

PROSPECTUS



4,375,000 Shares of Common Stock
Series A Common Warrants to Purchase Up to 7,894,736 Shares of Common Stock
Up to 7,894,736 Shares of Common Stock Underlying the Series A Common Warrants
Series B Common Warrants to Purchase Up to 7,894,736 Shares of Common Stock
Up to 7,894,736 Shares of Common Stock Underlying the Series B Common Warrants
Pre-Funded Warrants to Purchase Up to 3,519,736 Shares of Common Stock
Up to 3,519,736 Shares of Common Stock Underlying the Pre-Funded Warrants
Placement Agent Warrants to Purchase Up to 1,657,894 Shares of Common Stock
Up to 1,657,894 Shares of Common Stock Underlying the Placement Agent Warrants

We are offering on a best efforts basis 4,375,000 shares of our common stock, par value \$0.001 (the "Common Stock") and 3,519,736 pre-funded warrants (the "Pre-Funded Warrants") to purchase up to 3,519,736 shares of Common Stock, together with a Series A warrant to purchase up to 7,894,736 shares of our Common Stock and a Series B warrant to purchase up to 7,894,736 shares of our Common Stock. Each share of Common Stock, or a pre-funded warrant in lieu thereof, is being sold together with a Series A common warrant to purchase one share of Common Stock (the "Series A Common Warrant") and a Series B common warrant to purchase one share of Common Stock (the "Series B Common Warrant" and together with the Series A Common Warrant, the "Common Warrants"). The shares of Common Stock and Common Warrants are immediately separable and will be issued separately in this offering, but must be purchased together in this offering. The public offering price for each share of Common Stock and accompanying Common Warrants is \$0.57. Each Common Warrant will have an exercise price per share of 100% of the offering price per share of Common Stock and accompanying Common Warrants and will be exercisable on or after the effective date of stockholder approval of the issuance of the shares upon exercise of the Common Warrants (the "Stockholder Approval") and the NYSE American approves of the supplemental listing application related to such Stockholder Approval. Each Series A Common Warrant will expire on the 5-year anniversary of the initial exercise date and each Series B Common Warrant will expire on the eighteen-month anniversary of the initial exercise date.

We are also offering Pre-Funded Warrants to any purchasers in lieu of shares of Common Stock that would otherwise result in such purchaser's beneficial ownership exceeding 4.99% (or, at the election of the purchaser, 9.99%) of our outstanding Common Stock. The public offering price of each Pre-Funded Warrant and accompanying Common Warrants will be \$0.569, which is equal to the price of one share of Common Stock and accompanying Common Warrants in this offering, minus \$0.001, and the exercise price of each Pre-Funded Warrant will be \$0.001 per share. The Pre-Funded Warrants will be immediately exercisable and may be exercised at any time until all of the Pre-Funded Warrants are exercised in full. The Pre-Funded Warrants and Common Warrants are immediately separable and will be issued separately in this offering, but must be purchased together in this offering. This prospectus also covers the shares of Common Stock issuable from time to time upon the exercise of the Pre-Funded Warrants, Common Warrants and placement agent warrants.

We have engaged Roth Capital Partners, LLC ("Roth" or the "Placement Agent"), to act as our exclusive placement agent, to use its reasonable best efforts to arrange for the sale of the securities offered by this prospectus. The Placement Agent is not purchasing or selling any of the securities we are offering, and the Placement Agent is not required to arrange the purchase or sale of any specific number or dollar amount of securities.

The securities will be offered at a fixed price and are expected to be issued in a single closing. The offering will terminate on December 31, 2024, unless (i) the closing occurs prior thereto or (ii) we decide to terminate the offering prior thereto (which we may do at any time in our discretion). Investors purchasing securities offered hereby will have the option to execute a securities purchase agreement (the "Securities Purchase Agreement") with us. We expect that the closing of the offering will occur on or about December 18, 2024, but no later than one trading day after we price the securities offered hereby. When we price the securities, we will simultaneously enter into Securities Purchase Agreements relating to the offering with those investors who so choose. The offering will settle delivery versus payment ("DVP")/receipt versus payment ("RVP"). That is, on the closing date, we will issue the shares of Common Stock directly to the account(s) at the Placement Agent identified by each purchaser; upon receipt of such shares, the Placement Agent shall promptly electronically deliver such shares to the applicable purchaser, and payment therefor shall be made by the Placement Agent (or its clearing firm) by wire transfer to us.

Since we will deliver the securities to be issued in this offering upon our receipt of investor funds, we and the Placement Agent have not made any arrangements to place investor funds in an escrow account or trust account. Because this is a best-efforts offering, the Placement Agent does not have an obligation to purchase any securities, and, as a result, there is a possibility that we may not be able to sell the securities. There is no minimum offering requirement as a condition of closing of this offering. Because there is no minimum offering amount required as a condition to closing this offering, we may sell fewer than all of the securities offered hereby, which may significantly reduce the amount of proceeds received by us, and investors in this offering will not receive a refund in the event that we do not sell an amount of securities sufficient to pursue our business goals described in this prospectus. In addition, because there is no escrow account and no minimum offering amount, investors could be in a position where they have invested in our company, but we are unable to fulfill all of our contemplated objectives due to a lack of interest in this offering. Further, any proceeds from the sale of securities offered by us will be available for our immediate use, despite uncertainty about whether we would be able to use such funds to effectively implement our business plan. See the section entitled "[Risk Factors](#)" for more information.

Our Common Stock is listed on the NYSE American under the symbol "TOON." On December 16, 2024, the last reported sale price of our Common Stock on the NYSE American was \$0.57 per share. The public offering price per share of Common Stock and accompanying Common Warrants is \$0.57, and per Pre-Funded Warrant and accompanying Common Warrants is \$0.569. There is no established public trading market for the Common Warrants or the Pre-Funded Warrants, and we do not expect such a market to develop. Without an active trading market, the liquidity of the Common Warrants and the Pre-Funded Warrants will be limited. In addition, we do not intend to list the Common Warrants or the Pre-Funded Warrants on NYSE American, any other national securities exchange or any other trading system.

Investing in our securities involves risks. You should review carefully the risks and uncertainties described under the heading "[Risk Factors](#)" contained in this prospectus and under similar headings in the other documents that are incorporated by reference into this prospectus, as described beginning on page 7 of this prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of the securities to be issued under this prospectus or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

	Per Share of Common Stock and Accompanying Common Warrants	Per Pre-Funded Warrant and Accompanying Common Warrants	Total
Public offering price	\$ 0.5700	\$ 0.5690	\$ 4,496,479.78
Placement agent fees ⁽¹⁾	\$ 0.0399	\$ 0.0398	\$ 314,753.58
Proceeds to us, before expenses ⁽²⁾	\$ 0.5301	\$ 0.5292	\$ 4,181,726.20

(1) We have agreed to pay to the Placement Agent a cash fee equal to 7% of the aggregate purchase price paid by investors in this offering. See [“Plan of Distribution”](#) for additional disclosure regarding compensation payable to the Placement Agent.

(2) Does not include proceeds from the exercise of the Common Warrants or the Pre-Funded Warrants in cash, if any. Because there is no minimum number of securities or amount of proceeds required as a condition to closing in this offering, the actual public offering amount, placement agent fees and proceeds to us, if any, are not presently determinable and may be substantially less than the total maximum offering amounts set forth above.

Delivery of the securities to the purchasers is expected to be made on or about December 18, 2024.

Roth Capital Partners

The date of this prospectus is December 16, 2024

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ABOUT THIS PROSPECTUS

You should rely only on the information that we have provided or incorporated by reference in this prospectus. We have not authorized anyone to provide you with different or additional information. If anyone provides you with different or additional information, you should not rely on it. You should assume that the information in this prospectus is accurate only as of the date on the cover of the document and that any information we have incorporated by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus or any sale of a security. Our business, financial condition, results of operations and prospects may have changed since those dates.

We urge you to carefully read this prospectus, together with the information incorporated herein by reference as described under the heading [“Where You Can Find Additional Information.”](#)

In this prospectus, unless otherwise specified or the context requires otherwise, we use the terms “Company,” “we,” “us” and “our” or similar references to refer to Kartoon Studios, Inc., a Nevada corporation, together with its consolidated subsidiaries.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the documents incorporated by reference into this prospectus include forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act, that relate to future events or our future financial performance and involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to differ materially from any future results, levels of activity, performance or achievements expressed or implied by these forward-looking statements. Words such as, but not limited to, “anticipate,” “aim,” “believe,” “contemplate,” “continue,” “could,” “design,” “estimate,” “expect,” “intend,” “may,” “might,” “plan,” “predict,” “poise,” “project,” “potential,” “suggest,” “should,” “strategy,” “target,” “will,” “would,” and similar expressions or phrases, or the negative of those expressions or phrases, are intended to

identify forward-looking statements, although not all forward-looking statements contain these identifying words. Although we believe that we have a reasonable basis for each forward-looking statement contained in this prospectus and incorporated by reference into this prospectus, we caution you that these statements are based on our projections of the future that are subject to known and unknown risks and uncertainties and other factors that may cause our actual results, level of activity, performance or achievements expressed or implied by these forward-looking statements, to differ. The section in this prospectus entitled “*Risk Factors*” and the sections in our periodic reports, including the Annual Report on Form 10-K for the year ended December 31, 2023 filed with the Securities and Exchange Commission (the “SEC”) on April 9, 2024 entitled “Business,” “Risk Factors” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” the Quarterly Report on Form 10-Q for the quarter ended March 31, 2024 filed with the SEC on May 15, 2024, the Quarterly Report for the quarter ended June 30, 2024 filed with the SEC on August 14, 2024, and the Quarterly Report for the quarter ended September 30, 2024 filed with the SEC on November 14, 2024, as well as other sections in this prospectus and the documents or reports incorporated by reference into this prospectus, discuss some of the factors that could contribute to these differences.

Please consider our forward-looking statements in light of those risks as you read this prospectus and the documents incorporated by reference into this prospectus. It is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. Given these uncertainties, you should not place undue reliance on these forward-looking statements.

You should not assume that the information contained in this prospectus is accurate as of any date other than as of the date of this prospectus, or that any information incorporated by reference into this prospectus is accurate as of any date other than the date of the document so incorporated by reference. Except as required by law, we assume no obligation to update these forward-looking statements publicly, or to update the reasons actual results could differ materially from those anticipated in these forward-looking statements, even if new information becomes available in the future. Thus, you should not assume that our silence over time means that actual events are bearing out as expressed or implied in such forward-looking statements.

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If one or more of these or other risks or uncertainties materializes, or if our underlying assumptions prove to be incorrect, actual results may vary materially from what we anticipate. All subsequent written and oral forward-looking statements attributable to us or individuals acting on our behalf are expressly qualified in their entirety by this Note. Before purchasing any securities, you should consider carefully all of the factors set forth or referred to in this prospectus and the documents incorporated by reference that could cause actual results to differ.

We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements, and you should not place undue reliance on our forward-looking statements. Forward-looking statements should be regarded solely as our current plans, estimates and beliefs. We have included important factors in the cautionary statements included in this document, particularly in the section entitled “*Risk Factors*” of this prospectus that we believe could cause actual results or events to differ materially from the forward-looking statements that we make. Moreover, we operate in a very competitive and rapidly changing environment. New risks emerge from time to time. It is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. Given these risks and uncertainties, readers are cautioned not to place undue reliance on such forward-looking statements. All forward-looking statements are qualified in their entirety by this cautionary statement. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures or investments we may make. You should read this prospectus and the documents that we have filed as exhibits to this prospectus and incorporated by reference herein completely and with the understanding that our actual future results may be materially different from the plans, intentions and expectations disclosed in the forward-looking statements we make. The forward-looking statements contained in this prospectus are made as of the date of this prospectus and we do not assume any obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by applicable law.

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PROSPECTUS SUMMARY

This summary contains basic information about us and this offering. Because it is a summary, it does not contain all of the information that you should consider before deciding to invest in our securities. Before you decide to invest in our securities, you should read this entire prospectus carefully and the documents incorporated by reference herein, including the information included under the heading titled “[Risk Factors](#).”

The Company

Overview

Kartoon Studios, Inc. (formerly known as Genius Brands International, Inc.) (the “Company” or “we,” “us” or “our”) is a global content and brand management company that creates, produces, licenses, and broadcasts timeless and educational, multimedia animated content for children. Led by experienced industry personnel, we distribute our content primarily on streaming platforms and television and license our properties for a broad range of consumer products based on our characters. We are a “work for hire” producer for many of the streaming outlets and animated content intellectual property (“IP”) holders. In the children’s media sector, our portfolio features “content with a purpose” for toddlers to tweens, providing enrichment as well as entertainment. With the exception of selected WOW Unlimited Media Inc. (“Wow”) titles, our programs, along with licensed programs, are being broadcast in the United States on our wholly-owned advertisement supported video on demand (“AVOD”) service, its free ad supported TV channels and subscription video on demand (“SVOD”) outlets, Kartoon Channel! and Ameba TV (as defined below), as well as linear streaming platforms. These streaming platforms include Comcast, Cox, DISH, Sling TV, Amazon Prime Video, Amazon Fire, Roku, Apple TV, Apple iOS, Android TV, Android mobile, Pluto TV, Xumo, Tubi, Youtube, and Youtube Kids and KartoonChannel.com, as well as Samsung and LG smart TVs. Our in-house owned and produced animated shows include Stan Lee’s Superhero Kindergarten starring Arnold Schwarzenegger, Llama starring Jennifer Garner, Rainbow Rangers, KC Pop Quiz and Shaq’s Garage starring Shaquille O’Neal. Our library titles include the award-winning Baby Genius, adventure comedy Thomas Edison’s Secret Lab®, and Warren Buffett’s Secret Millionaires Club, created with and starring iconic investor Warren Buffett, Team Zenko Go!, Reboot, Bee & PuppyCat: Lazy in Space and Castlevania.

We also license our programs to other services worldwide, in addition to the operation of our own channels, including but not limited to Netflix, Paramount+, Max, Samsung TV Plus, LG Smart TVs, Amazon, Nickelodeon, and satellite, cable and terrestrial broadcasters around the world.

Through our investments in Germany’s Your Family Entertainment AG (“YFE”), a publicly traded company on the Frankfurt Stock Exchange (RTV-Frankfurt), we have gained access to a leading producer and distributor of high-quality children’s and family programming. YFE owns and operates one of Europe’s largest channel-independent libraries of around 150 titles and 3,500 half-hour episodes.

Through the ownership of Wow, we established an affiliate relationship with Mainframe Studios, which is one of the largest animation producers in the world. In addition, Wow owns Frederator Networks Inc. (“Frederator”) (together with Kartoon Channel! and Ameba TV (the “TOON Media Networks”), the largest animation focused creator network on YouTube with over 2,500 channels. Frederator also owns Frederator Studios, focused on developing and producing shorts and series for and with partners, including Cartoon Network, Nickelodeon, Nick Jr., Netflix, Sony Pictures Animation and Amazon.

We have rights to a select amount of valuable IP, including among them a controlling interest in Stan Lee Universe, LLC (“SLU”), through which we control the name, likeness, signature, and all consumer product and IP rights to Stan Lee (the “Stan Lee Assets”).

We also own Beacon Media Group, LLC (“Beacon Media Group”) and Beacon Communications, Ltd. (“Beacon Communications,” together with Beacon Media Group, “Beacon”), a North American marketing and media agency and its first-class media research, planning and buying division. Beacon represents over 20 major toy companies, including Bandai Namco, Bazooka Candy Brands, and Moose Toys. In addition, we own the Canadian company Ameba Inc., which distributes SVOD service for kids (“Ameba TV”) and has become the focal point of revenue growth for our TOON Media Networks’ subscription offering.

We and our affiliates provide world class animation production studios a catalogue representing thousands of hours of premium global content for children, a broadcast system for delivering that content and an in-house consumer products licensing infrastructure to fully exploit the content.

On June 23, 2023, we were renamed Kartoon Studios, Inc. On June 26, 2023, we transferred our listing to NYSE American LLC (“NYSE American”). In connection with listing on NYSE American, we voluntarily delisted from the Nasdaq Capital Market (“Nasdaq”). Our Common Stock began trading on NYSE American under the new symbol “TOON” on June 26, 2023.

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Historically, we have incurred net losses. For the years ended December 31, 2023 and 2022, we reported net losses of \$77.1 million and \$45.6 million, respectively and for the nine months ended September 30, 2024 and 2023, we reported net losses of \$15.1 million and \$51.8 million, respectively. We reported net cash used in operating activities of \$16.1 million and \$25.9 million for the years ended December 31, 2023 and 2022, respectively and \$1.1 million and \$20.2 million for the nine months ended September 30, 2024 and 2023, respectively. As of September 30, 2024, we had an accumulated deficit of \$733.5 and total stockholders’ equity of \$42.8 million. As of September 30, 2024, we had current assets of \$37.2 million, including cash of \$4.6 million and marketable securities of \$4.1 million, and current liabilities of \$33.7 million. We had working capital of \$3.5 million as of September 30, 2024, compared to working capital of \$11.5 million as of December 31, 2023.

Based on our current expected level of operating expenditures and the cash and cash equivalents on hand at September 30, 2024, management concludes that there is substantial doubt about our ability to continue as a going concern for a period of at least 12 months. Historically, the Company has financed its operations primarily through revenue generated from operations, loans and sales of its securities, and the Company expects to continue to seek and obtain additional capital in a similar manner. There can be no assurance that the Company will be able to raise funds by selling additional shares of Common Stock or other securities convertible into Common Stock, the ownership interest of its existing shareholders will be diluted. The issuance of debt can result in restrictive covenants that limit operations. If funding is not available or not available at terms acceptable to the Company, the Company will seek to reduce overhead costs and reduce its weekly cash obligations in the short term as needed. In addition, the Company can look to divest or bring in equity partners for our various divisions and bring in near term capital.

Company Information

We were incorporated in California on January 3, 2006 and reincorporated in Nevada in October 2011. We commenced operations in January 2006, assuming all of the rights and obligations of our then Chief Executive Officer, under an Asset Purchase Agreement between us and Genius Products, Inc., in which we obtained all rights, copyrights, and trademarks to the brands “Baby Genius,” “Kid Genius,” “123 Favorite Music” and “Wee Worship,” and all then existing productions under those titles. In October 2011, we (i) changed our domicile to Nevada from California, and (ii) changed our name to Genius Brands International, Inc. from Pacific Entertainment Corporation (the “Reincorporation”). In connection with the Reincorporation, we changed our trading symbol from “PENT” to “GNUS.” In June 2023, we changed our name to Kartoon Studios, Inc. from Genius Brands International, Inc. along with our trading symbol “GNUS” to “TOON.”

Our principal executive offices are located at 190 N Canon Drive, 4th Floor, Beverly Hills, California 90210. Our telephone number is 310-273-4222. We maintain an Internet website at www.kartoonstudios.com. The information contained on, connected to or that can be accessed via our website is not part of this prospectus.

Smaller Reporting Company

We are a “smaller reporting company” as defined in the Securities Exchange Act of 1934, as amended (the “Exchange Act”). As a result, we may take advantage of certain reduced disclosure obligations available to smaller reporting companies, including the exemption from compliance with the auditor attestation requirements pursuant to the Sarbanes-Oxley Act of 2002, reduced disclosure about our executive compensation arrangements and the requirements to provide only two years of audited financial statements in our annual reports and registration statements. We will continue to be a “smaller reporting company” as long as (1) we have a public float (i.e., the market value of our common stock held by non-affiliates) less than \$250 million calculated as of the last business day of our most recently completed second fiscal quarter, or (2) our annual revenues are less than \$100 million for our previous fiscal year and we have either no public float or a public float of less than \$700 million as of the end of that fiscal year’s second fiscal quarter. Decreased disclosures in our SEC filings due to our status as a “smaller reporting company” may make it harder for investors to analyze our results of operations and financial prospects.

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THE OFFERING

Securities offered by us:

4,375,000 shares of Common Stock and Pre-Funded Warrants to purchase up to 3,519,736 shares of Common Stock, together with Series A Common Warrants to purchase up to 7,894,736 shares of Common Stock and Series B Common Warrants to purchase up to 7,894,736 shares of Common Stock, on a reasonable “best efforts” basis. The shares of Common Stock, or the Pre-Funded Warrants, and accompanying Common Warrants are immediately separable and will be issued separately in this offering, but must initially be purchased together in this offering. The Common Warrants are exercisable on or after the effective date of the Stockholder Approval and the NYSE American approves of the supplemental listing application related to such Stockholder Approval and have an exercise price per share equal to 100% of the offering price per share of Common Stock. Each accompanying Series A Common Warrant will expire five years after the initial exercise date and each accompanying Series B Common Warrant will expire eighteen months after the initial exercise date. This prospectus also relates to the offering of the shares of Common Stock issuable upon exercise of the Common Warrants and Pre-Funded Warrants. For more information regarding the Common Warrants and Pre-Funded Warrants, you should carefully read the section titled “[Description of Securities to be Registered](#)” in this prospectus.

Pre-Funded Warrants offered by us in this offering We are also offering Pre-Funded Warrants to each purchaser whose purchase of shares of Common Stock in this offering would otherwise result in the purchaser, together with its affiliates and certain related parties, beneficially owning more than 4.99% (or, at the election of the purchaser, 9.99%) of our outstanding Common Stock immediately following the consummation of this offering in lieu of shares of Common Stock that would otherwise result in the purchaser's beneficial ownership exceeding 4.99% of our outstanding Common Stock (or, at the election of the purchaser, 9.99%). The Pre-Funded Warrants and accompanying Common Warrants are immediately separable and will be issued separately in this offering, but must initially be purchased together in this offering. The purchase price of each Pre-Funded Warrant and accompanying Common Warrants is \$0.569, which is equal to the price at which one share of Common Stock and accompanying Common Warrants are being sold to the public in this offering, minus \$0.001, and the exercise price of each Pre-Funded Warrant is \$0.001 per share. The Pre-Funded Warrants will be exercisable immediately and may be exercised at any time until all of the Pre-Funded Warrants are exercised in full. For more information regarding the Pre-Funded Warrants, you should carefully read the section titled "Description of Securities We Are Offering" in this prospectus. This prospectus also covers the shares of Common Stock issuable from time to time upon the exercise of the Pre-Funded Warrants.

Reasonable Best Efforts Offering We have agreed to issue and sell the securities offered hereby to the purchasers through the Placement Agent. The Placement Agent is not required to buy or sell any specific number or dollar amount of the securities offered hereby, but will use its reasonable best efforts to solicit offers to purchase the securities offered by this prospectus. See "[Plan of Distribution](#)" beginning on page 34 of this prospectus.

Common Stock outstanding before this offering 39,639,793 shares

Common Stock to be outstanding after this offering 44,014,793 shares

Use of proceeds We estimate that we will receive approximately \$3.8 million in net proceeds from this offering, after deducting the estimated placement agent fees and estimated offering expenses.

We currently intend to use the net proceeds from this offering primarily for working capital and general corporate purposes, including for research and development. We may also use a portion of the net proceeds to invest in or acquire other products, businesses or technologies, although we have no commitments or agreements with respect to any such investments or acquisitions as of the date of this prospectus. See "[Use of Proceeds](#)" for additional information.

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Lock-Up We and each of our directors and officers have agreed with the Placement Agent, subject to certain exceptions, not to sell, transfer or dispose of, directly or indirectly, any of the Common Stock or securities convertible into or exercisable or exchangeable for the Common Stock for a period of 90 days after the closing of this offering. See "[Plan of Distribution](#)" for more information.

Risk Factors You should carefully read and consider the information set forth under "[Risk Factors](#)," together with all of the other information set forth in this prospectus, before deciding to invest in shares of the Common Stock.

NYSE American symbol Our Common Stock is listed on the NYSE American under the symbol "TOON."

Placement Agent Warrants We have agreed to issue to the Placement Agent warrants to purchase up to 1,657,894 shares of Common Stock as part of the compensation payable to the Placement Agent in connection with this offering (the "Placement Agent Warrants"), which number of shares is equal to seven percent (7%) of the number of shares of Common Stock, Common Warrants and Pre-Funded Warrants sold in the offering. See "[Plan of Distribution](#)." This prospectus also covers the shares of Common Stock issuable upon exercise of the Placement Agent Warrants.

Except as otherwise indicated, the number of shares of Common Stock to be outstanding immediately after this offering is based on 39,639,793 shares of Common Stock outstanding as of December 16, 2024 and excludes:

- 964,166 shares of Common Stock issuable upon vesting of restricted stock units outstanding;
- 953,640 shares of Common Stock issuable upon exercise of outstanding options, at a weighted average exercise price of \$12.75 per share;
- 6,925,385 shares of Common Stock issuable upon exercise of outstanding warrants, at a weighted average exercise price of \$6.98 per share;
- 1,666,017 shares of Common Stock reserved for future issuance under our 2020 Incentive Plan; and
- 166,666 shares of restricted Common Stock that we intend to gift to a charitable organization with a value of \$100,000, based upon the closing sale price per share of our Common Stock on the NYSE American on December 13, 2024 of \$0.60 per share.

Unless otherwise indicated, all information in this prospectus assumes no exercise of the outstanding options or warrants described above, no sale of any Pre-Funded Warrants in this offering and no exercise of the Placement Agent Warrants.

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RISK FACTORS

Our business, results of operations and financial condition and the industry in which we operate are subject to various risks. Accordingly, investing in our securities involves a high degree of risk. This prospectus does not describe all of those risks. You should consider the risk factors described in this prospectus below, as well as those described under the caption "[Risk Factors](#)" in the documents incorporated by reference herein, including our Annual Report on Form 10-K for the year ended December 31, 2023, the Quarterly Report on Form 10-Q for the quarter ended March 31, 2024, the Quarterly Report on Form 10-Q for the quarter ended June 30, 2024, and the Quarterly Report on Form 10-Q for the quarter ended September 30, 2024, together with the other information contained or incorporated by reference in this prospectus.

We have described below and in the documents incorporated by reference herein the most significant risk factors applicable to us, but they do not constitute all of the risks that may be applicable to us. New risks may emerge from time to time, and it is not possible for us to predict all potential risks or to assess the likely impact of all risks. Before making an investment decision, you should carefully consider these risks as well as other information we include or incorporate by reference in this prospectus. This prospectus also contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated in the forward-looking statements as a result of a number of factors, including the risks described below. See the section titled "[Special Note Regarding Forward-Looking Statements](#)."

Risks Related to this Offering

We have broad discretion in the use of the net proceeds from this offering and may not use them effectively.

We will have broad discretion in the application of the net proceeds from this offering and could spend the proceeds in ways that do not improve our results of operations or enhance the value of the Common Stock. Our failure to apply these funds effectively could result in financial losses that could have a material adverse effect on our business, cause the price of our shares of Common Stock to decline and delay the development of our product candidates. Pending their use, we may invest the net proceeds from this offering in a manner that does not produce income or that loses value.

This is a reasonable best efforts offering, with no minimum amount of securities required to be sold, and we may sell fewer than all of the securities offered hereby.

The Placement Agent has agreed to use its reasonable best efforts to solicit offers to purchase the securities in this offering. The Placement Agent has no obligation to buy any of the securities from us or to arrange for the purchase or sale of any specific number or dollar amount of the securities. There is no required minimum number of securities that must be sold as a condition to completion of this offering, and there can be no assurance that the offering contemplated hereby will ultimately be consummated. Even if we sell securities offered hereby, because there is no minimum offering amount required as a condition to closing of this offering, the actual offering amount is not presently determinable and may be substantially less than the maximum amount set forth on the cover page of this prospectus. We may sell fewer than all of the securities offered hereby, which may significantly reduce the amount of proceeds received by us. Thus, we may not raise the amount of capital we believe is required for our operations in the short-term and may need to raise additional funds, which may not be available or available on terms acceptable to us.

Because there is no minimum required for the offering to close, investors in this offering will not receive a refund in the event that we do not sell an amount of securities sufficient to pursue the business goals outlined in this prospectus.

We have not specified a minimum offering amount nor have or will we establish an escrow account in connection with this offering. Because there is no escrow account and no minimum offering amount, investors could be in a position where they have invested in our company, but we are unable to fulfill our objectives due to a lack of interest in this offering. Further, because there is no escrow account in operation and no minimum investment amount, any proceeds from the sale of securities offered by us will be available for our immediate use, despite uncertainty about whether we would be able to use such funds to effectively implement our business plan. Investor funds will not be returned under any circumstances whether during or after the offering.

Our stock price may be subject to substantial volatility, and stockholders may lose all or a substantial part of their investment.

Our Common Stock currently trades on NYSE American. There is limited public float, and trading volume historically has been low and sporadic. As a result, the market price for our Common Stock may not necessarily be a reliable indicator of our fair market value. The price at which our Common Stock trades may fluctuate as a result of a number of factors, including the number of shares available for sale in the market, quarterly variations in our operating results, actual or anticipated announcements of new releases by us or competitors, the gain or loss of significant customers, changes in the estimates of our operating performance, market conditions in our industry and the economy as a whole.

We do not intend to pay dividends on the Common Stock, so any returns will be limited to increases, if any, in the Common Stock's value. Your ability to achieve a return on your investment will depend on appreciation, if any, in the price of the Common Stock.

We currently anticipate that we will retain future earnings for the development, operation and expansion of our business and do not anticipate declaring or paying any cash dividends for the foreseeable future. Any future determination to declare dividends will be made at the discretion of our board of directors and will depend on, among other factors, our financial condition, operating results, capital requirements, general business conditions and other factors that our board of directors may deem relevant. Any return to stockholders will therefore be limited to the appreciation in the value of their stock, if any.

There is no public market for the Common Warrants or the Pre-Funded Warrants to purchase shares of the Common Stock being offered by us in this offering.

There is no established public trading market for the Common Warrants or the Pre-Funded Warrants to purchase shares of the Common Stock that are being offered as part of this offering, and we do not expect a market to develop. In addition, we do not intend to apply to list the Common Warrants or the Pre-Funded Warrants on any national securities exchange or other nationally recognized trading system, including the NYSE American. Without an active market, the liquidity of the Common Warrants and the Pre-Funded Warrants will be limited.

The Common Warrants and the Pre-Funded Warrants are speculative in nature.

The Common Warrants and the Pre-Funded Warrants offered hereby do not confer any rights of Common Stock ownership on their holders, such as voting rights, except as specified therein, but rather merely represent the right to acquire shares of the Common Stock at a fixed price. Specifically, commencing on the date of issuance, holders of the Common Warrants and the Pre-Funded Warrants may exercise their right to acquire the shares of the Common Stock upon the payment of an exercise price per share of \$0.57 per share of Common Stock in the case of the Common Warrants and an exercise price of \$0.001 per share in the case of the Pre-Funded Warrants. Moreover, following this offering, the market values of the Common Warrants and the Pre-Funded Warrants is uncertain and there can be no assurance that the market value of the Common Warrants or the Pre-Funded Warrants, as applicable, will equal or exceed their respective imputed public offering prices. Furthermore, each Series A Common Warrant will expire five years from its initial exercise date, each Series B Common Warrant will expire eighteen months from its initial exercise date and each Pre-Funded Warrant will not expire until it has been exercised in full. In the event the price of the Common Stock does not exceed the exercise price of the Common Warrants during the period when such Common Warrants are exercisable, the Common Warrants may not have any value. There is no established public trading market for the Common Warrants or the Pre-Funded Warrants being offered in this offering, and we do not expect a market to develop. In addition, we do not intend to apply to list the Common Warrants or the Pre-Funded Warrants on any securities exchange or nationally recognized trading system, including NYSE American. Without an active market, the liquidity of the Pre-Funded Warrants will be limited.

Holders of the Common Warrants and Pre-Funded Warrants will have no rights as a common stockholder until they acquire shares of the Common Stock.

The Common Warrants and Pre-Funded Warrants in this offering do not confer any rights of share ownership on their holders, except as specified therein, but rather merely represent the right to acquire shares of the Common Stock at a fixed price. Until holders of the Common Warrants and Pre-Funded Warrants acquire shares of the Common Stock upon exercise of the Common Warrants or Pre-Funded Warrants, as applicable, holders of Common Warrants and Pre-Funded Warrants will have no rights with respect to our shares of Common Stock underlying such Common Warrants and Pre-Funded Warrants, except as specified therein.

Provisions of the Common Warrants and Pre-Funded Warrants offered by this prospectus could discourage an acquisition of us by a third party.

In addition to the provisions of our articles of incorporation, as amended (the “Articles of Incorporation”), and our bylaws, as amended (the “Bylaws”), certain provisions of the Common Warrants and Pre-Funded Warrants offered by this prospectus could make it more difficult or expensive for a third party to acquire us. The Common Warrants and Pre-Funded Warrants prohibit us from engaging in certain transactions constituting “fundamental transactions” unless, among other things, the surviving entity assumes our obligations under the Common Warrants and Pre-Funded Warrants, as applicable. These and other provisions of the Common Warrants and Pre-Funded Warrants offered by this prospectus could prevent or deter a third party from acquiring us even where the acquisition could be beneficial to you.

We may not receive any meaningful amount of additional funds upon the exercise of the Common Warrants and Pre-Funded Warrants.

Each Common Warrant and each Pre-Funded Warrant may be exercised by way of a cashless exercise under certain circumstances, meaning that the holder may not pay a cash purchase price upon exercise, but instead would receive upon such exercise the net number of shares of Common Stock determined according to the formula set forth in the Common Warrant or Pre-Funded Warrant, respectively. Accordingly, we may not receive any additional funds upon the exercise of the Common Warrants or Pre-Funded Warrants.

You will experience immediate and substantial dilution in the net tangible book value of the shares you purchase in this offering and may experience additional dilution in the future.

The public offering price per share of Common Stock and Common Warrants and the public offering price of each Pre-Funded Warrant and Common Warrants are substantially higher than the pro forma as adjusted net tangible book value per share of our Common Stock after giving effect to this offering. Assuming the sale of 7,894,736 shares of our Common Stock at a public offering price of \$0.57 per share of Common Stock and accompanying Common Warrants or \$0.569 per Pre-Funded Warrant and accompanying Common Warrants, assuming the exercise in full of Pre-Funded Warrants issued in this offering and no exercise of the Common Warrants issued in this offering, and after deducting the Placement Agent fees and commissions and estimated offering expenses payable by us, you will incur immediate dilution in pro forma as adjusted net tangible book value of approximately \$0.03 per share. As a result of the dilution to investors purchasing securities in this offering, investors may receive significantly less than the purchase price paid in this offering, if anything, in the event of the liquidation of our company. See the section entitled “[Dilution](#)” below for a more detailed discussion of the dilution you will incur if you participate in this offering. To the extent shares are issued under outstanding options and warrants at exercise prices lower than the public offering price of our Common Stock in this offering, you will incur further dilution.

Purchasers who purchase our securities in this offering pursuant to a Securities Purchase Agreement may have rights not available to purchasers that purchase without the benefit of a Securities Purchase Agreement.

In addition to rights and remedies available to all purchasers in this offering under federal securities and state law, the purchasers that enter into a Securities Purchase Agreement will also be able to bring claims of breach of contract against us. The ability to pursue a claim for breach of contract provides those investors with the means to enforce the covenants uniquely available to them under the Securities Purchase Agreement including, but not limited to: (i) timely delivery of securities; (ii) agreement to not enter into any financings for 90 days from closing of this offering; and (iii) indemnification for breach of contract.

The offering could cause an adjustment to the exercise price of our outstanding warrants which could effect our stock price and the market for our stock.

We currently have outstanding Common Stock purchase warrants (the “New Warrants”) to purchase up to 4,784,909 shares of our Common Stock. The New Warrants provide for a reduction of the exercise price of the New Warrants if we, at any time while the New Warrants are outstanding, sell our Common Stock or Common Stock Equivalents, at an effective price per share less than the exercise price then in effect for the New Warrants (a “Dilutive Issuance”). The New Warrants currently have an exercise price of \$1.00 per share as a result of a prior Dilutive Issuance. Because the offering price per share of our Common Stock sold in this offering is less than \$1.00 per share, the exercise price of the New Warrants will adjust to such lower exercise price. The dilutive effect of the exercise price adjustments to the New Warrants will likely have a negative impact on the trading price of our Common Stock.

The Common Warrants will not be exercisable until and unless we obtain Stockholder Approval.

The Common Warrants are exercisable on or after the effective date of the Stockholder Approval and the NYSE American approves of the supplemental listing application related to such Stockholder Approval, and cannot be exercised prior to such time. Pursuant to the terms of the Securities Purchase Agreement, we are obligated to hold a special meeting of our stockholders on or prior to seventy-five (75) days after the closing date of this offering for the purpose of obtaining Stockholder Approval and, if Stockholder Approval is not obtained at such stockholders’ meeting, every sixty (60) days thereafter seeking Stockholder Approval until the earlier of the date Stockholder Approval is obtained or the Common Warrants are no longer outstanding. If we fail to timely hold the special meeting or meetings within the period required under the Securities Purchase Agreement, such failure or failures will result in a breach of the terms of the Purchase Agreement. We may not be successful at obtaining Stockholder Approval. In addition, we may incur substantial cost, and management may devote substantial time and attention, in connection with holding the special meeting or meetings for the purpose of obtaining Stockholder Approval of the issuance of shares of Common Stock upon exercise of the Common Warrants issued in this offering.

Until and unless we obtain Stockholder Approval, holders of our Common Warrants will be unable to exercise their Common Warrants for shares of Common Stock. Until such time as the Common Warrants may become exercisable, we will not receive any proceeds from the payment of any exercise price of Common Warrants.

The Common Warrants are not exercisable unless Stockholder Approval is obtained and may not have any value.

Under NYSE American listing rules, the Common Warrants are not exercisable without Stockholder Approval for the issuance of shares issuable upon exercise of the Common Warrants. While we intend to use reasonable best efforts to seek Stockholder Approval for issuances of shares of Common Stock issuable upon exercise of the Common Warrants, there is no guarantee that the Stockholder Approval will ever be obtained. The Common Warrants will be exercisable commencing on the date Stockholder Approval is obtained, if at all. In the event that the price of a share of our Common Stock does not exceed the exercise price of the Common Warrants during the period when the Common Warrants are exercisable, the Common Warrants may not have any value. If we are unable to obtain the Stockholder Approval, the Common Warrants will not be exercisable and therefore would have no value. During this time, the holders of the Common Warrants will have no rights with respect to our shares of Common Stock underlying such Common Warrants, except as specified therein.

Risks Related to Our Common Stock

There is uncertainty regarding our ability to maintain liquidity sufficient to operate our business effectively, which raises substantial doubt about our ability to continue as a going concern.

In our Quarterly Report on Form 10-Q for the quarter ended September 30, 2024 we disclosed that our management had concluded that there was substantial doubt about our ability to continue as a going concern for a period of at least 12 months.

Historically, we have financed our operations primarily through revenue generated from operations, loans and sales of our securities, and we expect to continue to seek and obtain additional capital in a similar manner. We have filed a registration statement on Form S-3 on December 22, 2023, as amended, registering the sale of up to \$75 million of our securities pursuant to a shelf registration statement, and this registration statement on Form S-1 on September 27, 2024, as amended, in connection with a best efforts public offering of up to \$8 million of our securities. However, we do not have any committed sources of financing at this time, and it is uncertain whether additional funding will be available when we need it on terms that will be acceptable to us, or at all. Our ability sell securities registered on our registration statement on Form S-3 is limited until such time the market value of our voting securities held by non-affiliates is \$75 million or more. In addition, the number of shares of Common Stock and securities convertible or exercisable for Common Stock that we can sell, under certain circumstances, will be limited by the NYSE American rules and regulations. There can be no assurance that we will be able to continue to raise funds through the sale of shares of Common Stock or issuance of debt. If we raise funds by selling additional shares of Common Stock or other securities convertible into Common Stock, the ownership interest of our existing stockholders will be diluted. The issuance of debt can result in restrictive covenants that limit operations. If funding is not available or not available at terms acceptable to us, we will seek to reduce overhead costs and reduce our weekly cash obligations in the short term as needed. In addition, we can look to divest or bring in equity partners for our various divisions and bring in near term capital. No adjustments have been made to the presented condensed consolidated financial statements as a result of this uncertainty.

If we sell Common Stock or preferred stock in the future, stockholders may experience immediate dilution and, as a result, our stock price may decline.

We may from time-to-time issue additional shares of Common Stock or preferred stock at a discount from the current trading price of the Common Stock. As a result, our stockholders could experience immediate dilution upon the purchase of any shares sold at such discount. In addition, as opportunities present themselves, we may enter into financing or similar arrangements in the future, including the issuance of debt securities, Common Stock or preferred stock. If we issue Common Stock or securities convertible into Common Stock, the holders of the Common Stock could experience additional dilution and, as a result, our stock price may decline.

In addition, to the extent that any Common Warrants, Pre-Funded Warrants or options are exercised, new options or restricted stock units are issued under our equity incentive plans, or we otherwise issue additional shares of Common Stock in the future, at a price less than the public offering price, our stockholders could experience dilution.

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We have identified material weaknesses in our internal control over financial reporting. As a result of such material weaknesses, our management has concluded that our disclosure controls and procedures, as defined in Rule 13a-15(e), were not effective at the reasonable assurance level. Failure to remediate the material weaknesses or any other material weaknesses that we identify in the future could result in material misstatements in our financial statements.

Pursuant to Section 404 of the Sarbanes-Oxley Act of 2002, as amended, our management is required to report on the effectiveness of our internal control over financial reporting. The rules governing the standards that must be met for management to assess our internal control over financial reporting are complex and require significant documentation, testing and possible remediation. Annually, we perform activities that include reviewing, documenting and testing our internal control over financial reporting. In addition, if we fail to maintain the adequacy of our internal control over financial reporting, we will not be able to conclude on an ongoing basis that we have effective internal control over financial reporting in accordance with Section 404 of the Sarbanes-Oxley Act of 2002. If we fail to achieve and maintain an effective internal control environment, we could suffer misstatements in our financial statements and fail to meet our reporting obligations, which would likely cause investors to lose confidence in our reported financial information. This could result in significant expenses to remediate any internal control deficiencies and lead to a decline in our stock price.

A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of a company's annual or interim financial statements will not be prevented or detected on a timely basis. We have identified material weaknesses in our internal control over financial reporting, including inadequate design of user access provisioning/deprovisioning controls and inadequate segregation of duties on certain controls or processes; lack of specialized experts related to income tax areas; and inappropriate application of accounting standards related to warrant modifications.

During the course of our financial reporting close for the 2023 financial statements, we identified various errors associated with our 2022 annual and 2023 previously reported unaudited consolidated financial statements. Our consolidated financial statements, including the unaudited condensed consolidated balance sheets as of June 30, 2022 and September 30, 2022 and the unaudited condensed consolidated financial statements as of and for the three months ended March 31, 2023, as of and for the three and six months ended June 30, 2023 and as of and for the nine months ended September 30, 2023, were restated in our Annual Report on Form 10-K for the fiscal year ended December 31, 2023 to correct such errors related to deferred tax liabilities and a warrant modification.

Additionally, we maintain disclosure controls and procedures designed to provide reasonable assurance that information required to be disclosed in reports filed or submitted under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms and accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosures. We carried out an evaluation, under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures, as defined in Rules 13a-15(e) Exchange Act. Based upon our evaluation, our Chief Executive Officer and Chief Financial Officer concluded that as September 30, 2024, our disclosure controls and procedures, as defined in Rule 13a-15(e), were not effective at the reasonable assurance level due to material weaknesses in our internal control over financial reporting which were disclosed in our Annual Report on Form 10-K for the year ended December 31, 2023. Our management, including our Chief Executive Officer and Chief Financial Officer, has also concluded that as of December 31, 2023, March 31, 2024, and June 30, 2024, our disclosure controls and procedures, as defined in Rule 13a-15(e), were not effective at the reasonable assurance level due to material weaknesses in our internal control over financial reporting which were disclosed in our Annual Report on Form 10-K for the year ended December 31, 2023.

We cannot provide assurance that we have identified all, or that we will not in the future have additional, material weaknesses in our internal control over financial reporting. As a result, we may be required to implement further remedial measures and to design enhanced processes and controls to address deficiencies. If we do not effectively remediate the material weaknesses identified by management and maintain adequate internal controls over financial reporting in the future, we may not be able to prepare reliable financial reports and comply with our reporting obligations under the Exchange Act on a timely basis. Any such delays in the preparation of financial reports and the filing of our periodic reports may result in a loss of public confidence in the reliability of our financial statements, which, in turn, could materially adversely affect our business, the market value of our common stock and our access to capital markets.

USE OF PROCEEDS

We estimate that we will receive net proceeds from this offering of approximately \$3.8 million, after deducting the estimated Placement Agent fees and estimated offering expenses payable by us and assuming no exercise of the Common Warrants. We will only receive additional proceeds from the exercise of the Common Warrants and Pre-Funded Warrants we are selling in this offering if the Common Warrants and Pre-Funded Warrants are exercised for cash. We cannot predict when or if these Common Warrants or Pre-Funded Warrants will be exercised. It is possible that these Common Warrants may expire and may never be exercised.

We currently intend to use the net proceeds from this offering primarily for working capital and general corporate purposes, including for research and development. We may also use a portion of the net proceeds to invest in or acquire other products, businesses or technologies, although we have no commitments or agreements with respect to any such investments or acquisitions as of the date of this prospectus.

These estimates exclude the proceeds, if any, from the exercise of Common Warrants offered hereby. If all of the Common Warrants offered hereby were to be exercised in cash at the exercise price per share equal to \$0.57, we would receive additional gross proceeds of approximately \$9.0 million. We cannot predict when or if these Common Warrants will be exercised. It is possible that these Common Warrants may expire and may never be exercised. Additionally, these Common Warrants contain a cashless exercise provision that permit exercise of such Common Warrants on a cashless basis at any time when there is no effective registration statement under the Securities Act covering the issuance of the underlying shares.

The amounts and timing of any expenditures will vary depending on the amount of cash generated by our operations, and the rate of growth, if any, of our business, and our plans and business conditions. The foregoing represents our intentions as of the date of this prospectus based upon our current plans and business conditions to use and allocate the net proceeds of the offering. However, our management will have significant flexibility and discretion in the timing and application of the net proceeds of the offering. Unforeseen events or changed business conditions may result in application of the proceeds of the offering in a manner other than as described in this prospectus.

To the extent that the net proceeds we receive from the offering are not immediately applied for the above purposes, we plan to invest the net proceeds in short-term, investment-grade, interest-bearing instruments and U.S. government securities.

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DIVIDEND POLICY

We have never declared or paid any cash dividends on the Common Stock and we do not currently intend to pay any cash dividends on the Common Stock in the foreseeable future. We expect to retain all available funds and future earnings, if any, to fund the development and growth of our business. Any future determination to pay dividends, if any, on the Common Stock will be at the discretion of our board of directors and will depend on, among other factors, the terms of any outstanding preferred stock, our results of operations, financial condition, capital requirements and contractual restrictions.

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CAPITALIZATION

The following table sets forth our cash and our capitalization as of September 30, 2024:

- on an actual basis;
- on a pro forma basis, giving effect to the issuance of (i) 25,796 shares of Common Stock upon vesting of restricted stock units and (ii) 58,836 shares of Common Stock; and
- on a pro forma as adjusted basis, giving effect to the pro forma adjustments set forth above and our issuance and sale of 7,894,736 shares of our Common Stock in this offering based on a public offering price of \$0.57 per share of Common Stock and Common Warrants and \$0.569 per Pre-Funded Warrant and Common Warrants, and assuming the exercise in full of the Pre-Funded Warrants issued in this offering and no of any Common Warrants, after deducting estimated Placement Agent fees and estimated offering expenses payable by us.

You should read the information in this table together with our consolidated financial statements and related notes and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in our Quarterly Report on Form 10-Q for the quarter ended September 30, 2024, incorporated by reference in this prospectus.

	September 30, 2024 (in thousands, except for shares and par value data)		
	Actual	Pro Forma ⁽¹⁾	Pro Forma As Adjusted
Cash	\$ 4,581	\$ 4,581	\$ 8,366
Stockholder’s equity			

Common Stock, \$0.001 par value, 190,000,000 shares authorized, 39,630,851 shares issued and 39,555,161 outstanding, actual; 190,000,000 shares authorized, and 39,715,483 shares issued and 39,639,793 outstanding, pro forma; 190,000,000 shares authorized, and 47,610,219 shares issued and 47,534,529 outstanding, pro forma as adjusted	40	40	48
Additional paid-in capital	778,438	778,536	782,313
Treasury Stock at Cost, 75,877 shares actual, pro forma and pro forma as adjusted	(339)	(339)	(339)
Accumulated deficit	(733,521)	(733,521)	(733,521)
Accumulated other comprehensive loss	(3,376)	(3,376)	(3,376)
Total Kartoon Studios' Stockholder's Equity	41,242	41,340	45,125
Non-Controlling Interests in Consolidated Subsidiaries	1,558	1,558	1,558
Total Stockholder's Equity	42,800	42,898	46,683
Total Capitalization	<u>\$ 42,800</u>	<u>\$ 42,898</u>	<u>\$ 46,683</u>

(1) Offsetting adjustments have been made to the Common Stock and Additional paid-in capital in the pro forma column to adjust for a calculation to the par value of Common stock included in the balance sheet as of September 30, 2024 contained in the Quarterly Report on Form 10-Q for the quarter ended September 30, 2024.

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The table above is based on 39,555,161 shares of Common Stock outstanding as of September 30, 2024 and gives effect to the pro forma adjustments described above and excludes as September 30, 2024 the following:

- 977,500 shares of Common Stock issuable upon vesting of restricted stock units outstanding;
- 953,640 shares of Common Stock issuable upon exercise of outstanding options, at a weighted average exercise price of \$12.75 per share;
- 6,926,952 shares of Common Stock issuable upon exercise of outstanding warrants, at a weighted average exercise price of \$6.98 per share;
- 1,746,256 shares of Common Stock reserved for future issuance under our 2020 Incentive Plan; and
- 166,666 shares of restricted Common Stock that we intend to gift to a charitable organization with a value of \$100,000, based upon the closing sale price per share of our Common Stock on the NYSE American on December 13, 2024 of \$0.60 per share.

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DILUTION

If you invest in our securities in this offering, your interest will be diluted immediately to the extent of the difference between the public offering price paid by the purchasers of the shares of Common Stock and Common Warrants sold in this offering and the pro forma as adjusted net tangible book value per shares of Common Stock after this offering.

Our historical net tangible book value of our Common Stock as of September 30, 2024, was approximately \$21.7 million, or approximately \$0.55 per share of Common Stock. Net tangible book value per share represents the amount of our total tangible assets less total liabilities divided by the total number of our shares of Common Stock outstanding as of September 30, 2024.

Our pro forma net tangible book value as of September 30, 2024 was approximately \$21.7 million, or approximately \$0.55 per share of Common Stock. Pro forma net tangible book value represents the amount of our tangible book value as adjusted to take into account the issuance of (i) 25,796 shares of Common Stock upon vesting of restricted stock units and (ii) 58,836 shares of Common Stock subsequent to September 30, 2024.

After giving effect to the pro forma adjustments set forth above and the sale by us in this offering of 7,894,736 shares of Common Stock at a public offering price of \$0.57 per share of Common Stock and Common Warrants and \$0.569 per Pre-Funded Warrant and Common Warrants, and assuming the exercise in full of Pre-Funded Warrants issued in this offering and no exercise of any Common Warrants, our pro forma as adjusted net tangible book value as of September 30, 2024, would have been approximately \$25.5 million, or approximately \$0.54 per share of Common Stock. This represents an immediate decrease in net tangible book value of approximately \$0.01 per share of Common Stock to our existing security holders and an immediate dilution in as adjusted net tangible book value of approximately \$0.03 per share of Common Stock to purchasers of Common Stock and Common Warrants in this offering. The final public offering price will be determined through negotiation between us, the Placement Agent, and prospective investors in the offering and may be at a discount to the current market price. The following table illustrates this per share dilution:

Public offering price per share of Common Stock and Common Warrants	\$	0.57
Historical net tangible book value per share as of September 30, 2024	\$	0.55
Pro Forma net tangible book value per share	\$	0.55
Increase in pro forma net tangible book value per share attributable to this offering	\$	(0.01)
Pro Forma as adjusted net tangible book value per share after giving effect to this offering	\$	0.54
Dilution per share to new investors in this offering	\$	0.03

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The table and discussion above are based on 39,555,161 shares of Common Stock outstanding as of September 30, 2024, and excludes, as of that date, the following:

- 977,500 shares of Common Stock issuable upon vesting of restricted stock units outstanding;
- 953,640 shares of Common Stock issuable upon exercise of outstanding options, at a weighted average exercise price of \$12.75 per share;
- 6,926,952 shares of Common Stock issuable upon exercise of outstanding warrants, at a weighted average exercise price of \$6.98 per share;
- 1,746,256 shares of Common Stock reserved for future issuance under our 2020 Incentive Plan; and

- 166,666 shares of restricted Common Stock that we intend to gift to a charitable organization with a value of \$100,000, based upon the closing sale price per share of our Common Stock on the NYSE American on December 13, 2024 of \$0.60 per share.

The information discussed above is illustrative only and will adjust based on the actual public offering price, the actual number of shares of Common Stock that we offer in this offering, and other terms of this offering determined at pricing. Except as indicated otherwise, the discussion and table above assumes no sale of Pre-Funded Warrants, which, if sold, would reduce the number of shares of Common Stock that we are offering on a one-for-one basis.

DESCRIPTION OF OUR CAPITAL STOCK

The following is a description of the material terms of our capital stock. This is a summary only and does not purport to be complete. It is subject to and qualified in its entirety by reference to our Articles of Incorporation and our Bylaws, each of which are incorporated by reference as an exhibit to the registration statement of which this prospectus forms a part. We encourage you to read our Articles of Incorporation, our Bylaws, and the applicable provisions of the Nevada Revised Statute (the "NRS"), for additional information.

Authorized Capital Stock

Our authorized capital stock consists of 200,000,000 shares of capital stock, of which 190,000,000 are shares of Common Stock, and 10,000,000 are shares of preferred stock, par value \$0.001 per share.

Capital Stock Issued and Outstanding

As of December 16, 2024, we have issued and outstanding:

- 39,639,793 shares of Common Stock;
- 964,166 unvested restricted stock units;
- options to purchase 953,640 shares of Common Stock, at a weighted average exercise price of \$12.75 per share; and
- warrants to purchase 6,925,385 shares of Common Stock, at a weighted average exercise price of \$6.98 per share.

Common Stock

The holders of our Common Stock are entitled to one vote per share. In addition, the holders of our Common Stock will be entitled to receive ratably such dividends, if any, as may be declared by our Board of Directors out of legally available funds; however, the current policy of our Board of Directors is to retain earnings, if any, for operations and growth. Upon liquidation, dissolution or winding-up, the holders of our Common Stock will be entitled to share ratably in all assets that are legally available for distribution. The holders of our Common Stock will have no preemptive, subscription, redemption or conversion rights. The rights, preferences and privileges of holders of our Common Stock will be subject to, and may be adversely affected by, the rights of the holders of any series of preferred stock, which may be designated solely by action of our board of directors and issued in the future.

Preferred Stock

Our Board of Directors is authorized, subject to any limitations prescribed by law, without further vote or action by our stockholders, to issue from time to time shares of preferred stock in one or more series. Each series of preferred stock will have such number of shares, designations, preferences, voting powers, qualifications and special or relative rights or privileges as shall be determined by our Board of Directors, which may include, among others, dividend rights, voting rights, liquidation preferences, conversion rights and preemptive rights.

The Board of Directors' authority to issue up to 10,000,000 shares of preferred stock without stockholder approval could make it more difficult for a third-party to acquire control of our company and could discourage such attempt. We have 6,000 shares of preferred stock designated as 0% Series A Convertible Preferred Stock, 1 share of preferred stock designated as Series B Preferred Stock, and 50,000 shares of preferred stock designated as Series C Preferred Stock. We currently do not have any shares of preferred stock outstanding and have no present plans to issue any additional shares of preferred stock.

Nevada Anti-Takeover Law and Certain Charter and Bylaw Provisions

Some features of the Nevada Revised Statutes, which are further described below, may have the effect of deterring third parties from making takeover bids for control of our company or may be used to hinder or delay a takeover bid. This would decrease the chance that our stockholders would realize a premium over market price for their shares of Common Stock as a result of a takeover bid.

Acquisition of Controlling Interest

The Nevada Revised Statutes contain provisions governing acquisition of a controlling interest of a Nevada corporation. These provisions provide generally that any person or entity that acquires a certain percentage of the outstanding voting shares of a Nevada corporation may be denied voting rights with respect to the acquired shares, unless the holders of a majority of the voting power of the corporation, excluding shares as to which any of such acquiring person or entity, an officer or a director of the corporation, or an employee of the corporation exercises voting rights, elect to restore such voting rights in whole or in part. These provisions apply whenever a person or entity acquires shares that, but for the operation of these provisions, would bring voting power of such person or entity in the election of directors within any of the following three ranges:

- 20% or more but less than 33 1/3%;
- 33 1/3% or more but less than or equal to 50%; or
- more than 50%.

The stockholders or board of directors of a corporation may elect to exempt the stock of the corporation from these provisions through adoption of a provision to that effect in the articles of incorporation or bylaws of the corporation.

These provisions are applicable only to a Nevada corporation, which:

- has 200 or more stockholders of record, at least 100 of whom have addresses in Nevada appearing on the stock ledger of the corporation; and
- does business in Nevada directly or through an affiliated corporation.

Our Bylaws, as amended in November 2013, provide that the provisions of NRS 78.378 and 78.3793 (“Acquisition of a Controlling Interest”) shall not apply to the Company or to any acquisition of a controlling interest in the Company by any existing or future stockholder.

Combination with Interested Stockholder

The Nevada Revised Statutes contain provisions governing combination of a Nevada corporation that has 200 or more stockholders of record with an interested stockholder. As of November 14, 2024, we had 188 stockholders of record, not including persons or entities that hold our stock in nominee or “street name” through various brokerage firms.

A corporation affected by these provisions may not engage in a combination within two years after the interested stockholder first became an interested stockholder, unless either (i) the combination or transaction by which the interested stockholder first became an interested stockholder is approved by the board of directors before the interested stockholder first became an interested stockholder, or (ii) the combination is approved by the board of directors and by the affirmative vote of the corporation’s stockholders representing at least 60% of the outstanding voting power of the corporation not beneficially owned by the interested stockholder or the interested stockholder’s affiliates. Generally, if approval is not obtained, then after the expiration of the two-year period, the business combination may be consummated with the approval of the board of directors of the combination or transaction by which the interested stockholder first became an interested stockholder before the person became an interested stockholder, or a majority of the voting power held by disinterested stockholders, or if the consideration to be received per share by disinterested stockholders is at least equal to the highest of:

- the highest price per share paid by the interested stockholder within the two years immediately preceding the date of the announcement of the combination or within two years immediately before, or in the transaction in which he, she or it became an interested stockholder, whichever is higher;
- the market value per share on the date of announcement of the combination or the date the person became an interested stockholder, whichever is higher; or
- if higher for the holders of preferred stock, the highest liquidation value of the preferred stock, if any.

Generally, these provisions define an interested stockholder as a person who is the beneficial owner, directly or indirectly, of 10% or more of the voting power of the outstanding voting shares of a corporation. Generally, these provisions define combination to include any merger or consolidation with an interested stockholder, or any sale, lease, exchange, mortgage, pledge, transfer or other disposition, in one transaction or a series of transactions, with an interested stockholder of assets of the corporation having:

- an aggregate market value equal to 5% or more of the aggregate market value of the assets of the corporation;
- an aggregate market value equal to 5% or more of the aggregate market value of all outstanding shares of the corporation; or
- representing 10% or more of the earning power or net income of the corporation.

Articles of Incorporation and Bylaws

Pursuant to our Articles of Incorporation, the existence of authorized but unissued Common Stock and undesignated preferred stock may enable our board of directors to make more difficult or to discourage an attempt to obtain control of our Company by means of a merger, tender offer, proxy contest or otherwise, and thereby to protect the continuity of management. If, in the due exercise of its fiduciary obligations, the board of directors were to determine that a takeover proposal was not in our best interest, such shares could be issued by the board of directors without stockholder approval in one or more transactions that might prevent or render more difficult or costly the completion of the takeover transaction by diluting the voting or other rights of the proposed acquirer or insurgent stockholder group, by putting a substantial voting block in institutional or other hands that might undertake to support the position of the incumbent board of directors, by effecting an acquisition that might complicate or preclude the takeover, or otherwise.

In addition, our Articles of Incorporation grants our board of directors broad power to establish the rights and preferences of authorized and unissued shares of preferred stock. The issuance of shares of preferred stock could decrease the amount of earnings and assets available for distribution to holders of shares of Common Stock. The issuance also may adversely affect the rights and powers, including voting rights, of those holders and may have the effect of delaying, deterring or preventing a change in control of our Company.

Limitations of Director Liability and Indemnification of Directors, Officers and Employees

NRS 78.138 provides that directors of a corporation is not individually liable to the corporation or its stockholders or creditors for any damages as a result of any act or failure to act in his or her capacity as a director or officer unless: (a) the presumption that directors and officers acted in good faith on an informed basis with a view toward the best interest of the corporation has been rebutted and (b) it is proven that:

- The director’s or officer’s act or failure to act constituted a breach of his or her fiduciary duties as a director or officer; and
- such breach involved intentional misconduct, fraud or a knowing violation of law.

Our articles of incorporation provide that every person who was or is a party to, or is threatened to be made a party to, or is involved in any action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that he, or a person of whom he is the legal representative, is or was a director or officer of our company, or is or was serving at our request as a director or officer of another corporation, or as our representative in a partnership, joint venture, trust or other enterprise, shall be indemnified and held harmless to the fullest extent legally permissible under the laws of the State of Nevada from time to time against all expenses, liability and loss (including attorneys' fees, judgments, fines and amounts paid or to be paid in settlement) reasonably incurred or suffered by him in connection therewith. The expenses of officers and directors incurred in defending a civil or criminal action, suit or proceeding must be paid by us as they are incurred and in advance of the final disposition of the action, suit or proceeding, upon receipt of an undertaking by or on behalf of the director or officer to repay the amount if it is ultimately determined by a court of competent jurisdiction that he is not entitled to be indemnified by us.

Our Bylaws provide that our directors and officers shall have no personal liability to us or our stockholders for damages for breach of fiduciary duty as a director or officer, except for damages for breach of fiduciary duty resulting from (a) acts or omissions which involve intentional misconduct, fraud, or a knowing violation of law, or (b) the payment of dividends in violation of section 78.3900 of the Nevada Revised Statutes as it may from time to time be amended or any successor provision thereto.

We have obtained a policy of directors' and officers' liability insurance.

We have entered into separate indemnification agreements with certain of our directors and officers. These agreements, among other things, require us to indemnify our directors and officers for any and all expenses (including reasonable attorneys' fees, retainers, court costs, transcript costs, fees of experts, witness fees, travel expenses, duplicating costs, printing and binding costs, telephone charges, postage, delivery service fees) judgments, fines and amounts paid in settlement actually and reasonably incurred by such directors or officers or on his or her behalf in connection with any action or proceeding arising out of their services as one of our directors or officers, or any of our subsidiaries or any other company or enterprise to which the person provides services at our request provided that such person follows the procedures for determining entitlement to indemnification and advancement of expenses set forth in the indemnification agreement. We believe that these bylaw provisions and indemnification agreements are necessary to attract and retain qualified persons as directors and officers.

The limitation of liability and indemnification provisions in our Articles of Incorporation and Bylaws may discourage stockholders from bringing a lawsuit against directors for breach of their fiduciary duties. They may also reduce the likelihood of derivative litigation against directors and officers, even though an action, if successful, might provide a benefit to us and our stockholders. Our results of operations and financial condition may be harmed to the extent we pay the costs of settlement and damage awards against directors and officers pursuant to these indemnification provisions.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers or persons controlling us, we have been informed that, in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

At present, there is no pending litigation or proceeding involving any of our directors or officers as to which indemnification is required or permitted, and we are not aware of any threatened litigation or proceeding that may result in a claim for indemnification.

Listing of the Common Stock on the NYSE American LLC

The Common Stock is listed for trading on the NYSE American LLC under the symbol "TOON."

Transfer Agent and Registrar

The transfer agent and registrar for the Common Stock is VStock Transfer LLC.

Stock Options

As of December 16, 2024, we had options outstanding to purchase an aggregate of 953,640 shares of Common Stock that were issued under our equity compensation plans. As of December 16, 2024, there were 1,666,017 shares of Common Stock reserved for future issuance under our 2020 Incentive Plan.

DESCRIPTION OF SECURITIES WE ARE OFFERING

We are offering 4,375,000 shares of Common Stock and 3,519,736 Pre-Funded Warrants, along with Series A Common Warrants to purchase up to 7,894,736 shares of Common Stock and Series B Common Warrants to purchase up to 7,894,736 shares of Common Stock. Each share of Common Stock or Pre-Funded Warrant is being sold together with a Series A Common Warrant to purchase one share of Common Stock and a Series B Common Warrant to purchase one share of Common Stock. The shares of Common Stock or Pre-Funded Warrants and accompanying Common Warrants will be issued separately. We are also registering the shares of Common Stock issuable from time to time upon exercise of the Pre-Funded Warrants offered hereby and the Common Warrants offered hereby.

Common Stock. See the description above under "[Description of our Capital Stock- Common Stock.](#)"

Common Warrants to be Issued in this Offering

The following summary of certain terms and provisions of the Series A Common Warrants and Series B Common Warrants that are being offered hereby is not complete and is

subject to, and qualified in its entirety by, the provisions of the Common Warrants, the form of which is filed as an exhibit to our registration statement of which this prospectus forms a part. Prospective investors should carefully review the terms and provisions of the form of Common Warrants for a complete description of the terms and conditions of the Common Warrants.

Stockholder Approval

Under NYSE American listing rules, the Common Warrants are not exercisable without Stockholder Approval. We have agreed to use reasonable best efforts to hold a special meeting of stockholders at the earliest practicable date after the date hereof, but in no event later than seventy-five (75) days after the closing of the offering, in order to obtain Stockholder Approval. If the Company does not obtain Stockholder Approval with respect to the terms of the Common Warrants at the first special meeting of the stockholders, the Company shall call a meeting every sixty (60) days thereafter to seek such Stockholder Approval until the date on which Stockholder Approval is obtained or the Common Warrants are no longer outstanding. We further agreed to solicit proxies from our stockholders in connection therewith in the same manner as all other management proposals in such proxy statement and that all management-appointed proxyholders would vote their proxies in favor of such proposal. We cannot assure you that we will be able to obtain Stockholder Approval. In the event that we are unable to obtain the Stockholder Approval, the Common Warrants will not be exercisable and therefore have no value.

Duration, Exercise Price and Form

Each Common Warrant offered hereby will have an initial exercise price per share of \$0.57, which is equal to 100% of the offering price per share of Common Stock and accompanying Common Warrants. The Series A Common Warrants will be exercisable on or after the effective date of the Stockholder Approval and the NYSE American approves of the supplemental listing application related to such Stockholder Approval and will expire five years from the initial exercise date. The Series B Common Warrants will be exercisable on or after the effective date of the Stockholder Approval and the NYSE American approves of the supplemental listing application related to such Stockholder Approval and will expire eighteen months from the initial exercise date. The exercise price and number of shares of Common Stock issuable upon exercise is subject to appropriate adjustment in the event of share dividends, share splits, reorganizations or similar events affecting our shares of Common Stock and the exercise price. The Common Warrants will be issued in certificated form only.

Exercisability

The Common Warrants will be exercisable, at the option of each holder, in whole or in part, by delivering to us a duly executed exercise notice accompanied by payment in full for the number of shares of Common Stock purchased upon such exercise (except in the case of a cashless exercise as discussed below). A holder (together with its affiliates) may not exercise any portion of the Common Warrants to the extent that the holder would own more than 4.99% of the outstanding shares of the Common Stock immediately after exercise, except that upon at least 61 days' prior notice from the holder to us, the holder may increase the amount of beneficial ownership of outstanding shares after exercising the holder's Common Warrants up to 9.99% of the number of our shares outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the Common Warrants. Purchasers of Common Warrants in this offering may also elect prior to the issuance of the Common Warrants to have the initial exercise limitation set at 9.99% of our outstanding shares of Common Stock.

Cashless Exercise

If, at the time a holder exercises its Common Warrants, a registration statement registering the issuance of the shares of Common Stock underlying the Common Warrants under the Securities Act is not then effective or available for the issuance of such shares, then in lieu of making the cash payment otherwise contemplated to be made to us upon such exercise in payment of the aggregate exercise price and subject to the nominal value of the shares being paid up as described below, the holder may elect instead to receive upon such exercise (either in whole or in part) the net number of shares determined according to a formula set forth in the Common Warrants.

Fractional Shares

No fractional shares of Common Stock or scrip representing fractional shares will be issued upon the exercise of the Common Warrants. Rather, the number of shares of Common Stock to be issued will, at our election, either be rounded up to the next whole share 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.

Transferability

Subject to applicable laws, a Common Warrant may be transferred at the option of the holder upon surrender of the Common Warrant to us together with the appropriate instruments of transfer and funds sufficient to pay any transfer taxes payable upon such transfer.

Trading Market

There is no trading market available for the Common Warrants on any securities exchange or nationally recognized trading system, and we do not expect a trading market to develop. We do not intend to list the Common Warrants on any securities exchange or nationally recognized trading market. Without a trading market, the liquidity of the Common Warrants will be extremely limited. The shares of Common Stock issuable upon exercise of the Common Warrants are currently traded on the NYSE American.

Right as a Stockholder

Except as otherwise provided in the Common Warrants or by virtue of such holder's ownership of Common Stock, the holders of the Common Warrants do not have the rights or privileges of holders of shares of Common Stock, including any voting rights, until they exercise their Common Warrants. The Common Warrants will provide that holders have the right to participate in distributions or dividends paid on Common Stock.

Fundamental Transaction

In the event of a fundamental transaction, as described in the Common Warrants and generally including (i) our merger or consolidation with or into another person, (ii) the sale, lease, license, assignment, transfer, conveyance or other disposition of all or substantially all of our assets, (iii) any purchase offer, tender offer or exchange offer pursuant to which holders of our Common Stock are permitted to sell, tender or exchange their shares for other securities, cash or property and has been accepted by the holders of 50% or more of our outstanding Common Stock or 50% or more of the voting power of our common equity, (iv) any reclassification, reorganization or recapitalization of our shares of Common Stock or any compulsory share exchange or (v) any stock or share purchase agreement or other business combination with another person or group of persons whereby such other person or group acquires 50% or more of our outstanding shares of Common Stock or 50% or more of the voting power of our common equity, the holders will be entitled to receive the number of shares of the Common Stock for which the Common Warrant is exercisable immediately prior to the occurrence of such fundamental transaction on a net exercise basis. Notwithstanding the foregoing, in the event of a fundamental transaction, the holders of the Common Warrants have the right to require us or a successor entity to redeem the Common Warrants for cash in the amount of the Black Scholes Value (as defined in each warrant) of the unexercised portion of the Common Warrants concurrently with or within 30 days following the consummation of a fundamental transaction.

However, in the event of a fundamental transaction which is not in our control, including a fundamental transaction not approved by our board of directors, the holders of the

Common Warrants will only be entitled to receive from us or our successor entity, as of the date of consummation of such fundamental transaction the same type or form of consideration (and in the same proportion), at the Black Scholes Value of the unexercised portion of the Common Warrant that is being offered and paid to the holders of the Common Stock in connection with the fundamental transaction, whether that consideration is in the form of cash, stock or any combination of cash and stock, or whether the holders of the Common Stock are given the choice to receive alternative forms of consideration in connection with the fundamental transaction.

Waivers and Amendments

The Common Warrants may be modified or amended or the provisions of the Common Warrants waived with the written consent of us and the holder.

Pre-Funded Warrants to be Issued in this Offering

The following summary of certain terms and provisions of the Pre-Funded Warrants that are being offered hereby is not complete and is subject to, and qualified in its entirety by, the provisions of the Pre-Funded Warrant, the form of which is filed as an exhibit to our registration statement of which this prospectus forms a part. Prospective investors should carefully review the terms and provisions of the form of Pre-Funded Warrant for a complete description of the terms and conditions of the Pre-Funded Warrants.

Duration, Exercise Price and Form

Each Pre-Funded Warrant offered hereby will have an initial exercise price per share equal to \$0.001. The Pre-Funded Warrants will be immediately exercisable and will expire when exercised in full. The exercise price and number of shares of Common Stock issuable upon exercise is subject to appropriate adjustment in the event of share dividends, share splits, reorganizations or similar events affecting our shares of Common Stock and the exercise price. Subject to the rules and regulations of the applicable trading market, we may at any time during the term of the Pre-Funded Warrant, subject to the prior written consent of the holders, reduce the then current exercise price to any amount and for any period of time deemed appropriate by our board of directors. The Pre-Funded Warrants will be issued in certificated form only.

Exercisability

The Pre-Funded Warrants will be exercisable, at the option of each holder, in whole or in part, by delivering to us a duly executed exercise notice accompanied by payment in full for the number of shares of Common Stock purchased upon such exercise (except in the case of a cashless exercise as discussed below). A holder (together with its affiliates) may not exercise any portion of the Pre-Funded Warrant to the extent that the holder would own more than 4.99% of the outstanding shares of the Common Stock immediately after exercise, except that upon at least 61 days' prior notice from the holder to us, the holder may increase the amount of beneficial ownership of outstanding shares after exercising the holder's Pre-Funded Warrants up to 9.99% of the number of our shares outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the Pre-Funded Warrants. Purchasers of Pre-Funded Warrants in this offering may also elect prior to the issuance of the Pre-Funded Warrants to have the initial exercise limitation set at 9.99% of our outstanding shares of Common Stock.

Cashless Exercise

In lieu of making the cash payment otherwise contemplated to be made to us upon such exercise in payment of the aggregate exercise price, the holder may elect instead to receive upon such exercise (either in whole or in part) the net number of shares of Common Stock determined according to a formula set forth in the Pre-Funded Warrants.

Fractional Shares

No fractional shares of Common Stock or scrip representing fractional shares will be issued upon the exercise of the Pre-Funded Warrants. Rather, the number of shares of Common Stock to be issued will, at our election, either be rounded up to the next whole share 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.

Transferability

Subject to applicable laws, a Pre-Funded Warrant may be transferred at the option of the holder upon surrender of the Pre-Funded Warrant to us together with the appropriate instruments of transfer and funds sufficient to pay any transfer taxes payable upon such transfer.

Trading Market

There is no trading market available for the Pre-Funded Warrants on any securities exchange or nationally recognized trading system, and we do not expect a trading market to develop. We do not intend to list the Pre-Funded Warrants on any securities exchange or nationally recognized trading market. Without a trading market, the liquidity of Pre-Funded Warrants will be extremely limited. The shares of Common Stock issuable upon exercise of the Pre-Funded Warrants are currently traded on the NYSE American.

Right as a Stockholder

Except as otherwise provided in the Pre-Funded Warrants or by virtue of such holder's ownership of Common Stock, the holders of the Pre-Funded Warrants do not have the rights or privileges of holders of the Common Stock, including any voting rights, until they exercise their Pre-Funded Warrants. The Pre-Funded Warrants will provide that holders have the right to participate in distributions or dividends paid on Common Stock.

Fundamental Transaction

In the event of a fundamental transaction, as described in the Pre-Funded Warrants and generally including (i) our merger or consolidation with or into another person, (ii) the sale, lease, license, assignment, transfer, conveyance or other disposition of all or substantially all of our assets, (iii) any purchase offer, tender offer or exchange offer pursuant to which holders of the Common Stock are permitted to sell, tender or exchange their shares for other securities, cash or property and has been accepted by the holders of 50% or more of our outstanding Common Stock or 50% or more of the voting power of our common equity, (iv) any reclassification, reorganization or recapitalization of our shares of Common Stock or any compulsory share exchange or (v) any stock or share purchase agreement or other business combination with another person or group of persons whereby such other person or group acquires 50% or more of our outstanding shares of Common Stock or 50% or more of the voting power of our common equity, the holders of the Pre-Funded Warrants will be entitled to receive upon exercise of the Pre-Funded Warrants the kind and amount of securities, cash or other property that the holders would have received had they exercised the Pre-Funded Warrants immediately prior to such fundamental transaction on a net exercise basis.

The Pre-Funded Warrants may be modified or amended or the provisions of the Pre-Funded Warrants waived with the written consent of us and the holder.

MATERIAL UNITED STATES FEDERAL INCOME TAX CONSIDERATIONS

The following discussion describes the material U.S. federal income tax consequences of the acquisition, ownership and disposition of the shares of Common Stock, Pre-Funded Warrants and Common Warrants acquired in this offering. This discussion is based on the current provisions of the Internal Revenue Code of 1986, as amended, referred to as the Code, existing and proposed U.S. Treasury regulations promulgated thereunder, and administrative rulings and court decisions in effect as of the date hereof, all of which are subject to change at any time, possibly with retroactive effect. No ruling has been or will be sought from the Internal Revenue Service, or IRS, with respect to the matters discussed below, and there can be no assurance the IRS will not take a contrary position regarding the tax consequences of the acquisition, ownership or disposition of the shares of Common Stock, Pre-Funded Warrants or Common Warrants, or that any such contrary position would not be sustained by a court.

We assume in this discussion that the shares of Common Stock, Pre-Funded Warrants and Common Warrants will be held as capital assets (generally, property held for investment). This discussion does not address all aspects of U.S. federal income taxes, does not discuss the potential application of the Medicare contribution tax or the alternative minimum tax and does not address state or local taxes or U.S. federal gift and estate tax laws, except as specifically provided below with respect to non-U.S. holders, or any non-U.S. tax consequences that may be relevant to holders in light of their particular circumstances. This discussion also does not address the special tax rules applicable to particular holders, such as:

- persons who acquired shares of Common Stock, Pre-Funded Warrants or Common Warrants as compensation for services;
- traders in securities that elect to use a mark-to-market method of accounting for their securities holdings;
- persons that own, or are deemed to own, more than 5% of our common stock (except to the extent specifically set forth below);
- persons required for U.S. federal income tax purposes to conform the timing of income accruals to their financial statements under Section 451(b) of the Code (except to the extent specifically set forth below);
- persons for whom our common stock constitutes “qualified small business stock” within the meaning of Section 1202 of the Code or “Section 1244 stock” for purposes of Section 1244 of the Code;
- persons deemed to sell our Common Stock, Pre-Funded Warrants or Common Warrants under the constructive sale provisions of the Code;
- banks or other financial institutions;
- brokers or dealers in securities or currencies;
- tax-exempt organizations or tax-qualified retirement plans;
- pension plans;
- regulated investment companies or real estate investment trusts;
- persons that hold shares of Common Stock, Pre-Funded Warrants or Common Warrants as part of a straddle, hedge, conversion transaction, synthetic security or other integrated investment;
- insurance companies;
- controlled foreign corporations, passive foreign investment companies, or corporations that accumulate earnings to avoid U.S. federal income tax; and
- certain U.S. expatriates, former citizens, or long-term residents of the United States.

In addition, this discussion does not address the tax treatment of partnerships (including any entity or arrangement classified as a partnership for U.S. federal income tax purposes) or other pass-through entities or persons who hold shares of Common Stock, Pre-Funded Warrants or Common Warrants through such partnerships or other entities which are pass-through entities for U.S. federal income tax purposes. If such a partnership or other pass-through entity holds shares of Common Stock, Pre-Funded Warrants or Common Warrants, the treatment of a partner in such partnership or investor in such other pass-through entity generally will depend on the status of the partner or investor and upon the activities of the partnership or other pass-through entity. A partner in such a partnership and an investor in such other pass-through entity that will hold shares of Common Stock, Pre-Funded Warrants or Common Warrants should consult his, her or its own tax advisor regarding the tax consequences of the ownership and disposition of shares of Common Stock, Pre-Funded Warrants or Common Warrants through such partnership or other pass-through entity, as applicable.

This discussion of U.S. federal income tax considerations is for general information purposes only and is not tax advice. Prospective investors should consult their own tax advisors regarding the U.S. federal, state, local and non-U.S. income and other tax considerations of acquiring, holding and disposing of our Common Stock, Pre-Funded Warrants and Common Warrants.

For the purposes of this discussion, a “U.S. Holder” means a beneficial owner of shares of Common Stock, Pre-Funded Warrants or Common Warrants that is for U.S. federal income tax purposes (a) an individual citizen or resident of the United States, (b) a corporation (or other entity taxable as a corporation for U.S. federal income tax purposes), created or organized in or under the laws of the United States, any state thereof or the District of Columbia, (c) an estate the income of which is subject to U.S. federal income taxation regardless of its source, or (d) a trust if it (1) is subject to the primary supervision of a court within the United States and one or more U.S. persons (within the meaning of Section 7701(a)(30) of the Code) has the authority to control all substantial decisions of the trust or (2) has a valid election in effect under applicable U.S. Treasury regulations to be treated as a domestic trust. A “Non-U.S. Holder” is, for U.S. federal income tax purposes, a beneficial owner of shares of Common Stock, Pre-Funded Warrants or Common Warrants that is not a U.S. Holder or a partnership for U.S. federal income tax purposes.

Potential Acceleration of Income

Under tax legislation signed into law in December 2017 commonly known as the Tax Cuts and Jobs Act of 2017, U.S. Holders that use an accrual method of accounting for tax purposes and have certain financial statements generally will be required to include certain amounts in income no later than the time such amounts are taken into account as revenue in such financial statements.

In addition, under the Inflation Reduction Act signed into law on August 16, 2022, certain large corporations (generally, corporations reporting at least \$1 billion average adjusted pre-tax net income on their consolidated financial statements) are potentially subject to a 15% alternative minimum tax on the “adjusted financial statement income” of such large corporations for tax years beginning after December 31, 2022. The U.S. Treasury Department, the IRS, and other standard-setting bodies are expected to issue guidance on how the alternative minimum tax provisions of the Inflation Reduction Act will be applied or otherwise administered.

The application of these rules thus may require the accrual of income earlier than would be the case under the general tax rules described below, although the precise application of these rules is unclear at this time. U.S. Holders that use an accrual method of accounting should consult with their tax advisors regarding the potential applicability of this legislation to their particular situation.

Treatment of Pre-Funded Warrants

Although it is not entirely free from doubt, a pre-funded warrant should be treated as a share of common stock for U.S. federal income tax purposes and a holder of Pre-Funded Warrants should generally be taxed in the same manner as a holder of common stock, as described below. Accordingly, no gain or loss should be recognized upon the exercise of a Pre-Funded Warrant and, upon exercise, the holding period of a Pre-Funded Warrant should carry over to the share of common stock received. Similarly, the tax basis of the Pre-Funded Warrant should carry over to the share of common stock received upon exercise, increased by the exercise price of \$0.0002 per share. Each holder should consult his, her or its own tax advisor regarding the risks associated with the acquisition of Pre-Funded Warrants pursuant to this offering (including potential alternative characterizations). The balance of this discussion generally assumes that the characterization described above is respected for U.S. federal income tax purposes.

Allocation of Purchase Price

For U.S. federal income tax purposes, each share of Common Stock (or, in lieu of Common Stock, each Pre-Funded Warrant) and the accompanying Common Warrants issued pursuant to this offering will be treated as an "investment unit" each of which consisting of one share of Common Stock or one Pre-Funded Warrant (which, as described above, should generally be treated as a share of Common Stock for U.S. federal income tax purposes), as applicable and the accompanying Common Warrants to acquire one share of Common Stock. The purchase price for each investment unit will be allocated between these components in proportion to their relative fair market values at the time the unit is purchased by the holder. This allocation of the purchase price for each unit will establish the holder's initial tax basis for U.S. federal income tax purposes in the share of Common Stock (or, in lieu of Common Stock, Pre-Funded Warrant) and the Common Warrants included in each unit. The separation of the share of Common Stock (or, in lieu of Common Stock, Pre-Funded Warrant) and the Common Warrants included in a unit should not be a taxable event for U.S. federal income tax purposes. Each holder should consult his, her or its own tax advisor regarding the allocation of the purchase price between the Common Stock (or, in lieu of Common Stock, Pre-Funded Warrants) and the Common Warrants.

Tax Considerations Applicable to U.S. Holders

Exercise and Expiration of Common Warrants

Except as discussed below with respect to the cashless exercise of a Common Warrant, a U.S. Holder generally will not recognize gain or loss for U.S. federal income tax purposes upon exercise of a Common Warrant. The U.S. Holder will take a tax basis in the shares acquired on the exercise of a Common Warrant equal to the exercise price of the Common Warrant, increased by the U.S. Holder's adjusted tax basis in the Common Warrant exercised (as determined pursuant to the rules discussed above). The U.S. Holder's holding period in the shares of Common Stock acquired on the exercise of a Common Warrant will begin on the date of exercise or possibly the day after such exercise, and will not include any period for which the U.S. Holder held the Common Warrant.

The lapse or expiration of a Common Warrant will be treated as if the U.S. Holder sold or exchanged the Common Warrant and recognized a capital loss equal to the U.S. Holder's tax basis in the Common Warrant. The deductibility of capital losses is subject to limitations.

The tax consequences of a cashless exercise of a Common Warrant are not clear under current tax law. A cashless exercise may be tax-free, either because the exercise is not a realization event or because the exercise is treated as a recapitalization for U.S. federal income tax purposes. In either tax-free situation, a U.S. Holder's tax basis in the Common Stock received generally would equal the U.S. Holder's tax basis in the Common Warrants. If the cashless exercise was not a realization event, it is unclear whether a U.S. Holder's holding period for the Common Stock would be treated as commencing on the date of exercise of the Common Warrant or the day following the date of exercise of the Common Warrant. If the cashless exercise were treated as a recapitalization, the holding period of the Common Stock would include the holding period of the Common Warrants.

It is also possible that a cashless exercise could be treated as a taxable exchange in which gain or loss would be recognized. In such event, a U.S. Holder could be deemed to have surrendered Common Warrants having an aggregate fair market value equal to the exercise price for the total number of Common Warrants to be exercised. The U.S. Holder would recognize capital gain or loss in an amount equal to the difference between the fair market value of the Common Stock received in respect of the Common Warrants deemed surrendered and the U.S. Holder's tax basis in such Common Warrants. Such gain or loss would be long-term or short-term, depending on the U.S. Holder's holding period in the Common Warrants deemed surrendered. In this case, a U.S. Holder's tax basis in the Common Stock received would equal the sum of the U.S. Holder's initial investment in the exercised Common Warrants (i.e., the portion of the U.S. Holder's purchase price for the investment unit that is allocated to the Common Warrants, as described above under "Allocation of Purchase Price") and the exercise price of such Common Warrants. It is unclear whether a U.S. Holder's holding period for the Common Stock would commence on the date of exercise of the Common Warrant or the day following the date of exercise of the Common Warrant. There may also be alternative characterizations of any such taxable exchange that would result in similar tax consequences, except that a U.S. Holder's gain or loss would be short-term.

Distributions

As discussed above, we currently anticipate that we will retain future earnings, if any, to finance the growth and development of our business and do not intend to pay cash dividends in respect of shares of common stock in the foreseeable future. In the event that we do make distributions on our common stock to a U.S. Holder, those distributions generally will constitute dividends for U.S. tax purposes to the extent paid out of our current or accumulated earnings and profits (as determined under U.S. federal income tax principles). Distributions in excess of our current and accumulated earnings and profits will constitute a return of capital that is applied against and reduces, but not below zero, a U.S. Holder's adjusted tax basis in our common stock. Any remaining excess will be treated as gain realized on the sale or exchange of shares of common stock as described below under the section titled "Disposition of Common Stock, Pre-Funded Warrants or Common Warrants."

Certain Adjustments to Pre-Funded Warrants or Common Warrants

The number of shares of common stock issued upon the exercise of the Pre-Funded Warrants or Common Warrants and the exercise price of Pre-Funded Warrants or Common Warrants are subject to adjustment in certain circumstances. Adjustments (or failure to make adjustments) that have the effect of increasing a U.S. Holder's proportionate interest in our assets or earnings and profits may, in some circumstances, result in a constructive distribution to the U.S. Holder. Adjustments to the conversion rate made pursuant to a bona fide reasonable adjustment formula which has the effect of preventing the dilution of the interest of the holders of Pre-Funded Warrants or Common

Warrants generally should not be deemed to result in a constructive distribution. If an adjustment is made that does not qualify as being made pursuant to a bona fide reasonable adjustment formula, a U.S. Holder of Pre-Funded Warrants or Common Warrants may be deemed to have received a constructive distribution from us, even though such U.S. Holder has not received any cash or property as a result of such adjustment. The tax consequences of the receipt of a distribution from us are described above under “Distributions.”

Disposition of Common Stock, Pre-Funded Warrants or Common Warrants

Upon a sale or other taxable disposition (other than a redemption treated as a distribution, which will be taxed as described above under “Distributions”) of shares of Common Stock, Pre-Funded Warrants or Common Warrants, a U.S. Holder generally will recognize capital gain or loss in an amount equal to the difference between the amount realized and the U.S. Holder’s adjusted tax basis in the Common Stock, Pre-Funded Warrants or Common Warrants sold. Capital gain or loss will constitute long-term capital gain or loss if the U.S. Holder’s holding period for the Common Stock, Pre-Funded Warrants or Common Warrants exceeds one year. The deductibility of capital losses is subject to certain limitations. U.S. Holders who recognize losses with respect to a disposition of shares of Common Stock, Pre-Funded Warrants or Common Warrants should consult their own tax advisors regarding the tax treatment of such losses.

Information Reporting and Backup Reporting

Information reporting requirements generally will apply to payments of distributions (including constructive distributions) on the Common Stock, Pre-Funded Warrants and Common Warrants, and to the proceeds of a sale or other disposition of Common Stock, Pre-Funded Warrants and Common Warrants paid by us to a U.S. Holder unless such U.S. Holder is an exempt recipient, such as a corporation. Backup withholding will apply to those payments if the U.S. Holder fails to provide the holder’s taxpayer identification number, or certification of exempt status, or if the holder otherwise fails to comply with applicable requirements to establish an exemption.

Backup withholding is not an additional tax. Rather, any amounts withheld under the backup withholding rules will be allowed as a refund or a credit against the U.S. Holder’s U.S. federal income tax liability provided the required information is timely furnished to the IRS. U.S. Holders should consult their own tax advisors regarding their qualification for exemption from information reporting and backup withholding and the procedure for obtaining such exemption.

Tax Considerations Applicable to Non-U.S. Holders

Exercise and Expiration of Common Warrants

In general, a Non-U.S. Holder will not recognize gain or loss for U.S. federal income tax purposes upon the exercise of Common Warrants into shares of Common Stock, however, to the extent a cashless exercise results in a taxable exchange, the consequences would be similar to those described in the discussion below under “Disposition of Common Stock, Pre-Funded Warrants or Common Warrants.”

The expiration of a Common Warrant will be treated as if the Non-U.S. Holder sold or exchanged Common Warrant and recognized a capital loss equal to the Non-U.S. Holder’s tax basis in the Common Warrants. However, a Non-U.S. Holder will not be able to utilize a loss recognized upon expiration of a Common Warrant against the Non-U.S. Holder’s U.S. federal income tax liability unless the loss is effectively connected with the Non-U.S. Holder’s conduct of a trade or business within the United States (and, if an income tax treaty applies, is attributable to a permanent establishment or fixed base in the United States) or is treated as a U.S.-source loss and the Non-U.S. Holder is present 183 days or more in the taxable year of disposition and certain other conditions are met.

Certain Adjustments to Warrants

As described under “—U.S. Holders—Certain Adjustments to Pre-Funded Warrants or Common Warrants,” an adjustment to the Pre-Funded Warrants or Common Warrants could result in a constructive distribution to a Non-U.S. Holder, which would be treated as described under “Distributions” below. Any resulting withholding tax attributable to deemed dividends would be collected from other amounts payable or distributable to the Non-U.S. Holder. Non-U.S. Holders should consult their tax advisors regarding the proper treatment of any adjustments to the Pre-Funded Warrants or Common Warrants.

In addition, regulations governing “dividend equivalents” under Section 871(m) of the Code may apply to the Pre-Funded Warrants. Under those regulations, an implicit or explicit payment under Pre-Funded Warrants that references a dividend distribution on our common stock would possibly be taxable to a Non-U.S. Holder as described under “Distributions” below. Such dividend equivalent amount would be taxable and subject to withholding whether or not there is actual payment of cash or other property, and the Company may satisfy any withholding obligations it has in respect of the Pre-Funded Warrants by withholding from other amounts due to the Non-U.S. Holder. Non-U.S. Holders are encouraged to consult their own tax advisors regarding the application of Section 871(m) of the Code to the Pre-Funded Warrants.

Distributions

As discussed above, we currently anticipate that we will retain future earnings, if any, to finance the growth and development of our business and do not intend to pay cash dividends in respect of our common stock in the foreseeable future. In the event that we do make distributions on our common stock to a Non-U.S. Holder, those distributions generally will constitute dividends for U.S. federal income tax purposes as described in “—U.S. Holders—Distributions.” To the extent those distributions do not constitute dividends for U.S. federal income tax purposes (i.e., the amount of such distributions exceeds both our current and our accumulated earnings and profits), they will constitute a return of capital and will first reduce a Non-U.S. Holder’s basis in our common stock (determined separately with respect to each share of common stock), but not below zero, and then will be treated as gain from the sale of that share of common stock as described below under the section titled “—Disposition of Common Stock or Pre-Funded Warrants or Common Warrants.”

Any distribution (including constructive distributions) on shares of common stock that is treated as a dividend paid to a Non-U.S. Holder that is not effectively connected with the holder’s conduct of a trade or business in the United States will generally be subject to withholding tax at a 30% rate or such lower rate as may be specified by an applicable income tax treaty between the United States and the Non-U.S. Holder’s country of residence. To obtain a reduced rate of withholding under a treaty, a Non-U.S. Holder generally will be required to provide the applicable withholding agent with a properly executed IRS Form W-8BEN, IRS Form W-8BEN-E or other appropriate form, certifying the Non-U.S. Holder’s entitlement to benefits under that treaty. Such form must be provided prior to the payment of dividends and must be updated periodically. If a Non-U.S. Holder holds stock through a financial institution or other agent acting on the holder’s behalf, the holder will be required to provide appropriate documentation to such agent. The holder’s agent may then be required to provide certification to the applicable withholding agent, either directly or through other intermediaries. If you are eligible for a reduced rate holding tax under an income tax treaty, you should consult with your own tax advisor to determine if you are able to obtain a refund or credit of any excess amounts withheld by timely filing an appropriate claim for a refund with the IRS.

We generally are not required to withhold tax on dividends paid (or constructive dividends deemed paid) to a Non-U.S. Holder that are effectively connected with the holder’s conduct of a trade or business within the United States (and, if required by an applicable income tax treaty, are attributable to a permanent establishment or fixed base that the holder maintains in the United States) if a properly executed IRS Form W-8ECI, stating that the dividends are so connected, is furnished to us (or, if stock is held through a financial institution or other agent, to the applicable withholding agent). In general, such effectively connected dividends will be subject to U.S. federal income tax on a net income basis at the regular tax rates applicable to U.S. persons. A corporate Non-U.S. Holder receiving effectively connected dividends may also be subject to an additional “branch profits tax,” which is imposed, under certain circumstances, at a rate of 30% (or such lower rate as may be specified by an applicable treaty) on the corporate Non-U.S.

See also the sections below titled “—Backup Withholding and Information Reporting” and “—Foreign Accounts” for additional withholding rules that may apply to dividends paid to certain foreign financial institutions or non-financial foreign entities.

Disposition of Common Stock or Pre-Funded Warrants or Common Warrants

Subject to the discussions below under the sections titled “—Backup Withholding and Information Reporting” and “—Foreign Accounts,” a Non-U.S. Holder generally will not be subject to U.S. federal income or withholding tax with respect to gain recognized on a sale or other disposition (other than a redemption treated as a distribution, which will be taxable as described above under “Distributions”) of shares of Common Stock, Pre-Funded Warrants or Common Warrants unless:

- the gain is effectively connected with the Non-U.S. Holder's conduct of a trade or business in the United States, and if an applicable income tax treaty so provides, the gain is attributable to a permanent establishment or fixed base maintained by the Non-U.S. Holder in the United States; in these cases, the Non-U.S. Holder will be taxed on a net income basis at the regular tax rates and in the manner applicable to U.S. persons, and if the Non-U.S. Holder is a corporation, an additional branch profits tax at a rate of 30%, or a lower rate as may be specified by an applicable income tax treaty, may also apply;
- the Non-U.S. Holder is a nonresident alien present in the United States for 183 days or more in the taxable year of the disposition and certain other requirements are met, in which case the Non-U.S. Holder will be subject to a 30% tax (or such lower rate as may be specified by an applicable income tax treaty between the United States and such holder's country of residence) on the net gain derived from the disposition, which may be offset by certain U.S.-source capital losses of the Non-U.S. Holder, if any; or
- the common stock constitutes a U.S. real property interest because we are, or have been at any time during the five-year period preceding such disposition (or the Non-U.S. Holder's holding period of the Common Stock, Pre-Funded Warrants or Common Warrants, if shorter), a “U.S. real property holding corporation,” unless the common stock is regularly traded on an established securities market, as defined by applicable Treasury Regulations, and the Non-U.S. Holder held no more than 5% of our outstanding common stock, directly or indirectly, during the shorter of the five-year period ending on the date of the disposition or the period that the Non-U.S. Holder held the common stock. Special rules may apply to the determination of the 5% threshold in the case of a holder of Pre-Funded Warrants or Commons Warrants. Non-U.S. Holders are urged to consult their own tax advisors regarding the effect of holding Pre-Funded Warrants or Common Warrants on the calculation of such 5% threshold. Generally, a corporation is a “U.S. real property holding corporation” if the fair market value of its “U.S. real property interests” (as defined in the Code and applicable regulations) equals or exceeds 50% of the sum of the fair market value of its worldwide real property interests plus its other assets used or held for use in a trade or business. Although there can be no assurance, we believe that we are not currently, and we do not anticipate becoming, a “U.S. real property holding corporation” for U.S. federal income tax purposes. No assurance can be provided that the common stock will be regularly traded on an established securities market for purposes of the rules described above. Non-U.S. Holders are urged to consult their own tax advisors regarding the U.S. federal income tax considerations that could result if we are, or become a “U.S. real property holding corporation.”

See the sections titled “—Backup Withholding and Information Reporting” and “—Foreign Accounts” for additional information regarding withholding rules that may apply to proceeds of a disposition of the common stock, Pre-Funded Warrants or Common Warrants paid to foreign financial institutions or non-financial foreign entities.

Backup Withholding and Information Reporting

We must report annually to the IRS and to each Non-U.S. Holder the gross amount of the distributions (including constructive distributions) on the common stock, Pre-Funded Warrants or Common Warrants paid to such holder and the tax withheld, if any, with respect to such distributions. Non-U.S. Holders may have to comply with specific certification procedures to establish that the holder is not a U.S. person (as defined in the Code) in order to avoid backup withholding at the applicable rate, currently 24%, with respect to dividends (or constructive dividends) on the Common Stock, Pre-Funded Warrants or Common Warrants. Generally, a holder will comply with such procedures if it provides a properly executed IRS Form W-8BEN (or other applicable Form W-8) or otherwise meets documentary evidence requirements for establishing that it is a Non-U.S. Holder, or otherwise establishes an exemption. Dividends paid to Non-U.S. Holders subject to withholding of U.S. federal income tax, as described above under the heading “*Distributions*,” will generally be exempt from U.S. backup withholding.

Information reporting and backup withholding generally will apply to the proceeds of a disposition of the Common Stock, Pre-Funded Warrants or Common Warrants by a Non-U.S. Holder effected by or through the U.S. office of any broker, U.S. or foreign, unless the holder certifies its status as a Non-U.S. Holder and satisfies certain other requirements, or otherwise establishes an exemption. Generally, information reporting and backup withholding will not apply to a payment of disposition proceeds to a Non-U.S. Holder where the transaction is effected outside the United States through a non-U.S. office of a broker. However, for information reporting purposes, dispositions effected through a non-U.S. office of a broker with substantial U.S. ownership or operations generally will be treated in a manner similar to dispositions effected through a U.S. office of a broker. Non-U.S. Holders should consult their own tax advisors regarding the application of the information reporting and backup withholding rules to them.

Copies of information returns may be made available to the tax authorities of the country in which the Non-U.S. Holder resides or is incorporated under the provisions of a specific treaty or agreement.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules from a payment to a Non-U.S. Holder can be refunded or credited against the Non-U.S. Holder's U.S. federal income tax liability, if any, provided that an appropriate claim is timely filed with the IRS.

Foreign Accounts

The Foreign Account Tax Compliance Act, or FATCA, generally imposes a 30% withholding tax on dividends (including constructive dividends) on the Common Stock, Pre-Funded Warrants and Common Warrants if paid to a non-U.S. entity unless (i) if the non-U.S. entity is a “foreign financial institution,” the non-U.S. entity undertakes certain due diligence, reporting, withholding, and certification obligations, (ii) if the non-U.S. entity is not a “foreign financial institution,” the non-U.S. entity identifies certain of its U.S. investors, if any, or (iii) the non-U.S. entity is otherwise exempt under FATCA.

Withholding under FATCA generally will apply to payments of dividends (including constructive dividends) on our Common Stock, Pre-Funded Warrants and Common Warrants. While withholding under FATCA would have also applied to payments of gross proceeds from a sale or other disposition of the Common Stock, Pre-Funded Warrants or Common Warrants, under proposed U.S. Treasury Regulations withholding on payments of gross proceeds is currently not required. Although such regulations are not final, applicable withholding agents may rely on the proposed regulations until final regulations are issued.

An intergovernmental agreement between the United States and an applicable foreign country may modify the requirements described in this section. Under certain

circumstances, a holder may be eligible for refunds or credits of the tax. Holders should consult their own tax advisors regarding the possible implications of FATCA on their investment in the Common Stock, Pre-Funded Warrants and Common Warrants.

Federal Estate Tax

Common stock owned or treated as owned by an individual who is not a citizen or resident of the United States (as specially defined for U.S. federal estate tax purposes) at the time of death will be included in the individual's gross estate for U.S. federal estate tax purposes and, therefore, may be subject to U.S. federal estate tax, unless an applicable estate tax or other treaty provides otherwise. The foregoing may also apply to Pre-Funded Warrants and Common Warrants. A Non-U.S. Holder should consult his, her, or its own tax advisor regarding the U.S. federal estate tax consequences of the ownership or disposition of shares of the Common Stock, Pre-Funded Warrants and Common Warrants.

The preceding discussion of material U.S. federal tax considerations is for information only. It is not tax advice. Prospective investors should consult their own tax advisors regarding the particular U.S. federal, state, local and non-U.S. tax consequences of purchasing, holding and disposing of the Common Stock, Pre-Funded Warrants or Common Warrants, including the consequences of any proposed changes in applicable laws.

PLAN OF DISTRIBUTION

Roth Capital Partners, LLC has agreed to act as our exclusive Placement Agent in connection with this offering on a reasonable best efforts basis subject to the terms and conditions of the placement agency agreement dated December 16, 2024. The Placement Agent is not purchasing or selling any of the securities offered by this prospectus, nor is it required to arrange for the purchase and sale of any specific number or dollar amount of such securities, other than to use its reasonable "best efforts" to arrange for the sale of such securities by us. Therefore, we may not sell all of the securities being offered pursuant to this prospectus. The securities will be offered at a fixed price and are expected to be issued in a single closing. We will enter into a Securities Purchase Agreement directly with certain investors, at the investor's option, who purchase our securities in this offering. Investors who do not enter into a Securities Purchase Agreement shall rely solely on this prospectus in connection with the purchase of our securities in this offering.

This offering will terminate no later than December 31, 2024, unless we decide to terminate the offering (which we may do at any time in our discretion) prior to that date. We will have one closing for all the securities purchased in this offering. We will deliver the securities being issued to the investors upon receipt of investor funds for the purchase of the securities offered pursuant to this prospectus. We expect to deliver the securities being offered pursuant to this prospectus on or about December 16, 2024.

Fees and Expenses

We have agreed to pay the Placement Agent an aggregate fee equal to seven percent (7%) of the purchase price paid by all purchasers in this offering. In addition, we have agreed to reimburse the Placement Agent for its legal fees in an amount up to \$75,000.

We estimate the total expenses of this offering paid or payable by us, exclusive of the Placement Agent fee, will be approximately \$400,000. After deducting the fees due to the Placement Agent and our estimated expenses in connection with this offering, we expect the net proceeds from this offering will be approximately \$3.8 million.

The following table shows the per share and total cash fees we will pay to the Placement Agent in connection with the sale of the securities pursuant to this prospectus.

	Per Share of Common Stock and Accompanying Common Warrants	Per Pre- Funded Warrant and Accompanying Common Warrants	Total
Offering price ⁽¹⁾	\$ 0.5700	\$ 0.5690	\$ 4,496,479.78
Placement Agent fees	\$ 0.0399	\$ 0.0398	\$ 314,753.58
Proceeds before expenses to us ⁽²⁾	\$ 0.5301	\$ 0.5292	\$ 4,181,726.20

(1) We have agreed to pay to the Placement Agent a cash fee equal to seven percent (7%) of the aggregate gross proceeds raised in this offering.

(2) Does not include proceeds from the exercise of the Pre-Funded Warrants, if any.

Placement Agent Warrants

The Placement Agent will receive warrants to purchase up to 1,657,894 shares of Common Stock, which is equal to seven percent (7%) of the number of shares of Common Stock, Common Warrants and Pre-Funded Warrants sold in the offering, which Placement Agent Warrants are exercisable at an exercise price equal to \$0.71, or 125% of the public offering price, and will terminate five (5) years from the date of the commencement of sales in this offering. The Placement Agent Warrants are exercisable on or after the effective date of the Stockholder Approval and the NYSE American approves of the supplemental listing application related to such Stockholder Approval. The Placement Agent warrants will be registered as part of this registration statement, along with the shares of Common Stock issuable upon exercise of the Placement Agent Warrants. Such warrants will be subject to FINRA Rule 5110(e)(1) in that, except as otherwise permitted by FINRA rules, for a period of 180 days from the commencement of sales of this offering, the warrant shall not be sold, transferred, assigned, pledged, or hypothecated, or be the subject of any hedging, short sale, derivative, put, or call transaction that would result in the effective economic disposition of the securities by any person except as permitted by FINRA Rule 5110(e)(2). The Placement Agent does not hold any piggyback or demand registration rights.

Tail

We have also agreed to pay the Placement Agent a tail fee equal to the compensation in this offering, if any investor, who was introduced to us by the Placement Agent or who had discussions or negotiations regarding a transaction with us during the term of the Placement Agent's engagement, provides us with capital in any offering of our securities during the six (6) month period following expiration or termination of our engagement of the Placement Agent. If the Company terminates such engagement of the Placement Agent for cause, in compliance with FINRA Rule 5110(g)(5)(B), then no tail fee will be owed to the Placement Agent.

Right of First Refusal

Provided the Placement Agent secures a bona fide offer from an investor or investors of at least \$7 million in the aggregate related to this offering that is accepted by us in our sole discretion, then during the period of engagement of the Placement Agent and for a period of nine (9) months thereafter if we decide to use a placement agent to pursue any private placement or pursue any public offering of debt, equity, equity-linked or an at-the-market offering, then we shall offer the Placement Agent the right to act as the exclusive placement agent or lead underwriter and sole book-runner, as applicable, for such offering. If the Company terminates the engagement of the Placement Agent for cause, in compliance with FINRA Rule 5110(g)(5)(B), then no such right of first refusal will be granted to the Placement Agent.

Indemnification

We have agreed to indemnify the Placement Agent and specified other persons against specified liabilities, including liabilities under the Securities Act, and to contribute to payments the Placement Agent may be required to make in respect thereof.

Lock-Up Agreements

We and each of our directors and officers have agreed with the Placement Agent to be subject to a period of 90 days following the closing of this offering. During the applicable lock-up period, we and such individuals agreed, subject to specified exceptions, not to sell or transfer any shares of Common Stock or securities convertible into, or exchangeable or exercisable for, Common Stock. Specifically, we and such individuals agreed, in part, subject to certain exceptions, not to:

- offer for sale, sell, pledge, or otherwise transfer or dispose of (or enter into any transaction or device that is designed to, or could be expected to, result in the transfer or disposition by any person at any time in the future of) any shares of Common Stock or securities convertible into or exercisable or exchangeable for Common Stock;
- enter into any swap or other derivatives transaction that transfers to another, in whole or in part, any of the economic benefits or risks of ownership of shares of Common Stock; or
- make any demand for or exercise any right or cause to be filed a registration statement, including any amendments thereto, with respect to the registration of any of our securities.

In addition, we have agreed to not issue any new securities that are subject to a price reset based on the trading prices of our Common Stock or upon a specified or contingent event in the future, or enter into any agreement to issue securities at a future determined price for a period of 180 days following the closing date of this offering, subject to certain exceptions. The Placement Agent may waive this prohibition in its sole discretion and without notice.

Transfer Agent and Registrar

The transfer agent and registrar for our Common Stock is VStock Transfer LLC.

No Sales of Similar Securities

We have agreed, subject to certain exceptions, not to issue, enter into any agreement to issue or announce the issuance or proposed issuance of, any shares of Common Stock (or securities convertible into or exercisable for Common Stock) or, subject to certain exceptions, file any registration statement, including any amendments or supplements thereto (other than the registration statement or amendment to the registration statement relating to the securities offered hereunder and a registration statement on Form S-8), until 90 days after the completion of this offering. We have also agreed not to enter into a variable rate transaction (as defined in the Securities Purchase Agreement) for six months after the completion of this offering.

Regulation M

The Placement Agent may be deemed to be an underwriter within the meaning of Section 2(a)(11) of the Securities Act, and any commissions received by it and any profit realized on the resale of the shares sold by it while acting as principal might be deemed to be underwriting discounts or commissions under the Securities Act. As an underwriter, the Placement Agent would be required to comply with the requirements of the Securities Act and the Exchange Act, including, without limitation, Rule 415(a)(4) under the Securities Act and Rule 10b-5 and Regulation M under the Exchange Act. These rules and regulations may limit the timing of purchases and sales of shares by the Placement Agent acting as principal. Under these rules and regulations, the placement agents:

- may not engage in any stabilization activity in connection with our securities; and
- may not bid for or purchase any of our securities or attempt to induce any person to purchase any of our securities, other than as permitted under the Exchange Act, until it has completed its participation in the distribution.

Electronic Distribution

A prospectus in electronic format may be made available on a website maintained by the Placement Agent and the Placement Agent may distribute prospectuses electronically. Other than the prospectus in electronic format, the information on these websites is not part of this prospectus or the registration statement of which this prospectus forms a part, has not been approved and/or endorsed by us or the Placement Agent and should not be relied upon by investors.

Discretionary Accounts

The Placement Agent does not intend to confirm sales of the securities offered hereby to any accounts over which it has discretionary authority.

Other Activities and Relationships

The Placement Agent and certain of its affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, investment research, principal investment, hedging, financing and brokerage activities. The Placement Agent and certain of its affiliates may in the future perform, various commercial and investment banking and financial advisory services for us and our affiliates, for which they received or will receive customary fees and expenses, but have performed no such services for us or our affiliates prior to this offering.

In the ordinary course of its various business activities, the Placement Agent and certain of its affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for its own account and for the accounts of its customers, and such investment and securities activities may involve securities and/or instruments issued by us and our affiliates. If the Placement Agent or its affiliates have a lending relationship with us, they routinely hedge their credit exposure to us consistent with their customary risk management policies. The Placement Agent and its affiliates may hedge such exposure by entering into transactions that consist of either the purchase of credit default swaps or the creation of short positions in our securities or the securities of our affiliates, including potentially the Common Stock offered hereby. Any such short positions could adversely affect future trading prices of the Common Stock offered hereby.

The Placement Agent and certain of its affiliates may also communicate independent investment recommendations, market color or trading ideas and/or publish or express independent research views in respect of such securities or instruments and may at any time hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

LEGAL MATTERS

Blank Rome LLP, New York, New York will pass upon certain legal matters relating to the Pre-Funded Warrants and Common Warrants offered hereby on our behalf and Flangas Law Group, Nevada will pass on certain legal matters related to the the Common Stock, Common Warrants and Pre-Funded Warrants offered hereby on our behalf.

Ellenoff Grossman & Schole LLP, New York, New York, is acting as counsel to the Placement Agent in connection with certain legal matters related to this offering.

EXPERTS

The consolidated financial statements of Kartoon Studios, Inc. as of December 31, 2023, and for the year ended December 31, 2023, incorporated by reference in this prospectus and in the registration statement have been so incorporated in reliance on the report of WithumSmith+Brown, PC, independent registered public accounting firm, given on the authority of such firm as experts in accounting and auditing.

Baker Tilly US, LLP, independent registered public accounting firm, has audited our financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2022 (which report expresses an unqualified opinion), which is incorporated by reference in this prospectus and elsewhere in this Registration Statement. Our financial statements are incorporated by reference in reliance on Baker Tilly US, LLP's report, given on their authority as experts in accounting and auditing.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

We have filed with the SEC a registration statement under the Securities Act for 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 or the exhibits and schedules filed therewith. For further information about us and the securities offered hereby, we refer you to the registration statement and the exhibits and schedules filed thereto. Any statements made in this prospectus concerning legal documents are not necessarily complete and you should read the documents that are filed as exhibits to the registration statement or otherwise filed with the SEC for a more complete understanding of the document or matter.

We file annual, quarterly and current reports, proxy statements and other information with the SEC. Our SEC filings are available to the public at the SEC's website at www.sec.gov. We are subject to the information and periodic reporting requirements of the Exchange Act, and we file periodic reports, proxy statements and other information with the SEC. These periodic reports, proxy statements and other information are available at the website of the SEC referred to above. We maintain a website at www.kartoonstudios.com. You may access our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act with the SEC free of charge at our website as soon as reasonably practicable after such material is electronically filed with, or furnished to, the SEC. The information contained in, or that can be accessed through, our website is not incorporated by reference in, and is not part of, this prospectus.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to "incorporate by reference" information from other documents that 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 part of this prospectus. Information in this prospectus supersedes information incorporated by reference that we filed with the SEC prior to the date of this prospectus.

We incorporate by reference into this prospectus and the registration statement of which this prospectus is a part the information or documents listed below that we have filed with the SEC (Commission File No. 001-37950):

- Our Annual Report on Form 10-K for the fiscal year ended [December 31, 2023](#) filed with the SEC on April 9, 2024;
- Our Quarterly Report on Form 10-Q for the quarter ended [March 31, 2024](#) filed with the SEC on May 15, 2024;
- Our Quarterly Report on Form 10-Q for the quarter ended [June 30, 2024](#) filed with the SEC on August 14, 2024;
- Our Quarterly Report on Form 10-Q for the quarter ended [September 30, 2024](#) filed with the SEC on November 14, 2024;
- Our Current Reports on Form 8-K (other than information furnished rather than filed) filed on [January 30, 2024](#), [February 13, 2024](#), as amended by Current Report on Form 8-K/A on [February 13, 2024](#), [April 9, 2024](#) (Item 4.02), [April 19, 2024](#), [April 24, 2024](#), and [May 29, 2024](#); and
- Our Definitive Proxy Statement on Schedule 14A for our Annual Meeting of Stockholders filed on [April 5, 2024](#).

We also incorporate by reference any future filings (other than current reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits filed on such form that are related to such items unless such Form 8-K expressly provides to the contrary) made with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, including those made (i) on or after the date of the initial filing of the registration statement of which this prospectus forms a part and prior to effectiveness of such registration statement, and (ii) on or after the date of this prospectus but prior to the termination of the offering (i.e., until the earlier of the date on which all of the securities registered hereunder have been sold or the registration statement of which this prospectus forms a part has been withdrawn). Information in such future filings updates and supplements the information provided in this prospectus. Any statements in any such future filings will automatically be deemed to modify and supersede any information in any document we previously filed with the SEC that is incorporated or deemed to be incorporated herein by reference to the extent that statements in the later filed document modify or replace such earlier statements.

We will furnish without charge to each person, including any beneficial owner, to whom a prospectus is delivered, upon written or oral request, a copy of any or all of the documents incorporated by reference into this prospectus but not delivered with the prospectus, including exhibits that are specifically incorporated by reference into such documents. You should direct any requests for documents to:

Kartoon Studios, Inc.
190 N. Canon Drive, 4th Floor
Beverly Hills, CA 90210
Attn: Brian Parisi

You may also access these documents, free of charge, on the SEC's website at www.sec.gov or on our website at www.kartoonstudios.com. The information contained in, or that can be accessed through, our website is not incorporated by reference in, and is not part of, this prospectus.

In accordance with Rule 412 of the Securities Act, any statement contained in a document incorporated by reference herein shall be deemed modified or superseded to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement.

You should rely only on information contained in, or incorporated by reference into, this prospectus and any prospectus supplement. We have not authorized anyone to provide you with information different from that contained in this prospectus or incorporated by reference into this prospectus. We are not making offers to sell the securities in any jurisdiction in which such an offer or solicitation is not authorized or in which the person making such offer or solicitation is not qualified to do so or to anyone to whom it is unlawful to make such an offer or solicitation.



4,375,000 Shares of Common Stock
Series A Common Warrants to Purchase Up to 7,894,736 Shares of Common Stock
Up to 7,894,736 Shares of Common Stock Underlying the Series A Common Warrants
Series B Common Warrants to Purchase Up to 7,894,736 Shares of Common Stock
Up to 7,894,736 Shares of Common Stock Underlying the Series B Common Warrants
Pre-Funded Warrants to Purchase Up to 3,519,736 Shares of Common Stock
Up to 3,519,736 Shares of Common Stock Underlying Pre-Funded Warrants
Placement Agent Warrants to Purchase Up to 1,657,894 Shares of Common Stock
Up to 1,657,894 Shares of Common Stock Underlying the Placement Agent Warrants

PROSPECTUS

Roth Capital Partners

December 16, 2024