As filed with the Securities and Exchange Commission on October 13, 2023

Registration No. 333-273395

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

PRE-EFFECTIVE AMENDMENT NO. 1
TO
FORM S-3
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

CATALYST BIOSCIENCES, INC.

(Exact name of registrant as specified in its charter)

Delaware	**56-2020050**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification Number)

Catalyst Biosciences, Inc.
12770 High Bluff Drive
Suite 150
San Diego, CA 92130
(650) 226-8674

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

Nassim Usman, Ph.D.
President and Chief Executive Officer
12770 High Bluff Drive
Suite 150
San Diego, CA 92130
(650) 226-8674

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

Copies to:

Stephen Thau **David Schwartz** **Orrick, Herrington & Sutcliffe LLP** **51 West 52nd Street** **New York, NY 10019** **(212) 506-5000**	**Ryan A. Murr** **Branden C. Berns** **Gibson, Dunn & Crutcher LLP** **555 Mission Street, Suite 3000** **San Francisco, CA 94105** **(415) 393-8200**

Approximate date of commencement of proposed sale to the public:
From time to time after this Registration Statement becomes effective.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box. ☐

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box. ☒

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box. ☐

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, 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 ☒	Emerging growth company ☐
			Smaller reporting 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. ☐

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment that specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until this registration statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

The information in this preliminary prospectus is not complete and may be changed. The Selling Stockholders may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and is not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED October 13, 2023

Prospectus

1,240,442,745 Shares

COMMON STOCK

Offered by the Selling Stockholders

This prospectus relates to the potential resale from time to time by the Selling Stockholders (as defined below) of up to 1,240,442,745 shares of common stock, par value $0.001 per share ("Common Stock"), of Catalyst Biosciences, Inc. (the "Company"), including 123,400,000 shares of Common Stock issuable upon the conversion of the Company's Series X Convertible Preferred Stock, par value $0.001 per share ("Convertible Preferred Stock"). The "Selling Stockholders" refer to GNI USA (as defined below), the Minority Holders (as defined below) and their respective permitted transferees. The shares of Common Stock registered by this prospectus are referred to herein as the "Resale Shares." The Resale Shares consist of:

(i) 6,266,521 shares of Common Stock beneficially owned by GNI USA, Inc., a Delaware corporation ("GNI USA"), previously issued to GNI Group Ltd, a company incorporated under the laws of Japan with limited liability ("GNI Japan"), and GNI Hong Kong Limited, a company incorporated under the laws of Hong Kong with limited liability ("GNI Hong Kong Limited"), in a private issuance pursuant to the Asset Purchase Agreement, dated December 26, 2022 (the "F351 Agreement"), and ultimately transferred to GNI USA prior to the closing of the Transactions (as defined below);

(ii) 123,400,000 shares of Common Stock issuable upon conversion of 12,340 shares of Convertible Preferred Stock beneficially owned by GNI USA, previously issued to GNI Japan and GNI Hong Kong Limited in the private issuance pursuant to the F351 Agreement, and ultimately transferred to GNI USA prior to the closing of the Transactions;

(iii) 953,821,796 shares of Common Stock issuable to GNI USA pursuant to the Business Combination Agreement, dated December 26, 2022 (the "Business Combination Agreement"), by and among the Company, GNI USA, the individuals listed on Annex A thereto (the "Minority Holders") and other parties thereto; and

(iv) 156,954,428 shares of Common Stock to be issued to the Minority Holders pursuant to the Business Combination Agreement.

Certain Resale Shares will be issued upon the completion of certain transactions contemplated by the Business Combination Agreement (the "Transactions"), subject to stockholder approval, which was obtained at the special meeting of stockholders of the Company held on August 29, 2023 (the "Special Meeting").

Further, at the Special Meeting, stockholders of the Company adopted and approved an amendment to the restated certificate of incorporation of the Company to effect a reverse stock split of Common Stock, by a ratio of not less than 1-for-10 and not more than 1-for-60. If all other conditions precedent to the completion of the Transactions are met or waived, we will file a prospectus supplement or an amendment to the registration statement of which this prospectus is a part, as applicable, to decrease the number of the Resale Shares by giving effect to the reverse stock split.

We are not offering or selling any shares of Common Stock under this prospectus, and we will not receive any proceeds from the sale of the Resale Shares by the Selling Stockholders pursuant to this prospectus. Our registration of the securities covered by this prospectus does not mean that the Selling Stockholders will offer or sell any of the Resale Shares. The Selling Stockholders may sell the Resale Shares covered by this prospectus in a number of different ways and at varying prices. We provide more information about how the Selling Stockholders may sell the Resale Shares in the section entitled "*Plan of Distribution*."

If any underwriters, dealers or agents are involved in the sale of any of the Resale Shares, their names and any applicable purchase price, fee, commission or discount arrangement between or among them will be set forth, or will be calculable from the information set forth, in an applicable prospectus supplement. See the sections of this prospectus entitled "*About this Prospectus*" and "*Plan of Distribution*" for more information.

Pursuant to the Business Combination Agreement, the "combined company" following the consummation of the Transactions will acquire an indirect controlling interest in Beijing Continent Pharmaceuticals Co., Ltd ("BC"), a company organized under the laws of the People's Republic of China (the "PRC"). BC faces various risks and uncertainties related to doing business in the PRC. BC's business operations are primarily conducted in the PRC, and BC is subject to complex and evolving PRC laws and regulations. For a detailed description of risks related to doing business in the PRC, please refer to the risks disclosed under "*Risk Factors—Risks Related to BC—Risks Related to BC's Business Operations in the PRC*" in the Company's Definitive Proxy Statement on Schedule 14A filed with the U.S. Securities and Exchange Commission (the "SEC") on July 20, 2023 (the "Proxy Statement").

The PRC government's significant authority in regulating the combined company's operations and its oversight and control over offerings conducted overseas by, and foreign investment in, PRC-based issuers could significantly limit or completely hinder the combined company's ability to offer or continue to offer securities to investors and cause the value of the combined company's securities to significantly decline or be worthless if the Transactions are consummated. Implementation of industry-wide regulations, including data security or anti-monopoly related regulations, in this nature could result in a material change in the combined company's operations and may cause the value of the combined company's securities to significantly decline or become worthless if the Transactions are consummated. Risks and uncertainties arising from the legal system in the PRC, including risks and uncertainties regarding the enforcement of laws and quickly evolving rules and regulations in the PRC could result in a material adverse change in the combined company's operations and the value of the combined company's common stock if the Transactions are consummated. For example, in recent years, the PRC government has made statements and taken regulatory actions to regulate certain market players or to improve its supervision of the market in general, such as those related to data security or anti-monopoly concerns. There is no assurance that any new rules or regulations promulgated in the future will not impose additional requirements on the combined company. If any such rules or regulations are adopted, the combined company may be subject to more stringent regulatory scrutiny of its operation and financing efforts, which may in turn result in more compliance costs and expenses for the combined company, delay the

combined company's investment and financing activities, or otherwise impact the combined company's ability to conduct its business, accept foreign investments, or list on a U.S. or other foreign exchange following the Transactions. For more details, see "*Risk Factors Risks Related to BC—Risks Related to BC's Business Operations in the PRC—The PRC government may intervene in or influence BC's operations at any time, which could result in a change in BC's operations" and "—There are uncertainties regarding the interpretation and enforcement of PRC laws, rules and regulations*" in the Proxy Statement.

Continued on next page

Pursuant to the Cybersecurity Review Measures published by the Cybersecurity Administration of the PRC, which became effective on February 15, 2022, critical information infrastructure operators purchasing network products and services which affect or may affect national security, or online platform operators possessing personal information of more than one million users, seeking to be listed on foreign stock markets must apply for a cybersecurity review by the Cybersecurity Review Office. For a detailed description, please refer to risks disclosed under "*Risk Factors—Risks Related to BC—Risks Related to BC's Business Operations in the PRC—Compliance with the PRC's new Data Security Law, Cyber Security Law, Cybersecurity Review Measures, Personal Information Protection Law, regulations and guidelines relating to the multi-level protection scheme on cyber security and any other future laws and regulations may entail significant expenses and could affect BC's business*" in the Proxy Statement.

According to Special Administrative Measure (Negative List) for Access of Foreign Investments (2021 Edition) which became effective on January 1, 2022 (the "Negative List"), if a PRC company, which engages in any business where foreign investment is prohibited under the Negative List or prohibited businesses, seeks an overseas offering or listing, it must obtain approval from competent governmental authorities. For a detailed description, please refer to "*BC's Business—Regulations on M&A and Overseas Listings*" in the Proxy Statement.

However, applicable PRC laws and regulations may be tightened, and new laws or regulations may be introduced to impose additional government approval, license, and permit requirements. If BC or its subsidiaries fail to obtain and maintain such approvals, licenses, or permits required for its business, inadvertently conclude that such approval is not required, or respond to changes in the regulatory environment, BC or its subsidiaries could be subject to liabilities, penalties, and operational disruption, which may materially and adversely affect its business, operating results, financial condition and the value of our ordinary shares, significantly limit or completely hinder the combined company's ability to offer or continue to offer securities to investors, or cause such securities to significantly decline in value or become worthless.

Generally, cash is transferred through BC's organization in the following manner: (i) funds are transferred to BC from Continent Pharmaceuticals Inc., a Cayman Islands company limited by shares ("CPI") as needed through BJContinent Pharmaceuticals Limited, a company incorporated under the laws of Hong Kong with limited liability ("BJC Limited"), or from other domestic shareholders, in the form of capital contributions or shareholder loans; and (ii) dividends or other distributions may be paid by BC to CPI through BJC Limited, or to other domestic shareholders.

In September 2020, BC paid a cash dividend of $1.9 million to BJC Limited. As required under the PRC Enterprise Income Tax Law, the dividends paid by BC were subject to a withholding tax rate of 10%. Such amount was settled in full net of withholding PRC tax through multiple payments by August 2020.

Since BC's inception to the date of this prospectus, there were no transfers, dividends, or distributions between BJC Limited, BC, BC's wholly-owned subsidiary (Beijing Continent Biomedical Technology Co., Ltd., a company organized under the laws of the PRC ("BC Biomedical")), or to investors (except as disclosed above and excluding shareholder capital contributions). BC intends to retain all available funds and any future earnings for use in the operation of its business and does not anticipate paying any cash dividends on its capital stock in the foreseeable future. Notwithstanding the foregoing, any determination to pay cash dividends subsequent to the Transactions will be at the discretion of the combined company's board of directors and will depend upon a number of factors, including the combined company's results of operations, financial condition, future prospects, contractual restrictions, restrictions imposed by applicable law and other factors the combined company's board of directors deems relevant. For more details, see "*BC's Business—Regulatory Requirements in the PRC—Dividends, Distributions and Other Transfers*", Audited Financial Statements of Beijing Continent Pharmaceuticals Co., Ltd. and "Selected Historical and Unaudited Pro Forma Condensed Combined Financial Information—Unaudited Pro Forma Condensed Combined Financial Information" included in the Proxy Statement.

Under the Holding Foreign Companies Accountable Act (the "HFCAA"), the SEC is required to identify issuers that retain an auditor that has a branch or office that is located in a foreign jurisdiction and that the Public Company Accounting Oversight Board (the "PCAOB") determines it is unable to inspect or investigate completely because of a position taken by an authority in that foreign jurisdiction. On December 16, 2021, the PCAOB issued a report on its determination that it is unable to inspect or investigate completely PCAOB-registered accounting firms headquartered in the PRC and in Hong Kong. On December 15, 2022, the PCAOB announced that it was able to conduct inspections and investigations of PCAOB-registered public accounting firms headquartered in mainland PRC and Hong Kong in 2022, and as a result, the PCAOB vacated its December 2021 determinations. While vacating those determinations, the PCAOB noted that, should it encounter any impediment to conducting an inspection or investigation of auditors in mainland PRC or Hong Kong as a result of a position taken by any authority there, the PCAOB would act to immediately reconsider the need to issue new determinations consistent with the HFCAA and PCAOB Rule 6100.

If (i) the combined company's operations require that it retain an auditor that is headquartered in mainland PRC to act as a principal auditor in order to comply with the standards of the PCAOB and (ii) the PCAOB retakes a position that is similar to its December 2021 determinations, then the combined company would be identified by the SEC as a Commission-Identified Issuer. In accordance with the HFCAA, the combined company's securities would be prohibited from being traded on a national securities exchange or in the over-the-counter trading market in the United States if the SEC identifies the combined company as a Commission-Identified Issuer for two consecutive years in the future. The combined company's operations will likely require such an auditor to act as its principal auditor. For a detailed description of risks of and impacts on the combined company relating to the HFCAA and related regulations, please refer to risks disclosed under "*Risk Factors—Risks Related to the Combined Company—The PRC-operations portion of the combined company's audit may be conducted by an independent registered public accounting firm that is not subject to inspection by the PCAOB, which may negatively impact investor sentiment towards the combined company or its PRC operations, which could adversely affect the market price of the combined company's common stock*" in the Proxy Statement.

Our Common Stock is currently listed on The Nasdaq Capital Market ("Nasdaq") under the symbol "CBIO." We have applied to continue the listing of our Common Stock on Nasdaq under the symbol "GYRE" upon the completion of the Transactions. It is a condition to the completion of the Transactions that the Resale Shares be approved for listing on Nasdaq (subject only to official notice of issuance thereof), but there can be no assurance that such listing condition will be met. If such listing condition is not met, the Transactions will not be consummated unless the listing condition is waived pursuant to the terms of the Business Combination Agreement.

On October 12, 2023, the last reported sale price of our Common Stock as reported on Nasdaq was $0.41 per share.

Investing in our Common Stock involves risk. See "Risk Factors" beginning on page 11 of this prospectus and in the documents incorporated by reference in this prospectus for a discussion of the factors you should carefully consider before deciding to purchase these securities.

The Securities and Exchange Commission and state securities regulators have not approved or disapproved these securities, or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus is , 2023.

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ABOUT THIS PROSPECTUS

This prospectus is part of the registration statement that we filed with the SEC using a "shelf" registration process. Under this shelf registration process, the Selling Stockholders may, from time to time, sell the shares of our Common Stock through any means described in the section entitled "*Plan of Distribution*." More specific terms of any securities that the Selling Stockholders offer and sell may be provided in a prospectus supplement that describes, among other things, the specific amounts and prices of the Common Stock being offered and the terms of the offering.

A prospectus supplement may also add, update or change information included in this prospectus. Any statement contained in this prospectus will be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in such prospectus supplement modifies or supersedes such statement. Any statement so modified will be deemed to constitute a part of this prospectus only as so modified, and any statement so superseded will be deemed not to constitute a part of this prospectus.

Neither we nor the Selling Stockholders have authorized anyone to provide you with any information other than the information contained or incorporated by reference in this prospectus or any free writing prospectus prepared by or on behalf of us in connection with this offering to which we have referred you. We and the Selling Stockholders take no responsibility for, and can provide no assurances as to the reliability of, any other information that others may give you. The information contained or incorporated by reference in this prospectus or any such free writing prospectus provided in connection with this offering is accurate only as of the date thereof, regardless of the time of delivery of such document or of any sale of our Common Stock. Our business, financial condition and results of operations may have changed since those dates. It is important for you to read and consider all the information contained in this prospectus, including the documents incorporated by reference herein or any free writing prospectus prepared by or on behalf of us in connection with this offering, in making your investment decision.

The Selling Stockholders are not offering to sell, or seeking offers to buy, shares of our Common Stock in any jurisdictions where offers and sales are not permitted. The distribution of this prospectus and the offering of the Resale Shares in certain jurisdictions may be restricted by law. Persons outside the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of the Resale Shares and the distribution of this prospectus outside the United States. This prospectus does not constitute, and may not be used in connection with, an offer to sell, or a solicitation of an offer to buy, any securities offered by this prospectus by any person in any jurisdiction in which it is unlawful for such person to make such an offer or solicitation.

This prospectus contains summaries of certain provisions contained in some of the documents described herein, but reference is made to the actual documents for complete information. All of the summaries are qualified in their entirety by the actual documents. Copies of some of the documents referred to herein have been filed, will be filed or will be incorporated by reference as exhibits to the registration statement of which this prospectus is a part, and you may obtain copies of those documents as described below under "*Where You Can Find More Information*."

In this prospectus, unless otherwise indicated or the context otherwise requires, the terms "Company," "we," "us" and "our" refer to Catalyst Biosciences, Inc.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the documents incorporated by reference herein contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements include information concerning our future results of operations and financial position, strategy and plans, and our expectations for future operations. Forward-looking statements include all statements that are not historical facts and, in some cases, can be identified by terms such as “anticipate,” “believe,” “continue,” “could,” “design,” “estimate,” “expect,” “intend,” “may,” “plan,” “possible,” “potential,” “predict,” “project,” “seek,” “should,” “target,” “will,” “would” or the negative version of these words and similar expressions.

Forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements, including those described in “*Risk Factors*” included elsewhere in this prospectus and in the documents that are incorporated by reference herein. Given these uncertainties, you should not place undue reliance on these forward-looking statements. Also, forward-looking statements represent our beliefs and assumptions only as of the date of this prospectus, or, in the case of any document incorporated by reference herein in this prospectus, as of the date of such document. In light of the significant uncertainties in these forward-looking statements, you should not regard these statements as a representation or warranty by us or any other person that we will achieve our objectives and plans in any specified time frame, or at all. You should read this prospectus and the documents incorporated by reference herein completely and with the understanding that our actual future results may be materially different from what we expect.

These forward-looking statements include, but are not limited to, statements concerning the following:

- the ability of our clinical trials to demonstrate safety and efficacy of our product candidates and other positive results;
- our ability to develop a pipeline of product candidates to address unmet needs in the treatment of organ fibrosis and other inflammatory diseases;
- the timing, progress and results of clinical trials for Hydronidone from the Company’s Phase 2a trial and other product candidates that the Company may develop, including statements regarding the timing of initiation and completion of studies or trials and related preparatory work, the period during which the results of the studies or trials will become available and research and development programs;
- the timing, scope and likelihood of regulatory filings and approvals, including timing of investigational new drug applications and final approval of Hydronidone from the U.S. Food and Drug Administration for the treatment of nonalcoholic steatohepatitis (“NASH”) and liver fibrosis associated with chronic hepatitis B, and any other future product candidates;
- the timing, scope or likelihood of foreign regulatory filings and approvals;
- our expectations regarding the reconsideration of its strategic alternatives in the event the Transactions are not completed;
- our expectations regarding the future pursuit of product development efforts, including whether it will pursue such efforts, estimates regarding the expenses, future revenue, timing of any future revenue, capital requirements and need for additional financing related to such efforts, the timing of and ability of the Company to pursue such efforts and the Company’s plans to develop and, if approved, subsequently commercialize any product candidates resulting from such efforts;
- our expectations regarding its ability to fund its operating expenses and capital expenditure requirements with its cash, cash equivalents and investments;
- our ability to develop and advance current product candidates and programs into, and successfully complete, clinical studies;
- our manufacturing, commercialization and marketing capabilities and strategy;
- plans relating to commercializing our product candidates, if approved, including the geographic areas of focus and sales strategy;
- the need to hire additional personnel and our ability to attract and retain such personnel;

- the size of the market opportunity for our product candidates, including estimates of the number of patients who suffer from the diseases the Company is targeting;
- expectations regarding the approval and use of our product candidates in combination with other drugs;
- expectations regarding potential for accelerated approval or other expedited regulatory designation;
- our competitive position and the success of competing therapies that are or may become available;
- estimates of the number of patients that the Company will enroll in its clinical trials;
- the beneficial characteristics and the potential safety, efficacy and therapeutic effects of our product candidates;
- our ability to obtain and maintain regulatory approval of its product candidates and its expectations regarding particular lines of therapy;
- plans relating to the further development of our product candidates, including additional indications the Company may pursue;
- existing regulations and regulatory developments in the United States, Europe, and other jurisdictions;
- expectations regarding the impact of the COVID-19 pandemic on our business;
- our intellectual property position, including the scope of protection the Company is able to establish and maintain for intellectual property rights covering Hydronidone, and other product candidates it may develop, including the extensions of existing patent terms where available, the validity of intellectual property rights held by third parties and our ability not to infringe, misappropriate or otherwise violate any third-party intellectual property rights;
- our continued reliance on third parties to conduct additional clinical trials of our product candidates and for the manufacture of its product candidates for clinical trials;
- our relationships with patient advocacy groups, key opinion leaders, regulators, the research community and payors;
- our ability to obtain and negotiate favorable terms of, any collaboration, licensing or other arrangements that may be necessary or desirable to develop, manufacture or commercialize our product candidates;
- the pricing and reimbursement of Hydronidone, and other product candidates the Company may develop, if approved;
- the rate and degree of market acceptance and clinical utility of Hydronidone, and other product candidates the Company may develop;
- our estimates regarding expenses, future revenue, capital requirements and needs for additional financing;
- our financial performance;
- the period over which the Company estimates its existing cash and cash equivalents will be sufficient to fund its planned operating expenses and capital expenditure requirements;
- statements regarding the approval and closing of the Transactions;
- the timing of the consummation of the Transactions;
- our ability to solicit a sufficient number of proxies to approve the change of control resulting from the Transactions;
- satisfaction of conditions to the completion of the Transactions;
- the expected benefits of the Transactions;
- our ability to complete the Transactions;
- expectations about the continued listing of Common Stock on Nasdaq;
- the impact of laws and regulations; and
- expectations regarding the period during which the Company will qualify as a smaller reporting company under the Securities Exchange Act of 1934, as amended (the “Exchange Act”).

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC this registration statement under the Securities Act of 1933, as amended (the "Securities Act") covering the Common Stock to be offered and sold by this prospectus and any applicable prospectus supplement. This prospectus does not contain all of the information included in the registration statement, some of which is contained in exhibits to the registration statement. In addition, we are subject to the information and periodic and current reporting requirements of the Exchange Act, and in accordance therewith, we file periodic and current reports, proxy statements and other information with the SEC.

You may access our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, proxy statements on Schedule 14A and amendments or supplements to those reports and statements, filed with the SEC, free of charge at our website at *www.catalystbiosciences.com* or by means of the SEC's website at *www.sec.gov*. The information found on, or that can be accessed from or that is hyperlinked to, our website or the SEC's website is not part of this prospectus and you should not rely on that information when making a decision to invest in our Common Stock.

Any statement made in this prospectus and any prospectus supplement, periodic and current reports, proxy statements and other information filed or furnished with the SEC concerning the contents of any contract, agreement or other document is only a summary of the actual contract, agreement or other document. If we have filed any contract, document, agreement or other document as an exhibit to such filing or furnishing, you should read the exhibit for a more complete understanding of the document or matter involved. Each statement regarding a contract, agreement or other document is qualified in its entirety by reference to the actual document.

Upon written or oral request, we will provide without charge to each person to whom a copy of the prospectus is delivered a copy of the documents incorporated by reference herein (other than exhibits to such documents unless such exhibits are specifically incorporated by reference herein). You may request a copy of these filings, at no cost, by writing or calling us at the contact information set forth below. We have authorized no one to provide you with any information that differs from that contained in this prospectus. Accordingly, we take no responsibility for any other information that others may give you. You should not assume that the information in this prospectus is accurate as of any date other than the date of the front cover of this prospectus.

Catalyst Biosciences, Inc.
Investor Relations
12770 High Bluff Drive,
Suite 150
San Diego, CA 92130
(650) 226-8674

INFORMATION INCORPORATED BY REFERENCE

The SEC allows us to "incorporate by reference" the information we file with them, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference herein is considered to be part of this prospectus, and information that we file later with the SEC will automatically update and supersede this information. We incorporate by reference the documents listed below (except the information contained in such documents to the extent "furnished" and not "filed") and any future filings we make with the SEC under Section 13(a), 13(c), 14 or 15(d) of the Exchange Act (except the information contained in such documents to the extent "furnished" and not "filed"):

- our Annual Report on Form 10-K for the fiscal year ended December 31, 2022 filed with the SEC on March 30, 2023 (and any portions of the Proxy Statement that are incorporated by reference into our Annual Report on Form 10-K for the year ended December 31, 2022);
- our Quarterly Reports on Form 10-Q for the fiscal quarters ended March 31, 2023 and June 30, 2023 filed with the SEC on May 15, 2023 and August 14, 2023, respectively;
- our Current Reports on Form 8-K as filed with the SEC on January 19, 2023, March 2, 2023, March 30, 2023, April 7, 2023, May 5, 2023, June 20, 2023, and August 31, 2023;
- the Proxy Statement; and
- the Description of Catalyst Capital Stock section contained in the Proxy Statement, including any amendment or report filed for the purpose of updating such description.

We will provide without charge upon written or oral request a copy of any or all of the documents that are incorporated by reference herein into this prospectus, other than exhibits which are specifically incorporated by reference herein into such documents. Requests should be directed to our Investor Relations department at Catalyst Biosciences, Inc., 12770 High Bluff Drive, Suite 150, San Diego, CA 92130. Our telephone number is (650) 226-8674.

Any statement contained in a document incorporated or deemed to be incorporated by reference herein into this prospectus shall be deemed to be modified or superseded for the purposes of this prospectus to the extent that a statement contained in this prospectus (or in any document incorporated by reference herein therein) or in any other subsequently filed document that is or is deemed to be incorporated by reference herein into this prospectus modifies or supersedes such statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

PROSPECTUS SUMMARY

You should read the following summary together with the entire prospectus and the documents incorporated by reference herein, including our consolidated financial statements and related notes as well as any free writing prospectus prepared by us or on our behalf. You should carefully consider, among other things, the matters discussed in the sections entitled "Risk Factors" included in or incorporated by reference in this prospectus.

Our Company

We are a biopharmaceutical company focused on the development and commercialization of Hydronidone for the treatment of NASH in the United States. Hydronidone is being evaluated for the treatment of liver fibrosis associated with a broad spectrum of chronic liver diseases. A Phase 1 clinical trial of Hydronidone has been completed in the United States and generated pharmacokinetics ("PK"), safety and tolerability data of single and multiple ascending doses of Hydronidone in U.S. healthy subjects.

We anticipate filing an investigational new drug application for the treatment of NASH in the United States in late 2023. NASH is a severe form of nonalcoholic fatty liver disease, characterized by inflammation and fibrosis in the liver that can progress to cirrhosis, liver failure, hepatocellular carcinoma and death. There are currently no approved products for the treatment of NASH.

We plan to initiate the clinical development of Hydronidone in NASH fibrosis in a randomized, double-blind, placebo-controlled, parallel group, Phase 2a, Proof-of-Concept ("PoC") clinical study evaluating the safety, tolerability, PK, and Pharmacodynamics ("PD") of Hydronidone capsules administered daily at an oral dose of 360 mg (given as 120 mg thrice daily) for 24 weeks to adult subjects with advanced liver fibrosis associated with noncirrhotic NASH. The main goal of the proposed Phase 2a study is to obtain early PoC for Hydronidone in subjects with NASH fibrosis as a basis of expansion into a more comprehensive Phase 2/3 clinical program, provided that the drug is successful. The study will include a small sample size (total of 60 evaluable subjects) who will receive in a 2:1 ratio Hydronidone or Placebo. The study will evaluate changes from baseline in a set of noninvasive biochemical and imaging biomarkers relevant to assessment of NASH fibrosis in the context of drug exposure, as well as the mechanism of anti-fibrotic action of Hydronidone. The study will employ PK blood sampling and assessment of the initial population PK and PK/PD relationship to inform Hydronidone treatment in future clinical studies in NASH fibrosis. In addition, this trial will include a disease-specific patient-reported outcomes, a validated composite Chronic Liver Disease Questionnaire – NASH, to collect patient-reported data about the impact of Hydronidone treatment on quality of life of subjects with advanced NASH fibrosis.

Prior to our acquisition from GNI Japan and GNI Hong Kong Limited, of all of the assets and intellectual property rights primarily related to the proprietary Hydronidone compound, other than such assets and intellectual property rights located in the PRC, we were engaged in the research and development of product candidates from our protease engineering platform. In February 2022, we engaged Perella Weinberg Partners as a financial advisor to assist our company in exploring strategic alternatives to monetize our assets. In March 2022, we ceased research and development activities and in May 2022, we entered into an asset purchase agreement with Vertex Pharmaceuticals Inc., pursuant to which Vertex Pharmaceuticals Inc. ("Vertex") purchased our complement portfolio, including CB 2782-PEG and CB 4332, as well as our complement-related intellectual property, including the ProTUNE™ and ImmunoTUNE™ platforms, for $60.0 million in cash consideration (the "Vertex Transaction"). $55.0 million was received upfront in May 2022 and the remaining $5.0 million was received in May 2023 upon satisfaction of certain post-closing indemnification obligations. The hold-back amount was initially recorded within accounts and other receivables on the condensed consolidated balance sheet. In June 2023, we distributed $3.5 million, which reflected, in consideration with the Vertex Transaction, the hold-back amount received from Vertex less expenses and a reserve for potential tax liabilities to holders of the contingent value right issued to our stockholders of record on January 5, 2023 (the "CVR Holders"). On February 27, 2023, we signed an asset purchase agreement with GC Biopharma ("GCBP") pursuant to which GCBP acquired our legacy rare bleeding disorders programs, including marzeptacog alpha activated, dalcinonacog alpha and CB-2679d-GT, for a total of $6 million; $1 million payable on signing and $5 million payable on February 28, 2025, subject to satisfaction of post-closing indemnification obligations. In March 2023, we distributed net proceeds of approximately $0.2 million to the CVR Holders. Once received, any additional net proceeds from the transaction will be distributed to the CVR Holders. We are also pursuing certain legal claims against a third party related to payments under a 2016 asset purchase agreement, and any net recoveries related to these claims will be distributed to the CVR Holders.

We had a net loss of $8.2 million for the year ended December 31, 2022 and $2.2 million for the six months ended June 30, 2023, and an accumulated deficit of $410.9 million as of December 31, 2022 and $413.1 million as of June 30, 2023. As of December 31, 2022, we had $21.7 million of cash and cash equivalents. As of June 30, 2023, we had $6.9 million of cash and cash equivalents. Substantially all our operating losses were incurred in its research and development programs and in our general and administrative operations. For a description of our business, financial condition, results of operations and other important information regarding us and our business, we refer you to our filings with the SEC, incorporated by reference in this prospectus. For instructions on how to find copies of these documents, see "*Where You Can Find More Information*."

Pursuant to the Business Combination Agreement, following the consummation of the Transactions, we (as the combined company following the consummation of the Transactions) will acquire an indirect controlling interest in BC. BC faces various risks and uncertainties related to doing business in the PRC. BC's business operations are primarily conducted in the PRC, and BC is subject to complex and evolving PRC laws and regulations. For a detailed description of risks related to doing business in the PRC, please refer to the risks disclosed under *"Risk Factors—Risks Related to BC—Risks Related to BC's Business Operations in the PRC"* in the Proxy Statement.

The PRC government's significant authority in regulating the combined company's operations and its oversight and control over offerings conducted overseas by, and foreign investment in, PRC-based issuers could significantly limit or completely hinder the combined company's ability to offer or continue to offer securities to investors and cause the value of the combined company's securities to significantly decline or be worthless if the Transactions are consummated. Implementation of industry-wide regulations, including data security or anti-monopoly related regulations, in this nature could result in a material change in the combined company's operations and may cause the value of the combined company's securities to significantly decline or become worthless if the Transactions are consummated. Risks and uncertainties arising from the legal system in the PRC, including risks and uncertainties regarding the enforcement of laws and quickly evolving rules and regulations in the PRC could result in a material adverse change in the combined company's operations and the value of the combined company's common stock if the Transactions are consummated. For example, in recent years, the PRC government has made statements and taken regulatory actions to regulate certain market players or to improve its supervision of the market in general, such as those related to data security or anti-monopoly concerns. There is no assurance that any new rules or regulations promulgated in the future will not impose additional requirements on the combined company. If any such rules or regulations are adopted, the combined company may be subject to more stringent regulatory scrutiny for its operation and financing efforts, which may in turn result in more compliance costs and expenses for the combined company, delay the combined company's investment and financing activities, or otherwise impact the combined company's ability to conduct its business, accept foreign investments, or list on a U.S. or other foreign exchange following the Transactions. For more details, see *"Risk Factors Risks Related to BC—Risks Related to BC's Business Operations in the PRC—The PRC government may intervene in or influence BC's operations at any time, which could result in a change in BC's operations and There are uncertainties regarding the interpretation and enforcement of PRC laws, rules and regulations"* in the Proxy Statement.

Pursuant to the Cybersecurity Review Measures published by the Cybersecurity Administration of the PRC, which became effective on February 15, 2022, critical information infrastructure operators purchasing network products and services which affect or may affect national security, or online platform operators possessing personal information of more than one million users, seeking to be listed on foreign stock markets must apply for a cybersecurity review by the Cybersecurity Review Office. For a detailed description, please refer to risks disclosed under *"Risk Factors—Risks Related to BC—Risks Related to BC's Business Operations in the PRC—Compliance with the PRC's new Data Security Law, Cyber Security Law, Cybersecurity Review Measures, Personal Information Protection Law, regulations and guidelines relating to the multi-level protection scheme on cyber security and any other future laws and regulations may entail significant expenses and could affect BC's business"* in the Proxy Statement.

According to the Negative List, if a PRC company, which engages in any business where foreign investment is prohibited under the Negative List, or prohibited businesses, seeks an overseas offering or listing, it must obtain approval from competent governmental authorities. For a detailed description, please refer to *"BC's Business—Regulations on M&A and Overseas Listings"* in the Proxy Statement.

However, applicable PRC laws and regulations may be tightened, and new laws or regulations may be introduced to impose additional government approval, license, and permit requirements. If BC or its subsidiaries fail to obtain and maintain such approvals, licenses, or permits required for its business, inadvertently conclude that such

approval is not required, or respond to changes in the regulatory environment, BC or its subsidiaries could be subject to liabilities, penalties, and operational disruption, which may materially and adversely affect its business, operating results, financial condition and the value of our ordinary shares, significantly limit or completely hinder the combined company's ability to offer or continue to offer securities to investors, or cause such securities to significantly decline in value or become worthless.

Generally, cash is transferred through BC's organization in the following manner: (i) funds are transferred to BC from CPI as needed through BJC Limited, or from other domestic shareholders, in the form of capital contributions or shareholder loans; and (ii) dividends or other distributions may be paid by BC to CPI through BJC Limited, or to other domestic shareholders.

In September 2020, BC paid a cash dividend of $1.9 million to BJC Limited. As required under the PRC Enterprise Income Tax Law, the dividends paid by BC were subject to a withholding tax rate of 10%. Such amount was settled in full net of withholding PRC tax through multiple payments by August 2020.

Since BC's inception to the date of this prospectus, there were no transfers, dividends, or distributions between BJC Limited, BC, BC's wholly-owned subsidiary (BC Biomedical), or to investors (except as disclosed above and excluding shareholder capital contributions). BC intends to retain all available funds and any future earnings for use in the operation of its business and does not anticipate paying any cash dividends on its capital stock in the foreseeable future. Notwithstanding the foregoing, any determination to pay cash dividends subsequent to the Transactions will be at the discretion of the combined company's board of directors and will depend upon a number of factors, including the combined company's results of operations, financial condition, future prospects, contractual restrictions, restrictions imposed by applicable law and other factors the combined company's board of directors deems relevant. For more details, see *"BC's Business—Regulatory Requirements in the PRC—Dividends, Distributions and Other Transfers"*, Audited Financial Statements of Beijing Continent Pharmaceuticals Co., Ltd. and "Selected Historical and Unaudited Pro Forma Condensed Combined Financial Information—Unaudited Pro Forma Condensed Combined Financial Information" included in the Proxy Statement.

Under the HFCAA, the SEC is required to identify issuers that retain an auditor that has a branch or office that is located in a foreign jurisdiction and that the PCAOB determines it is unable to inspect or investigate completely because of a position taken by an authority in that foreign jurisdiction. On December 16, 2021, the PCAOB issued a report on its determination that it is unable to inspect or investigate completely PCAOB-registered accounting firms headquartered in the PRC and in Hong Kong. On December 15, 2022, the PCAOB announced that it was able to conduct inspections and investigations of PCAOB-registered public accounting firms headquartered in mainland PRC and Hong Kong in 2022, and as a result, the PCAOB vacated its December 2021 determinations. While vacating those determinations, the PCAOB noted that, should it encounter any impediment to conducting an inspection or investigation of auditors in mainland PRC or Hong Kong as a result of a position taken by any authority there, the PCAOB would act to immediately reconsider the need to issue new determinations consistent with the HFCAA and PCAOB Rule 6100.

If (i) the combined company's operations require that it retain an auditor that is headquartered in mainland PRC to act as a principal auditor in order to comply with the standards of the PCAOB and (ii) the PCAOB retakes a position that is similar to its December 2021 determinations, then the combined company would be identified by the SEC as a Commission-Identified Issuer. In accordance with the HFCAA, the combined company's securities would be prohibited from being traded on a national securities exchange or in the over-the-counter trading market in the United States if the SEC identifies the combined company as a Commission-Identified Issuer for two consecutive years in the future. The combined company's operations will likely require such an auditor to act as its principal auditor. For a detailed description of risks of and impacts on the combined company relating to the HFCAA and related regulations, please refer to risks disclosed under *"Risk Factors—Risks Related to the Combined Company—The PRC-operations portion of the combined company's audit may be conducted by an independent registered public accounting firm that is not subject to inspection by the PCAOB, which may negatively impact investor sentiment towards the combined company or its PRC operations, which could adversely affect the market price of the combined company's common stock."* in the Proxy Statement.

Corporate Information

We were incorporated in Delaware in 1997 as a wholly-owned subsidiary of R.J. Reynolds Tobacco Company. In August 2000, we became an independent company when we issued and sold stock to venture capital investors. On August 20, 2015, pursuant to the merger agreement between Targacept, Inc. and Catalyst Biosciences, Inc. ("Private

Catalyst"), we acquired Private Catalyst and on August 20, 2015, we changed our name from Targacept, Inc. to Catalyst Biosciences, Inc. Our principal executive offices are located at 12770 High Bluff Drive, Suite 150, San Diego, CA 92130, and our telephone number is (650) 226-8674. Our website address is *https://www.catalystbiosciences.com*. We do not incorporate the information on, or accessible through, our website into this prospectus, and you should not consider any information on, or accessible through, our website as part of this prospectus.

We own various U.S. federal trademark registrations and applications and unregistered trademarks, including our corporate logo. This prospectus contains additional trade names, trademarks and service marks of ours and of other companies. We do not intend our use or display of other companies' trade names, trademarks or service marks to imply a relationship with, or endorsement or sponsorship of us by, these other companies.

THE OFFERING

Common Stock offered by the Selling Stockholders	1,240,442,745 shares of Common Stock.
Use of proceeds	We will not receive any proceeds from the sale of our Common Stock by the Selling Stockholders pursuant to this prospectus. See "*Use of Proceeds*" and "*Selling Stockholders*."
Plan of distribution	The Selling Stockholders may sell all or a portion of the Resale Shares owned by them and offered hereby from time to time directly or through one or more underwriters, broker-dealers or agents. Registration of the Resale Shares covered by this prospectus does not mean, however, that such shares necessarily will be offered or sold. See "*Plan of Distribution*."
Risk factors	Investing in our Common Stock involves a high degree of risk. See "*Risk Factors*" and other information included or incorporated into this prospectus for a discussion of the factors you should carefully consider before deciding to invest in our Common Stock.
Nasdaq symbol	Our Common Stock is currently listed on Nasdaq under the symbol "CBIO." We have applied to continue the listing of our Common Stock on Nasdaq under the symbol "GYRE" upon the completion of the Transactions.

RISK FACTORS

Investing in our Common Stock involves a high degree of risk. You should consider carefully the risks and uncertainties described in the section entitled "*Risk Factors*" contained in our most recent Annual Report on Form 10-K and the Proxy Statement, as well as any amendments thereto reflected in subsequent filings with the SEC, which are incorporated by reference into this prospectus in their entirety, together with all of the other information contained in this prospectus or any document incorporated by reference herein and any free writing prospectus that we may authorize for use in connection with this offering. The risks described in this prospectus or any document incorporated by reference herein are not the only risks facing us, but those that we consider to be material. There may be other unknown or unpredictable economic, business, competitive, regulatory or other factors that could have material adverse effects on our future results. Past financial performance may not be a reliable indicator of future performance, and historical trends should not be used to anticipate results or trends in future periods. If any of these risks actually occurs, our business, financial condition, results of operations or cash flow could be adversely affected, which could cause the trading price of our Common Stock to decline, resulting in a loss of all or part of your investment.

USE OF PROCEEDS

We are not selling any securities under this prospectus and we will not receive any proceeds from the sale of the Resale Shares covered hereby. The net proceeds from the sale of the Resale Shares offered by this prospectus will be received by the Selling Stockholders.

Subject to limited exceptions, the Selling Stockholders will pay any underwriting discounts and commissions and expenses incurred by the Selling Stockholders for brokerage, accounting, tax or legal services or any other expenses incurred by the Selling Stockholders in disposing of any of the Resale Shares. We will bear the costs, fees and expenses incurred in effecting the registration of the Resale Shares covered by this prospectus, including all registration and filing fees, Nasdaq listing fees and fees and expenses of our counsel and our independent registered public accounting firm.

SELLING STOCKHOLDERS

This prospectus relates to the resale by the Selling Stockholders from time to time of up to 1,240,442,745 shares of our Common Stock, including shares of our Common Stock that are issuable to the Selling Stockholders pursuant to the Business Combination Agreement and shares of our Common Stock that are issuable to the Selling Stockholders upon conversion of the Convertible Preferred Stock. The Selling Stockholders may from time to time offer and sell any or all of the Resale Shares set forth below pursuant to this prospectus and any accompanying prospectus supplement. When we refer to the "Selling Stockholders" in this prospectus, we mean the persons listed in the table below, and the pledgees, donees, transferees, assignees, successors, designees and others who later come to hold any of the Selling Stockholders' interest in the Resale Shares other than through a public sale.

Certain Information Concerning the Selling Stockholders

The table below presents information regarding the Selling Stockholders and the shares of our Common Stock that they may sell or otherwise dispose of from time to time under this prospectus.

In accordance with the F351 Agreement, on December 26, 2022, our board of directors appointed two persons affiliated with GNI USA, Ying Luo, Ph.D. and Mr. Thomas Eastling, to our board as directors. Dr. Luo will serve as a Class I director with a term expiring at our 2025 annual meeting of the stockholders and until such time as his successor is duly elected and qualified, or until his earlier death, resignation or removal. Mr. Eastling will serve as a Class III director with a term expiring at our 2024 annual meeting of the stockholders and until such time as his successor is duly elected and qualified, or until his earlier death, resignation or removal. GNI USA, through entities affiliated with GNI Japan is a wholly-owned subsidiary of GNI Japan. Dr. Luo is a director, representative executive officer, president and chief executive officer and executive committee member of GNI Japan. Mr. Eastling is an outside member of GNI Japan and an advisor to the executive committee of GNI Japan. Except as disclosed herein, other Selling Stockholders do not have, and within the past three years have not had, any position, office or other material relationship with us.

For the Selling Stockholders collectively listed on the table below, we have calculated the maximum estimated number of Resale Shares that could become saleable by such Selling Stockholders pursuant to this prospectus if such Selling Stockholders were to convert their shares of our Convertible Preferred Stock into shares of our Common Stock at a rate equal to $10,000 per share divided by the $1.00. On an aggregate basis, the total number of the Resale Shares saleable pursuant to this prospectus is 1,240,442,745 shares.

For purposes of the table below, we have assumed that the Selling Stockholders will not acquire beneficial ownership of any additional securities during the offering. The following table is prepared based on information provided to us by the Selling Stockholders. In addition, we assume that the Selling Stockholders have not sold, transferred or otherwise disposed of, our Common Stock in transactions exempt from the registration requirements of the Securities Act. Any changed or new information given to us by the Selling Stockholders, including regarding the identity of, and the securities held by, each Selling Stockholder, will be set forth in a prospectus supplement or amendments to the registration statement of which this prospectus is a part, if and when necessary.

We have determined beneficial ownership in accordance with the rules of the SEC. Beneficial ownership generally includes voting or investment power over securities. Except in cases where community property laws apply or as indicated in the footnotes to this table, to our knowledge, each Selling Stockholder identified in the table possesses sole voting and investment power over the Resale Shares shown as beneficially owned by the Selling Stockholder. The information is not necessarily indicative of beneficial ownership for any other purpose.

	Beneficial Ownership Prior to the Date of this Prospectus		Beneficial Ownership Assuming the Sale of All Shares registered pursuant to this Prospectus	
Name	Number of Shares Beneficially Owned Following Conversion[1]	Percent of Outstanding Common Stock[2]	Number of Shares	Percent of Outstanding Common Stock
GNI USA[3]	1,083,488,317	85.17%	0	0%
Ping Lan[4]	42,605,648	3.35%	0	0%
Hui Sun[5]	34,084,519	2.68%	0	0%
Yueying Zhu[6]	44,137,006	3.47%	0	0%
Arthur Xin-bin Cheng[7]	36,127,255	2.84%	0	0%

(1) One share of Convertible Preferred Stock converts into 10,000 shares of Common Stock.

(2) Based upon 1,272,151,116 shares of Common Stock outstanding assuming the conversion of all shares of Convertible Preferred Stock that a Selling Stockholder beneficially owns into shares of Common Stock.

(3) GNI USA, through entities affiliated with GNI Japan, is a wholly-owned subsidiary of GNI Japan. By virtue of such relationship, GNI Japan may be deemed to have voting and investment power with respect to the shares held by GNI USA. Ying Luo, Ph.D. is a director, representative executive officer, president and chief executive officer and executive committee member of GNI Japan and may be deemed to share voting and dispositive power over the shares held of record by GNI USA. The business address for GNI USA is 12730 High Bluff Drive, Suite 250, San Diego, California 92130. The address for GNI Japan and Ying Luo, Ph.D. is c/o GNI Group Ltd., Nihonbashi-Honcho YS Bldg. 3rd Floor 2-2-2 Nihonbashi-Honcho, Chuo-ku, 103-0023 Tokyo, Japan.

(4) The business address for Ping Lan is c/o Beijing Continent Pharmaceuticals Co., Ltd, Room 320507-320509, Building 5, Wangjing SOHO Tower, Yard 1, Futong East Street, Chaoyang District, Beijing, PRC.

(5) The business address for Hui Sun is c/o Beijing Continent Pharmaceuticals Co., Ltd, Room 320507-320509, Building 5, Wangjing SOHO Tower, Yard 1, Futong East Street, Chaoyang District, Beijing, PRC.

(6) The business address for Yueying Zhu is c/o Beijing Continent Pharmaceuticals Co., Ltd, Room 320507-320509, Building 5, Wangjing SOHO Tower, Yard 1, Futong East Street, Chaoyang District, Beijing, PRC.

(7) The business address for Arthur Xin-bin Cheng is c/o Beijing Continent Pharmaceuticals Co., Ltd, Room 320507-320509, Building 5, Wangjing SOHO Tower, Yard 1, Futong East Street, Chaoyang District, Beijing, PRC.

PLAN OF DISTRIBUTION

The Selling Stockholders may sell all or a portion of the Resale Shares covered by this prospectus from time to time. The Selling Stockholders will act independently of us in making decisions with respect to the timing, manner and size of each sale. Such sales may be made directly or through one or more underwriters, broker-dealers or agents. If the Resale Shares are sold through underwriters or broker-dealers, the Selling Stockholders will be responsible for underwriting discounts or commissions or agent's commissions. The Resale Shares may be sold on any national securities exchange or quotation service on which the securities may be listed or quoted at the time of sale, in the over-the-counter market or in transactions otherwise than on these exchanges or systems or in the over-the-counter market and in one or more transactions at fixed prices, at prevailing market prices at the time of the sale, at varying prices determined at the time of sale, or at negotiated prices. These sales may be effected in transactions, which may involve crosses or block transactions. The Selling Stockholders may use any one or more of the following methods when selling the Resale Shares:

- on the Nasdaq, in the over-the-counter market or on any other national securities exchange on which our securities are listed or traded;
- in privately negotiated transactions;
- in underwritten offerings;
- in ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- in a block trade in which the broker-dealer will attempt to sell the offered shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- through purchases by a broker-dealer as principal and resale by the broker-dealer for its account pursuant to this prospectus;
- through the writing of options (including put or call options), whether the options are listed on an options exchange or otherwise;
- through the distribution of the shares by any Selling Stockholder to its partners, members or stockholders;
- in short sales entered into after the effective date of the registration statement of which this prospectus is a part;
- by pledge to secured debts and other obligations;
- through delayed delivery arrangements;
- an exchange distribution in accordance with the rules of the applicable exchange;
- through delayed delivery arrangements;
- to or through underwriters or agents;
- "at the market" or through market makers or into an existing market for the securities;
- through trading plans entered into by a Selling Stockholder pursuant to Rule 10b5-1 under the Exchange Act that are in place at the time of an offering pursuant to this prospectus and any applicable prospectus supplement hereto that provide for periodic sales of securities on the basis of parameters described in such trading plans; or
- a combination of any such methods of sale.

The Selling Stockholders also may resell all or a portion of the Resale Shares in open market transactions in reliance upon Rule 144 under the Securities Act, as permitted by that rule, or Section 4(a)(1) under the Securities Act, if available, rather than under this prospectus, provided that they meet the criteria and conform to the requirements of those provisions.

Broker-dealers engaged by the Selling Stockholders may arrange for other broker-dealers to participate in sales. If the Selling Stockholders effect such transactions by selling the Resale Shares to or through underwriters, broker-dealers or agents, such underwriters, broker-dealers or agents may receive commissions in the form of discounts, concessions or commissions from the Selling Stockholders or commissions from purchasers of the Resale Shares for whom they may act as agent or to whom they may sell as principal. Such commissions will be in amounts

to be negotiated, but, except as set forth in a supplement to this prospectus, in the case of an agency transaction will not be in excess of a customary brokerage commission in compliance with FINRA Rule 2121; and in the case of a principal transaction a markup or markdown in compliance with FINRA Rule 2121.01.

The Selling Stockholders may transfer and donate the Resale Shares in other circumstances in which case the transferees, donees or pledgees will be the selling beneficial owners for purposes of this prospectus.

Any broker-dealer or agents participating in the distribution of the Resale Shares may be deemed to be "underwriters" within the meaning of Section 2(11) of the Securities Act in connection with such sales. In such event, any commissions paid, or any discounts or concessions allowed to, any such broker-dealer or agent and any profit on the resale of the Resale Shares purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act.

The Selling Stockholders may also sell our securities short and deliver the securities to close out their short positions or loan or pledge the securities to broker-dealers that in turn may sell the securities. The shares may be sold directly or through broker-dealers acting as principal or agent or pursuant to a distribution by one or more underwriters on a firm commitment or best-efforts basis. The Selling Stockholders may also enter into hedging transactions with broker-dealers. In connection with such transactions, broker-dealers of other financial institutions may engage in short sales of our securities in the course of hedging the positions they assume with the Selling Stockholders. The Selling Stockholders may also enter into options or other transactions with broker-dealers or other financial institutions, which require the delivery to such broker-dealer or other financial institution of securities offered by this prospectus, which securities such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

Each Selling Stockholder has informed the Company that it is not a registered broker-dealer and does not have any written or oral agreement or understanding, directly or indirectly, with any person to distribute the Resale Shares. Upon the Company being notified in writing by a Selling Stockholder that any material arrangement has been entered into with a broker-dealer for the Resale Shares through a block trade, special offering, exchange distribution or secondary distribution or a purchase by a broker or dealer, a supplement to this prospectus will be filed, if required, pursuant to Rule 424(b) under the Securities Act, disclosing (i) the name of each such Selling Stockholder and of the participating broker-dealer(s), (ii) the number of Resale Shares involved, (iii) the price at which the Resale Shares were sold, (iv) the commissions paid or discounts or concessions allowed to such broker-dealer(s), where applicable, (v) that such broker-dealer(s) did not conduct any investigation to verify the information set out or incorporated by reference in this prospectus, and (vi) other facts material to the transaction.

Under the securities laws of some U.S. states, shares of our Common Stock may be sold in such states only through registered or licensed brokers or dealers. In addition, in some U.S. states shares of our Common Stock may not be sold unless such shares have been registered or qualified for sale in such state or an exemption from registration or qualification is available and is complied with.

There can be no assurance that any Selling Stockholder will sell any or all of the Resale Shares registered pursuant to the shelf registration statement, of which this prospectus is a part.

Each Selling Stockholder and any other person participating in such distribution will be subject to applicable provisions of the Exchange Act and the rules and regulations thereunder, including, without limitation, to the extent applicable, Regulation M of the Exchange Act, which may limit the timing of purchases and sales of any of the Resale Shares by the Selling Stockholder and any other participating person. To the extent applicable, Regulation M may also restrict the ability of any person engaged in the distribution of the Resale Shares to engage in market-making activities with respect to the Resale Shares. All of the foregoing may affect the marketability of the Resale Shares and the ability of any person or entity to engage in market-making activities with respect to the Resale Shares.

The Selling Stockholders will pay all of the expenses incurred in connection with the registration of the Resale Shares, including, without limitation, SEC filing fees and expenses of compliance with state securities or "blue sky" laws, all underwriting discounts and selling commissions, if any, and any legal or other expenses incurred by us or them in connection with the registration and offer and sale of the Resale Shares.

DIVIDEND POLICY

On September 20, 2022, we paid a special, one-time cash dividend of approximately $45.0 million (or $1.43 per share) to our common stockholders of record as of the close of business on September 6, 2022. On January 12, 2023, we paid a special, one-time cash dividend of approximately $7.6 million (or $0.24 per share) to our common stockholders of record as of the close of business on January 5, 2023. In June 2023, we distributed $3.5 million, which reflected, in connection with the Vertex Transaction, the hold-back amount received from Vertex less expenses and a reserve for potential tax liabilities, to the CVR Holders. We currently intend to retain all future earnings, if any, for use in our business and do not anticipate paying any cash dividends on our common stock in the foreseeable future. Any future determination to declare cash dividends will be made at the discretion of our board of directors, subject to applicable laws, and will depend on our financial condition, results of operations, capital requirements, general business conditions and other factors our board of directors may deem relevant.

LEGAL MATTERS

The validity of the issuance of the Resale Shares offered by this prospectus has been passed upon for us by Orrick, Herrington & Sutcliffe LLP, New York, New York. Certain legal matters in connection with the Resale Shares offered hereby will be passed on for any agents, dealers or underwriters by counsel that will be named in the applicable prospectus supplement.

EXPERTS

The consolidated balance sheets of Catalyst Biosciences, Inc. and Subsidiary as of December 31, 2022 and 2021, and the related consolidated statements of operations, comprehensive loss, redeemable convertible preferred stock and stockholders' equity (deficit), and cashflows for each of the years then ended, have been audited by EisnerAmper LLP, independent registered public accounting firm, as stated in their report, which is incorporated herein by reference, which report includes an explanatory paragraph about the existence of substantial doubt concerning the Company's ability to continue as a going concern. Such financial statements have been incorporated herein by reference in reliance on the report of such firm given upon their authority as experts in accounting and auditing.

The consolidated financial statements of Beijing Continent Pharmaceuticals Co., Ltd. at December 31, 2022 and 2021, and for each of the years then ended, which are incorporated by reference in this Prospectus and Registration Statement, have been audited by Ernst & Young Hua Ming LLP, independent registered public accounting firm, as set forth in their report thereon, including therein, and are incorporated herein by reference in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

1,240,442,745 Shares

COMMON STOCK

Offered by the Selling Stockholders

PROSPECTUS

The date of this prospectus , 2023

PART II
INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 14. Other Expenses of Issuance and Distributions.

The following table sets forth the expenses to be borne by Catalyst Biosciences, Inc. in connection with the offerings described in this Registration Statement.

Registration fee – Securities and Exchange Commission	$57,152.93
Printing and engraving expenses	*
Legal fees and expenses	*
Accounting fees and expenses	*
Transfer agent fees and expenses	*
Miscellaneous	
Total	*

* These fees are calculated based on the securities offered and the number of issuances and accordingly cannot be defined at this time.

ITEM 15. Indemnification of Directors and Officers.

Section 145 of the Delaware General Corporation Law authorizes a court to award, or a corporation's board of directors to grant, indemnity to directors and officers under certain circumstances and subject to certain limitations. The terms of Section 145 of the Delaware General Corporation Law are sufficiently broad to permit indemnification under certain circumstances for liabilities, including reimbursement of expenses incurred, arising under the Securities Act of 1933, as amended, or the Securities Act.

As permitted by the Delaware General Corporation Law, our restated certificate of incorporation and amended and restated bylaws contain provisions relating to the limitation of liability and indemnification of directors and officers. The restated certificate of incorporation provides that our directors will not be personally liable to us or our stockholders for monetary damages for any breach of fiduciary duty as a director, except for liability:

- for any breach of the director's duty of loyalty to us or our stockholders;
- for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law;
- under Section 174 of the Delaware General Corporation Law; or
- for any transaction from which the director derived an improper personal benefit.

Our restated certificate of incorporation also provides that if the Delaware General Corporation Law is amended to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of our directors will be eliminated or limited to the fullest extent permitted by the Delaware General Corporation Law as so amended.

Our amended and restated bylaws provide that we will indemnify our directors and officers to the fullest extent permitted by Delaware law, as it now exists or may in the future be amended (but, in the case of any amendment, only to the extent such amendment permits broader indemnification rights than such law permitted us prior to such amendment), against all expenses reasonably incurred in connection with their service for or on our behalf. Our amended and restated bylaws provide that we shall advance the expenses incurred by a director or officer in advance of the final disposition of an action or proceeding; provided, however, that if the Delaware General Corporation Law so requires, an advancement of expenses incurred by an indemnitee in his or her capacity as a director or officer (and not in any other capacity in which service was or is rendered by such indemnitee, including without limitation, service to an employee benefit plan) will be made only upon delivery to us of an undertaking, by or on behalf of such indemnitee, to repay all amounts so advanced if it is ultimately determined that such indemnitee is not entitled to be indemnified by us under our amended and restated bylaws or otherwise. Our amended and restated bylaws permit us to secure insurance on behalf of any director, officer, employee, or agent or individual serving at the request of us as a director, officer, employee or agent of another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise against any liability asserted against such person and incurred by such person in any such capacity, or arising out of such person's status as such, whether or not we would have the power or the obligation to indemnify such person against such liability under the provisions of our amended and restated bylaws.

We have entered into indemnification agreements with each of our directors and with each executive officer. Pursuant to the indemnification agreements, we have agreed to indemnify and hold harmless these directors and officers to the fullest extent permitted by the Delaware General Corporation Law. The agreements generally cover expenses that a director or officer incurs or amounts that a director or officer becomes obligated to pay because of any proceeding to which he or she is made or threatened to be made a party or participant by reason of his or her service as a current or former director, officer, employee or agent of our company. The agreements also provide for the advancement of expenses to the directors and officers subject to specified conditions. There are certain exceptions to our obligation to indemnify the directors and officers, including any intentional malfeasance or act where the director or officer did not in good faith believe he or she was acting in our best interests, with respect to "short-swing" profit claims under Section 16(b) of the Exchange Act and, with certain exceptions, with respect to proceedings that he or she initiates.

We maintain insurance policies that indemnify our directors and officers against various liabilities arising under the Securities Act and the Exchange Act of 1934, as amended, that might be incurred by any director or officer in his capacity as such.

ITEM 16. Exhibits.

Exhibit No.	Description	Incorporated by reference herein			Filed Herewith
		Form	File No.	Filing Date	
2.1	Asset Purchase Agreement, dated December 26, 2022, by and among Catalyst Biosciences, Inc., GNI Japan, and GNI Hong Kong Limited	8-K	000-51173	December 27, 2022	
2.2	Agreement and Amendment to Asset Purchase Agreement, dated as of March 29, 2023, by and among Catalyst, GNI Japan and GNI Hong Kong Limited.	8-K	000-51173	March 30, 2023	
2.3	Business Combination Agreement, dated December 26, 2022, by and among Catalyst Biosciences, Inc., GNI USA, Inc., GNI Japan, GNI Hong Kong Limited, Shanghai Genomics, Inc., the individuals listed on Annex A thereto and Continent Pharmaceuticals Inc.	8-K	000-51173	December 27, 2022	
2.4	Amendment to Business Combination Agreement, dated as of March 29, 2023, by and among Catalyst, GNI USA, GNI Japan, GNI Hong Kong Limited, Shanghai Genomics Inc., the Minority Holders and CPI.	8-K	000-51173	March 30, 2023	
2.5	Second Amendment to Business Combination Agreement, dated as of August 30, 2023, by and among Catalyst, GNI USA, GNI Japan, GNI Hong Kong Limited, Shanghai Genomics Inc. and CPI.	8-K	000-51173	August 31, 2023	
2.6	Contingent Value Rights Agreement, dated as of December 26, 2022, between Catalyst and American Stock Transfer & Trust Company, LLC	S-3	333-273395	July 24, 2023	
2.7	Amendment to Contingent Value Rights Agreement, dated as of March 29, 2023, executed by Catalyst.	8-K	000-51173	March 30, 2023	
3.1	Fourth Amended and Restated Certificate of Incorporation of the Registrant	S-8	333-133881	May 8, 2006	

Exhibit No.	Description	Incorporated by reference herein			Filed Herewith
		Form	File No.	Filing Date	
3.2	Certificate of Amendment to the Fourth Amended and Restated Certificate of Incorporation of the Registrant	8-K	000-51173	August 20, 2015	
3.3	Second Certificate of Amendment to the Fourth Amended and Restated Certificate of Incorporation of the Registrant	8-K	000-51173	February 10, 2017	
3.4	Certificate of Designation of Series X Convertible Preferred Stock	8-K	000-51173	December 27, 2022	
3.5	Certificate of Designation of Series Y Preferred Stock	8-K	000-51173	June 20, 2023	
3.6	Certificate of Elimination for Catalyst's Series Y Preferred Stock.	8-K	000-51173	August 31, 2023	
3.7	Amended and Restated Bylaws of the Registrant	8-K	000-51173	December 27, 2022	
5.1	Opinion of Orrick, Herrington & Sutcliffe LLP				X
23.1	Consent of EisnerAmper LLP				X
23.2	Consent of Ernst & Young Hua Ming LLP				X
23.3	Consent of Orrick, Herrington & Sutcliffe LLP (contained in Exhibit 5.1)				X
24.1	Power of Attorney (contained in the signature page hereto)	S-3	333-273395	July 24, 2023	
107	Filing Fee Table	S-3	333-273395	July 24, 2023	

ITEM 17. 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 of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the 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 the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Filing Fee Table" filed as an exhibit in the effective 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 such information in the registration statement; *provided, however,* that paragraphs (a)(1)(i), (a)(1)(ii) and (a)(1)(iii) do not apply if the 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 Securities Exchange Act of 1934 that are incorporated by reference herein in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, 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.

(4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:

(i) If the registrant is relying on Rule 430B,

(A) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

(B) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. *Provided, however,* that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference herein into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date;

(ii) If the registrant is subject to Rule 430C, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. *Provided, however,* that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference herein into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.

(5) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference herein in the 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.

(6) Insofar as indemnification for liabilities arising under the Securities Act of 1933 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 Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act of 1933 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 of 1933 and will be governed by the final adjudication of such issue.

(7) The undersigned registrant hereby undertakes that: in a registration statement permitted by Rule 430A,

(i) For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the Registrant pursuant to Rule 424(b) (1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective; and

(ii) For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus 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.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, Catalyst Biosciences, Inc. certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Registration Statement on Form S-3 to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of South San Francisco, State of California, on the 13th day of October, 2023.

Catalyst Biosciences, Inc.

By: /s/ Nassim Usman, Ph.D.
Nassim Usman, Ph.D.
President and Chief Executive Officer

Signature	Title	Date
/s/ Nassim Usman, Ph.D. Nassim Usman, Ph.D.	President and Chief Executive Officer, Director *(Principal Executive Officer)*	October 13, 2023
* Seline Miller	Interim Chief Financial Officer *(Interim Principal Financial Officer and Principal Accounting Officer)*	October 13, 2023
* Ying Luo, Ph.D.	Chairman of the Board	October 13, 2023
* Augustine Lawlor	Director	October 13, 2023
* Thomas Eastling	Director	October 13, 2023
* Andrea Hunt	Director	October 13, 2023

*By: /s/ Nassim Usman, Ph.D.
Nassim Usman, Ph.D.
Attorney-in-Fact

Exhibit 5.1

October 13, 2023

Orrick, Herrington & Sutcliffe LLP
51 West 52nd Street
New York, NY 10019-6142

+1 212 506 5000
orrick.com

Catalyst Biosciences, Inc.
12770 High Bluff Drive, Suite 150
San Diego, CA 92130

Re: Catalyst Biosciences, Inc.
Registration Statement on Form S-3

Ladies and Gentlemen:

We have acted as counsel to Catalyst Biosciences, Inc., a Delaware corporation (the "***Company***"), and you have requested our opinion in connection with the filing of a Registration Statement on Form S-3 (the "***Registration Statement***") with the Securities and Exchange Commission (the "***Commission"***), including a related prospectus filed with the Registration Statement (the "***Prospectus***"), covering the resale of up to 1,240,442,745 shares (the "***Shares***") of common stock, par value $0.001 per share (the "***Common Stock***") of the Company, consisting of (i) 6,266,521 shares of Common Stock beneficially owned by GNI USA, Inc., a Delaware corporation ("***GNI USA***"), and 123,400,000 shares of Common Stock issuable upon conversion of 12,340 shares of the Company's Series X Convertible Preferred Stock, par value $0.001 per share, to be beneficially owned by GNI USA following the transfer of such shares by GNI Group Ltd., a company incorporated under the laws of Japan with limited liability ("***GNI Japan***"), to GNI USA prior to the closing of the transactions contemplated by the Business Combination Agreement (as defined below), (ii) 953,821,796 shares of Common Stock issuable to GNI USA pursuant to the Business Combination Agreement, dated December 26, 2022, as amended on March 29, 2023 and August 30, 2023 (the "***Business Combination Agreement***"), by and among the Company, GNI USA, GNI Japan, GNI Hong Kong Limited, a company incorporated under the laws of Hong Kong with limited liability, Shanghai Genomics, Inc., a company organized under the laws of the People's Republic of China, Continent Pharmaceuticals Inc., a Cayman Islands company limited by shares, and the individuals listed on Annex A to the Business Combination Agreement (the "***Minority Holders***"), and (iii) 156,954,428 shares of Common Stock to be issued to the Minority Holders pursuant to the Business Combination Agreement, and resale of the Shares by certain selling securityholders (the "***Selling Securityholders***") named in the Registration Statement, which may be offered and sold from time to time on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, as amended (the "***Securities Act***").

All of the Shares are being registered on behalf of the Selling Securityholders.

In connection with this opinion, we have examined and relied upon the Registration Statement, the Prospectus, the Company's certificate of incorporation, as amended and bylaws, as amended, each as currently in effect and the originals, or copies identified to our satisfaction, of such corporate records of the Company, certificates of public officials, officers of the Company, and other persons, and such other documents, agreements and instruments as we have deemed relevant and necessary for the basis of our opinions hereinafter expressed. In such examination, we have assumed the following: (a) the authenticity of original documents and the genuineness of all signatures; (b) the conformity to the originals of all documents submitted to us as copies; and (c) the truth, accuracy, and completeness of the information, representations, and warranties contained in the records, documents, instruments, and certificates we have reviewed.

On the basis of the foregoing, and in reliance thereon, we are of the opinion that the Shares have been duly authorized, validly issued, fully paid and nonassessable.

Our opinion set forth in the immediately preceding paragraph is subject to (i) the effects of bankruptcy, insolvency, fraudulent conveyance, reorganization, moratorium and other similar laws relating to or affecting creditors' rights generally, (ii) general equitable principles (whether considered in a proceeding in equity or at law) and (iii) an implied covenant of good faith and fair dealing. Our opinion is subject to the qualification that the availability of specific performance, an injunction or other equitable remedies is subject to the discretion of the court before which the request is brought.

Our opinions herein are limited to the General Corporation Law of the State of Delaware and the federal laws of the United States of America. This opinion is limited to such laws as are in effect on the date hereof. Without limitation, no opinion is expressed herein with respect to the qualification of the Shares under the securities or blue sky laws of any state or any foreign jurisdiction.

Our opinions are limited to the matters stated herein and no opinion is implied or may be inferred beyond the matters expressly stated. Our opinions are based on these laws as in effect on the date hereof, and we disclaim any obligation to advise you of facts, circumstances, events or developments which hereafter may be brought to our attention and which may alter, affect or modify the opinion expressed herein.

We consent to the filing of this opinion as an exhibit to the Registration Statement, and we further consent to the use of our name under the caption "Legal Matters" in the Registration Statement and the Prospectus. In giving these consents, we do not thereby admit that we are within the category of persons whose consent is required under Section 7 of the Securities Act, or the rules and regulations of the Commission promulgated thereunder, nor do we thereby admit that we are "experts" within the meaning of such term as used in the Securities Act with respect to any part of the Registration Statement, including this opinion letter as an exhibit or otherwise.

Very truly yours,

/s/ Orrick, Herrington & Sutcliffe LLP

ORRICK, HERRINGTON & SUTCLIFFE LLP

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in this Pre-Effective Amendment No. 1 to the Registration Statement of Catalyst Biosciences, Inc. on Form S-3 to be filed on or about October 13, 2023 of our report dated March 30, 2023, on our audits of the financial statements as of December 31, 2022 and 2021 and for each of the years then ended, which report was included in the Annual Report on Form 10-K filed March 30, 2023. Our report includes an explanatory paragraph about the existence of substantial doubt concerning the Company's ability to continue as a going concern. We also consent to the reference to our firm under the caption “Experts” in this Registration Statement.

/s/ EisnerAmper LLP
EISNERAMPER LLP
Philadelphia, Pennsylvania
October 13, 2023

Exhibit 23.2

Consent of Independent Registered Public Accounting Firm

We consent to the reference to our firm under the caption "Experts" and to the use of our report dated March 30, 2023, with respect to the consolidated financial statements of Beijing Continent Pharmaceuticals Co., Ltd. incorporated by reference in the Registration Statement (Form S-3 No. 333-273395) and related Prospectus of Catalyst Biosciences, Inc. for the potential resale of up to 1,240,442,745 shares of its common stock.

/s/ Ernst & Young Hua Ming LLP
Beijing, The People's Republic of China
October 13, 2023