, 2019, filed with the Securities and Exchange Commission.

/s/ Ernst & Young Hua Ming LLP  
Shanghai, the People's Republic of China  
July 2, 2020

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