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UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-1 REGISTRATION STATEMENT UNDER

THE SECURITIES ACT OF 1933

INHIBIKASE THERAPEUTICS, INC.

(Exact name of Registrant as specified in its charter)

Delaware e or other iurisdicti

(State or other jurisdiction of incorporation or organization)

2836 (Primary Standard Industrial Classification Code Number) 26-3407249 (I.R.S. Employer Identification Number)

Atlanta, GA 30339 (678) 392-3419 (Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

3350 Riverwood Parkway SE, Suite 1900

Milton H. Werner, Ph.D. President and Chief Executive Officer Inhibikase Therapeutics, Inc. 3350 Riverwood Parkway SE, Suite 1900 Atlanta, GA 30339 (678) 392-3419

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

Copies to: Merrill M. Kraines Todd Kornfeld McDermott Will & Emery LLP One Vanderbilt Avenue New York, New York 10017-3852 (212) 547-5616

Approximate date of commencement of proposed sale to the public:

From time to time after this Registration Statement becomes effective.

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, 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. \Box

If this form is a post-effective amendment filed pursuant to Rule 462(d) 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. \Box

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, anon-accelerated filer, 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.

| ge accelerated filer | | Accelerated filer | |
|----------------------|-------------|---------------------------|----------|
| n-accelerated filer | \boxtimes | Smaller reporting company | X |
| | | Emerging growth company | \times |
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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 which 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 the Registration Statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

The information contained in this prospectus is not complete and may be changed. The selling stockholders named in this prospectus 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 we are not soliciting offers to buy these securities in any jurisdiction where such offer or sale is not permitted.

PRELIMINARY PROSPECTUS SUBJECT TO COMPLETION DATED JUNE 18, 2024

4,761,904 shares of Common Stock



Inhibikase Therapeutics, Inc.

This prospectus relates to the resale from time to time, by the selling stockholder (the "Selling Stockholder") identified in this prospectus under the caption "Selling Stockholder" of up to 4,761,904 shares of common stock, par value \$0.001 per share (the "Common Stock"), of Inhibikase Therapeutics, Inc. (the "Company"), consisting of (i) up to 3,344,904 shares of Common Stock which the selling stockholder may acquire upon the exercise of certain outstanding warrants (the "Private Common Warrants") and (ii) up to 1,417,000 shares of Common Stock which the Selling Stockholder may acquire upon the exercise of certain outstanding warrants (the "Inducement Warrants").

We issued the Private Common Warrants to the Selling Stockholder in a private placement concurrent with a registered direct offering (the "Offering") of 714,527 shares of Common Stock and pre-funded warrants (the "Pre-Funded Warrants") to purchase 957,925 shares of Common Stock. We issued the Inducement Warrants to the Selling Stockholder in connection with the repricing of certain warrants issued by the Company to the Selling Stockholder on January 27, 2023 (the "Existing Warrants") pursuant to a letter agreement (the "Inducement Letter") by and between the Company and the Selling Stockholder, dated as of May 20, 2024, and in connection with the Selling Stockholder exercising certain Existing Warrants. Each Private Common Warrant and each Inducement Warrant has an exercise price of \$1.68 per share of Common Stock and will become exercisable upon Stockholder Approval. "Stockholder Approval" means the approval required by the applicable rules and regulations of The Nasdaq Capital Market ("Nasdaq") from the Company's stockholder Approval Date" means the date that the Company notifies the Selling Stockholder that it has obtained Stockholder Approval. 1,672,452 of the Private Common Warrants will expire on the twelve-month anniversary of the Stockholder Approval Date (the "Series B Warrants") and 1,672,452 of the Private Common Warrants will expire on the five-year anniversary of the Stockholder Approval Date (the "Series B Warrants"). 708,500 of the Inducement Warrants will expire on the twelve-month anniversary of the Stockholder Approval Date (the "Series C Warrants") and 708,500 of the Inducement Warrants will expire on the five-year anniversary of the Stockholder Approval Date (the "Series C Warrants") and 708,500 of the Inducement Warrants will expire on the five-year anniversary of the Stockholder Approval Date (the "Series C Warrants") and 708,500 of the Inducement Warrants will expire on the five-year anniversary of the Stockholder Approval Date (the "Series C Warrants") and 708,500 of the Inducement Warra

The closing of the issuance and sale of the Private Common Warrants, Common Stock, Pre-Funded Warrants and Inducement Warrants was consummated on May 22, 2024.

The Selling Stockholder and any of its pledgees, assignees and successors-in-interest may, from time to time, sell any or all of their securities covered hereby on the principal trading market or any other stock exchange, market or trading facility on which the securities are traded or in private transactions. These sales may be at fixed or negotiated prices. See "Plan of Distribution" in this prospectus for more information. We will not receive any proceeds from the resale or other disposition of the Common Stock by the Selling Stockholder. However, we will receive the proceeds of cash exercises, if any, of the Private Common Warrants and Inducement Warrants. See "<u>Use of Proceeds</u>" beginning on page 14 and "<u>Plan of Distribution</u>" beginning on page 22 of this prospectus for more information.

Our Common Stock is listed on Nasdaq under the symbol "IKT." On June 17, 2024, the last reported sale price of our Common Stock was \$1.55 per share.

We are an "emerging growth company" as defined in Section 2(a) of the Securities Act of 1933, as amended (the "Securities Act"), and, as such, have elected to comply with certain reduced disclosure and regulatory requirements.

Investing in our securities involves a high degree of risk. See "<u>Risk Factors</u>" beginning on page 8 of this prospectus and under similar headings in the other documents that are incorporated by reference into this prospectus for a discussion of information that should be considered in connection with an investment in our securities.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense. The securities are not being offered in any jurisdiction where the offer is not permitted.

The date of this prospectus is , 20

, 2024.

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ABOUT THIS PROSPECTUS

The information contained in this prospectus is not complete and may be changed. You should rely only on the information provided in or incorporated by reference in this prospectus, or in a related free writing prospectus, or documents to which we otherwise refer you. We have not authorized anyone else to provide you with different information.

We have not authorized any dealer, agent or other person to give any information or to make any representation other than those contained or incorporated by reference in this prospectus or any related free writing prospectus. You must not rely upon any information or representation not contained or incorporated by reference in this prospectus or any related free writing prospectus. This prospectus and any related free writing prospectus, if any, do not constitute an offer to sell or the solicitation of an offer to buy any securities other than the registered securities to which they relate, nor do this prospectus and any related free writing prospectus, if any, constitute an offer to sell or the solicitation of an offer to sell or the solicitation to any person to whom it is unlawful to make such offer or solicitation in such jurisdiction. You should not assume that the information contained in this prospectus and any related free writing prospectus, if any, is accurate on any date subsequent to the date of the document incorporated by reference, even though this prospectus and any related free writing prospectus is delivered or securities are sold on a later date.

We have not done anything that would permit this offering or possession or distribution of this prospectus or any free writing prospectus in any jurisdiction where action for that purpose is required, other than in the United States. You are required to inform yourself about and to observe any restrictions relating as to this offering and the distribution of this prospectus and any such free writing prospectus outside the United States.

We further note that the representations, warranties and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference in this prospectus were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreements, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties or covenants were accurate only as of the date when made. Accordingly, such representations, warranties and covenants should not be relied on as accurately representing the current state of our affairs.

PROSPECTUS SUMMARY

This summary highlights certain information about us, this offering and information appearing elsewhere in this prospectus and in the documents we incorporate by reference in this prospectus. This summary is not complete and does not contain all of the information that you should consider before investing in our securities. After you carefully read this summary, to fully understand our Company and this offering and its consequences to you, you should read this entire prospectus and any related free writing prospectus authorized by us, including the information referred to under the heading "Risk Factors" in this prospectus beginning on page 8, and any related free writing prospectus, as well as the other documents that we incorporate by reference into this prospectus, including our financial statements and the notes to those financial statements, which are incorporated herein by reference from our Annual Report on Form 10-K for the year ended December 31, 2023, filed on March 27, 2024, and our Quarterly Report on Form0-Q for the three month period ended March 31, 2024, filed on May 15, 2024. Please read "Where You Can Find More Information" on page 31 of this prospectus.

In this prospectus, unless context requires otherwise, references to "we," "us," "our," or "the Company" refer to Inhibikase Therapeutics, Inc., a Delaware corporation and its consolidated subsidiaries. We own or have rights to trademarks and trade names that we use in connection with the operation of our business. In addition, our name, logos and website name and address are our trademarks. Solely for convenience, in some cases, the trademarks and trade names referred to in this prospectus are listed without the applicable \mathbb{R} and \mathbb{M} symbols, but we will assert, to the fullest extent under applicable law, our rights to these trademarks and trade names. Other trademarks and trade names appearing in this prospectus are the property of their respective owners.

Overview

Inhibikase Therapeutics, Inc.

Company Overview

We are a clinical-stage pharmaceutical company developing protein kinase inhibitor therapeutics to modify the course of Parkinson's disease ("PD"), Parkinson's-related disorders and other diseases of the Abelson Tyrosine Kinases. The Company's multi-therapeutic pipeline has a primary focus on neurodegeneration and its lead program utilizing Risvodetinib (also known as IkT-148009), a selective inhibitor of the non-receptor Abelson Tyrosine Kinases, targets the treatment of Parkinson's disease inside and outside the brain as well as other diseases that arise from Abelson Tyrosine Kinases. In 2021, we commenced clinical development of Risvodetinib (IkT-148009), which we believe can modify the course of Parkinson's disease including its manifestation in the gastrointestinal, or GI, tract. In January, 2023, the Company initiated its Phase 2 program, termed 'the 201 trial' (www.the201trial.com), for Risvodetinib (IkT-148009) as a treatment for Parkinson's disease and began the process of opening up to 34 sites in the U.S. As of June 17, 2024, 32 sites are open and the trial is fully enrolled. As of June 17, 2024, 32 mild and 4 moderate possibly treatment-related adverse events have been reported across all enrolled patients taking Risvodetinib (IkT-148009). Results from this trial will be reported in the fourth quarter of 2024. The emerging path to complete enrollment has prompted us to take further advantage of this multi-dose study by planning to extend the 201 trial by up to 12 months, subject to additional resources. In addition, emerging biomarker data from the 201 trial evaluating pathological alpha-synuclein in multiple tissues and fluids supported our recent grant submissions to the National Institute of Neurological Disease and Stroke. One of these grants, if approved, will introduce our novel monoclonal antibody to track phospho-Tyr39-alpha-synuclein in the clinical trial setting, which we believe in turn will enhance the meaning of biomarker measurements. We believe the utilization of this antibody in tiss

The twelve-week 201 trial is evaluating three doses in participants who have untreated Parkinson's disease on a staggered schedule and is placebo controlled with 1:1:1:1 randomization. The primary endpoints of this trial are safety and tolerability and a hierarchy of 15 secondary endpoints will evaluate treatment benefit in the brain and

GI tract. The recent analysis of 11 patients who participated in the 201 trial prior to the temporary clinical hold issued by the FDA in November, 2022, which was lifted in January, 2023, suggested that Risvodetinib (IkT-148009) may have some effect on disease. These participants were withdrawn from the trial following the FDA's temporary clinical hold. As detailed at the Movement Disorder Society Congress held August 2023, the primary secondary endpoint is a functional assessment comprised of the sum of Parts 2 and 3 of the Movement Disorder Society Universal Parkinson's Disease Rating Scale (MDS-UPDRS Parts II+III). This sum showed an average -8.7 point improvement in the three participants on the 200 mg dose relative to baseline, while three placebo participants increased by +1.7 points; this represents an average spread of -10.4 points. A lower (or negative) change relative to placebo of greater than -3 to -6 points might be considered a measure of improvement. Given the small sample size on this dose, we believe it is premature to conclude a clinical benefit, but this observation reinforces our desire to extend the trial for an additional 12 months to potentially obtain a clear picture of clinical benefit over a total measurement of 15 months. Blinded functional assessment and biomarker data supports the trial extension and may reinforce the observations made from the 11 unblinded patients.

In March 2023, we opened our Investigational New Drug Application, or IND, for Risvodetinib(IkT-148009) as a treatment for the Parkinson's-related orphan disease Multiple System Atrophy, or MSA. Our evaluation of Risvodetinib (IkT-148009) in MSA was benefited by a grant received from the National Institute of Neurological Diseases and Stroke, an Institute of the National Institutes of Health, for \$0.39 million to fund animal model studies of Risvodetinib (IkT-148009) as a therapy for MSA. Two different animal studies were undertaken to evaluate whether Risvodetinib(IkT-148009) could have an impact on disease in the animal. One model evaluated the ability of Risvodetinib (IkT-148009) to modify disease early in its progression, while the second model is evaluating whether Risvodetinib (IkT-148009) can correct functional loss much later in the disease course. The early progression model study has now been shown to preserve nearly normal functional activity following 20 weeks of once daily dosing relative to untreated controls. Preservation of function in this model occurred with substantial reduction of the underlying alpha-synuclein protein pathology. The second model evaluating Risvodetinib (IkT-148009) late in the disease course is ongoing. In addition, Risvodetinib (IkT-148009) was recently given Orphan Drug Designation by the FDA for the treatment of MSA. We are working with the National Institute of Neurological Diseases and Stroke to possibly initiate a Phase 2/3 program to evaluate Risvodetinib (IkT-148009) as a treatment for MSA through a clinical trial network supported by the Institute. The proposed Phase 2/3 study will have a primary efficacy endpoint following once daily dosing at one of two dose levels for twelve months. We plan to submit complementary regulatory documents for Risvodetinib (IkT-148009) to European Union authorities in 2024.

We are also developing platform technologies to improve delivery of protein kinase inhibitors in patients. One example of our potential ability to improve drug delivery is IkT-001Pro, a prodrug of the anticancer agent imatinib mesylate, which is intended to treat Stable Phase Chronic Myelogenous Leukemia, or SP-CML. A three-part dose finding/dose equivalence study in 66 healthy volunteers (known as 'the 501 trial') has completed withlkT-001Pro. The study was designed to evaluate the 96-hour pharmacokinetics of imatinib delivered as IkT-001Pro and determine the dose of IkT-001Pro that can deliver the equivalent of either 400 mg or 600 mg imatinib mesylate. As of the date of this Report, bioequivalence to 400 mg imatinib mesylate has been established to our satisfaction for a 600 mg dose of IkT-001Pro. We further evaluated 600 mg imatinib mesylate. We studied 800 mg lkT-001Pro and determine the dose of IkT-001Pro and dose of IkT-001Pro is the preferred dose of IkT-001Pro. Use further evaluated 600 mg imatinib mesylate. We studied 800 mg lkT-001Pro and go mg lkT-001Pro is the preferred dose of IkT-001Pro to deliver a dose of imatinib equivalent to 600 mg imatinib mesylate. We may study higher doses of IkT-001Pro to cover the full range of doses approved for imatinib mesylate to treat up to 11 adult and pediatric blood cancers.

On January 19, 2024, members of the Company along with its medical oncology consultants met with the FDA Review Team (the "Review Team") from the Division of Hematologic Malignancies in a Pre-New Drug Application, or NDA, meeting to discuss our bioequivalence studies of IkT-001Pro and its path to approval. All questions were addressed and summarized in official meeting minutes issued by the FDA on February 12, 2024. During the meeting we inquired whether additional clinical studies may be needed to seek approval and

discussed manufacturing and quality control requirements for approval. The Review Team acknowledged that the 505(b)(2) pathway appears to be the appropriate pathway for approval of IkT-001Pro and indicated that, pending formal review of our clinical data, clinical studies completed to date indicate that 600 mg and 800 mg IkT-001Pro provides similar exposures to 400 mg and 600 mg imatinib mesylate, respectively, subject to review of the NDA upon filing. In addition, given that imatinib mesylate is approved for use between 300 mg and 800 mg once daily for a variety of blood and gastrointestinal cancers, the Review Team stated that if we intend to seek approval across all currently approved indications, we should evaluate additional dose(s) as needed to measure the safety, tolerability and bioequivalent dose of IkT-001Pro that would deliver up to 800 mg, the highest approved dose of imatinib mesylate. The Review Team also discussed the possible difference between IkT-001Pro and imatinib mesylate absorption in the gut and recommended that we evaluate whether IkT-001Pro and imatinib mesylate behave differently with respect to certain gut transporters that regulate absorption. We are in alignment with the FDA and are initiating the necessary pre-clinical test to evaluate this further to ensure that delivery of imatinib by IkT-001Pro and imatinib mesylate is frally, a number of recommendations were discussed to prevent the potentiahix-up between 001Pro and imatinib mesylate either at the pharmacy or by patients for two drugs delivering the same active ingredient. We discussed alternate dosage forms for IkT-001Pro and will provide a justification of the dosage forms chosen and why they are unlikely to cause medication errors. To ensure that we meet the manufacturing and quality control processes.

We are also evaluating the application of IkT-001Pro to pulmonary arterial hypertension (PAH). PAH is a rare disease of the pulmonary microvasculature with about 30,000 cases in the U.S., mostly in women between the ages of 30 and 60. The global PAH market size was valued at \$7.66 billion in 2023 and is estimated to grow at a compound annual growth rate of 5.4% between 2024 to 2030. Most treatments for PAH attempt to address symptoms of this progressive disorder, but in the early 2010s, imatinib delivered by imatinib mesylate was shown to be a disease-modifying therapy for PAH. Co-administration of medications with harmful drug-drug interactions precluded the approval of imatinib asadd-on therapy in PAH. Today, on the other hand, changes to standard-of-care for these patients has reduced the safety risk from imatinib treatment in PAH in our view. As such, on April 5, 2024, members of the Company met with the FDA Division of Cardiology and Nephrology in a pre-IND meeting to discuss the Company's plan to utilize IkT-001Pro at 300 mg or 450 mg in a Phase 2/3 efficacy, safety and tolerability trial in World Health Organization Functional Class I patients. At the meeting, the FDA confirmed that IkT-001Pro would be viewed as a New Molecular Entity (NME) for PAH and that the appropriate path for approval is the 505(b)(2) statute. This opens up the possibility of IkT-001Pro being granted NME and patent exclusivity on approval. The period of exclusivity would be evaluated once the NDA is filed. The FDA requested that we conduct a comparative cell-culture based study of the hERG ion channel, a standard cardiovascular safety test performed for any NME for which a new IND is to be opened. The Company plans to complete this study later in the second quarter or in early third quarter of 2024 and file the IND. The Company is in active discussion with potential strategic partners on this program. The Company has also applied for Orphan Drug Designation for delivery of imatinib by IkT-001Pro for PAH.

We have also improved drug delivery of Risvodetinib (IkT-148009) through development of a tablet formulation, which we measured to nearly double the concentration of Risvodetinib (IkT-148009) delivered relative to the same dose previously administered as a gelatin capsule. This provides the opportunity to lower the effective oral dose, which could lead to further safety and tolerability improvements for Risvodetinib (IkT-148009). The Company plans to introduce the tablet formulation into the 12-month extension study, once implemented, as well as in all future clinical trials.

Finally, we are evaluating a number of research phase molecules (IKT-148x and BIP 4-7) for a variety of neurodegenerative disease indications across our pre-clinical development pipeline.

In our opinion, the multi-decade failures in the treatment of neurodegenerative diseases such as PD result from a lack of understanding of the biochemistry of the disease processes involved. Neurodegeneration is marked by a

progressive degeneration and loss of function of neurons which send and receive signals to and from the brain. Historically, the cause of a neurodegenerative disease was thought to be a "plaque" made up of a misfolded and/or aggregated protein(s). Therapeutic approaches, therefore, sought to remove "plaque" from the brain. A "plaque"-focused treatment strategy has failed to alter the course of Parkinson's disease in two Phase 2 trials that reported results in 2020 and 2021. We believe we are different. We identified the proteins that become dysfunctional in a disease pathway and sought to understand how a dysfunctional protein causes disease and published those results in several high-profile peer reviewed publications. We believe our approach to PD and other neurological diseases has identified the underlying cause of disease is validated by our 2022 and 2023 publications are linked together to define the disease process. We believe our approach to neurodegenerative diseases is validated by our 2022 and 2023 publications and oral presentations at the major academic and industry conferences in Parkinson's and Alzheimer's diseases.

To increase the probability of success, we are making parallel investments in several product candidates andback-up candidates, and plan to advance only those candidates to the later stages of clinical development that show strong preclinical and early clinical data. By developing a portfolio of product candidates across therapeutic indications, we can continuously apply learnings and tools across programs and leverage economies of scale in our research and development organization. Our target indications include diseases with large patient populations, such as PD, as well as orphan indications, such as, Multiple System Atrophy and Chronic Myelogenous Leukemia.

Pivot Arbitration

On April 26, 2024, we received a notice of a demand for arbitration with the American Arbitration Association from Pivot Holding LLC ("Pivot"), that alleges to be a successor in interest to Sphaera Pharma Pte. Ltd. ("Sphaera"), in connection with the Collaborative Research and Development Agreement dated February 29, 2012, as amended, between us and Sphaera. Pivot alleges breach of contract by us for failure to pay milestone payments and seeks damages of \$1.625 million in milestone payments plus interest. We believe that Pivot's claims are without merit and that we have not owed and do not owe any milestone payments to Pivot. We filed our Answering Statement on June 17, 2024, in which we asserted various defenses and a counterclaim seeking damages or offset of no less than \$900,000. The parties have agreed to mediate before arbitrating.

Reduction of At The Market Offering

On February 1, 2024, we entered into an At The Market Offering Agreement (the "Sales Agreement") with H.C. Wainwright & Co., LLC, as sales agent (the "Agent"), pursuant to which we may, from time to time, issue and sell shares of our common stock in an aggregate offering price of up to \$5,659,255 through the Agent. The offer and sales of such shares of common stock made pursuant to the Sales Agreement are made under the Company's effective "shelf" registration statement on Form S-3 (File No. 333-262551) dated February 11, 2022, the base prospectus contained therein, and a prospectus supplement ("ATM Prospectus Supplement") related to the offering of such shares of common stock dated February 1, 2024. Under the terms of the Sales Agreement, the Agent may sell such shares of common stock at market prices by any method that is deemed to be an "at the market offering" as defined in Rule 415 under the Securities Act. As of May 20, 2024, we have sold 315,338 shares of common stock covered by the ATM Prospectus Supplement for an aggregate gross sales price of \$849,187.85 prior to the filing of Prospectus Supplement No. 1 to the ATM Prospectus Supplement. On May 20, 2024, we filed Prospectus Supplement No. 1 to the ATM Prospectus Supplement No. 1 to the ATM Prospectus Supplement. On May 20, 2024, we filed Prospectus Supplement No. 1 to the ATM Prospectus Supplement to reduce the additional maximum aggregate gross sales price of our common stock that may be offered, issued and sold under the Sales Agreement to \$50,000.

Company Information

We were incorporated in Delaware in 2010 as a successor to a Georgia limited liability company and commenced operations in September 2008. Our principal executive offices are located at 3350 Riverwood Parkway SE, Suite

1900, Atlanta, Georgia, 30339. We also maintain offices at 1 Cranberry Hill, Ste 200, Lexington, Massachusetts, 02421. Our telephone numbers are (678) 392-3419 and (617) 936-0184. Our website address is www.inhibikase.com. Information contained on our website is not incorporated by reference into this prospectus, and it should not be considered to be part of this prospectus.

Implications of Being an Emerging Growth Company

As a company with less than \$1.235 billion in revenues during our last completed fiscal year, we qualify as an "emerging growth company" as defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act. An emerging growth company may take advantage of specified reduced reporting requirements that are otherwise applicable generally to public companies. These reduced reporting requirements include:

- an exemption from compliance with the auditor attestation requirement on the effectiveness of our internal control over financial reporting;
- an exemption from compliance with any requirement that the Public Company Accounting Oversight Board may adopt regarding a supplement to the auditor's report providing additional information about the audit and the financial statements;
- reduced disclosure about our executive compensation arrangements; and
- an exemption from the requirements to obtain anon-binding advisory vote on executive compensation or a stockholder approval of any golden parachute arrangements.

We have elected to take advantage of some, but not all, of the available benefits under the JOBS Act. Accordingly, the information contained herein may be different from the information you receive from other public companies in which you hold stock. Further, pursuant to Section 107 of the JOBS Act, as an emerging growth company, we have elected to use the extended transition period for complying with new or revised accounting standards until those standards would otherwise apply to private companies. As a result, our consolidated financial statements may not be comparable to the financial statements of issuers who are required to comply with the effective dates for new or revised accounting standards that are applicable to public companies, which may make our common stock less attractive to investors.

We will remain an emerging growth company until the earliest to occur of: (i) the end of the first fiscal year in which our annual gross revenues are \$1.235 billion or more; (ii) the end of the first fiscal year in which we are deemed to be a "large accelerated filer," as defined in the Securities Exchange Act of 1934, as amended (the "Exchange Act"); (iii) the date on which we have, during the previous three-year period, issued more than \$1.0 billion in non-convertible debt securities; and (iv) December 31, 2025.

THE OFFERING

| Common Stock Offered by the Selling Stockholder: | Up to 4,761,904 shares of Common Stock, consisting of (i) up to 3,344,904 shares of Common Stock issuable upon exercise of the Private Common Warrants and (ii) up to 1,417,000 shares of Common Stock issuable upon exercise of the Inducement Warrants (in each case, subject to Stockholder Approval). |
|--|--|
| Use of Proceeds: | We will not receive any proceeds from the Common Stock offered by the Selling Stockholder under this prospectus. However, we will receive the proceeds of cash exercises, if any, of the Private Common Warrants and the Inducement Warrants. We intend to use the net proceeds from any cash exercise of the Private Common Warrants and the Inducement Warrants for general corporate purposes. See "Use of Proceeds." |
| Market for Common Stock: | Our Common Stock is listed on The Nasdaq Capital Market under the symbol "IKT." On June 17, 2024, the last reported sale price of our Common Stock was \$1.55 per share. |
| Risk Factors | See " <u>Risk Factors</u> " beginning on page 8 and the other information included and incorporated in this prospectus for a discussion of factors you should carefully consider before investing in our securities. |

RISK FACTORS

Investing in our securities involves a high degree of risk. In addition to the other information included or incorporated by reference in this prospectus, you should carefully consider the risks described below and in the section titled "Risk Factors" in our Annual Report on Form 10-K for our most recent fiscal year filed with the SEC, subsequent Quarterly Reports on Form 10-Q, any amendment or updates thereto reflected in subsequent filings with the SEC, and in other reports we file with the SEC that are incorporated by reference herein, before making an investment decision. The following risks are presented as of the date of this prospectus and we expect that these will be updated from time to time in our periodic and current reports filed with the SEC, which will be incorporated herein by reference. Please refer to these subsequent reports for additional information relating to the risks associated with investing in our securities.

The risks and uncertainties described therein and below could materially adversely affect our business, operating results and financial condition, as well as cause the value of our securities to decline. You may lose all or part of your investment as a result. You should also refer to the other information contained in this prospectus, or incorporated by reference, including our financial statements and the notes to those statements, and the information set forth under the caption "Special Note Regarding Forward-Looking Statements." Our actual results could differ materially from those anticipated in these forward-looking statements as a result of certain factors, including the risks mentioned below. Forward-looking statements included in this prospectus are based on information available to us on the date hereof, and all forward-looking statements incorporated by reference are based on information available to us as of the date of such documents. We disclaim any intent to update any forward-looking statements. The risks described below and contained in our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q and in our other periodic reports are not the only ones that we face. Additional risks not presently known to us or that we currently deem immaterial may also adversely affect our business operations.

Risks Related to this Offering

The sale or availability for sale of the shares of Common Stock pursuant to this prospectus may depress the price of our Common Stock, dilute the interest of our existing stockholders, and encourage short sales by third parties, which could further depress the price of our Common Stock.

To the extent that the Selling Stockholder sells shares of Common Stock pursuant to this prospectus, the market price of the shares of Common Stock may decrease due to the additional selling pressure in the market. In addition, the dilution from exercise of the Private Common Warrants and the Inducement Warrants may cause stockholders to sell their shares of Common Stock, which could further contribute to any decline in the price of the Shares of Common Stock caused by the sale or potential sale of such shares could encourage short sales by third parties. Such sales could place downward pressure on the price of the Common Stock by increasing the number of shares of Common Stock being sold, which could further contribute to any decline in the market price of the shares of Common Stock.

Risks Related to Our Common Stock and Other Securities

We may be required to repurchase certain of our warrants.

Under the Common Warrants and the Inducement Warrants, in the event of a "Fundamental Transaction" (as defined in the applicable warrant and/or warrant agreement, which generally includes any merger with another entity, the sale, transfer or other disposition of all or substantially all of our assets to another entity, or the acquisition by a person of more than 50% of our Common Stock), each warrant holder will have the right at any time prior to the consummation of the Fundamental Transaction to require us to repurchase the warrant for a purchase price in cash equal to the Black Scholes value (as calculated under the warrant agreement) of the then remaining unexercised portion of such warrant on the date of such Fundamental Transaction, which may materially adversely affect our financial condition and/or results of operations and may prevent or deter a third party from acquiring us.

The exercisability of the Private Common Warrants and the Inducement Warrants is contingent upon us obtaining Stockholder Approval. If we do not obtain such Stockholder Approval, the Private Common Warrants and the Inducement Warrants may never become exercisable.

The Private Common Warrants and the Inducement Warrants are not immediately exercisable, as their exercisability is contingent upon us obtaining Stockholder Approval. The Private Common Warrants and the Inducement Warrants will become exercisable upon Stockholder Approval. The Series A Warrants and the Series C Warrants will expire on the twelve-month anniversary of the Stockholder Approval Date. The Series B Warrants and the Series D Warrants will expire on the five-year anniversary of the Stockholder Approval Date. In the event that we cannot obtain Stockholder Approval, the Private Common Warrants and the Inducement Warrants may never become exercisable. In no event will we be required to net cash settle any Private Common Warrant or any Inducement Warrant.

Risks Related to Our Business, Financial Condition and Capital Requirements

There is substantial doubt regarding our ability to continue as a going concern and our independent registered public accounting firm has included an explanatory paragraph relating to our ability to continue as a going concern in its report on our audited financial statements included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2023. We will need to raise additional funding, which may not be available on acceptable terms, or at all. Failure to obtain this necessary capital when needed may force us to delay, limit or terminate our clinical trials or other operations.

We have incurred net losses and used significant cash in operating activities since inception, and we expect to continue to generate operating losses for the foreseeable future. As of March 31, 2024, we had an accumulated deficit of \$71,550,360. As of March 31, 2024, we had cash and cash equivalents of \$2,353,346 and marketable securities of \$7,396,009, which we believe should be sufficient to fund our operating expenses through November 2024. We have based this estimate on assumptions that may prove to be wrong, and we could use our capital resources sooner than we currently expect. Pursuant to the requirements of Accounting Standards Codification (ASC) 205-40, Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern, and as a result of our financial condition and other factors described herein, there is substantial doubt about our ability to continue as a going concern will depend on our ability to obtain additional funding, as to which no assurances can be given. Our future success depends on our ability to raise capital and/or execute our current operating plan. However, we cannot be certain that these initiatives or raising additional capital, will be available to us or, if available, will be on terms acceptable to us. If we issue additional securities to raise funds, these securities may have rights, preferences, or privileges senior to those of our common stock, and our current stockholders may experience dilution. If we are unable to obtain funds when needed or on acceptable terms, we may be required to curtail our current clinical trials, cut operating costs, forego future development and other opportunities or even terminate our operations, which may involve seeking bankruptcy protection. We have identified conditions and over that raise doubt about our ability to continue as a going concern in its report on our audited financial statements for the years ended December 31, 2023 and 2022 included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2023.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, including the documents incorporated by reference herein and therein, and any free writing prospectus that we have authorized for use in connection with this offering, contain forward-looking statements concerning our business, operations and financial performance and condition, as well as our plans, objectives and expectations for our business operations and financial performance and condition. Any statements contained herein that are not statements of historical facts may be deemed to be forward-looking statements. In some cases, you can identify forward-looking statements by terminology such as "can", "may", "could", "should", "assume", "forecasts", "believe", "designed to", "will", "expect", "plan", "anticipate", "estimate", "potential", "position", "predicts", "strategy", "guidance", "intend", "budget", "seek", "project" or "continue", or the negative thereof or other comparable terminology regarding beliefs, plans, expectations or intentions regarding the future. You should read statements that contain these words carefully because they:

- discuss our future expectations;
- · contain projections of our future results of operations or of our financial condition; and
- state other "forward-looking" information.

We believe it is important to communicate our expectations. However, forward-looking statements are based on our current expectations, assumptions, estimates and projections about our business and our industry and are subject to known and unknown risks, uncertainties and other factors. Accordingly, our actual results and the timing of certain events may differ materially from those expressed or implied in such forward-looking statements due to a variety of factors and risks, including, but not limited to, those set forth under "Risk Factors" in this prospectus, including the documents incorporated herein by reference, and the following factors and risks:

- We are a clinical-stage drug development company with limited resources, a limited operating history and have no products approved for commercial sale, which may make it difficult to evaluate our current business and predict our future success and viability;
- If we are unable to successfully raise additional capital, our future clinical trials and product development could be limited and our long-term viability may be threatened;
- There is substantial doubt regarding our ability to continue as a going concern and our independent registered public accounting firm has
 included an explanatory paragraph relating to our ability to continue as a going concern in its report on our audited financial statements
 included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2023.
- We will need to raise additional funding, which may not be available on acceptable terms, or at all. Failure to obtain this necessary capital when needed may force us to delay, limit or terminate our clinical trials or other operations;
- While the FDA lifted the clinical holds with respect to the Risvodetinib programs relating to Parkinson's disease and Multiple System Atrophy, we may be subject to further clinical holds by the FDA in the future;
- Drug development is a highly uncertain undertaking and involves a substantial degree of risk. We have never generated any revenue from product sales, we may never generate any revenue from product sales, and we may fail to generate further revenue from grants or contracts or to be profitable;
- The wars between Russia and Ukraine and between Israel and Hamas could materially adversely affect our business, results of operations, and financial condition;
- Our results of operations have been adversely affected and, in the future, could be materially adversely impacted by the COVID-19 virus;
- Adverse developments affecting financial institutions, companies in the financial services industry or the financial services industry generally, including those we do business with, could adversely affect our operations and liquidity;

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- We have incurred significant net losses since our inception and anticipate that we will continue to incur net losses for the foreseeable future;
- Due to the significant resources required for the development of our programs, and depending on our ability to access capital, we must
 prioritize development of certain product candidates;
- Our business is highly dependent on the success of our initial product candidates targeting neurodegenerative diseases;
- We currently contract with various research institutions to perform the research and development activities needed to develop our products, and if we ever choose to or need to find alternative research institutions, we may not be able to do so at all or, if we are able to do so, it may be costly and may cause significant delays in the development and commercialization of our products;
- Positive results from early preclinical or clinical studies of our product candidates are not necessarily predictive of the results of later preclinical studies and any current and future clinical trials of our product candidates;
- We have no history of completing clinical trials for novel drug substances or commercializing pharmaceutical products, which may make it difficult to evaluate the prospects for our future viability;
- Our clinical trials may reveal significant adverse events, toxicities or other side effects not seen in our preclinical studies and may result in a safety profile that could inhibit regulatory approval or market acceptance of any of our product candidates;
- We have concentrated much of our research and development efforts on the treatment of neurodegenerative diseases, a field that has seen limited success in drug development;
- We may encounter substantial delays in our current and planned clinical trials, or may not be able to conduct or complete our clinical trials on the timelines we expect, if at all;
- Our current and planned clinical trials may fail to demonstrate substantial evidence of the safety and efficacy of our product candidates, which would prevent, delay or limit the scope of regulatory approval and commercialization;
- Clinical development is a lengthy and expensive process with an uncertain outcome, and failure can occur at any stage of clinical development;
- The manufacture of our product candidates is complex and difficulties may be encountered in production;
- If, in the future, we are unable to establish sales and marketing capabilities or enter into agreements with third parties to sell and market any
 product candidates we may develop, we may not be successful in commercializing those product candidates if and when they are approved;
- Even if any product candidates we develop receive marketing approval, they may fail to achieve the degree of market acceptance by physicians, patients, healthcare payors, and others in the medical community necessary for commercial success;
- Even if we are able to commercialize any product candidates, such products may become subject to unfavorable pricing regulations, thirdparty reimbursement practices, or healthcare reform initiatives, which would harm our business;
- The regulatory approval processes of the FDA, EMA and comparable foreign regulatory authorities are lengthy, time consuming, and inherently unpredictable. Regulatory authorities have substantial discretion in the approval process and may refuse to accept an application, may disagree with our regulatory strategy or proposed pathway for approval or may decide that our data are insufficient for approval and require additional preclinical, clinical or other studies;
- We expect to depend in whole or in part on collaborations with third parties for the research, development and commercialization of any product candidates we may develop;

- We contract with third parties for the manufacture of materials for our research programs, preclinical studies and current clinical trials and expect to continue to do so for any future clinical trials and for commercialization of any product candidates that we may develop;
- We depend on a small number of third-party suppliers for key raw materials used in the manufacturing processes for our product candidates, and the loss of these third-party suppliers or their inability to supply us with adequate raw materials could harm our business; and
- If we are unable to obtain and maintain patent protection for any product candidates we develop, our competitors could develop and commercialize products or technology similar or identical to ours, and our ability to successfully commercialize any product candidates we may develop, and our technology may be adversely affected.

All forward-looking statements and risk factors included in this prospectus are made as of the date hereof, and all forward-looking statements and risk factors included in documents incorporated herein by reference are made as of their original date, in each case based on information available to us as of the date hereof, or in the case of documents incorporated by reference, the original date of any such document, and we assume no obligations to update any forward-looking statement or risk factor, unless we are required to do so by law. If we do update one or more forward-looking statements, no inference should be drawn that we will make updates with respect to other forward-looking statements or that we will make any further updates to those forward-looking statements at any future time.

Forward-looking statements may include our plans and objectives for future operations, including plans and objectives relating to our products and our future economic performance, projections, business strategy and timing and likelihood of success. Assumptions relating to the foregoing involve judgments with respect to, among other things, future economic, competitive and market conditions, future business decisions, demand for our products and services, and the time and money required to successfully complete development and commercialization of our technologies, all of which are difficult or impossible to predict accurately and many of which are beyond our control.

Any of the assumptions underlying the forward-looking statements contained in this prospectus could prove inaccurate and, therefore, we cannot assure you that any of the results or events contemplated in any of such forward-looking statements will be realized. Based on the significant uncertainties inherent in these forward-looking statements, the inclusion of any such statement should not be regarded as a representation or as a guarantee by us that our objectives or plans will be achieved, and we caution you against relying on any of the forward looking-statements contained herein.

MARKET, INDUSTRY AND OTHER DATA

Market data and certain industry data and forecasts used throughout this prospectus were obtained from sources we believe to be reliable, including market research databases, publicly available information, reports of governmental agencies and industry publications and surveys. We have relied on certain data from third-party sources, including internal surveys, industry forecasts and market research, which we believe to be reliable based on our management's knowledge of the industry. Forecasts are particularly likely to be inaccurate, especially over long periods of time. In addition, we do not necessarily know what assumptions regarding general economic growth were used in preparing the third-party forecasts we cite. Statements as to our market position are based on the most currently available data. While we are not aware of any misstatements regarding the industry data presented in this prospectus, our estimates involve risks and uncertainties and are subject to change based on various factors, including those discussed under the heading "Risk Factors" in this prospectus and the documents incorporated by reference into this prospectus.

USE OF PROCEEDS

We will not receive any proceeds from the sale of the shares of Common Stock by the Selling Stockholder. However, we will receive proceeds from the exercise of the Private Common Warrants and the Inducement Warrants by the Selling Stockholder to the extent they are exercised for cash. We estimate that the maximum proceeds that we may receive from the exercise of the Private Common Warrants and the Inducement Warrants, assuming all the Private Common Warrants and all the Inducement Warrants are exercised for cash at their exercise price of \$1.68, will be approximately \$8 million. We do not know, however, whether any of the Private Common Warrants or any of the Inducement Warrants will be exercised or, if any of the Private Common Warrants or any of the Inducement Warrants and the Inducement Warrants will expire and never be exercised. There are circumstances under which the Private Common Warrants and the Inducement Warrants may be exercised on a cashless basis. In these circumstances, even if the Private Common Warrants and the Inducement Warrants are exercised, we may not receive any proceeds, or the proceeds that we do receive may be significantly less than what we might expect. We intend to use the aggregate net proceeds from the exercise of the Private Common Warrants and the Inducement Warrants will depend upon the amount and timing of such exercises, our operating revenues and cash position at such time and our working capital requirements. The Selling Stockholder will pay any expenses incurred by it for brokerage, accounting, tax or legal services or any other expenses incurred by the Selling Stockholder in disposing of its shares of Common Stock. We will bear all other costs, fees and expenses of our counsel and our accountants.

MARKET PRICE OF OUR COMMON STOCK AND RELATED STOCKHOLDER MATTERS

Market Information

Our Common Stock is listed on The Nasdaq Capital Market under the symbol "IKT." A description of our Common Stock is set forth under the heading "Description of Capital Stock" beginning on page 24 of this prospectus.

The last reported sale price for our Common Stock on June 17, 2024 was \$1.55 per share.

Holders

As of June 17, 2024, we had 14 record holders of our Common Stock and no preferred stock issued and outstanding. The number of record holders was determined from the records of our transfer agent and does not include beneficial owners of Common Stock whose shares are held in the names of various security brokers, dealers, and registered clearing agencies. The transfer agent and registrar of our Common Stock is Equiniti Trust Company, LLC. The transfer agent and registrar's address is 6201 15th Ave, Brooklyn, NY 11219.

Dividend Policy

We have never declared or paid any cash dividends on our Common Stock. We do not anticipate paying any cash dividends to stockholders in the foreseeable future. In addition, any future determination to pay cash dividends will be at the discretion of our board of directors and will be dependent upon our financial condition, results of operations, capital requirements, and such other factors as our board of directors deem relevant.

PRIVATE PLACEMENT OF PRIVATE COMMON WARRANTS

Concurrently with the sale of shares of Common Stock and Pre-Funded Warrants in a registered direct offering, we also issued and sold to the Selling Stockholder the Private Common Warrants to purchase an aggregate of up to 3,344,904 shares of Common Stock. Each Private Common Warrant has an exercise price of \$1.68 per share of Common Stock and will become exercisable upon Stockholder Approval. The 1,672,452 Series A Warrants will expire on the twelve-month anniversary of the Stockholder Approval Date. The 1,672,452 Series B Warrants will expire on the five-year anniversary of the Stockholder Approval Date. The 1,672,452 Series B Warrants will expire on the five-year anniversary of the Stockholder Approval Date. The Private Common Warrants are exercisable, at the option of each holder, in whole or in part by delivering to us a duly executed exercise notice and, at any time a registration statement registering the issuance of the Common Stock underlying the Private Common Warrants under the Securities Act is effective and available for the issuance of such shares, or an exemption from registration under the Securities Act is available for the issuance of such shares, or an exemption from registration under the Securities Act is available for the issuance of the prospectus contained therein is not available for the issuance of the common stock purchased upon such exercise. If at the time of exercise there is no effective registration statement registering, or the prospectus contained therein is not available for the issuance of the common stock underlying the Private Common Warrants, then the Private Common Warrants may also be exercised, in whole or in part, at such time by means of a cashless exercise, in which case the holder would receive upon such exercise the net number of Shares of Common Stock determined according to the formula set forth in the Private Common Warrants.

Subject to limited exceptions, a holder of Private Common Warrants will not have the right to exercise any portion of its Private Common Warrants if the holder, together with its affiliates, would beneficially own in excess of 4.99% (or 9.99% at the election of the holder prior to the date of issuance) of the number of shares of Common Stock outstanding immediately after giving effect to such exercise, provided that the holder may increase or decrease the beneficial ownership limitation up to 9.99%. Any increase in the beneficial ownership limitation shall not be effective until 61 days following notice of such change to us.

Pursuant to the securities purchase agreement, dated as of May 20, 2024, we entered into in connection with the Offering (the "Securities Purchase Agreement"), we agreed to file within 30 calendar days from the date of the Securities Purchase Agreement a registration statement on Form S-1 or Form S-3 providing for the resale by the Selling Stockholder of the shares of Common Stock issuable upon exercise of the Private Common Warrants. We agreed to use commercially reasonable efforts to cause such registration statement to become effective within 60 days (90 days in the event the SEC elects to review such registration statement) following the filing date of such registration statement and to keep such registration statement effective at all times until the Selling Stockholder no longer owns any Private Common Warrants or shares of Common Stock issuable upon exercise thereof. We also agreed to use our reasonable best efforts to hold a meeting of stockholders by August 18, 2024 for the purpose of obtaining Stockholder Approval and, in the event that we do not obtain Stockholder Approval at the first such meeting, to call a meeting every 90 days thereafter to seek Stockholder Approval until the earlier of the date on which Stockholder Approval is obtained or the Private Common Warrants are no longer outstanding.

In the event of any fundamental transaction, as described in the Private Common Warrants, and generally including any merger or consolidation with or into another entity, sale of all or substantially all of our assets, any purchase offer, tender offer or exchange offer, reclassification, reorganization or recapitalization of our shares of common stock, or any person or group becoming the beneficial owner of 50% or more of the outstanding shares of our common stock, then upon any subsequent exercise of a Private Common Warrant, as applicable, the holder will be entitled to receive the kind and amount of securities, cash or other property that the holder would have received had they exercised the Private Common Warrant immediately prior to the occurrence of such fundamental transaction. Additionally, in the event of a fundamental transaction, we or any successor entity will, at the option of the holder of a Private Common Warrant exercisels at any time concurrently with or within 30 days after the consummation of the fundamental transaction (or, if later, the date of the public announcement thereof), purchase the Private Common Warrant from the holder by paying to the holder an amount of consideration equal to the value of the remaining unexercised portion of such Private Common Warrant on the date of consummation of the fundamental transaction based on the Black-Scholes option pricing model,

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determined pursuant to a formula set forth in the Private Common Warrants. The consideration paid to the holder will be the same type or form of consideration that was offered and paid to the holders of Common Stock in connection with the fundamental transaction; provided that if no such consideration was offered or paid, the holders of Common Stock will be deemed to have received Common Stock of the successor entity in such fundamental transaction for purposes of this provision of the Private Common Warrants.

WARRANT REPRICING

On May 20, 2024, we entered into the Inducement Letter with the Selling Stockholder pursuant to which the Selling Stockholder agreed to exercise, for cash, certain outstanding Common Stock purchase warrants that we issued to the Selling Stockholder on January 27, 2023 with an exercise price of \$4.50 per warrant (as adjusted for the 1-for-6 reverse split of Common Stock the Company effected on June 30, 2023). The Investor exercised, in the aggregate, Existing Warrants to purchase 708,500 shares of Common Stock (the "Existing Warrant Shares") in exchange for the Company's agreement to (i) lower the exercise price of the Existing Warrants to \$1.68 per share pursuant to an amendment to the Existing Warrants (the "Warrant Amendment") and (ii) issue the Inducement Warrant Inducement"). In addition, 1,229,484 Existing Warrants held by the Selling Stockholder which were not exercised in connection with the Warrant Inducement had their exercise price reduced to \$1.68 per share (such transactions together with the Warrant Inducement, the "Warrant Repricing").

Each Inducement Warrant has an exercise price of \$1.68 per share of Common Stock and will become exercisable upon Stockholder Approval. The 708,500 Series C Warrants will expire on the twelve-month anniversary of the Stockholder Approval Date. The 708,500 Series D Warrants will expire on the five-year anniversary of the Stockholder Approval Date. The Inducement Warrants are exercisable, at the option of each holder, in whole or in part by delivering to us a duly executed exercise notice and, at any time a registration statement registering the issuance of the Common Stock underlying the Inducement Warrants under the Securities Act is effective and available for the issuance of such shares, or an exemption from registration under the Securities Act is available for the issuance of such shares, by payment in full in immediately available funds for the number of Common Stock purchased upon such exercise. If at the time of exercise there is no effective registration statement registering, or the prospectus contained therein is not available for the issuance of the common stock underlying the Inducement Warrants, then the Inducement Warrants may also be exercised, in whole or in part, at such time by means of a cashless exercise, in which case the holder would receive upon such exercise the net number of shares of Common Stock determined according to the formula set forth in the Inducement Warrants.

Subject to limited exceptions, a holder of Inducement Warrants will not have the right to exercise any portion of its Inducement Warrants if the holder, together with its affiliates, would beneficially own in excess of 4.99% (or 9.99% at the election of the holder prior to the date of issuance) of the number of shares of Common Stock outstanding immediately after giving effect to such exercise, provided that the holder may increase or decrease the beneficial ownership limitation up to 9.99%. Any increase in the beneficial ownership limitation shall not be effective until 61 days following notice of such change to us.

Pursuant to the Inducement Letter, we agreed to file within 30 calendar days from the date of the Securities Purchase Agreement a registration statement on Form S-1 or Form S-3 providing for the resale by the Selling Stockholder of the shares of Common Stock issuable upon exercise of the Inducement Warrants. We agreed to use commercially reasonable efforts to cause such registration statement to become effective within 60 days (90 days in the event the SEC elects to review such registration statement) following the filing date of such registration statement and to keep such registration statement effective at all times until the Selling Stockholder no longer owns any Inducement Warrants or shares of Common Stock issuable upon exercise thereof. We also agreed to use our reasonable best efforts to hold a meeting of stockholders by August 18, 2024 for the purpose of obtaining Stockholder Approval and, in the event that we do not obtain Stockholder Approval at the first such meeting, to call a meeting every 90 days thereafter to seek Stockholder Approval until the earlier of the date on which Stockholder Approval is obtained or the Inducement Warrants are no longer outstanding.

In the event of any fundamental transaction, as described in the Inducement Warrants, and generally including any merger or consolidation with or into another entity, sale of all or substantially all of our assets, any purchase offer, tender offer or exchange offer, reclassification, reorganization or recapitalization of our shares of common stock, or any person or group becoming the beneficial owner of 50% or more of the outstanding shares of our

common stock, then upon any subsequent exercise of a Inducement Warrant, as applicable, the holder will be entitled to receive the kind and amount of securities, cash or other property that the holder would have received had they exercised the Inducement Warrant immediately prior to the occurrence of such fundamental transaction. Additionally, in the event of a fundamental transaction, we or any successor entity will, at the option of the holder of a Inducement Warrant exercisable at any time concurrently with or within 30 days after the consummation of the fundamental transaction (or, if later, the date of the public announcement thereof), purchase the Inducement Warrant from the holder by paying to the holder an amount of consideration equal to the value of the remaining unexercised portion of such Inducement Warrant on the date of consummation of the fundamental transaction based on the Black-Scholes option pricing model, determined pursuant to a formula set forth in the Inducement Warrants. The consideration paid to the holder will be the same type or form of consideration that was offered and paid to the holders of Common Stock will be deemed to have received Common Stock of the successor entity in such fundamental transaction for purposes of this provision of the Inducement Warrants.

SELLING STOCKHOLDER

The shares of Common Stock being offered by the Selling Stockholder are those issuable to the Selling Stockholder upon exercise of the Private Common Warrants and the Inducement Warrants. For additional information regarding the issuance of the Private Common Warrants, see "Private Placement of Private Common Warrants" above. We are registering the shares of Common Stock underlying the Private Common Warrants and the Inducement Warrants in order to permit the Selling Stockholder to offer the shares for resale from time to time. In addition to the ownership of the shares of Common Stock and the Private Common Warrants and the Inducement Warrants, the Selling Stockholder has had material relationships with us within the past three years, including the purchase of securities in our January 2023 offering and the purchase of shares of common stock in the Offering.

The table below lists the Selling Stockholder and other information regarding the beneficial ownership of the shares of Common Stock by the Selling Stockholder. The second column lists the number of shares of Common Stock beneficially owned by the Selling Stockholder, based on its ownership of the shares of Common Stock, Private Common Warrants, Inducement Warrants and other warrants, as of June 17, 2024, assuming exercise of the warrants held by the Selling Stockholder on that date, without regard to any limitations on exercises. The third column lists the shares of Common Stock underlying the Private Common Warrants and the Inducement Warrants offered by this prospectus by the Selling Stockholder. The fourth and fifth columns assume the sale of all of the shares offered by the Selling Stockholder pursuant to this prospectus.

In accordance with the terms of the Securities Purchase Agreement, this prospectus generally covers the resale of the maximum number of shares of Common Stock issuable upon exercise of the Private Common Warrants and the Inducement Warrants.

Under the terms of the Private Common Warrants and the Inducement Warrants, the Selling Stockholder may not exercise the warrants to the extent such exercise would cause the Selling Stockholder, together with its affiliates and attribution parties, to beneficially own a number of shares of Common Stock which would exceed 4.99% or 9.99%, as applicable, of our then outstanding Common Stock following such exercise, excluding for purposes of such determination shares of Common Stock issuable upon exercise of such Private Common Warrants and Inducement Warrants which have not been exercised. The number of shares in the table below does not reflect this limitation. The Selling Stockholder may sell all, some or none of its shares in this offering. See "Plan of Distribution."

| | | Shares | | Percentage of Shares |
|---------------------------------------|--------------|--------------|-------------|-------------------------|
| | Shares | Offered by | Shares | Beneficially |
| | Owned prior | this | Owned after | Owned after |
| Name of Selling Stockholder | to Offering | Prospectus | Offering | Offering (1) |
| Armistice Capital, LLC ⁽²⁾ | 8,255,388(3) | 4,761,904(4) | 3,493,484 | 29.2% |

(1) Percentages are based on 7,216,145 shares of Common Stock outstanding as of June 17, 2024 and assuming the exercise of all securities that are registered by this prospectus.

(2) The securities are directly held by Armistice Capital Master Fund Ltd., a Cayman Islands exempted company (the "Master Fund"), and may be deemed to be beneficially owned by: (i) Armistice Capital, LLC ("Armistice Capital"), as the investment manager of the Master Fund; and (ii) Steven Boyd, as the Managing Member of Armistice Capital. The warrants are subject to a beneficial ownership limitation of 4.99%, which such limitation restricts the Selling Stockholder from exercising that portion of the warrants that would result in the Selling Stockholder and its affiliates owning, after exercise, a number of shares of common stock in excess of the beneficial ownership limitation. The address of Armistice Capital Master Fund Ltd. is c/o Armistice Capital, LLC, 510 Madison Avenue, 7th Floor, New York, NY 10022.

(3) Consists of (i) 597,575 shares of Common Stock, (ii) Private Common Warrants to purchase up to 3,344,904 shares of Common Stock, (iii) Inducement Warrants to purchase up to 1,417,000 shares of

Common Stock, (iv) Existing Warrants to purchase up to 1,229,484 shares of Common Stock, and (v) Pre-Funded Warrants to purchase up to 1,666,425 shares of Common Stock.

(4) Represents shares of Common Stock underlying the Private Common Warrants and the Inducement Warrants to purchase up to 4,761,904 shares of Common Stock in the aggregate.

PLAN OF DISTRIBUTION

The Selling Stockholder of and any of its pledgees, assignees and successors-in-interest may, from time to time, sell any or all of their securities covered hereby on the principal trading market or any other stock exchange, market or trading facility on which the securities are traded or in private transactions. These sales may be at fixed or negotiated prices. The Selling Stockholder may use any one or more of the following methods when selling securities:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the securities as agent but may position and resell a portion of the block as
 principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- settlement of short sales;
- in transactions through broker-dealers that agree with the Selling Stockholder to sell a specified number of such securities at a stipulated price per security;
- · through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;
- a combination of any such methods of sale; or
- any other method permitted pursuant to applicable law.

The Selling Stockholder may also sell securities under Rule 144 or any other exemption from registration under the Securities Act, if available, rather than under this prospectus.

Broker-dealers engaged by the Selling Stockholder may arrange for other brokers-dealers to participate in sales. Broker-dealers may receive commissions or discounts from the Selling Stockholder (or, if any broker-dealer acts as agent for the purchaser of securities, from the purchaser) in amounts to be negotiated, but, except as set forth in a supplement to this prospectus, in the case of an agency transaction not 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.

If at the time of any offering made under this prospectus a member of FINRA participating in the offering has a "conflict of interest" as defined in FINRA Rule 5121 ("Rule 5121"), that offering will be conducted in accordance with the relevant provisions of Rule 5121.

Our Common Stock is listed the Nasdaq Capital Market under the symbol "IKT."

In connection with the sale of the securities or interests therein, the Selling Stockholder may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the securities in the course of hedging the positions they assume. The Selling Stockholder may also sell securities short and deliver these securities to close out its short positions, or loan or pledge the securities to broker-dealers that in turn may sell these securities. The Selling Stockholder may also enter into option or other transactions with broker-dealers or other financial institutions or create one or more derivative securities 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).

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The Selling Stockholder and any broker-dealers or agents that are involved in selling the securities may be deemed to be "underwriters" within the meaning of the Securities Act in connection with such sales. In such event, any commissions received by such broker-dealers or agents and any profit on the resale of the securities purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act. The Selling Stockholder has informed the Company that it does not have any written or oral agreement or understanding, directly or indirectly, with any person to distribute the securities.

The Company is required to pay certain fees and expenses incurred by the Company incident to the registration of the securities. The Company has agreed to indemnify the Selling Stockholder against certain losses, claims, damages and liabilities, including liabilities under the Securities Act.

We agreed to keep this prospectus effective until the Selling Stockholder no longer owns any Private Common Warrants, Inducement Warrants or shares of Common Stock issuable upon exercise thereof. The securities covered hereby will be sold only through registered or licensed brokers or dealers if required under applicable state securities laws. In addition, in certain states, the securities covered hereby may not be sold unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and is complied with.

Under applicable rules and regulations under the Exchange Act, any person engaged in the distribution of the resale securities may not simultaneously engage in market making activities with respect to the Common Stock for the applicable restricted period, as defined in Regulation M, prior to the commencement of the distribution. In addition, the Selling Stockholder will be subject to applicable provisions of the Exchange Act and the rules and regulations thereunder, including Regulation M, which may limit the timing of purchases and sales of the Common Stock by the Selling Stockholder or any other person. We will make copies of this prospectus available to the Selling Stockholder and have informed them of the need to deliver a copy of this prospectus to each purchaser at or prior to the time of the sale (including by compliance with Rule 172 under the Securities Act).

DESCRIPTION OF CAPITAL STOCK

The following descriptions of the Common Stock, Private Common Warrants and Inducement Warrants summarize the material terms and provisions of the securities that we may issue in connection with this offering. It may not contain all the information that is important to you. For the complete terms of our Common Stock, please refer to our Certificate of Incorporation and our by-laws ("By-Laws"), which are filed as exhibits to the registration statement which includes this prospectus. See "Where You Can Find More Information." The Delaware General Corporation Law ("DGCL") may also affect the terms of these securities. The summary below is qualified in its entirety by reference to our Certificate of Incorporation and By-Laws, each as in effect at the time of any offering of securities under this prospectus.

Our authorized capital stock consists of 110,000,000 shares of capital stock, par value \$0.001 per share, of which 100,000,000 shares are designated as Common Stock and 10,000,000 shares are designated as preferred stock. As of June 17, 2024, 7,216,145 shares of Common Stock were issued and outstanding and 0 shares of preferred stock were issued and outstanding. In addition, as of June 17, 2024, there were 1,020,280 shares of Common Stock issuable upon exercise of options outstanding, 7,985,965 shares of Common Stock issuable upon exercise of warrants outstanding (including the shares of Common Stock underlying the Private Common Warrants and the Inducement Warrants), and 3,585,589 shares of Common Stock reserved for future grant or issuance. The authorized and unissued shares of Common Stock and preferred stock are available for issuance without further action by our stockholders.

Common Stock

Each holder of Common Stock is entitled to one vote for each share on all matters submitted to a vote of the stockholders, including the election of directors. Our amended and restated certificate of incorporation and amended and restated bylaws do not provide for cumulative voting rights. Except as otherwise required by law, directors shall be elected by a plurality of the voting power of the shares present in person or represented by proxy at the meeting and entitled to vote in any election of directors. With respect to matters other than the election of directors, at any meeting of the stockholders at which a quorum is present or represented by proxy, the affirmative vote of a majority of the voting power of the shares present in person or represented by proxy at such meeting and entitled to vote on the subject matter shall be the act of the stockholders, except as otherwise required by law. The holders of a majority of the stock issued and outstanding and entitled to vote, present in person or represented by proxy, shall constitute a quorum for the transaction of business at all meetings of the stockholders. Subject to preferences that may be applicable to any then-outstanding preferred stock, holders of Common Stock are entitled to receive dividends, if any, as may be declared from time to time by our board of directors out of legally available funds. In the event of our liquidation, dissolution or winding up, holders of Common Stock will be entitled to share ratably in the net assets legally available for distribution to stockholders after the payment of all of our debts and other liabilities and the satisfaction of any liquidation preference granted to the holders of any thenoutstanding shares of preferred stock. Holders of Common Stock have no preemptive, conversion, subscription or other rights, and there are no redemption or sinking fund provisions applicable to Common Stock. The rights, preferences and privileges of the holders of Common Stock are subject to and may be adversely affected by the rights of the holders of shares of any series of our preferred stock that we may designate in the future. All of our outstanding shares of Common Stock are, and the shares of Common Stock underlying the Private Common Warrants and the Inducement Warrants, upon payment and delivery in accordance with their terms, will be fully paid and non-assessable.

The Common Stock is listed the Nasdaq Capital Market under the symbol "IKT." The transfer agent and registrar for the Common Stock is Equiniti Trust Company, LLC. The transfer agent and registrar's address is 6201 15th Ave, Brooklyn, NY 11219.

Private Common Warrants

Duration and Exercise Price

Each Private Common Warrant has an exercise price of \$1.68 per share of Common Stock and will become exercisable upon Stockholder Approval. The 1,672,452 Series A Warrants will expire on the twelve-month anniversary of the Stockholder Approval Date. The 1,672,452 Series B Warrants will expire on the five-year anniversary of the Stockholder Approval Date.

Exercisability

The Private Common Warrants are exercisable, at the option of each holder, in whole or in part by delivering to us a duly executed exercise notice and, at any time a registration statement registering the issuance of the Common Stock underlying the Private Common Warrants under the Securities Act is effective and available for the issuance of such shares, or an exemption from registration under the Securities Act is available for the issuance of such shares, by payment in full in immediately available funds for the number of Common Stock purchased upon such exercise. Subject to limited exceptions, a holder of Private Common Warrants will not have the right to exercise any portion of its Private Common Warrants if the holder, together with its affiliates, would beneficially own in excess of 4.99% (or, at the election of the purchaser prior to issuance of the Private Common Warrants, 9.99%) of the number of shares of our Common Stock outstanding immediately after giving effect to such exercise. A holder may increase or decrease the beneficial ownership limitation up to 9.99%, provided, however, that any increase in the beneficial ownership limitation shall not be effective until 61 days following notice of such change to the Company.

Cashless Exercise

If at the time of exercise there is no effective registration statement registering, or the prospectus contained therein is not available for the issuance of the Common Stock underlying the Private Common Warrants, then the Private Common Warrants may also be exercised, in whole or in part, at such time by means of a cashless exercise, in which case the holder would receive upon such exercise the net number of common shares determined according to the formula set forth in the Private Common Warrant.

Fundamental Transactions

In the event of any fundamental transaction, as described in the Private Common Warrants, and generally including any merger or consolidation with or into another entity, sale of all or substantially all of our assets, any purchase offer, tender offer or exchange offer, reclassification, reorganization or recapitalization of our shares of common stock, or any person or group becoming the beneficial owner of 50% or more of the outstanding shares of our common stock, then upon any subsequent exercise of a Private Common Warrant, as applicable, the holder will be entitled to receive the kind and amount of securities, cash or other property that the holder would have received had they exercised the Private Common Warrant immediately prior to the occurrence of such fundamental transaction. Additionally, in the event of a fundamental transaction, we or any successor entity will, at the option of the holder of a Private Common Warrant exercisable at any time concurrently with or within 30 days after the consummation of the fundamental transaction (or, if later, the date of the public announcement thereof), purchase the Private Common Warrant from the holder by paying to the holder an amount of consideration paid to the value of the remaining unexercised portion of such Private Common Warrant on the date of consummation of the fundamental transaction paid to the holder will be the same type or form of consideration that was offered and paid to the holder will be deemed to have received Common Stock of the successor entity in such fundamental transaction for purposes of this provision of the Private Common Warrants.

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Transferability

In accordance with its terms and subject to applicable laws, a Private Common Warrant may be transferred at the option of the holder upon surrender of the Private Common Warrant to us together with the appropriate instruments of transfer and payment of funds sufficient to pay any transfer taxes (if applicable).

Fractional Shares

No fractional shares of Common Stock will be issued upon the exercise of the Private Common Warrants. Rather, the number of shares of Common Stock to be issued will, at our election, either be rounded up to the nearest whole number or we will pay a cash adjustment in respect of such final fraction in an amount equal to such fraction multiplied by the exercise price.

Trading Market

There is no established trading market for the Private Common Warrants, and we do not expect a market to develop. We do not intend to apply for a listing for the Private Common Warrants on any securities exchange or other nationally recognized trading system. Without an active trading market, the liquidity of the Private Common Warrants will be limited.

Rights as a Shareholder

Except as otherwise provided in the Private Common Warrants or by virtue of the holders' ownership of shares of Common Stock, the holders of Private Common Warrants do not have the rights or privileges of holders of our shares of Common Stock, including any voting rights, until such Private Common Warrant holders exercise their warrants.

Inducement Warrants

Duration and Exercise Price

Each Inducement Warrant has an exercise price of \$1.68 per share of Common Stock and will become exercisable upon Stockholder Approval. The 708,500 Series C Warrants will expire on the twelve-month anniversary of the Stockholder Approval Date. The 708,500 Series D Warrants will expire on the five-year anniversary of the Stockholder Approval Date.

Exercisability

The Inducement Warrants are exercisable, at the option of each holder, in whole or in part by delivering to us a duly executed exercise notice and, at any time a registration statement registering the issuance of the Common Stock underlying the Inducement Warrants under the Securities Act is effective and available for the issuance of such shares, or an exemption from registration under the Securities Act is available for the issuance of such shares, by payment in full in immediately available funds for the number of Common Stock purchased upon such exercise. Subject to limited exceptions, a holder of Inducement Warrants will not have the right to exercise any portion of its Inducement Warrants if the holder, together with its affiliates, would beneficially own in excess of 4.99% (or, at the election of the purchaser prior to issuance of the Inducement Warrants, 9.99%) of the number of shares of our Common Stock outstanding immediately after giving effect to such exercise. A holder may increase or decrease the beneficial ownership limitation up to 9.99%, provided, however, that any increase in the beneficial ownership limitation shall not be effective until 61 days following notice of such change to the Company.

Cashless Exercise

If at the time of exercise there is no effective registration statement registering, or the prospectus contained therein is not available for the issuance of the Common Stock underlying the Inducement Warrants, then the

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Inducement Warrants may also be exercised, in whole or in part, at such time by means of a cashless exercise, in which case the holder would receive upon such exercise the net number of common shares determined according to the formula set forth in the Inducement Warrant.

Fundamental Transactions

In the event of any fundamental transaction, as described in the Inducement Warrants, and generally including any merger or consolidation with or into another entity, sale of all or substantially all of our assets, any purchase offer, tender offer or exchange offer, reclassification, reorganization or recapitalization of our shares of common stock, or any person or group becoming the beneficial owner of 50% or more of the outstanding shares of our common stock, then upon any subsequent exercise of a Inducement Warrant, as applicable, the holder will be entitled to receive the kind and amount of securities, cash or other property that the holder would have received had they exercised the Inducement Warrant immediately prior to the occurrence of such fundamental transaction. Additionally, in the event of a fundamental transaction, we or any successor entity will, at the option of the holder of a Inducement Warrant form the holder by paying to the holder an amount of consideration equal to the value of the remaining unexercised portion of such Inducement Warrant on the date of consummation of the fundamental transaction based on the Black-Scholes option pricing model, determined pursuant to a formula set forth in the Inducement Warrants. The consideration paid to the holder will be the same type or form of consideration that was offered and paid to the holders of Common Stock will be deemed to have received Common Stock of the successor entity in such fundamental transaction for purposes of this provision of the Inducement Warrants.

Transferability

In accordance with its terms and subject to applicable laws, a Inducement Warrant may be transferred at the option of the holder upon surrender of the Inducement Warrant to us together with the appropriate instruments of transfer and payment of funds sufficient to pay any transfer taxes (if applicable).

Fractional Shares

No fractional shares of Common Stock will be issued upon the exercise of the Inducement Warrants. Rather, the number of shares of Common Stock to be issued will, at our election, either be rounded up to the nearest whole number or we will pay a cash adjustment in respect of such final fraction in an amount equal to such fraction multiplied by the exercise price.

Trading Market

There is no established trading market for the Inducement Warrants, and we do not expect a market to develop. We do not intend to apply for a listing for the Inducement Warrants on any securities exchange or other nationally recognized trading system. Without an active trading market, the liquidity of the Inducement Warrants will be limited.

Rights as a Shareholder

Except as otherwise provided in the Inducement Warrants or by virtue of the holders' ownership of shares of Common Stock, the holders of Inducement Warrants do not have the rights or privileges of holders of our shares of Common Stock, including any voting rights, until such Inducement Warrant holders exercise their warrants.

Possible Anti-Takeover Effects of Delaware Law and our Certificate of Incorporation and By-Laws

Our Certificate of Incorporation contains provisions that could make it more difficult to acquire control of our company by means of a tender offer, open market purchases, a proxy contest or otherwise. A description of these provisions is set forth below.

Anti-Takeover Effects of Certain Provisions of Delaware Law, Our Amended and Restated Certificate of Incorporation and Our Amended and Restated Bylaws

Certain provisions of Delaware law and certain provisions that are included in our amended and restated certificate of incorporation and amended and restated bylaws summarized below may be deemed to have an anti- takeover effect and may delay, deter, or prevent a tender offer or takeover attempt that a stockholder might consider to be in its best interests, including attempts that might result in a premium being paid over the market price for the shares held by stockholders. Certain provisions of the charter require the affirmative approval of two-thirds vote of the outstanding stock of the Company.

Preferred Stock

Our amended and restated certificate of incorporation contains provisions that permit our board of directors to issue, without any further vote or action by the stockholders, shares of preferred stock in one or more series and, with respect to each such series, to fix the number of shares constituting the series and the designation of the series, the voting rights (if any) of the shares of the series, and the powers, preferences or relative, participation, optional and other special rights, if any, and any qualifications, limitations or restrictions, of the shares of such series. The issuance of preferred stock could adversely affect the voting power of holders of our common stock and the likelihood that such holders will receive dividend payments and payments upon liquidation. In addition, the issuance of preferred stock could have the effect of delaying, deferring or preventing change in our control or other corporate action.

Classified board of directors

Our amended and restated certificate of incorporation provides that our board of directors is divided into three classes, designated Class I, Class II, and Class III. Each class has an equal number of directors, as nearly as possible, consisting of one-third of the total number of directors constituting our entire board of directors. The term of the current Class I director shall terminate on the date of the 2027 annual meeting, the term of the Class II directors shall terminate on the date of the 2026 annual meeting. At each annual meeting of stockholders, successors to the class of directors whose terms expire at that annual meeting are elected for three-year terms.

Removal of Directors

Our amended and restated certificate of incorporation provides that stockholders may only remove a director for cause by a vote of no less than a majority of the shares present in person or by proxy at the meeting and entitled to vote.

Director Vacancies

Our amended and restated certificate of incorporation authorizes only our board of directors to fill vacant directorships.

No Cumulative Voting

Our amended and restated certificate of incorporation provides that stockholders do not have the right to cumulate votes in the election of directors.

Special Meetings of Stockholders

Our amended and restated certificate of incorporation and amended and restated bylaws provide that, except as otherwise required by law, special meetings of the stockholders may be called only by an officer at the request of a majority of our board of directors, by the chairperson or president of our board of directors, or by our Chief Executive Officer.

Advance Notice Procedures for Director Nominations

Our amended and restated bylaws provide that stockholders seeking to nominate candidates for election as directors at an annual or special meeting of stockholders must provide timely notice thereof in writing. To be timely, a stockholder's notice generally will have to be delivered to and received at our principal executive offices before notice of the meeting is issued by the secretary of the company, with such notice being served not less than 90 nor more than 120 days before the meeting. Although the amended and restated bylaws do not give our board of directors the power to approve or disapprove stockholder nominations of candidates to be elected at an annual meeting, the amended and restated bylaws may have the effect of precluding the conduct of certain business at a meeting if the proper procedures are not followed or may discourage or deter a potential acquirer from conducting a solicitation of proxies to elect its own slate of directors or otherwise attempting to obtain control of the company.

Action by Written Consent

Our amended and restated certificate of incorporation and amended and restated bylaws provide that any action to be taken by the stockholders must be effected at a duly called annual or special meeting of stockholders and may not be effected by written consent.

Amending our Certificate of Incorporation and Bylaws

Our amended and restated certificate of incorporation may be amended or altered in any manner provided by the DGCL. Certain provisions of our amended and restated certificate of incorporation may only be amended or altered in any manner by the affirmative vote of 66 2/3% of the thenoutstanding shares of our common stock. Our amended and restated bylaws may not be amended by stockholders. Additionally, our amended and restated certificate of incorporation provides that our bylaws may be amended, altered, or repealed by our board of directors.

Authorized but Unissued Shares

Our authorized but unissued shares of common stock and preferred stock are available for future issuances without stockholder approval, except as required by the listing standards of Nasdaq, and could be utilized for a variety of corporate purposes, including future offerings to raise additional capital, acquisitions and employee benefit plans. The existence of authorized but unissued and unreserved shares of our common stock and preferred stock could render more difficult or discourage an attempt to obtain control of the company by means of a proxy contest, tender offer, merger or otherwise.

Exclusive Forum

Our amended and restated certificate of incorporation provides that, unless we consent to the selection of an alternative forum, the Court of Chancery of the State of Delaware shall be the sole and exclusive forum for any derivative action or proceeding brought on our behalf, any action asserting a claim of breach of fiduciary duty, any action asserting a claim arising pursuant to the DGCL, any action regarding our amended and restated certificate of incorporation or our amended and restated bylaws or any action asserting a claim against us that is governed by the internal affairs doctrine. Our amended and restated certificate of incorporation further provides that the federal district courts of the United States of America will be the exclusive forum for resolving any

complaint asserting a cause of action arising under the Securities Act. The choice of the Court of Chancery of the State of Delaware as the sole and exclusive forum for any derivative action or proceeding brought on our behalf does not apply to suits seeking to enforce a duty or liability created by the Securities Act or Exchange Act.

Business Combinations with Interested Stockholders

Subject to certain exceptions, Section 203 of the DGCL prohibits a public Delaware corporation from engaging in a business combination (as defined in such section) with an "interested stockholder" (defined generally as any person who beneficially owns 15% or more of the outstanding voting stock of such corporation or any person affiliated with such person) for a period of three years following the time that such stockholder became an interested stockholder, unless (i) prior to such time the board of directors of such corporation approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder; (ii) upon consummation of the transaction that resulted in the stockholder becoming an interested stockholder owned at least 85% of the voting stock of such corporation at the time the transaction commenced (excluding for purposes of determining the voting stock of such corporation and (B) by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer); or (ii) at or subsequent to such time the business combination is approved by the board of directors of such corporation and authorized at a meeting of stockholders.

Our amended and restated certificate of incorporation and our amended and restated bylaws provide that we must indemnify our directors and officers to the fullest extent authorized by the DGCL. We are expressly authorized to carry, and we do carry, directors' and officers' insurance providing coverage for our directors, officers and certain employees for some liabilities. We believe that these indemnification provisions and insurance are useful to attract and retain qualified directors and executive directors.

The limitation on liability and indemnification provisions in our amended and restated certificate of incorporation and amended and restated bylaws may discourage stockholders from bringing a lawsuit against directors for breach of their fiduciary duty. These provisions may also have the effect of reducing the likelihood of derivative litigation against directors and officers, even though such an action, if successful, might otherwise benefit us and our stockholders. In addition, your investment may be adversely affected to the extent we pay the costs of settlement and damage awards against directors and officers pursuant to these indemnification provisions.

LEGAL MATTERS

The validity of the issuance of our securities offered in this prospectus will be passed upon for us by McDermott Will & Emery LLP, New York, New York.

EXPERTS

The consolidated financial statements of Inhibikase Therapeutics, Inc. and Subsidiary for the years ended December 31, 2023 and 2022 have been audited by CohnReznick LLP, independent registered public accounting firm, as set forth in their report thereon appearing in Inhibikase Therapeutics, Inc. and Subsidiary's Annual Report on Form 10-K for the year ended December 31, 2023, and incorporated by reference herein. Such consolidated financial statements are incorporated by reference herein in reliance upon such report, which includes an explanatory paragraph on Inhibikase Therapeutics, Inc. and Subsidiary's ability to continue as a going concern, given on the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

We have filed with the SEC a registration statement on Form S-1 under the Securities Act with respect to the securities offered by this prospectus. This prospectus, which constitutes a part of the registration statement, does not contain all of the information set forth in the registration statement, as permitted by the rules and regulations of the SEC. For further information with respect to us and our securities, we refer you to the registration statement, including the exhibits filed as a part of the registration statement. Statements contained in this prospectus concerning the contents of any contract or any other document are not necessarily complete. If a contract or document has been filed as an exhibit to the registration statement, please see the copy of the contract or document that has been filed. Each statement in this prospectus relating to a contract or document filed as an exhibit is qualified in all respects by the filed exhibit. The SEC also maintains an Internet website that contains the registration statement of which this prospectus forms a part, as well as the exhibits thereto. These documents, along with future reports, proxy statements and other information about us, are available at the SEC's website, www.sec.gov.

We are subject to the information and reporting requirements of the Exchange Act, and, in accordance with this law, file periodic reports and other information with the SEC. These periodic reports and other information are available at the SEC's website, www.sec.gov. We also maintain a website at http://www.adnas.com. You may access these materials free of charge as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC. Information contained on our website is not a part of this prospectus, and the inclusion of our website address in this prospectus is an inactive textual reference only.

MATERIAL CHANGES

None.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE.

The SEC allows us to "incorporate by reference" into this prospectus the information in documents we file with it, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be a part of this prospectus, and information that we file later with the SEC will automatically update and supersede this information. Any statement contained in any document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in or omitted from this prospectus or any accompanying prospectus supplement, or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein, modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

We incorporate by reference the documents listed below and any future documents that we file with the SEC (excluding any portion of such documents that are furnished and not filed with the SEC) under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act (1) on and after the date of the initial filing of the registration statement of which this prospectus is a part prior to the effectiveness of the registration statement, (2) prior to the effectiveness of the registration statement, (2) prior to the effectiveness of the registration statement of which this prospectus is a part, and (3) after the date of effectiveness of this prospectus until the offering of the underlying securities is terminated; provided, however, we are not incorporating by reference any information furnished (but not filed) under Item 2.02 or Item 7.01 of any Current Report on Form 8-K:

- Our Annual Report on Form 10-K for the fiscal year ended December 31, 2023 filed with the SEC on March 27, 2024;
- Our Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2024, filed with the SEC on May 15, 2024;
- Our Current Reports on Form 8-K filed with the SEC on January 16, 2024, as amended by the Form 8-K/A filed with the SEC on <u>April 2</u>, 2024, February 1, 2024, February 7, 2024, April 30, 2024 (excluding Item 7.01), May 20, 2024 (excluding Item 7.01) and June 10, 2024; and
- The description of the Common Stock contained in the Company's Registration Statement on Form 8-A filed with the Commission on October 29, 2020 (File No. 001-39676), together with any amendment thereto filed with the SEC for the purpose of updating such description.

Upon written or oral request, we will provide without charge to each person, including any beneficial owner, to whom a copy of the prospectus is delivered a copy of the documents incorporated by reference in this prospectus (other than exhibits to such documents unless such exhibits are specifically incorporated by reference in this prospectus). You may request a copy of these filings, at no cost, by writing or telephoning us at the following address: Inhibitase Therapeutics, Inc., 3350 Riverwood Parkway SE, Suite 1900, Atlanta, GA 30339. You may also access these documents on our website at *www.inhibitase.com*.

Information on our website, including subsections, pages, or other subdivisions of our website, or any website linked to by content on our website, is not part of this prospectus and you should not rely on that information unless that information is also in this prospectus or incorporated by reference in this prospectus.

4,761,904 shares of Common Stock



Inhibikase Therapeutics, Inc.

PRELIMINARY PROSPECTUS

, 2024

PART II

INFORMATION NOT REQUIRED IN THE PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution

The following table sets forth the expenses to be incurred in connection with the offering described in this Registration Statement. All amounts are estimates except the SEC's registration fee.

| | Amount to be Paid |
|------------------------------|-------------------|
| SEC Registration Fee | \$ 1,180.80 |
| Printing expenses | \$ 20,000 |
| Legal fees and expenses | \$ 25,000 |
| Accounting fees and expenses | \$ 10,000 |
| Total | \$ 56,180.80 |

Item 14. Indemnification of Directors and Officers

Section 145 of the Delaware General Corporation Law empowers a corporation to indemnify its directors and officers and to purchase insurance with respect to liability arising out of their capacity or status as directors and officers, provided that the person acted in good faith and in a manner the person reasonably believed to be in our best interests, and, with respect to any criminal action, had no reasonable cause to believe the person's actions were unlawful. The Delaware General Corporation Law further provides that the indemnification permitted thereunder shall not be deemed exclusive of any other rights to which the directors and officers may be entitled under the corporation's bylaws, any agreement, a vote of stockholders or otherwise. The amended and restated certificate of incorporation of the registrant provides for the indemnification of the registrant's directors and officers to the fullest extent permitted under the Delaware General Corporation Law. In addition, the amended and restated bylaws of the registrant require the registrant to fully indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding (whether civil, criminal, administrative or investigative) by reason of the fact that such person is or was a director or officer of the registrant, or is or was a director or officer of the registrant, or is or was a director or officer of the registrant, or is or was a director or officer of the registrant, point venture, trust or of the registrant serving at the registrant's fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding, to the fullest extent permitted by applicable law.

Section 102(b)(7) of the Delaware General Corporation Law permits a corporation to provide in its certificate of incorporation that a director of the corporation shall not be personally liable to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, except (i) for any breach of the director's duty of loyalty to the corporation or its stockholders; (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law; (iii) for payments of unlawful dividends or unlawful stock repurchases or redemptions; or (iv) for any transaction from which the director derived an improper personal benefit. The registrant's amended and restated certificate of incorporation provides that the registrant's directors shall not be personally liable to it or its stockholders for monetary damages for breach of fiduciary duty as a director and 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 the registrant's directors shall be eliminated or limited to the fullest extent permitted by the Delaware General Corporation Law, as so amended.

As permitted by the Delaware General Corporation Law, the registrant has entered into separate indemnification agreements with each of the registrant's directors and certain of the registrant's officers which require the registrant, among other things, to indemnify them against certain liabilities which may arise by reason of their status as directors, officers or certain other employees.

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The registrant has obtained and maintains insurance policies under which its directors and officers are insured, within the limits and subject to the limitations of those policies, against certain expenses in connection with the defense of, and certain liabilities which might be imposed as a result of, actions, suits or proceedings to which they are parties by reason of being or having been directors or officers. The coverage provided by these policies may apply whether or not the registrant would have the power to indemnify such person against such liability under the provisions of the Delaware General Corporation Law.

These indemnification provisions and the indemnification agreements the registrant intends to enter into between the registrant and the registrant's officers and directors may be sufficiently broad to permit indemnification of the registrant's officers and directors for liabilities (including reimbursement of expenses incurred) arising under the Securities Act of 1933, as amended.

The registration rights agreements between the registrant and the Selling Stockholder filed as Exhibit 10.23 to this registration statement provides for the indemnification by the Selling Stockholder of the registrant against specified liabilities, including liabilities under the Securities Act with respect to information provided by the Selling Stockholder specifically for inclusion in the registration statement.

Item 15.

Recent Sales of Unregistered Securities

The following is a summary of transactions by us within the past three years involving sales or our securities that were not registered under the Securities Act. All of the sales listed below were made pursuant to an exemption from registration afforded by Section 4(a)(2) of the Securities Act and/or Regulation D thereunder in that (i) none of the offers and sales constituted a public offering of securities and/or (ii) the securities were only offered and sold to accredited investors.

On May 20, 2024, the Company entered into a placement agency agreement (the "Placement Agency Agreement") with Maxim Group LLC ("Maxim") pursuant to which Maxim Group agreed to serve as the exclusive placement agent, on a "reasonable best efforts" basis, in connection with the Offering of 714,527 shares of the Company's common stock and pre-funded warrants to purchase 957,925 shares of the Company's common stock and, in a concurrent private placement, unregistered private common warrants to purchase up to 3,344,904 shares of the Company's common stock. Also on May 20, 2024, in connection with the offering, the Company entered into a securities purchase agreement with an institutional investor (the "Selling Stockholder").

The offering closed on May 22, 2024. The Company received gross proceeds of approximately \$2.8 million, before deducting placement agent fees and other estimated offering expenses payable by the Company. Pursuant to the Placement Agency Agreement, the Company paid Maxim a cash placement fee of \$182,625.53 (equal to 6.5% of the aggregate gross proceeds raised in the offering from sales arranged for by Maxim). The Company also reimbursed Maxim for \$80,000 in expenses in connection with the offering, including but not limited to legal fees.

Also on May 20, 2024, the Company entered into a letter agreement (the "Inducement Letter") with the Selling Stockholder pursuant to which the Selling Stockholder agreed to exercise, for cash, certain existing warrants to purchase 708,500 shares of the Company's common stock at a reduced exercise price of \$1.68 per share, resulting in gross proceeds to the Company of approximately \$1.2 million. Pursuant to the Inducement Letter, the Company agreed to lower the exercise price of 1,229,484 additional existing warrants held by the Selling Stockholder to \$1.68 per share and issued new warrants to the Selling Stockholder to purchase, in the aggregate, up to 1,417,000 shares of Common Stock at an exercise price of \$1.68 per share. In connection with such transactions, the Company paid Maxim a cash fee of \$77,368.20 (equal to 6.5% of the gross proceeds received by the Company from the exercise by the Selling Stockholder of the 708,500 existing warrants).

In both September 2023 and December 2023, the Company issued 12,000 shares of Common Stock to an accredited investor in exchange for digital media consulting services. The fair value of the Common Stock was

\$17,280 and \$14,280, respectively, based upon the closing price of the shares on the date of the respective transaction. Issuance costs were not material. No additional rights or options were granted to the accredited investor in connection with these issuances.

In February 2022, a corporate accredited investor subscribed for, and the Company issued, 8,334 shares of Common Stock in exchange for consulting services. The fair value of the Common Stock was \$67,000 based upon the closing price of the shares on the date of the transaction. Issuance costs were not material. No additional rights or options were granted to the accredited investor in connection with this issuance.

In January 2022, the Company issued 3,643 shares of Common Stock to an accredited investor in connection with the exercise ofion-qualified stock options with a strike price of \$12.12 per share. Issuance costs were not material. No additional rights or options were granted to this accredited investor in connection with this issuance.

In August 2021, the Company issued 3,634 shares of Common Stock in connection with the exercise of non-qualified stock options with a strike price of \$12.12 per share.

Item 16. Exhibit and Financial Statement Schedules

(a) Exhibits.

The exhibit index attached hereto is incorporated herein by reference.

(b) Financial Statement Schedules.

Schedules have been omitted because the information required to be set forth therein is not applicable or is shown in the financial statements or notes thereto.

Item 17. Undertakings

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 U.S. Securities and Exchange 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 "Calculation of Registration Fee" table 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 (1)(i), (1)(ii) and (1)(iii) above 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 Securities and Exchange Commission by the registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in 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, 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 into the registration statement 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 prospectus tha

(5) That for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of securities, the undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

(i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;

(ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;

(iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and

(iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

(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 any charter provision, by law 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 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 it is against public policy as expressed in the Securities of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

(7) The undersigned registrant hereby undertakes that:

(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.

EXHIBIT INDEX

| Exhibit Number | Description* | Form | File Number | Where Located Exhibit Number | Filing Date | Filed Herewith |
|-------------------|--|-------|-------------|------------------------------------|-------------|-------------------|
| 3.1 | Amended and Restated Certificate of Incorporation of Inhibikase Therapeutics, Inc. | 8-K | 001-39676 | 3.1 | 12/29/2020 | |
| 3.2 | Certificate of Amendment to the Amended and Restated Certificate of Incorporation of Inhibikase Therapeutics, Inc. | 8-K | 001-39676 | 3.1 | 6/29/2023 | |
| 3.3 | Amended and Restated Bylaws of Inhibikase Therapeutics, Inc. | 8-K | 001-39676 | 3.2 | 12/29/2020 | |
| 4.1 | Specimen common stock Certificate of the Registrant. | S-1 | 333-240036 | 4.1 | 07/23/2020 | |
| 4.2 | Form of Warrant to purchase common stock of the Registrant, issued to each of the members of the Scientific Advisory Board and the investor named in Schedule A thereto. | S-1 | 333-240036 | 4.2 | 07/23/2020 | |
| 4.3 | Warrant, issued by Inhibikase Therapeutics, Inc. to Kubera North America, Inc., dated October 5, 2018. | S-1 | 333-240036 | 4.3 | 07/23/2020 | |
| 4.4 | Warrant, issued by Inhibikase Therapeutics, Inc. to Francis E. McDaniel, dated January 1, 2019. | S-1/A | 333-240036 | 4.4 | 09/15/2020 | |
| 4.5 | Warrant, issued by Inhibikase Therapeutics, Inc. to Francis E. McDaniel, dated March 31, 2020. | S-1 | 333-240036 | 4.5 | 07/23/2020 | |
| 4.6 | Form of Representative's Warrant. | S-1 | 333-240036 | 4.6 | 07/23/2020 | |
| 4.7 | Form of Late IPO Warrant. | S-1 | 333-240036 | 4.7 | 07/23/2020 | |
| 4.8 | Form of Pre-Funded Warrant (January 2023). | 8-K | 001-39676 | 4.1 | 01/26/2023 | |
| 4.9 | Form of Private Common Warrant (January 2023). | 8-K | 001-39676 | 4.2 | 01/26/2023 | |
| 4.10 | Form of PIPE Pre-Funded Warrant (January 2023). | 8-K | 001-39676 | 4.3 | 01/26/2023 | |
| 4.11 | Form of PIPE Common Warrant (January 2023). | 8-K | 001-39676 | 4.4 | 01/26/2023 | |
| 4.12 | Form of Placement Agent Warrant (January 2023). | 8-K | 001-39676 | 4.5 | 01/26/2023 | |
| 4.13 | Form of Pre-Funded Warrant. | 8-K | 001-39676 | 4.1 | 05/20/2024 | |
| 4.14 | Form of Series A Warrant. | 8-K | 001-39676 | 4.2 | 05/20/2024 | |
| | | | | | | |

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| Exhibit Number | Description* | Form | File Number | Where Located Exhibit Number | Filing Date | Filed Herewith |
|-------------------|--|-------|-------------|------------------------------------|-------------|-------------------|
| 4.15 | Form of Series B Warrant. | 8-K | 001-39676 | 4.3 | 05/20/2024 | |
| 4.16 | Form of Series C Warrant. | 8-K | 001-39676 | 4.4 | 05/20/2024 | |
| 4.17 | Form of Series D Warrant. | 8-K | 001-39676 | 4.5 | 05/20/2024 | |
| 4.18 | Form of Warrant Amendment. | 8-K | 001-39676 | 4.6 | 05/20/2024 | |
| 5.1 | Opinion of McDermott Will & Emery LLP. | | | | | Х |
| 10.1 | <u>Collaborative Research and Development Agreement, by and</u> <u>between Inhibikase Therapeutics, Inc. and Sphaera Pharma Pte. Ltd.,</u> <u>dated February 29, 2012.</u> | S-1 | 333-240036 | 10.2 | 07/23/2020 | |
| 10.2 | First Amendment to Collaborative Research and Development Agreement, by and between Inhibikase Therapeutics Inc. and Sphaera Pharma Pte. Ltd., dated October 5, 2012. | S-1 | 333-240036 | 10.3 | 07/23/2020 | |
| 10.3# | 2011 Equity Incentive Plan and forms of agreements thereunder. | S-1 | 333-240036 | 10.4 | 07/23/2020 | |
| 10.4# | 2020 Equity Incentive Plan and forms of agreements thereunder. | S-1/A | 333-240036 | 10.5 | 12/04/2020 | |
| 10.5# | Employment Agreement, by and between Inhibikase Therapeutics, Inc. and Milton H. Werner, Ph.D., effective upon the completion of the Company's Initial Public Offering. | S-1 | 333-240036 | 10.7 | 07/23/2020 | |
| 10.6 | Form of Inhibikase Therapeutics, Inc. Directors and Officers Indemnification Agreement. | S-1 | 333-240036 | 10.9 | 07/23/2020 | |
| 10.7 | Side Letter to Subscription Agreement of Joseph Ventures Allium, LLC, dated July 19, 2018. | S-1 | 333-240036 | 10.11 | 07/23/2020 | |
| 10.8 | Side Letter to Subscription Agreement of Joseph Ventures Allium, LLC, dated August 31, 2018. | S-1 | 333-240036 | 10.12 | 07/23/2020 | |
| 10.9 | Side Letter to Subscription Agreement of Joseph Ventures Allium, LLC, dated June 15, 2018. | S-1 | 333-240036 | 10.13 | 07/23/2020 | |
| 10.10 | Form of Representative's Warrant Agreement. | 8-K | 001-39676 | 4.1 | 06/16/2021 | |
| 10.11# | Amendment dated March 3, 2022 to the Employment Agreement, by and between Inhibikase Therapeutics, Inc. and Milton H. Werner, Ph.D., dated December 28, 2020. | 8-K | 001-39676 | 10.1 | 03/08/2022 | |

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| Exhibit Number | Description* | Form | File Number | Where Located Exhibit Number | d Filing Date | Filed Herewith |
|-------------------|--|------|-------------|------------------------------------|------------------|-------------------|
| 10.12 | Form of Stock Option Grant Notice and Award Agreement. | 8-K | 001-39676 | 10.3 | 03/08/2022 | |
| 10.13# | Form of Director Offer Letter. | 8-K | 001-39676 | 10.1 | 09/01/2022 | |
| 10.14 | Securities Purchase Agreement, dated as of January 25, 2023 (Registered Direct). | 8-K | 001-39676 | 10.1 | 01/26/2023 | |
| 10.15 | Securities Purchase Agreement, dated as of January 25, 2023 (PIPE). | 8-K | 001-39676 | 10.2 | 01/26/2023 | |
| 10.16 | Registration Rights Agreement, dated as of January 25, 2023 (PIPE). | 8-K | 001-39676 | 10.3 | 01/26/2023 | |
| 10.17 | At The Market Offering Agreement, dated February 1, 2024, by and between Inhibikase Therapeutics, Inc. and H.C. Wainwright & Co., LLC. | 8-K | 001-39676 | 10.1 | 02/01/2024 | |
| 10.18 | Employment Agreement between Inhibikase Therapeutics, Inc. and Garth Lees-Rolfe, dated as of April 1, 2024. | S-1 | 333-278844 | 10.18 | 04/19/2024 | |
| 10.19 | Form of Lock-Up Agreement (May 2024). | | | | | Х |
| 10.20 | Support Agreement, dated as of May 20, 2024, by and between the Company and Milton H. Werner, Ph.D. | | | | | Х |
| 21.1 | Subsidiaries of the Registrant. | 10-K | 001-39676 | 21.1 | 03/31/2023 | |
| 23.1 | Consent of Independent Registered Public Accounting Firm. | | | | | Х |
| 23.2 | Consent of McDermott Will and Emery LLP (included in Exhibit 5.1). | | | | | Х |
| 24.1 | Power of Attorney (included on signature page). | | | | | Х |
| 107 | Filing Fee Table. | | | | | Х |
| | | | | | | |

(#) A contract, compensatory plan or arrangement to which a director or executive officer is a party or in which one or more directors or executive officers are eligible to participate.

(*) Certain of the agreements filed as exhibits contain representations and warranties made by the parties thereto. The assertions embodied in such representations and warranties are not necessarily assertions of fact, but a mechanism for the parties to allocate risk. Accordingly, investors should not rely on the representations and warranties as characterizations of the actual state of facts or for any other purpose at the time they were made or otherwise.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Atlanta, State of Georgia, on the 18th day of June, 2024.

INHIBIKASE THERAPEUTICS, INC.

By: /s/ Milton H. Werner Milton H. Werner, Ph.D. President and Chief Executive Officer

KNOW ALL MEN BY THESE PRESENTS, that each officer and director of Inhibikase Therapeutics, Inc. whose signature appears below constitutes and appoints Milton H. Werner, Ph.D. and Garth Lees-Rolfe and each of them, his true and lawful attorney-in-fact and agent, with full power of substitution and revocation, for him and in his name, place and stead, in any and all capacities, to execute any or all amendments including any post- effective amendments and supplements to this Registration Statement, and any additional Registration Statement filed pursuant to Rule 462(b), and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agent full power and authority to do and perform each and every act and thing requisite and necessary to be done, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent, or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

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

| Signature | Title | Date |
|---|---|---------------|
| /s/ Milton H. Werner Milton H. Werner, Ph.D. | President, Chief Executive Officer and Director (Principal Executive Officer) | June 18, 2024 |
| /s/ Garth Lees-Rolfe Garth Lees-Rolfe, CPA | Chief Financial Officer (Principal Financial Officer) | June 18, 2024 |
| /s/ Dennis Berman Dennis Berman | Director | June 18, 2024 |
| /s/ Roy Freeman Roy Freeman | Director | June 18, 2024 |
| /s/ Paul Grint Paul Grint | Director | June 18, 2024 |
| /s/ Gisele Dion Gisele Dion | Director | June 18, 2024 |



June 18, 2024

Inhibikase Therapeutics, Inc. 3350 Riverwood Parkway SE, Suite 1900 Atlanta, Georgia 30339

Re: Registration Statement on Form S-1

Ladies and Gentlemen:

Reference is made to the filing by Inhibikase Therapeutics, Inc., a Delaware corporation (the '*Company*''), with the United States Securities and Exchange Commission (the "*SEC*") pursuant to the Securities Act of 1933, as amended (the '*Securities Act*''), of the Company's registration statement on Form S-1 (the '*Registration Statement*'), filed on June 18, 2024, which includes a prospectus (the '*Prospectus*'').

We are rendering this opinion in connection with the filing by the Company with the SEC of the Registration Statement relating to the offering by a selling stockholder (the "Selling Stockholder") of up to an aggregate of 4,761,904 shares of the Company's common stock, par value \$0.001 per share (the "Common Stock"), which is comprised of: (i) 3,344,904 shares of Common Stock underlying common stock purchase warrants issued to the selling stockholder in a private placement on May 22, 2024 (the "Private Common Warrants" and the shares of Common Stock underlying the Private Common Warrants, the "Private Common Warrant Shares"), (ii) 1,417,000 shares of Common Stock underlying certain other common stock purchase warrants issued to the Selling Stockholder in a private placement on May 22, 2024 (the "Inducement Warrants" and such the shares of Common Stock underlying the Inducement Warrants, the "Inducement Warrants" is contingent on May 22, 2024 (the "Inducement Warrants" and such the shares of Common Stock underlying the Inducement Warrants, the "Inducement Warrants" is contingent upon the Company's receipt of stockholder approval, in accordance with Nasdaq Listing Rule 5635(d) ("Stockholder Approval"). 1,672,452 of the Private Common Warrants are exercisable for a period of twelve months from the date that Stockholder Approval is obtained (the "Series B Warrants"). 708,500 of the Inducement Warrants are exercisable for twelve months from the date that Stockholder Approval is obtained (the "Series C Warrants"). and the remaining 708,500 Inducement Warrants are exercisable for five years from the date that Stockholder Approval is obtained (the "Series C Warrants").

We understand that the Private Common Warrant Shares to be issued upon the exercise of the Private Common Warrants and the Inducement Warrant Shares to be issued upon the exercise of the Inducement Warrants are to be offered and sold in the manner set forth in the Prospectus. This opinion letter is furnished to you at your request to enable you to fulfill the requirements of Item 601(b)(5) of Regulation S-K in connection with the Registration Statement.

We have acted as your counsel in connection with the preparation of the Registration Statement. We are familiar with the proceedings taken by the board of directors of the Company (the "*Board*") in connection with the authorization, issuance and sale of the Private Common Warrant Shares and the Inducement Warrant Shares. We have examined all such documents as we considered necessary to enable us to render this opinion, including, but not limited to: (i) the Registration Statement, (ii) the Series A Warrants, (iii) the Series B Warrants, (iv) the Series C Warrants, (v) the Series D Warrants, (vi) the Securities Purchase Agreement, dated as of May 20, 2024, by and between the Company and the Selling Stockholder, (vii) the Placement Agency Agreement, dated as of May 20, 2024, by and between the Company and the Selling Stockholder, (ix) the Company's amended and restated certificate of incorporation, as amended to date, (x) the Company's amended and restated bylaws, as amended to date, (ix) certain resolutions of the Board, and (x) such other corporate records and instruments, and such laws and regulations as we have deemed necessary for purposes of rendering the opinions set forth herein.

In our examination, we have assumed the legal capacity of all natural persons, the genuineness of all signatures, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as certified, conformed, photostatic or facsimile copies, the authenticity of all documents submitted to us as certified, conformed, photostatic or facsimile copies, the authenticity of the originals of such certified, conformed, photostatic or facsimile copies. In addition, we have assumed that the Private Common Warrant Shares and the Inducement Warrant Shares will be offered in the manner and on the terms identified or referred to in the Prospectus. As to any facts material to the opinions expressed herein, which were not independently established or verified, we have relied upon statements and representations of officers and other representatives of the Company and others.

We express no opinion herein as to the law of any state or jurisdiction other than the laws of the State of New York and the General Corporation Law of the State of Delaware.

Based upon the foregoing, and subject to the assumptions, limitations and qualifications stated herein, we are of the opinion that the Private Common Warrant Shares and the Inducement Warrant Shares have been duly authorized and, when issued and delivered by the Company subsequent to Stockholder Approval in accordance with the terms of the Private Common Warrants and the Inducement Warrants, as applicable, and upon receipt by the Company of the consideration therefor provided therein, will be validly issued, fully paid and non-assessable.

We assume no obligation to supplement this opinion if any applicable law changes after the date hereof or if we become aware of any fact that might change the opinion expressed herein after the date hereof. We hereby consent to the filing of this opinion as a part of the Registration Statement and to the reference of our firm under the caption "Legal Matters" in the Prospectus. In giving such consent, we do not hereby admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the SEC.

Very truly yours,

/s/ MCDERMOTT WILL & EMERY LLP

McDermott Will & Emerγ

One Vanderbilt Avenue New York NY 10017-3852 Tel +1 212 547 5400 Fax +1 212 547 5444

US practice conducted through McDermott Will & Emery LLP.

May 22, 2024

Maxim Group LLC 300 Park Ave, 16th Floor New York, NY 10022

Re: Placement of Inhibikase Therapeutics, Inc.

Ladies and Gentlemen:

The undersigned, a holder of securities of Inhibikase Therapeutics, Inc., a Delaware corporation (the '**Company**'), understands that you are the placement agent (the "**Placement Agent**") named in the letter agreement dated May 20, 2024 (the '**Placement Agreement**") between the Placement Agent and the Company, providing for the placement (the "**Placement**") of shares of the Company's common stock, par value \$0.001 per share ('**Common Stock**"), or Pre-Funded Warrants (the "**Pre-Funded Warrants**"), and Common Warrants (the "**Common Warrants**", and together with the Common Stock and Pre-Funded Warrants, the "**Securities**"). Capitalized terms used herein and not otherwise defined shall have the meanings set forth for them in the Placement.

In consideration of the Placement Agent's agreement to proceed with the Placement of the Securities, and for other good and valuable consideration, receipt of which is hereby acknowledged, the undersigned hereby agrees, for the benefit of the Company and the Placement Agent that, without the prior written consent of the Placement Agent, the undersigned will not, during the period specified in the following paragraph (the "Lock-Up Period"), directly or indirectly, unless otherwise provided herein, (a) offer, sell, agree to offer or sell, solicit offers to purchase, convert, exercise, exchange, grant any call option or purchase any put option with respect to, pledge, encumber, assign, borrow or otherwise dispose of or transfer (each a "Transfer") any Relevant Security (as defined below) or otherwise publicly disclose the intention to do so, or (b) establish or increase any "put equivalent position" or liquidate or decrease any "call equivalent position" (in each case within the meaning of Section 16 of the Securities Exchange Act of 1934 (the "Exchange Act") and the rules and regulations thereunder) with respect to any Relevant Security or otherwise enter into any swap, derivative or other transaction or arrangement that Transfers to another, in whole or in part, any economic consequence of ownership of a Relevant Security, whether or not such transaction is to be settled by the delivery of Relevant Securities, other securities, cash or other consideration, or otherwise Shares or any other security of the Company or any other entity that is convertible into, or exercisable or exchangeable for, Shares or any other equity security of the Company, in each case owned beneficially or otherwise by the undersigned on the date set forth on the front cover of the final prospectus used in connection with the Placement of the Securities (the "Effective Date") or acquired by the undersigned during the Lock-Up Period.

The Lock-Up Period will commence on the date of this Lock-up Agreement and continue and include the date that is six (6) months after the final closing of the Placement.

In addition, the undersigned further agrees that, without the prior written consent of the Placement Agent, during theLock-Up Period the undersigned will not: (i) file or participate in the filing with the SEC of any registration statement or circulate or participate in the circulation of any preliminary or final prospectus or other disclosure document, in each case with respect to any proposed offering or sale of a Relevant Security, or (ii) exercise any rights the undersigned may have to require registration with the SEC of any proposed offering or sale of a Relevant Security. In furtherance of the undersigned's obligations hereunder, the undersigned hereby authorizes the Company during the Lock-Up Period to cause any transfer agent for the Relevant Securities to decline to transfer, and to note stop transfer restrictions on the stock register and other records relating to, Relevant Securities for which the undersigned is the beneficial but not the record owner, agrees that during the Lock-Up Period it will cause the record owner to cause the relevant transfer agent to decline to transfer, and to note stop transfer restrictions on the stock register and other records relating to, such Relevant Securities for which the undersigned is the beneficial but not the record owner, agrees that during the Lock-Up Period it will cause the record owner to cause the relevant transfer agent to decline to transfer, and to note stop transfer restrictions on the stock register and other records relating to, such Relevant Securities for which the undersigned is the beneficial but not the record owner, agrees that during the Lock-Up Period it will cause the record owner to cause the relevant transfer agent to decline to transfer, and to note stop transfer restrictions on the stock register and other records relating to, such Relevant Securities to the extent such transfer would be a violation of this Lock-Up Agreement.

Notwithstanding the foregoing, the undersigned may transfer the undersigned's Relevant Securities:

- (i) as a *bona fide* gift or gifts,
- (ii) to any trust for the direct or indirect benefit of the undersigned or a member of members of the immediate family of the undersigned,
- (iii) if the undersigned is a corporation, partnership, limited liability company, trust or other business entity, (1) to another corporation, partnership, limited liability company, trust or other business entity that is a direct or indirect affiliate (as defined in Rule 405 under the Securities Act of 1933) of the undersigned, (2) to limited partners, limited liability company members or stockholders of the undersigned, or (3) in connection with a sale, merger or transfer of all or substantially all of the assets of the undersigned or any other change of control of the undersigned, not undertaken for the purpose of avoiding the restrictions imposed by this Lock-Up Agreement,
- (iv) if the undersigned is a trust, to the beneficiary of such trust,
- (v) by testate or intestate succession, or
- (vi) by operation of law, such as pursuant to a qualified domestic order or in connection with a divorce settlement,

provided, in the case of clauses (i)-(vi), that (A) such transfer shall not involve a disposition for value, (B) the transferee agrees in writing with the Placement Agent and the Company to be bound by the terms of this Lock-Up Agreement, and (C) such transfer would not require any filing under Section 16(a) of the Exchange Act and no such filing is voluntarily made.

For purposes of this Lock-Up Agreement, "immediate family" shall mean any relationship by blood, marriage or adoption, not more remote than first cousin.

The undersigned hereby represents and warrants that the undersigned has full power and authority to enter into thisLock-Up Agreement and that this Lock-Up Agreement has been duly authorized (if the undersigned is not a natural person) and constitutes the legal, valid and binding obligation of the undersigned, enforceable in accordance with its terms. Upon request, the undersigned will execute any additional documents necessary in connection with the enforcement hereof. Any obligations of the undersigned shall be binding upon the successors and assigns of the undersigned from the date of this Lock-Up Agreement.

The undersigned understands that if the Placement Agreement (other than the provisions thereof which survive termination) shall terminate or be terminated prior to payment for and delivery of the Securities to be sold thereunder, the undersigned shall be released from all obligations under this Lock-Up Agreement.

The undersigned, whether or not participating in the Placement, understands that the Placement Agent is proceeding with the Placement in reliance upon this Lock-Up Agreement.

This Lock-Up Agreement shall be governed by and construed in accordance with the laws of the State of New York, without regard to the conflict of laws principles thereof. Delivery of a signed copy of this Lock-Up Agreement by facsimile or e-mail/.pdf transmission shall be effective as the delivery of the original hereof.

Very truly yours,

Signature: Name (printed): Title (if applicable): Entity (if applicable):

SUPPORT AGREEMENT

This SUPPORT AGREEMENT (this "<u>Agreement</u>") is entered into as of May 20, 2024, by and between Inhibikase Therapeutics, Inc., a Delaware corporation (the "<u>Company</u>") and the stockholder whose name appears on the signature page hereto (the '<u>Stockholder</u>").

WHEREAS, the Company and a certain investor (the '<u>Investor</u>") entered into a Securities Purchase Agreement, of even dated hereof (the '<u>Securities</u> <u>Purchase Agreement</u>"), pursuant to which, among other things, the Company has agreed to sell to the Investor up to an aggregate of approximately \$2.8 million of the Company's shares of common stock, par value \$0.001 per share (the "<u>Common Stock</u>") and Common Stock purchase warrants;

WHEREAS, the Company and the Investor entered into that certain letter agreement, even dated hereof (the <u>Letter Agreement</u>"), pursuant to which, among other things, the Investor has agreed to exercise the Existing Warrants (as defined in the Letter Agreement), and the Company has agreed to issue the New Warrants (as defined in the Letter Agreement);

WHEREAS, as of the date hereof, the Stockholder beneficially owns 889,242 shares of Common Stock (the <u>Stockholder Shares</u>"), which represent approximately 13.7% of the total issued and outstanding Common Stock of the Company; and

WHEREAS, as a condition to the willingness of the Investor to enter into the Securities Purchase Agreement and the Letter Agreement, and to consummate the transactions contemplated thereby (collectively, the "Transaction"), the Investor has required that the Stockholder agrees, and in order to induce the Investor to enter into the Securities Purchase Agreement and the Letter Agreement, the Stockholder has agreed, to enter into this Agreement with respect to all the Stockholder Shares now owned and which may hereafter be acquired by the Stockholder and any other securities of the Company (the "<u>Other Securities</u>" and together with the Stockholder Shares, the "<u>Stockholder Securities</u>"), if any, which the Stockholder is currently entitled to vote, or after the date hereof becomes entitled to vote, at any meeting of the stockholders of the Company.

NOW, THEREFORE, in consideration of the foregoing and the respective representations, warranties, covenants and agreements set forth below and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto, intending to be legally bound, do hereby agree as follows:

ARTICLE I VOTING AGREEMENT

1.1. <u>Voting of Stockholder Securities</u>. Subject to the last sentence of this Section 1.1, from and after the date hereof, at every meeting of the stockholders of the Company, however called, and at every adjournment or postponement thereof (or pursuant to a written consent if the Company's stockholders act by written consent in lieu of a meeting), the Stockholder shall, or shall cause the holder of record on any applicable record date to, be present (in person or by proxy) and to vote the Stockholder Securities (a) in favor of the Stockholder Approval (as defined in the Securities Purchase Agreement and the New Warrants); and (b) against any proposal or any other corporate action or agreement that would result in a breach of any covenant, representation or warranty or any other obligation or agreement of the Company under the Transaction Documents (as defined in the Securities Purchase Agreement), the Letter Agreement and the New Warrants, or which could result in any of the conditions to the Company's obligations thereunder not being fulfilled. The Stockholder acknowledges receipt and review of a copy of the Securities Purchase Agreement, including the other Transaction Documents, the Letter Agreement, and the New Warrants. The obligations of the Stockholder under this Section 1.01 shall terminate immediately following the occurrence of the Stockholder Approval.

ARTICLE II REPRESENTATIONS AND WARRANTIES OF THE STOCKHOLDER

The Stockholder represent and warrant to the Company and the Investor as follows:

2.1. <u>Authorization; Binding Agreement</u>. The Stockholder has all requisite power and authority to execute and deliver this Agreement, to perform its obligations hereunder and to consummate the transactions contemplated hereby. This Agreement has been duly executed and delivered by the Stockholder and constitutes a legal, valid and binding obligation of the Stockholder, enforceable against the Stockholder in accordance with its terms, except (a) as such enforceability may be limited by applicable bankruptcy, insolvency, reorganization, fraudulent conveyance, moratorium or similar laws now or hereafter in effect relating to, or affecting generally, the enforcement of creditors' rights and (b) where the remedy of specific performance or other forms of equitable relief may be subject to certain equitable defenses and principles and to the discretion of the court before which the proceeding may be brought.

2.2. <u>Ownership of Stockholder Securities</u>. As of the date hereof, the Stockholder is the owner of that number of shares of Common Stock set forth next to its signature hereto, entitled to vote, without restriction, on all matters brought before holders of capital stock of the Company. Such shares of Common Stock are all the securities of the Company owned, either of record or beneficially, by the Stockholder. Such Common Stock is owned free and clear of all Encumbrances (as defined below). The Stockholder has not appointed or granted any proxy, which appointment or grant is still effective, with respect to the Common Stock or Other Securities owned by the Stockholder.

2.3. <u>No Conflict</u>. The execution and delivery of this Agreement by the Stockholder does not, and the performance of this Agreement by the Stockholder shall not, (i) conflict with or violate any federal, state or local law, statute, ordinance, rule, regulation, order, judgment or decree applicable to the Stockholder or by which the Stockholder Securities owned by the Stockholder are bound or affected or (ii) result in any breach of or constitute a default (or an event that with notice or lapse of time or both would become a default) under, or give to others any rights of termination, amendment, acceleration or cancellation of, or result in the creation of a lien or encumbrance on any of the Stockholder Securities owned by the Stockholder is a party or by which the Stockholder or the Stockholder Securities owned by the Stockholder is bound. The execution and delivery of this Agreement by the Stockholder shall not, require any consent, approval, authorization or permit of, or filing with or notification to, any governmental entity by the Stockholder.

2.4. <u>Absence of Litigation</u>. With respect to the Stockholder, as of the date hereof, there is no action, suit, investigation, or proceeding pending against, or, to the knowledge of the Stockholder, threatened in writing against, the Stockholder or any of the Stockholder's properties or assets (including the Stockholder Securities) that could reasonably be expected to prevent, delay, or impair the ability of the Stockholder to perform the Stockholder's obligations hereunder or to consummate the transactions contemplated hereby.

ARTICLE III COVENANTS

3.1. <u>No Disposition or Encumbrance of Stock</u>. The Stockholder hereby severally but not jointly covenants and agrees that the Stockholder shall not offer or agree to sell, transfer, tender, assign, hypothecate or otherwise dispose of, grant a proxy or power of attorney with respect to, or create or permit to exist any security interest, lien, claim, pledge, option, right of first refusal, agreement, limitation on the Stockholder's voting rights, charge or other encumbrance of any nature whatsoever ("<u>Encumbrance</u>") with respect to the Stockholder Securities, directly or indirectly, or initiate, solicit or encourage any person to take actions which could reasonably be expected to lead to the occurrence of any of the foregoing.

3.2. <u>Company Cooperation</u>. The Company hereby covenants and agrees that it will not, and the Stockholder irrevocably and unconditionally acknowledges and agrees that the Company will not (and waives any rights against the Company in relation thereto), recognize any Encumbrance or agreement (other than this Agreement) on any of the Stockholder Securities subject to this Agreement.

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ARTICLE IV MISCELLANEOUS

4.1. <u>Further Assurances</u>. The Stockholder shall execute and deliver such further documents and instruments and take all further action as may be reasonably necessary in order to consummate the transactions contemplated hereby.

4.2. Termination. This Agreement shall terminate automatically, without any notice or other action by any Person, upon the Stockholder Approval.

4.3. <u>Specific Performance</u>. The parties hereto agree that irreparable damage would occur in the event any provision of this Agreement was not performed in accordance with the terms hereof and that the Investor shall be entitled to specific performance of the terms hereof, in addition to any other remedy at law or in equity. The Investor shall be entitled to its reasonable attorneys' fees in any action brought to enforce this Agreement in which it is the prevailing party.

4.4. Entire Agreement. This Agreement constitutes the entire agreement between the Company and the Stockholder (other than the Securities Purchase Agreement, including the other Transaction Documents, the Letter Agreement, and the New Warrants) with respect to the subject matter hereof and supersedes all prior agreements and understandings, both written and oral, among the Company and the Stockholder with respect to the subject matter hereof.

4.5. Amendment. This Agreement may not be amended except by an instrument in writing signed by the parties hereto.

4.6. <u>Severability</u>. If any term or other provision of this Agreement is invalid, illegal or incapable of being enforced by any rule of law, or public policy, all other conditions and provisions of this Agreement shall nevertheless remain in full force and effect so long as the economic or legal substance of this Agreement is not affected in any manner materially adverse to any party. Upon such determination that any term or other provision is invalid, illegal or incapable of being enforced, the parties hereto shall negotiate in good faith to modify this Agreement so as to effect the original intent of the parties as closely as possible in a mutually acceptable manner in order that the terms of this Agreement remain as originally contemplated to the fullest extent possible.

4.7. No Third Party Beneficiaries. This Agreement is intended for the benefit of the parties hereto and their respective permitted successors and assigns, and is not for the benefit of, nor may any provision hereof be enforced by, any other person.

4.8. <u>Governing Law</u>; Jurisdiction. All questions concerning the construction, validity, enforcement and interpretation of this Agreement shall be governed by the internal laws of the State of New York, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of New York or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of New York. The Company hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in the Borough of Manhattan in the City of New York, New York, for the adjudication of any dispute hereunder or in connection herewith or under the Letter Agreement, the New Warrants, or any of the other Transaction Documents or with any transaction contemplated hereby or thereby, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper. The parties consent to the jurisdiction and venue of the foregoing courts and consent that any process or notice of motion or other application to any of said courts or a judge thereof may be served inside or outside the State of New York or the Southern District of New York by registered mail, return receipt requested, directed to the party being served at its address set forth on the signature ages to this Agreement (and service so made shall be deemed complete three (3) days after the same has been posted as aforesaid) or by personal service or in such other manner as may be permissible under the rules of said courts. Each of the Company and the Stockholder irrevocably waives, to the fullest extent permitted by law, any objection which it may now or hereafter have to the laying of the venue of any such suit, action, or proceeding has been brought in an inconvenient forum. EACH PART

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TO REQUEST, A JURY TRIAL FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION WITH OR ARISING OUT OF THIS AGREEMENT OR ANY TRANSACTION CONTEMPLATED HEREBY.

[The remainder of the page is intentionally left blank]

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed as of the date first written above.

INHIBIKASE THERAPEUTICS, INC.

By:/s/ Garth Lees-RolfeName:Garth Less-RolfeTitle:Chief Financial Officer

STOCKHOLDER:

Milton H. Werner

| /s/ Milton H. Werner Milton H. Werner Stockholder |
|--|
| 889,242 s: 3350 Riverwood Pkwy SE, Ste 1900, Atlanta, GA 30339 |

Email: mhwerner@inhibikase.com

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in this Registration Statement on FormS-1 and related Prospectus, of our report dated March 27, 2024, with respect to the consolidated financial statements of Inhibikase Therapeutics, Inc. and Subsidiary as of December 31, 2023 and 2022, and for the years then ended, which report is included in the Annual Report on Form 10-K of Inhibikase Therapeutics, Inc. and Subsidiary for the year ended December 31, 2023, filed with the Securities and Exchange Commission. Our audit report includes an explanatory paragraph relating to Inhibikase Therapeutics, Inc. and Subsidiary ability to continue as a going concern.

We also consent to the reference to our firm under the caption "Experts."

/s/ CohnReznick LLP

Holmdel, New Jersey

June 18, 2024

Calculation of Filing Fee Table

S-1

(Form Type)

Inhibikase Therapeutics, Inc. (Exact Name of Registrant as Specified in its Charter)

Table 1: Newly Registered Securities

| | Security Type | Security Class Title | Fee Calculation Rule | Amount Registered ⁽¹⁾ | Proposed Maximum Offering Price Per Unit | Maximum Aggregate Offering Price | Fee Rate | Amount of Registration Fee |
|-----------------|---|--|----------------------------|-------------------------------------|--|---|-------------|----------------------------------|
| Fees to Be Paid | | Common stock issuable upon exercise of | | 4.5(1.004 | e1 (0(2) | * - 000 000 - 0 | 0 0001 17(0 | ¢1 100 00 |
| | Equity | warrants | 457(g) | 4,761,904 | \$1.68(2) | \$7,999,998.70 | 0.00014760 | \$1,180.80 |
| | Total Offering Amounts | | | | | \$7,999,998.70 | | \$1,180.80 |
| | Total Fees Previously Paid Total Fee Offsets | | | | | | | _ |
| | | | | | | | | _ |
| | Net Fee Due | | | | | | \$1,180.80 | |

(1) Pursuant to Rule 416(a) of the Securities Act of 1933, as amended (the "Securities Act"), there is also being registered hereby such indeterminate number of additional shares of the Registrant's common stock as may be issued or issuable because of stock splits, stock dividends stock distributions, and similar transactions.

(2) Estimated solely for the purpose of calculating the amount of the registration fee pursuant to Rule 457(g) of the Securities Act. The proposed maximum offering price per share is calculated based on the exercise price of the subject warrants.