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

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**FORM S-1**  
(Amendment No. 1)  
REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

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**MOTUS GI HOLDINGS, INC.**

(Exact name of registrant as specified in its charter)

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**Delaware**  
(State or other jurisdiction of  
incorporation or organization)

**3841**  
(Primary Standard Industrial  
Classification Code Number)

**81-4042793**  
(I.R.S Employer  
Identification Number)

**1301 East Broward Boulevard, 3rd Floor**  
**Ft. Lauderdale, FL**  
**Telephone: (954) 541-8000**  
(Address, including zip code, and telephone number,  
including area code, of registrant's principal executive offices)

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**Mark Pomeranz**  
**Chief Executive Officer**  
**Motus GI Holdings, Inc.**  
**1301 East Broward Boulevard, 3rd Floor**  
**Ft. Lauderdale, FL 33301**  
**(954) 541-8000**  
(Name, address, including zip code, and telephone number,  
including area code, of agent for service)

*Please send copies of all communications to:*

**Steven M. Skolnick, Esq.**  
**Alexander E. Dinur, Esq.**  
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**300 Madison Avenue, 27th Floor**  
**New York, New York 10017**  
**Telephone: (212) 344-5680**

**Approximate date of commencement of proposed sale to the public:**  
**As soon as practicable after the effective date of this registration statement.**

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box:

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

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

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

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

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

Emerging growth company

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

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

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

**SUBJECT TO COMPLETION, DATED NOVEMBER 30, 2023**

## PRELIMINARY PROSPECTUS



**Up to 1,500,000 Shares of Common Stock**  
**Up to 1,500,000 Pre-Funded Warrants to Purchase up to 1,500,000 Shares of Common Stock**  
**Up to 1,500,000 Common Warrants to Purchase up to 1,500,000 Shares of Common Stock**  
**Up to 1,500,000 Shares of Common Stock issuable upon exercise of the Pre-Funded Warrants**  
**Up to 1,500,000 Shares of Common Stock issuable upon exercise of the Common Warrants**

We are offering on a “reasonable best efforts” basis up to \$6.0 million of shares of our common stock and common warrants to purchase shares of our common stock (and the shares of common stock that are issuable from time to time upon exercise of the common warrants), at an assumed public offering price of \$4.00 per share and accompanying common warrant to purchase one share of common stock, which was the closing price of our common stock on The Nasdaq Capital Market on November 27, 2023. We are also offering to certain purchasers 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, the opportunity to purchase, if any such purchaser so chooses, pre-funded warrants to purchase shares of our common stock, 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. Each pre-funded warrant will be exercisable for one share of our common stock. The purchase price of each pre-funded warrant and accompanying common warrant will be equal to the price at which a share of common stock and accompanying common warrant are sold to the public in this offering, minus \$0.0001, and the exercise price of each pre-funded warrant will be \$0.0001 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. Each share of common stock and pre-funded warrant is being sold together with a common warrant to purchase one share of our common stock at an exercise price of \$ per share (representing % of the price at which a share of common stock and accompanying common warrant are sold to the public in this offering). The common warrants will be exercisable immediately and will expire five years from the date of issuance. For each pre-funded warrant we sell, the number of shares of common stock we are offering will be decreased on a one-for-one basis. Because we will issue a common warrant for each share of our common stock and for each pre-funded warrant to purchase one share of our common stock sold in this offering, the number of common warrants sold in this offering will not change as a result of a change in the mix of the shares of our common stock and pre-funded warrants sold. The shares of common stock and pre-funded warrants, and the accompanying common warrants, can only be purchased together in this offering but will be issued separately and will be immediately separable upon issuance. This offering also relates to the shares of common stock issuable upon exercise of any common warrants and pre-funded warrants sold in this offering.

Immediately following the closing of this offering, pursuant to the 2021 Loan Agreement (as defined in this prospectus), an aggregate of \$4.0 million of the principal amount under such loan will be automatically converted into an assumed 1,000,000 shares of common stock (and/or pre-funded warrants in lieu thereof), at a conversion price equal to the public offering price per share of common stock and accompanying common warrant in this offering, based on the assumed combined public offering price of \$4.00 per share of common stock and accompanying common warrant, which is the last reported sale price of our common stock on The Nasdaq Capital Market on November 27, 2023. The Lender (as defined in this prospectus) will also be issued Conversion Common Warrants (as defined in this prospectus) to purchase an assumed 1,000,000 shares of common stock, representing warrant coverage on the shares being issued to the Lender at the same proportion as investors in this offering, and will have executed a customary lock-up agreement with respect to such shares and warrants for a 90-day period following the closing. We will also prepay \$1.5 million of the principal amount of such loan from the net proceeds of this offering. The securities issued to the Lender in the conversion will be issued in reliance on the exemption from registration set forth in Section 3(a) (9) of the Securities Act, and this offering does not relate to the issuance of such securities.

Our common stock is listed on The Nasdaq Capital Market under the symbol “MOTS.” On November 27, 2023 the last reported sale price of our common stock on The Nasdaq Capital Market was \$4.00 per share. There is no established public trading market for the pre-funded warrants or common warrants, and we do not expect a market to develop. In addition, we do not intend to apply for a listing of the pre-funded warrants or common warrants on any national securities exchange. Without an active trading market, the liquidity of the pre-funded warrants and common warrants will be limited.

The public offering price per share of common stock and accompanying common warrant and any pre-funded warrant and accompanying common warrant, as the case may be, will be determined by us at the time of pricing, may be at a discount to the current market price, and the recent market price used throughout this prospectus may not be indicative of the final offering price.

You should read this prospectus, together with additional information described under the headings “Information Incorporated by Reference” and “Where You Can Find More Information,” carefully before you invest in any of our securities.

We are an “emerging growth company” as defined under the federal securities laws and, as such, have elected to comply with certain reduced public company reporting requirements.

**Investing in our securities involves a high degree of risk. See “Risk Factors” beginning on page 7 of this prospectus and in the documents incorporated by reference into this prospectus for a discussion of risks that should be considered in connection with an investment in our securities.**

**Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.**

Because there is no minimum number of securities or minimum aggregate amount of proceeds for this offering to close, we may sell fewer than all of the securities offered hereby, 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 the business goals outlined in this prospectus; provided that we will only consummate an offering of \$5.0 million or more in gross proceeds. This offering may be closed without further notice to you. We expect to close the offering on , 2023 but the offering will be terminated by December 31, 2023, provided that the closing of the offering has not occurred by such date, and may not be extended. Because there is no escrow account and there is no minimum offering amount (subject to a minimum of \$5.0 million), 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. Also, 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.

We have engaged A.G.P./Alliance Global Partners (“A.G.P.”) as our placement agent in connection with this offering. We refer to A.G.P. as the “placement agent” in this prospectus. The placement agent is not purchasing or selling the securities offered by us, and is not required to arrange for the purchase or sale of any specific number or dollar amount of our securities, but will use its reasonable best efforts to solicit offers to purchase the securities offered by this prospectus. The securities will be offered at a fixed price and are expected to be issued in a single closing. Because there is no minimum offering amount required as a condition to closing in this offering (subject to a minimum of \$5.0 million), the actual public offering amount, placement agent’s 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.

	<b>Per Share and Accompanying Common Warrant</b>	<b>Per Pre-Funded Warrant and Accompanying Common Warrant</b>	<b>Total</b>
Public offering price	\$	\$	\$
Placement agent fees (1)	\$	\$	\$
Proceeds to us, before expenses	\$	\$	\$

(1) We have agreed to pay the placement agent a cash fee equal to 7% (or 5% with respect to proceeds from certain investors agreed upon between us and the placement agent). We have also agreed to reimburse the placement agent for certain of their offering-related expenses. See “Plan of Distribution” for a description of the compensation to be received by the placement agent.

The delivery of the securities offered hereby to purchasers is expected to be made on or about , 2023.

*Sole Placement Agent*

**A.G.P.**

**The date of this prospectus is , 2023.**

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## ABOUT THIS PROSPECTUS

We incorporate by reference important information into this prospectus. You may obtain the information incorporated by reference without charge by following the instructions under “Where You Can Find More Information.” You should carefully read this prospectus as well as additional information described under “Information Incorporated by Reference,” before deciding to invest in our securities.

Neither we nor the placement agent have authorized anyone to provide you with additional information or information different from that contained or incorporated by reference in this prospectus filed with the Securities and Exchange Commission (the “SEC”). We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. The placement agent is seeking offers to buy our securities only in jurisdictions where offers and sales are permitted. The information contained in this prospectus, or any document incorporated by reference in this prospectus, is accurate only as of the date of those respective documents, regardless of the time of delivery of this prospectus or any sale of our securities. Our business, financial condition, results of operations and prospects may have changed since that date.

The information incorporated by reference or provided in this prospectus contains statistical data and estimates, including those relating to market size and competitive position of the markets in which we participate, that we obtained from our own internal estimates and research, as well as from industry and general publications and research, surveys and studies conducted by third parties. Industry publications, studies and surveys generally state that they have been obtained from sources believed to be reliable. While we believe our internal company research is reliable and the definitions of our market and industry are appropriate, neither this research nor these definitions have been verified by any independent source.

For investors outside the United States (“U.S.”): We and the placement agent have not done anything that would permit this offering or the possession or distribution of this prospectus in any jurisdiction where action for those purposes is required, other than in the U.S. Persons outside the U.S. who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of the securities and the distribution of this prospectus outside of the U.S.

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## CAUTIONARY NOTE CONCERNING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements that involve substantial risks and uncertainties for purposes of the safe harbor provided by the Private Securities Litigation

Reform Act of 1995. All statements contained in this prospectus other than statements of historical fact, including statements regarding our strategy, future operations, future financial position, liquidity, future revenue, projected expenses, results of operations, expectations concerning the timing and our ability to commence and subsequently report data from planned non-clinical studies and clinical trials, prospects, plans and objectives of management are forward-looking statements. The words “believe,” “may,” “will,” “estimate,” “continue,” “anticipate,” “intend,” “plan,” “expect,” “predict,” “potential,” “opportunity,” “goals,” or “should,” and similar expressions are intended to identify forward-looking statements. Such statements are based on management’s current expectations and involve risks and uncertainties. Actual results and performance could differ materially from those projected in the forward-looking statements as a result of many factors.

We based these forward-looking statements largely on our current expectations and projections about future events and trends that we believe may affect our financial condition, results of operations, business strategy, short-term and long-term business operations and objectives, and financial needs. These forward-looking statements are subject to a number of risks, uncertainties, and assumptions, including those described in “Risk Factors” in this prospectus, and under a similar heading in any other annual, periodic or current report incorporated by reference into this prospectus or that we may file with the SEC in the future. Moreover, we operate in a very competitive and rapidly changing environment. New risks emerge quickly and 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. In light of these risks, uncertainties and assumptions, the future events and trends discussed in this prospectus, may not occur and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statements. We undertake no obligation to revise or publicly release the results of any revision to these forward-looking statements, except as required by law. 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.

You should also read carefully the factors described in the “Risk Factors” section of this prospectus, and under a similar heading in any other annual, periodic or current report incorporated by reference into this prospectus, to better understand the risks and uncertainties inherent in our business and underlying any forward-looking statements. You are advised to consult any further disclosures we make on related subjects in our future public filings.

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## PROSPECTUS SUMMARY

*This summary highlights information about our company, this offering and information contained in greater detail in other parts of this prospectus or incorporated by reference into this prospectus from our filings with the SEC listed in the section entitled “Information Incorporated by Reference.” Because it is only a summary, it does not contain all of the information that you should consider before purchasing our securities in this offering and it is qualified in its entirety by, and should be read in conjunction with, the more detailed information appearing elsewhere or incorporated by reference into this prospectus. You should read the entire prospectus, the registration statement of which this prospectus is a part, and the information incorporated by reference into this prospectus in their entirety, including the “Risk Factors” and our financial statements and the related notes incorporated by reference into this prospectus, before purchasing our securities in this offering.*

*Except as otherwise indicated herein or as the context otherwise requires, references in this prospectus to “the Company,” “we,” “us” and “our” refer to Motus GI Holdings, Inc. and our subsidiaries.*

### Corporate Overview

Motus GI Holdings, Inc. (“we,” “us,” “our” or the “Company”), has developed the Pure-Vu System, a medical device that has been cleared by the U.S. Food and Drug Administration (the “FDA”) to help facilitate the cleansing of a poorly prepared gastrointestinal tract during colonoscopy and to help facilitate upper gastrointestinal (“GI”) endoscopy procedures. The Pure-Vu System is also CE marked in the European Economic Area (EEA) for use in colonoscopy. The Pure-Vu System integrates with standard and slim colonoscopes, as well as gastroscopes, to improve visualization during colonoscopy and upper GI procedures while preserving established procedural workflow and techniques. Through irrigation and evacuation of debris, the Pure-Vu System is designed to provide better-quality exams. Challenges exist for inpatient colonoscopy and endoscopy, particularly for patients who are elderly, with comorbidities, or active bleeds, where the ability to visualize, diagnose and treat is often compromised due to debris, including fecal matter, blood, or blood clots. We believe this is especially true in high acuity patients, like GI bleeding where the existence of blood and blood clots can impair a physician’s view and removing them can be critical in allowing a physician the ability to identify and treat the source of bleeding on a timely basis. We believe use of the Pure-Vu System may lead to positive outcomes and lower costs for hospitals by safely and quickly improving visualization of the colon and upper GI tract, potentially enabling effective diagnosis and treatment without delay. In multiple clinical studies to date, involving the treatment of challenging inpatient and outpatient cases, the Pure-Vu System has consistently helped achieve adequate bowel cleanliness rates greater than 95% following a reduced prep regimen. We also believe that the technology may be useful in the future as a tool to help reduce user dependency on conventional pre-procedural bowel prep regimens. Based on our review and analysis of 2019 market data and 2021 projections for the U.S. and Europe, as obtained from iData Research Inc., we believe that during 2022 approximately 1.5 million inpatient colonoscopy procedures were performed in the U.S. and approximately 4.8 million worldwide. Upper GI bleeds occurred in the U.S. at a rate of approximately 400,000 cases per year in 2019, according to iData Research Inc. The Pure-Vu System has been assigned an ICD-10 code in the US. The system does not currently have unique codes with any private or governmental third-party payors in any other country or for any other use; however, we may pursue reimbursement activities in the future, particularly in the outpatient colonoscopy market. We received 510(k) clearance in October 2023 from the FDA for the Pure-Vu EVS System for use in the Upper GI tract as well as an enhanced version for the colon. We expect to begin market introduction of these products in the coming months. The Company does not expect to generate significant revenue from product sales until it further expands its commercialization efforts, which is subject to significant uncertainty.

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### Recent Developments

#### 2021 Loan Amendment

On July 16, 2021 (the “Effective Date”), we entered into a loan facility (the “2021 Loan Agreement”) with a private institutional lender (the “Lender”). Under the 2021 Loan Agreement, the Lender agreed to provide us with access to term loans in an aggregate principal amount of up to \$12.0 million (the “Loan”) in three tranches as follows: (a) on the Effective Date, a loan in the aggregate principal amount of \$4.0 million (the “Convertible Note”, or “Tranche A”), (b) on the effective date of the Loan, a loan in the aggregate principal amount of \$5.0 million (“Tranche B”), and (c) available until December 31, 2021, a loan in the aggregate principal amount of \$3.0 million (“Tranche C” and, together with Tranche B, the “Term Loan”). The 2021 Loan Agreement contains customary representations and warranties, indemnification provisions in favor of the Lender, events of default and affirmative and negative covenants, including, among others, covenants that limit or restrict our ability to, among other things, incur additional indebtedness, merge or consolidate, make acquisitions, pay dividends or other distributions or repurchase equity, make investments, dispose of assets and enter into certain transactions with affiliates, in each case subject to certain exceptions. Outstanding borrowings under the Loan are secured by a first priority security interest on substantially all of our personal property assets, including our material intellectual property and equity interests in its subsidiaries. There are no liquidity or financial covenants.

The Convertible Note and Tranche B were funded on the effective date. As of December 31, 2021, we drew down the full \$3 million aggregate principal amount of Tranche C.

The Convertible Note requires forty-eight monthly interest only payments at 7.75% per annum commencing after the Effective Date and thereafter full payment of the then outstanding principal balance of the Convertible Note on July 1, 2025. The Tranche B loan requires interest only monthly payments commencing on the Effective Date until September 30, 2022 and, thereafter, thirty-three (33) monthly payments of principal and interest accrued thereon until June 1, 2025. The Tranche C loan, to the extent drawn on or prior to December 31, 2021, requires monthly payments of interest only commencing on the date drawn until September 30, 2022 and, thereafter, thirty-three (33) payments of principal and interest accrued thereon until June 1, 2025. Interest on the Tranche B and Tranche C loans accrues at 9.5% per annum.

The 2021 Loan Agreement contains features that would permit the Lender to convert all or any portion of the outstanding principal balance of the Convertible Note at any time, pursuant to which the converted part of the Convertible Note will be converted into that number of shares of our common stock to be issued to the Lender at a price per share equal to the conversion price, of \$420.00 per share. Following the conversion of any portion of the outstanding principal balance of the Convertible Note, the principal balance of the Convertible Note remaining outstanding shall continue to bear interest at 7.75% per annum.

On November 28, 2023, we and the Lender entered into a First Amendment to the 2021 Loan Agreement (the “Amendment”), pursuant to which, among other things, (a)(i) on the effective date of the Amendment, we paid to the Lender a sum of \$750,000 in cash via wire transfer in immediately available funds (the “Amendment Execution Date Payment”), and (ii) upon consummation of a First Amendment Capital Raise (as defined below) and immediately following the Convertible Note Securities Exchange (as defined below), we will prepay to the Lender a sum of \$1,500,000 in cash via wire transfer in immediately available funds (the “Closing Payment”), which sums set forth in (i) and (ii) shall be applied towards partial prepayment of the outstanding principal balance of the Term Loan; and (b) subject to the satisfaction (or waiver by Lender) of certain Exchange Conditions (as defined in the Amendment), immediately following the consummation of a First Amendment Capital Raise, which we assume this offering will be, the Lender will be deemed to have surrendered to us securities representing \$4.0 million (the “Conversion Amount”) of the outstanding aggregate principal balance of the Convertible Note (“Convertible Loan Securities”) and we will deliver to the Lender, for no additional consideration, in exchange for the surrender of the Convertible Loan Securities, such number of shares of our common stock (the “Convertible Note Securities Exchange”) at a price per share equal to the public offering price per share in the First Amendment Capital Raise representing the Conversion Amount; provided, that, (A) the Lender shall have executed a customary lock-up agreement for a 90-day period following the Convertible Note Securities Exchange, (B) the Lender shall receive the same warrant coverage (the “Conversion Common Warrants”) per share of common stock, if any, as investors purchasing securities in the First Amendment Capital Raise and (C) the Lender shall receive a pre-funded warrant (the “Conversion Pre-Funded Warrant”) in lieu of shares of common stock otherwise issuable upon the Convertible Note Securities Exchange for such number of shares that would represent more than 4.5% of the pre-exercise outstanding shares of common stock, providing that the Lender will not own (x) more than 4.99% of the post-exercise outstanding shares of common stock at any time and (y) to the extent required under the rules of The Nasdaq Capital Market, more than 19.99% of the shares of common stock outstanding immediately prior to the Convertible Note Securities Exchange (but after the consummation of the First Amendment Capital Raise) unless applicable shareholder approval is obtained. “First Amendment Capital Raise” means the Company raising additional cash through one equity financing registered under the Securities Act (to be consummated no later than December 29, 2023) with gross proceeds of at least \$5.0 million. The securities issued to Lender in the Convertible Note Securities Exchange will be issued in reliance on the exemption from registration set forth in Section 3(a)(9) of the Securities Act, and this offering does not relate to the issuance of such securities. We also agreed to file a resale registration statement to register the securities being issued to Lender in the Convertible Note Securities Exchange as promptly as practicable (and in no event later than 91 calendar days after the closing of the Convertible Note Securities Exchange). Assuming this offering will satisfy the definition of the First Amendment Capital Raise, we will issue to the Lender an aggregate of 1,000,000 shares of our common stock (or Conversion Pre-Funded Warrants in lieu thereof) and Conversion Common Warrants to purchase 1,000,000 shares of our common stock at an exercise price equal to the exercise price and a term of the common warrants sold in this offering, based on the assumed combined public offering price of \$4.00 per share of common stock and accompanying common warrant, which is the last reported sale price of our common stock on The Nasdaq Capital Market on November 27, 2023. We do not intend to price this offering for less than \$5.0 million in gross proceeds.

#### *Nasdaq Deficiencies and Reverse Stock Split*

As previously disclosed, we received a letter from the Nasdaq Stock Market, LLC (“Nasdaq”) indicating that we are not in compliance with the minimum stockholders’ equity requirement for continued listing on Nasdaq under Rule 5550(b)(1) (the “Equity Rule”). In addition, as previously disclosed on the Current Report on Form 8-K filed April 5, 2023, we received a letter from Nasdaq indicating that the bid price of the Company’s common stock had failed to close above the minimum \$1 requirement for the past 30 trading days in violation of Listing Rule 5550(a)(2) (the “Bid Price Rule”). The Company was provided 180 calendar days, or until September 27, 2023, to regain compliance with the Bid Price Rule. On September 27, 2023, we received notice that the Nasdaq Hearings Panel (the “Hearings Panel”) granted us an extension to regain compliance with the Equity Rule and the Bid Price Rule until January 2, 2024.

At our annual meeting of stockholders held on September 21, 2023, our stockholders approved a proposed amendment to our Certificate of Incorporation to effect a reverse stock split of our outstanding common stock at a ratio of not less than two-for-one (2:1) and not greater than twenty-for-one (20:1), at any time prior to the one year anniversary date of our annual meeting of stockholders, with the exact ratio to be determined by our Board of Directors. On November 2, 2023, we effected a reverse stock split of our issued and outstanding common stock at a ratio of 1-for-15 (the “2023 Reverse Stock Split”), and on November 21, 2023, we received a letter from Nasdaq confirming that we had regained compliance with the Bid Price Rule. All historical information in this prospectus (other than information incorporated by reference herein dated prior to November 2, 2023) has been retroactively adjusted for the 2023 Reverse Stock Split. We intend to regain compliance with the Equity Rule through the consummation of this offering and the Convertible Note Securities Exchange. Even if we regain compliance with the Equity Rule prior to the January 2, 2024 deadline, we expect that we will need to raise additional capital to remain in compliance with the Equity Rule for future reporting periods, which capital raises may result in additional dilution to investors in our securities.

#### **Implications of Being an Emerging Growth Company**

We are an “emerging growth company” as defined in Section 2(a)(19) of the Securities Act, as modified by the Jumpstart Our Business Startups Act of 2012 (the “JOBS Act”). As such, we are eligible for and intend to take advantage of certain exemptions from various reporting requirements applicable to other public companies that are not emerging growth companies for as long as we continue to be an emerging growth company, including, but not limited to, (i) the exemption from the auditor attestation requirements with respect to internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act of 2002, as amended, (the “Sarbanes Oxley Act”), (ii) the exemptions from say-on-pay, say-on-frequency and say-on-golden parachute voting requirements and (iii) reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements.

Our eligibility to qualify as an emerging growth company will end on December 31, 2023 (which is the last day of the fiscal year following the fifth anniversary of the closing of our initial public offering, which occurred during 2018). In addition, the JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. This allows an emerging growth company to delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have elected to avail ourselves of this extended transition period and, as a result, we will adopt new or revised accounting standards on the relevant dates on which adoption of such standards is required for non-public companies instead of the dates required for other public companies.

#### **Corporate Information**

We are a Delaware corporation formed in September 2016 under the name Eight-Ten Merger Corp. In November 2016, we changed our name to Motus GI Holdings, Inc. We are the parent company of Motus GI Medical Technologies Ltd., an Israeli corporation, and Motus GI, LLC (formerly Motus GI, Inc.), a Delaware limited liability company. Motus GI, Inc. was converted from a Corporation into a Limited Liability Company effective January 1, 2021.

Our principal executive offices are located at 1301 East Broward Boulevard, 3rd Floor, Ft. Lauderdale, FL 33301. Our phone number is (954) 541-8000 and our web address is [www.motusgi.com](http://www.motusgi.com). Our website and the information contained on, or that can be accessed through, our website will not be deemed to be incorporated by reference in, and are not considered part of, this prospectus. You should not rely on any such information in making your decision whether to purchase our common stock.

“Motus GI,” “Pure-Vu,” and our other registered or common law trademarks, service marks or trade names appearing herein are the property of Motus GI Holdings, Inc. Some trademarks referred to in this report are referred to without the ® and ™ symbols, but such references should not be construed as any indicator that their respective owners will not assert, to the fullest extent under applicable law, their rights thereto. We do not intend the use or display of other companies’ trademarks and trade names to imply a relationship with, or endorsement or sponsorship of us by, any other companies.

<b>Common Stock to be Offered</b>	Up to 1,500,000 shares, based on the sale of our common stock at an assumed combined public offering price of \$4.00 per share of common stock and accompanying common warrant, which is the last reported sale price of our common stock on The Nasdaq Capital Market on November 27, 2023.
<b>Pre-funded Warrants to be Offered</b>	We are also offering to certain purchasers 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, the opportunity to purchase, if such purchasers so choose, pre-funded warrants to purchase shares of common stock, in lieu of shares of common stock that would otherwise result in any such purchaser's beneficial ownership exceeding 4.99% (or, at the election of the purchaser, 9.99%) of our outstanding common stock. Each pre-funded warrant will be exercisable for one share of our common stock. The purchase price of each pre-funded warrant and accompanying common warrant will equal the price at which the share of common stock and accompanying common warrant are being sold to the public in this offering, minus \$0.0001, and the exercise price of each pre-funded warrant will be \$0.0001 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. This offering also relates to the shares of common stock issuable upon exercise of any pre-funded warrants sold in this offering. For each pre-funded warrant we sell, the number of shares of common stock we are offering will be decreased on a one-for-one basis. Because we will issue a common warrant for each share of our common stock and for each pre-funded warrant to purchase one share of our common stock sold in this offering, the number of common warrants sold in this offering will not change as a result of a change in the mix of the shares of our common stock and pre-funded warrants sold.
<b>Common Warrants to be Offered</b>	Up to 1,500,000 common warrants to purchase an aggregate of up to 1,500,000 shares of our common stock, based on the sale of our common stock at an assumed combined public offering price of \$4.00 per share of common stock and accompanying common warrant, which is the last reported sale price of our common stock on The Nasdaq Capital Market on November 27, 2023. Each share of our common stock and each pre-funded warrant to purchase one share of our common stock is being sold together with a common warrant to purchase one share of our common stock. Each common warrant will have an exercise price of \$ _____ per share (representing _____ % of the price at which a share of common stock and accompanying common warrant are sold to the public in this offering), will be immediately exercisable and will expire on the fifth anniversary of the original issuance date. The shares of common stock and pre-funded warrants, and the accompanying common warrants, as the case may be, can only be purchased together in this offering but will be issued separately and will be immediately separable upon issuance. This prospectus also relates to the offering of the shares of common stock issuable upon exercise of the common warrants.

<b>Debt Conversion</b>	Immediately following the closing of this offering, pursuant to the 2021 Loan Agreement (as defined in this prospectus), an aggregate of \$4.0 million of the principal amount under such loan will be automatically converted into an assumed 1,000,000 shares of common stock (and/or pre-funded warrants in lieu thereof), at a conversion price equal to the public offering price per share of common stock and accompanying common warrant in this offering, based on the assumed combined public offering price of \$4.00 per share of common stock and accompanying common warrant, which is the last reported sale price of our common stock on The Nasdaq Capital Market on November 27, 2023. The Lender (as defined in this prospectus) will also be issued Conversion Common Warrants (as defined in this prospectus) to purchase an assumed 1,000,000 shares of common stock, representing warrant coverage on the shares being issued to the Lender at the same proportion as investors in this offering, and will have executed a customary lock-up agreement with respect to such shares and warrants for a 90-day period following the closing. We will also prepay \$1.5 million of the principal amount of such loan from the net proceeds of this offering. The securities issued to the Lender in the conversion will be issued in reliance on the exemption from registration set forth in Section 3(a)(9) of the Securities Act, and this offering does not relate to the issuance of such securities The Nasdaq Capital Market.
<b>Common Stock to be Outstanding Immediately After this Offering (1)</b>	3,190,247 shares, assuming in each case none of the common warrants issued in this offering are exercised, and based on the sale of our common stock at an assumed combined public offering price of \$4.00 per share of common stock, which is the last reported sale price of our common stock on The Nasdaq Capital Market on November 27, 2023, no sale of any pre-funded warrants and the issuance, under the 2021 Loan Agreement, of an assumed 1,000,000 shares of common stock upon the conversion of \$4.0 million of principal amount of the Convertible Note immediately following the closing of this offering at a conversion price equal to the assumed combined public offering price per share and accompanying common warrant in this offering (which assumes no issuance of any Conversion Pre-Funded Warrants).
<b>Reasonable Best Efforts</b>	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 it will use its reasonable best efforts to solicit offers to purchase the securities offered by this prospectus. See "Plan of Distribution" on page 17 of this prospectus.
<b>Use of Proceeds</b>	We estimate that the net proceeds from this offering will be approximately \$5.3 million, based on an assumed combined public offering price of \$4.00 per share of common stock and accompanying common warrant, which was the last reported sales price of our common stock on The Nasdaq Capital Market on November 27, 2023, and assuming no sale of any pre-funded warrants, after deducting estimated placement agent fees and estimated offering expenses payable by us, and excluding the proceeds, if any, from the exercise of the common warrants in this offering.  We currently intend to use the net proceeds from this offering to support the market introduction of our Upper GI and next generation system, research and development, including clinical trials, working capital and general corporate purposes, including the prepayment of \$1.5 million of principal under the 2021 Loan Agreement and future debt payments under the 2021 Loan Agreement. See "Use of Proceeds" for additional information.
<b>Risk Factors</b>	An investment in our securities involves a high degree of risk. See "Risk Factors" beginning on page 7 of this prospectus and the other information included and incorporated by reference in this prospectus for a discussion of the risk factors you should carefully consider before deciding to invest in our securities.
<b>National Securities Exchange Listing</b>	Our common stock is listed on The Nasdaq Capital Market under the symbol "MOTS." There is no established public trading market for the pre-funded warrants or common warrants, and we do not expect a market to develop. In addition, we do not intend to apply to list the pre-funded warrants or common warrants on any national securities exchange or other nationally recognized trading system. Without an active trading market, the liquidity of the pre-funded warrants or common warrants will be limited.

(1) The number of shares of our common stock that will be outstanding immediately after this offering is based on 690,247 shares of common stock outstanding as of November 15, 2023, and assumes the sale and issuance by us of 1,500,000 shares of common stock (and no sale of any pre-funded warrants) in this offering and

excludes:

- 4,277 shares of common stock reserved for future issuance under the 2016 Equity Incentive Plan, as amended, as of November 15, 2023;
- 61,975 shares of common stock issuable upon the exercise of options outstanding as of November 15, 2023, with a weighted average exercise price of \$194.58 per share;
- 312,107 shares of common stock issuable upon the exercise of other warrants outstanding as of November 15, 2023, with a weighted average exercise price of \$13.69 per share;
- the shares of common stock issuable upon the exercise of the pre-funded warrants issued in this offering, if any;
- up to 1,500,000 shares of common stock issuable upon the exercise of the common warrants issued in this offering; and
- up to 1,000,000 shares of common stock issuable upon the exercise of the Conversion Common Warrants to be issued immediately following this offering.

Unless otherwise indicated, this prospectus reflects and assumes no issuances or exercises of any other outstanding shares, options or warrants after November 15, 2023.

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## RISK FACTORS

*Investing in our securities involves a high degree of risk. We urge you to carefully consider all of the information contained in this prospectus and other information which may be incorporated by reference in this prospectus as provided under "Information Incorporated by Reference." In particular, you should consider the risk factors below, together with those under the heading "Risk Factors" in our most recent Annual Report on Form 10-K, which is incorporated by reference into this prospectus, as those risk factors are amended or supplemented by our subsequent filings with the SEC. These risks and uncertainties are not the only risks and uncertainties we face. Additional risks and uncertainties not currently known to us, or that we currently view as immaterial, may also impair our business. If any of the risks or uncertainties described below or in our SEC filings or any additional risks and uncertainties actually occur, our business, financial condition, results of operations and cash flow could be materially and adversely affected. As a result, you could lose all or part of your investment.*

### RISKS RELATED TO THIS OFFERING

***If you purchase shares of common stock in this offering, you will experience immediate and substantial dilution in your investment. You will experience further dilution if we issue additional equity or equity-linked securities in the future.***

Because the price per share of our common stock being offered is substantially higher than the pro forma as adjusted net tangible book value per share of our common stock, you will suffer immediate and substantial dilution with respect to the net tangible book value of the common stock you purchase in this offering. Based on an assumed combined public offering price of \$4.00 per share of common stock and accompanying common warrant being sold in this offering, and our pro forma as adjusted net tangible book value as of September 30, 2023 of \$2.10 per share, if you purchase shares of common stock in this offering, you will suffer immediate and substantial dilution of \$1.90 per share with respect to the pro forma as adjusted net tangible book value of the common stock. See the section entitled "Dilution" for a more detailed discussion of the dilution you will incur if you purchase common stock in this offering.

If we issue additional shares of common stock, or securities convertible into or exchangeable or exercisable for shares of common stock, our stockholders, including investors who purchase shares of common stock and/or pre-funded warrants and accompanying common warrants in this offering, will experience additional dilution, and any such issuances may result in downward pressure on the price of our common stock. We also cannot assure you that we will be able to sell shares or other securities in any other offering at a price per share that is equal to or greater than the price per share paid by investors in this offering, and investors purchasing shares or other securities in the future could have rights superior to existing stockholders.

***This is a reasonable best efforts offering, in which no minimum number or dollar amount of securities is required to be sold, and we may not raise the amount of capital we believe is required for our business plans.***

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; provided that we will only consummate an offering of \$5.0 million or more in gross proceeds. Even if we sell securities offered hereby, because there is no minimum offering amount required as a condition to the closing of this offering (subject to a minimum of \$5.0 million), the actual offering amount is not presently determinable and may be substantially less than the maximum amount set forth above. 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.

***If we fail to regain compliance with the requirements for continued listing on Nasdaq, our common stock could be delisted from trading, which would adversely affect the liquidity of our common stock and our ability to raise additional capital.***

The Nasdaq Capital Market's rules for listed companies requires us to meet certain financial, public float, bid price and liquidity standards on an ongoing basis in order to continue the listing of our common stock. In order to maintain our listing on Nasdaq, we must satisfy the continued listing requirements of Nasdaq for inclusion in The Nasdaq Capital Market, including among other things, a minimum stockholders' equity of \$2.5 million and a minimum bid price for our common stock of \$1.00 per share.

As previously disclosed, we received a letter from the Nasdaq Stock Market, LLC ("Nasdaq") indicating that we are not in compliance with the minimum stockholders' equity requirement for continued listing on Nasdaq under Rule 5550(b)(1) (the "Equity Rule"). In addition, as previously disclosed on the Current Report on Form 8-K filed April 5, 2023, we received a letter from Nasdaq indicating that the bid price of the Company's common stock had failed to close above the minimum \$1 requirement for the past 30 trading days in violation of Listing Rule 5550(a)(2) (the "Bid Price Rule"). The Company was provided 180 calendar days, or until September 27, 2023, to regain compliance with the Bid Price Rule. On September 27, 2023, we received notice that the Nasdaq Hearings Panel (the "Hearings Panel") granted us an extension to regain compliance with the Equity Rule and the Bid Price Rule until January 2, 2024.

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At our annual meeting of stockholders held on September 21, 2023, our stockholders approved a proposed amendment to our Certificate of Incorporation to effect a reverse stock split of our outstanding common stock at a ratio of not less than two-for-one (2:1) and not greater than twenty-for-one (20:1), at any time prior to the one year anniversary date of our annual meeting of stockholders, with the exact ratio to be determined by our Board of Directors. On November 2, 2023, we effected a reverse stock split of our issued and outstanding common stock at a ratio of 1-for-15.

We intend to regain compliance with the applicable continued listing requirements of The Nasdaq Capital Market prior to the end of the compliance period set forth in the abovementioned letter. On November 21, 2023, we received a letter from Nasdaq confirming that we had regained compliance with the Bid Price Rule. We intend to regain compliance with the Equity Rule through the consummation of this offering and the Convertible Note Securities Exchange. However, until Nasdaq has reached a final determination that we have regained compliance with all of the applicable continued listing requirements, there can be no assurances regarding the continued listing of our common stock on Nasdaq. The delisting of our common stock from Nasdaq would have a material adverse effect on our access to capital markets, and any limitation on market liquidity or reduction in the price of our common stock as a result of that delisting would adversely affect our ability to raise capital on terms acceptable to us, if at all. Even if we regain compliance with the Equity Rule prior to the January 2, 2024 deadline, we expect that we will need to raise additional capital to remain in compliance with the Equity Rule for future reporting periods, which capital raises may result in additional dilution to investors in our securities.

***Future sales of substantial amounts of our common stock or securities convertible into or exchangeable or exercisable for shares of common stock, either by us or by our existing stockholders, or the possibility that such sales could occur, could adversely affect the market price of our common stock.***

Future sales in the public market of shares of our common stock or securities convertible into or exchangeable or exercisable for shares of common stock, including shares referred to in the foregoing risk factor, shares held by our existing stockholders or shares issued upon exercise of our outstanding stock options or warrants, or the perception by the market that these sales could occur, could lower the market price of our common stock or make it difficult for us to raise additional capital.

***There is no public market for the pre-funded warrants or common warrants being offered in this offering.***

There is no established public trading market for the pre-funded warrants or common 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 pre-funded warrants or common warrants on any securities exchange or nationally recognized trading system, including The Nasdaq Capital Market. Without an active market, the liquidity of the pre-funded warrants and common warrants will be limited.

***Holders of pre-funded warrants and common warrants purchased in this offering will have no rights as common stockholders until such holders exercise such warrants and acquire our common stock.***

Until holders of pre-funded warrants or common warrants acquire shares of our common stock upon exercise of such warrants, holders of pre-funded warrants or common warrants will have no rights with respect to the shares of our common stock underlying such warrants. Upon exercise of the pre-funded warrants or common warrants, the holders will be entitled to exercise the rights of a common stockholder only as to matters for which the record date occurs after the exercise date.

***We will have broad discretion in the use of our existing cash and cash equivalents, including the proceeds from this offering, and may invest or spend our cash in ways with which you do not agree and in ways that may not increase the value of your investment.***

We will have broad discretion over the use of our cash and cash equivalents, including the proceeds from this offering. You may not agree with our decisions, and our use of cash may not yield any return on your investment. We intend to use the net proceeds from this offering to support the market introduction of our Upper GI and next generation system, research and development, including clinical trials, working capital and general corporate purposes, including the prepayment of \$1.5 million of principal under the 2021 Loan Agreement and future debt payments under the 2021 Loan Agreement. Our failure to apply the net proceeds from this offering effectively could compromise our ability to pursue our growth strategy and we might not be able to yield a significant return, if any, on our investment of these net proceeds. You will not have the opportunity to influence our decisions on how to use our net proceeds from this offering.

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## USE OF PROCEEDS

We estimate that we will receive net proceeds of approximately \$5.3 million from the sale of the securities offered by us in this offering, based on an assumed combined public offering price of \$4.00 per share and accompanying common warrant, which was the last reported sales price of our common stock on The Nasdaq Capital Market on November 27, 2023, after deducting the estimated placement agent fees and estimated offering expenses payable by us, excluding the proceeds, if any, from the exercise of the common warrants issued in this offering.

The foregoing discussion 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.

We currently intend to use the net proceeds from this offering to support the market introduction of our Upper GI and next generation system, research and development, including clinical trials, working capital and general corporate purposes, including the prepayment of \$1.5 million of principal under the 2021 Loan Agreement and future debt payments under the 2021 Loan Agreement. See “Risk Factors” for a discussion of certain risks that may affect our intended use of the net proceeds from this offering.

Our expected use of net proceeds from this offering represents our current intentions based upon our present plans and business condition. As of the date of this prospectus, we cannot currently allocate specific percentages of the net proceeds that we may use for the purposes specified above, and we cannot predict with certainty all of the particular uses for the net proceeds to be received upon the completion of this offering, or the amounts that we will actually spend on the uses set forth above. The amounts and timing of our actual use of the net proceeds will vary depending on numerous factors, including our ability to obtain additional financing, the progress, cost and results of our preclinical and clinical development programs, and whether we are able to enter into future licensing or collaboration arrangements.

Pending the use of the net proceeds from this offering, we intend to invest the net proceeds in investment-grade, interest-bearing instruments, certificates of deposit or direct or guaranteed obligations of the U.S.

A 250,000 increase or decrease in the number of shares offered by us, as set forth on the cover page of this prospectus, would increase or decrease the net proceeds to us by approximately \$0.9 million, based on the assumed public offering price of \$4.00 per share remaining the same, and after deducting estimated placement agent fees and estimated offering expenses payable by us.

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## CAPITALIZATION

The following table sets forth our cash and capitalization as of September 30, 2023:

- on an actual basis;
- on a pro forma basis to give effect to (i) the payment of the \$750,000 Amendment Execution Date Payment under the amended 2021 Loan Agreement, to be applied towards partial prepayment of the outstanding principal balance of the Term Loan, on November 29, 2023, (ii) the issuance of an aggregate of 161,268 shares of common stock upon exercises of previously issued pre-funded warrants, for nominal cash payment, between October 1, 2023 and November 15, 2023 and (iii) the cancellation of 1,470 fractional shares in connection with the 2023 Reverse Stock Split (collectively, the “pro forma events”); and



- on a pro forma, as adjusted basis, to give further effect to (i) the sale of 1,500,000 (or 1,250,000 in the fourth column) shares of common stock and the accompanying common warrants in this offering at an assumed combined public offering price of \$4.00 per share and accompanying common warrant, which was the last reported sale price of our common stock on The Nasdaq Capital Market on November 27, 2023, (ii) the payment of the \$1,500,000 Closing Payment under the 2021 Loan Agreement, to occur immediately following the closing of this offering, and (iii) the issuance, under the 2021 Loan Agreement, of an assumed 1,000,000 shares of common stock upon the conversion of \$4.0 million of principal amount of the Convertible Note (net of unamortized debt discount of \$64,000 solely for accounting purposes), to occur immediately following the closing of this offering at a conversion price equal to the assumed combined public offering price per share and accompanying common warrant in this offering (which assumes no issuance of any Conversion Pre-Funded Warrants), and after deducting estimated placement agent fees and estimated offering expenses payable by us, excluding the proceeds, if any, from the exercise of the common warrants issued in this offering, and assuming no sale of pre-funded warrants in this offering (collectively, the “closing events”).

You should read this table together with “Use of Proceeds,” “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and our audited and unaudited financial statements and related notes thereto incorporated by reference in this prospectus.

	As of September 30, 2023		Pro Forma As	Pro Forma As
	Actual	Pro Forma	Adjusted (\$6 million	Adjusted (\$5 million
	(unaudited)	(unaudited)	offering)	offering)
Cash	\$ 5,724,000	\$ 4,974,000	\$ 8,729,000	\$ 7,799,000
Total liabilities	10,969,000	10,219,000	4,783,000	4,783,000
Stockholders’ deficit:				
Common stock, \$0.0001 par value, 115,000,000 shares authorized as of September 30, 2023, and 530,449 shares, actual, 690,247 shares, pro forma, 3,190,247 shares, pro forma as adjusted (\$6 million offering) and 2,940,247 shares, pro forma as adjusted (\$5 million offering), issued as of September 30, 2023	53	69	319	294
Additional paid-in capital	\$ 148,935,000	\$ 148,935,000	\$ 158,189,750	\$ 157,259,775
Accumulated deficit	\$ (151,413,000)	\$ (151,413,000)	\$ (151,477,000)	\$ (151,477,000)
Total stockholders’ (deficit) equity	\$ (2,477,947)	\$ (2,477,947)	\$ 6,713,069	\$ 5,783,069
Total capitalization	\$ 8,491,053	\$ 7,741,069	\$ 11,496,069	\$ 10,566,069

The table and discussion above is based on 530,449 shares of common stock outstanding as of September 30, 2023 and excludes:

- 62,588 shares of common stock issuable upon the exercise of options outstanding as of September 30, 2023, with a weighted average exercise price of \$200.79 per share;
- 5,134 shares of common stock reserved for future issuance under 2016 Equity Incentive Plan, as amended, as of September 30, 2023;
- 473,408 shares of common stock issuable upon the exercise of other warrants outstanding as of September 30, 2023, with a weighted average exercise price of \$9.16 per share;
- the shares of common stock issuable upon the exercise of the pre-funded warrants issued in this offering;
- up to 1,500,000 shares of common stock issuable upon the exercise of the common warrants issued in this offering; and
- up to 1,000,000 shares of common stock issuable upon the exercise of the Conversion Common Warrants to be issued immediately following this offering.

The information discussed above is illustrative only and will adjust based on the actual public offering price, the actual number of shares and common warrants that we offer in this offering, and other terms of this offering determined at pricing. Except as indicated otherwise, the discussion and table above assume (i) 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 and (ii) no exercise of common warrants accompanying the shares of common stock sold in this offering.

## DILUTION

If you invest in our securities, your ownership interest will be diluted to the extent of the difference between the public offering price per share of our common stock and the adjusted net tangible book value per share of our common stock immediately after the closing of this offering.

Our historical net tangible book value (deficit) as of September 30, 2023 was \$(2.5) million, or \$(4.67) per share of common stock. Our historical net tangible book value is the amount of our total tangible assets less our liabilities. Historical net tangible book value per share of common stock is our historical net tangible book value divided by the number of shares of common stock outstanding as of September 30, 2023.

Our pro forma net tangible book value (deficit) as of September 30, 2023 was \$(2.5) million, or \$(3.59) per share of common stock. The pro forma net tangible book value gives effect to (i) the payment of the \$750,000 Amendment Execution Date Payment under the amended 2021 Loan Agreement, to be applied towards partial prepayment of the outstanding principal balance of the Term Loan, on November 29, 2023, (ii) the issuance of an aggregate of 161,268 shares of common stock upon exercises of previously issued pre-funded warrants, for nominal cash payment, between October 1, 2023 and November 15, 2023 and (iii) the cancellation of 1,470 fractional shares in connection with the 2023 Reverse Stock Split (collectively, the “pro forma events”).

After giving further effect to (i) the sale of 1,500,000 shares of common stock and the accompanying common warrants in this offering at an assumed combined public offering price of \$4.00 per share and accompanying common warrant, which was the last reported sale price of our common stock on The Nasdaq Capital Market on November 27, 2023, (ii) the payment of the \$1,500,000 Closing Payment under the 2021 Loan Agreement, to occur immediately following the closing of this offering, and (iii) the issuance, under the 2021 Loan Agreement, of an assumed 1,000,000 shares of common stock upon the conversion of \$4.0 million of principal amount of the Convertible Note (net of unamortized debt discount of \$64,000 solely for accounting purposes), to occur immediately following the closing of this offering at a conversion price equal to the assumed combined public offering price per share and accompanying common warrant in this offering (which assumes no issuance of any Conversion Pre-Funded Warrants), and after deducting estimated placement agent fees and estimated offering expenses payable by us, excluding the proceeds, if any, from the exercise of the common warrants issued in this offering, and assuming no sale of pre-funded warrants in this offering (collectively, the “closing events”), our pro forma as adjusted net tangible book value as of September 30, 2023 would be \$6.7 million, or \$2.10 per share of common stock. This amount represents an immediate increase in pro forma net tangible book value of \$5.69 per share to our existing stockholders and an immediate dilution of \$1.90 per share to investors participating in this offering. We determine dilution per share to investors participating in this offering by subtracting pro forma as adjusted net tangible book value per share after this offering from the assumed combined public offering price per share paid by investors participating in this offering.

The following table illustrates this dilution on a per share basis to new investors:

Assumed combined public offering price per share and accompanying common warrant		\$	4.00
Historical net tangible book value (deficit) per share as of September 30, 2023	\$	(4.67)	
Increase in historical net tangible book value per share attributable to the pro forma events		1.08	
Pro forma net tangible book value (deficit) per share as of September 30, 2023		(3.59)	
Increase in net tangible book value per share attributable to the closing events		5.69	
Net tangible book value per share after giving effect to this offering	\$		2.10
Dilution per share to new investors in this offering	\$		1.90

We may increase or decrease the number of shares we are offering. An increase of 250,000 in the number of shares offered by us, as set forth on the cover page of this prospectus, would increase the pro forma as adjusted net tangible book value per share by approximately \$0.12 and decrease the dilution per share to new investors participating in this offering by approximately \$0.12, based on an assumed combined public offering price of \$4.00 per share and accompanying common warrant, which was the last reported sale price of our common stock on The Nasdaq Capital Market on November 27, 2023, remaining the same and after deducting estimated placement agent fees and estimated offering expenses payable by us. A reduction of 250,000 in the number of shares offered by us, as set forth on the cover page of this prospectus, would decrease the pro forma as adjusted net tangible book value per share after this offering by approximately \$0.14 and increase the dilution per share to new investors participating in this offering by approximately \$0.14, based on an assumed combined public offering price of \$4.00 per share and accompanying common warrant, which was the last reported sale price of our common stock on The Nasdaq Capital Market on November 27, 2023, remaining the same and after deducting estimated placement agent fees and estimated offering expenses payable by us.

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The table and discussion above is based on 530,449 shares of common stock outstanding as of September 30, 2023 and excludes:

- 62,588 shares of common stock issuable upon the exercise of options outstanding as of September 30, 2023, with a weighted average exercise price of \$200.79 per share;
- 5,134 shares of common stock reserved for future issuance under 2016 Equity Incentive Plan, as amended, as of September 30, 2023;
- 473,408 shares of common stock issuable upon the exercise of other warrants outstanding as of September 30, 2023, with a weighted average exercise price of \$9.16 per share;
- the shares of common stock issuable upon the exercise of the pre-funded warrants issued in this offering;
- up to 1,500,000 shares of common stock issuable upon the exercise of the common warrants issued in this offering; and
- up to 1,000,000 shares of common stock issuable upon the exercise of the Conversion Common Warrants to be issued immediately following this offering.

The information discussed above is illustrative only and will adjust based on the actual public offering price, the actual number of shares and common warrants that we offer in this offering, and other terms of this offering determined at pricing. Except as indicated otherwise, the discussion and table above assume (i) 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 and (ii) no exercise of common warrants accompanying the shares of common stock sold in this offering.

In addition, we may choose to raise additional capital in the future. To the extent that capital is raised through equity or convertible securities, the issuance of those securities may result in further dilution to the holders of common stock.

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## DESCRIPTION OF CAPITAL STOCK

### Description of Common Stock

Our authorized capital stock consists of:

- 115,000,000 shares of common stock, par value \$0.0001 per share;
- 10,000,000 shares of preferred stock, par value \$0.0001 per share.

The additional shares of our authorized capital stock available for issuance may be issued at times and under circumstances so as to have a dilutive effect on earnings per share and on the equity ownership of the holders of our common stock. The ability of our board of directors to issue additional shares of stock could enhance the board's ability to negotiate on behalf of the stockholders in a takeover situation but could also be used by the board to make a change-in-control more difficult, thereby denying stockholders the potential to sell their shares at a premium and entrenching current management. The following description is a summary of the material provisions of our common stock. You should refer to our Certificate of Incorporation and Bylaws, both of which are on file with the SEC as exhibits to previous SEC filings, for additional information. The summary below is qualified by provisions of applicable law.

**Voting.** The holders of our common stock are entitled to one vote for each share held of record on all matters on which the holders are entitled to vote (or consent to). When a quorum is present at any meeting of stockholders, any matter before any such meeting (other than an election of a director or directors) shall be decided by a majority of the votes properly cast on such matter, except where a different vote is required by our Certificate of Incorporation, by our Bylaws, by law, by the rules or regulations of any stock exchange applicable to us, or pursuant to any regulation applicable to us or our securities, in which case, such different vote shall apply. A majority in voting power of the shares entitled to vote at the meeting, present in person or represented by proxy, shall constitute a quorum at any meeting of stockholders.

**Dividends.** The holders of our common stock are entitled to receive, ratably, dividends only if, when and as declared by our board of directors out of funds legally available therefor and after provision is made for each class of capital stock having preference over our common stock.

**Liquidation Rights.** In the event of our liquidation, dissolution or winding-up, the holders of our common stock are entitled to share, ratably, in all assets remaining available for distribution after payment of all liabilities and after provision is made for each class of capital stock having preference over our common stock.

**Conversion Right.** The holders of our common stock have no conversion rights.

**Preemptive and Similar Rights.** The holders of our common stock have no preemptive or similar rights.

**Redemption/Put Rights.** There are no redemption or sinking fund provisions applicable to our common stock. All of the outstanding shares of our common stock are

fully-paid and non-assessable.

#### **Anti-Takeover Effects of Delaware Law and Our Certificate of Incorporation and Bylaws**

Our Certificate of Incorporation and Bylaws contain provisions that could have the effect of discouraging potential acquisition proposals or tender offers or delaying or preventing a change of control. These provisions are as follows:

- they provide that special meetings of stockholders may be called by the board of directors or at the request in writing by stockholders of record owning at least twenty (20%) percent of the issued and outstanding voting shares of our common stock;
- they do not include a provision for cumulative voting in the election of directors. Under cumulative voting, a minority stockholder holding a sufficient number of shares may be able to ensure the election of one or more directors. The absence of cumulative voting may have the effect of limiting the ability of minority stockholders to effect changes in our board of directors; and
- they allow us to issue, without stockholder approval, up to 10,000,000 shares of preferred stock that could adversely affect the rights and powers of the holders of our common stock.

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We are subject to the provisions of Section 203 of the DGCL, an anti-takeover law. In general, Section 203 prohibits a publicly held Delaware corporation from engaging in a “business combination” with an “interested stockholder” for a period of three years after the date of the transaction in which the person became an interested stockholder, unless the business combination is approved in the following prescribed manner:

- prior to the time of the transaction, the board of directors of the corporation approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder;
- upon completion of the transaction that resulted in the stockholder becoming an interested stockholder, the stockholder owned at least eighty-five percent (85%) of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the number of shares outstanding: (1) shares owned by persons who are directors and also officers and (2) shares owned by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; and
- on or subsequent to the time of the transaction, the business combination is approved by the board and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least sixty-six and two-thirds percent (66 2/3%) of the outstanding voting stock which is not owned by the interested stockholder.

Generally, for purposes of Section 203, a “business combination” includes a merger, asset or stock sale, or other transaction resulting in a financial benefit to the interested stockholder. An “interested stockholder” is a person who, together with affiliates and associates, owns or, within three (3) years prior to the determination of interested stockholder status, owned fifteen percent (15%) or more of a corporation’s outstanding voting securities.

#### **Requirements for Advance Notification of Stockholder Nominations and Proposals**

Our Bylaws establish advance notice procedures with respect to stockholder proposals and the nomination of candidates for election as directors, other than nominations made by or at the direction of our board of directors or a committee of our board of directors. These provisions may have the effect of precluding the conduct of certain business at a meeting if the proper procedures are not followed. These provisions may also discourage or deter a potential acquirer from conducting a solicitation of proxies to elect the acquirer’s own slate of directors or otherwise attempting to obtain control of our company.

#### **Choice of Forum**

Our Certificate of Incorporation provides that, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware will be the exclusive forum for any derivative action or proceeding brought on our behalf; any action asserting a breach of fiduciary duty; any action asserting a claim against us, or any of our officers or Directors, arising pursuant to the DGCL, our Certificate of Incorporation or our Bylaws; or any action asserting a claim against us that is governed by the internal affairs doctrine. This exclusive forum provision may limit the ability of our stockholders to bring a claim in a judicial forum that such stockholders find favorable for the disputes listed above, which may discourage such lawsuits against us, or any of our officers or directors.

#### **Potential Effects of Authorized but Unissued Stock**

We have shares of common stock and preferred stock available for future issuance without stockholder approval. We may utilize these additional shares for a variety of corporate purposes, including future public offerings to raise additional capital, to facilitate corporate acquisitions or payment as a dividend on the capital stock.

The existence of unissued and unreserved common stock and preferred stock may enable our board of directors to issue shares to persons friendly to current management or to issue preferred stock with terms that could render more difficult or discourage a third-party attempt to obtain control of us by means of a merger, tender offer, proxy contest or otherwise, thereby protecting the continuity of our management. In addition, the board of directors has the discretion to determine designations, rights, preferences, privileges and restrictions, including voting rights, dividend rights, conversion rights, redemption privileges and liquidation preferences of each series of preferred stock, all to the fullest extent permissible under the DGCL and subject to any limitations set forth in our Certificate of Incorporation. The purpose of authorizing the board of directors to issue preferred stock and to determine the rights and preferences applicable to such preferred stock is to eliminate delays associated with a stockholder vote on specific issuances. The issuance of preferred stock, while providing desirable flexibility in connection with possible financings, acquisitions and other corporate purposes, could have the effect of making it more difficult for a third-party to acquire, or could discourage a third-party from acquiring, a majority of our outstanding voting stock.

#### **Transfer Agent and Registrar**

The transfer agent and registrar for our common stock is Continental Stock Transfer & Trust Company. The transfer agent address is Continental Stock Transfer & Trust Company, 1 State Street, 30th Floor, New York, NY 10004, (212) 509-4000.

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### **DESCRIPTION OF SECURITIES WE ARE OFFERING**

We are offering shares of our common stock or pre-funded warrants to purchase shares of our common stock and common warrants to purchase shares of our common stock. Each share of common stock or pre-funded warrant is being sold together with a common warrant to purchase one share of our 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 and common warrants offered hereby.

## Common Stock

The material terms and provisions of our common stock are described under the caption “Description of Capital Stock” in this prospectus.

## Pre-Funded Warrants

*The following summary of certain terms and provisions of 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 will be filed as an exhibit to the 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 and Exercise Price.** Each pre-funded warrant offered hereby will have an initial exercise price per share equal to \$0.0001. The pre-funded warrants will be immediately exercisable and may be exercised at any time until the pre-funded warrants are 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 stock dividends, stock splits, reorganizations or similar events affecting our common stock and the exercise price. The pre-funded warrants will be issued separately from the accompanying common warrants and may be transferred separately immediately thereafter.

**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 our common stock purchased upon such exercise (except in the case of a cashless exercise as discussed below). Purchasers of the pre-funded warrants in this offering may elect to deliver their exercise notice following the pricing of the offering and prior to the issuance of the pre-funded warrants at closing to have their pre-funded warrants exercised immediately upon issuance and receive shares of common stock underlying the pre-funded warrants upon closing of this offering. 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 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 ownership of outstanding stock after exercising the holder’s pre-funded warrants up to 9.99% of the number of shares of our common stock 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 common stock. No fractional shares of common stock will be issued in connection with the exercise of a pre-funded warrant. In lieu of fractional shares, we will round down to the next whole share.

**Cashless Exercise.** If, at the time a holder exercises its pre-funded warrants, a registration statement registering the issuance of the shares of common stock underlying the pre-funded warrants under the Securities Act is not then effective or available, 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, 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.

**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.

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**Exchange Listing.** There is no trading market available for the pre-funded warrants on any securities exchange or nationally recognized trading system. We do not intend to list the pre-funded warrants on any securities exchange or nationally recognized trading system.

**Right as a Stockholder.** Except as otherwise provided in the pre-funded warrants or by virtue of such holder’s ownership of shares of our common stock, the holders of the pre-funded warrants do not have the rights or privileges of holders of our common stock, including any voting rights, until they exercise their pre-funded warrants.

**Fundamental Transaction.** In the event of a fundamental transaction, as described in the pre-funded warrants and generally including any reorganization, recapitalization or reclassification of our common stock, the sale, transfer or other disposition of all or substantially all of our properties or assets, our consolidation or merger with or into another person, the acquisition of more than 50% of our outstanding common stock, or any person or group becoming the beneficial owner of 50% of the voting power represented by our outstanding common stock, 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.

## Common Warrants

*The following summary of certain terms and provisions of 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 will be filed as an exhibit to the 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.*

**Duration and Exercise Price.** Each common warrant offered hereby will have an initial exercise price per share equal to \$ . The common warrants will be immediately exercisable and will expire on the fifth anniversary of the original issuance date. The exercise price and number of shares of common stock issuable upon exercise is subject to appropriate adjustment in the event of stock dividends, stock splits, reorganizations or similar events affecting our common stock and the exercise price. The common warrants will be issued separately from the common stock (or pre-funded warrants) and may be transferred separately immediately thereafter. A common warrant to purchase one share of our common stock will be issued for every share of common stock (or pre-funded warrant to purchase a share of common stock) purchased in this offering.

**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 our 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 warrant to the extent that the holder would own more than 4.99% of the outstanding 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 ownership of outstanding stock after exercising the holder’s common warrants up to 9.99% of the number of shares of our common stock outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the common warrants. No fractional shares of common stock will be issued in connection with the exercise of a common warrant. In lieu of fractional shares, we will round down to the next whole share.

**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 and an exemption from registration under the Securities Act is not 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, 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 common warrants.

**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.

**Exchange Listing.** There is no established public trading market for the common warrants, and we do not expect a market to develop. In addition, we do not intend to list the common warrants on any securities exchange or nationally recognized trading system. Without an active trading market, the liquidity of the common warrants will be limited.

**Right as a Stockholder.** Except as otherwise provided in the common warrants or by virtue of such holder’s ownership of shares of our common stock, the holders of the common warrants do not have the rights or privileges of holders of our common stock, including any voting rights, until they exercise their common warrants.

*Fundamental Transaction.* In the event of a fundamental transaction, as described in the form of common warrant, and generally including any reorganization, recapitalization or reclassification of our common stock, the sale, transfer or other disposition of all or substantially all of our properties or assets, our consolidation or merger with or into another person, the acquisition of more than 50% of our outstanding common stock, or any person or group becoming the beneficial owner of 50% of the voting power represented by our outstanding common stock, the holders of the common warrants will be entitled to receive upon exercise of the common warrants the kind and amount of securities, cash or other property that the holders would have received had they exercised the common warrants immediately prior to such fundamental transaction. In the event of a fundamental transaction approved by our Board of Directors, 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 common warrants) of the unexercised portion of the common warrants as of the date of the consummation of the fundamental transaction. In the event of a fundamental transaction which is not approved by our Board of Directors, the holders of the common warrants have the right to require us or a successor entity to redeem the common warrants for the consideration paid in the fundamental transaction in the amount of the Black Scholes Value of the unexercised portion of the common warrants as of the date of the consummation of the fundamental transaction.

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## PLAN OF DISTRIBUTION

A.G.P./Alliance Global Partners (“A.G.P.”), has agreed to act as our sole placement agent on a reasonable best efforts basis in connection with this offering subject to the terms and conditions of a placement agency agreement, dated , 2023 between A.G.P. and us. The placement agent is not purchasing or selling any shares in this offering but has arranged for the sale of the securities offered hereby. The public offering price of the securities in this offering has been determined based upon arm’s-length negotiations between the purchasers and us. The placement agent agreement will provide certain representations, warranties and covenants, including indemnifications, from us. A.G.P. will have no authority to bind us. We will enter into a securities purchase agreement directly with the 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. All of the shares will be sold at the offering price specified in this prospectus and, we expect, at a single closing. 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 will deliver the securities being offered pursuant to this prospectus upon closing.

Because there is no minimum number of securities or minimum aggregate amount of proceeds for this offering to close, we may sell fewer than all of the securities offered hereby, 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 the business goals outlined in this prospectus; provided that we will only consummate an offering of \$5 million or more in gross proceeds. This offering may be closed without further notice to you. We expect to close the offering on , 2023 but the offering will be terminated by December 31, 2023, provided that the closing of the offering has not occurred by such date, and may not be extended. Because there is no escrow account and there is no minimum offering amount (subject to a minimum of \$5 million), 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. Also, 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.

### Commissions and Expenses

We have agreed to pay the placement agent an aggregate cash placement fee equal to seven percent (7.0%) (or 5.0% with respect to proceeds from certain investors agreed upon between us and the placement agent) of the gross proceeds in this offering from sales arranged for by the placement agent.

Subject to certain conditions, we have also agreed to pay the following expenses relating to this offering: (a) all filing fees and expenses relating to the registration with the SEC of the securities sold in this offering; (b) all FINRA public offering filing fees; (c) all fees and expenses relating to the listing of the Company’s equity or equity-linked securities on the Nasdaq Stock Exchange; (d) all fees, expenses and disbursements relating to the registration or qualification of the securities under the “blue sky” securities laws of such states and other jurisdictions as A.G.P. may reasonably designate (including, without limitation, all filing and registration fees, and the reasonable fees and disbursements of the Company’s “blue sky” counsel, which will be A.G.P.’s counsel) unless such filings are not required in connection with the Company’s proposed listing with Nasdaq; (e) all fees, expenses and disbursements relating to the registration, qualification or exemption of the securities under the securities laws of such foreign jurisdictions as A.G.P. may reasonably designate; (f) the costs of all mailing and printing of the offering documents; (g) transfer and/or stamp taxes, if any, payable upon the transfer of securities from the Company to A.G.P.; (h) the fees and expenses of the Company’s accountants; (i) \$100,000 for reasonable legal fees and disbursements for A.G.P.’s counsel; (j) up to \$25,000 for reimbursement of non-accountable expenses and (k) up to \$10,000 for clearing costs.

We estimate the total offering expenses of this offering that will be payable by us, excluding the placement agent fees, will be approximately \$325,000. After deducting the placement agent fees and our estimated offering expenses, we expect the net proceeds from this offering to be approximately \$5.3 million.

### Lock-Up Agreements.

In connection with this offering, each of our executive officers and directors has agreed, subject to certain exceptions set forth in the lock-up agreements, not to sell, offer, agree to sell, contract to sell, hypothecate, pledge, grant any option to purchase, make any short sale of, or otherwise dispose of, directly or indirectly, any common stock, or any securities convertible into or exercisable or exchangeable for common stock, for sixty (60) days following the closing of the offering.

### Securities Issuance Standstill

In addition, we have agreed, subject to certain exceptions, that for a period of sixty (60) days from the closing date of the offering, without the prior written consent of the placement agent, we will not (a) offer, sell, issue, or otherwise transfer or dispose of, directly or indirectly, any equity of the Company or any securities convertible into or exercisable or exchangeable for equity of the Company; (b) file or caused to be filed any registration statement with the Commission relating to the offering of any equity of the Company or any securities convertible into or exercisable or exchangeable for equity of the Company; or (c) enter into any agreement or announce the intention to effect any of the actions described in subsections (a) or (b) hereof (all of such matters, the “Standstill”). So long as none of such equity securities shall be saleable in the public market until the expiration of the sixty (60) day period described above, the following matters shall not be prohibited by the Standstill: (i) the adoption of an equity incentive plan and the grant of awards or equity pursuant to any equity incentive plan and the issuance of shares of our common stock pursuant to any outstanding convertible securities, and the filing of a registration statement on Form S-8; and (ii) the issuance of equity securities in connection with an acquisition or a strategic relationship, which may include the sale of equity securities.

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### Determination of Offering Price

The public offering price of the securities we are offering was negotiated between us and the investors, in consultation with the placement agent based on the trading of our common stock prior to the offering, among other things. Other factors considered in determining the public offering price of the securities we are offering include our history and prospects, the stage of development of our business, our business plans for the future and the extent to which they have been implemented, an assessment of our management, general conditions of the securities markets at the time of the offering and such other factors as were deemed relevant.

### Passive Market Making

In connection with this offering, the placement agent may engage in passive market making transactions in our common stock on the Nasdaq Stock Market in

accordance with Rule 103 of Regulation M promulgated under the Exchange Act during a period before the commencement of offers or sales of shares of our common stock and extending through the completion of the distribution.

#### **Indemnification**

We have agreed to indemnify the placement agent against certain liabilities, including liabilities under the Securities Act, and liabilities arising from breaches of representations and warranties contained in the placement agency agreement, or to contribute to payments that the placement agent may be required to make in respect of those liabilities.

#### **Potential Conflicts of Interest**

The placement agent and its affiliates have in the past and may in the future, from time to time, engage in transactions with and perform services for us in the ordinary course of their business for which it may receive customary fees and reimbursement of expenses. In the ordinary course of its various business activities, the placement agent and 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 accounts and for the accounts of its customers and such investment and securities activities may involve securities and/or instruments of our Company. The placement agent and its affiliates may also make investment recommendations 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.

#### **Electronic Distribution**

This prospectus may be made available in electronic format on websites or through other online services maintained by the placement agent or by an affiliate. Other than this prospectus, the information on the placement agent's website and any information contained in any other website maintained by the placement agent 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.

#### **Transfer Agent and Registrar**

The transfer agent and registrar for our common stock is Continental Stock Transfer and Trust.

#### **The Nasdaq Capital Market Listing**

Our common stock is currently listed on The Nasdaq Capital Market under the symbol "MOTS."

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### **INFORMATION INCORPORATED BY REFERENCE**

The SEC allows us to "incorporate by reference" information into this document, which means that we can disclose important information to you by referring you to another document filed separately with the SEC. The information incorporated by reference is an important part of this prospectus, and information that we file later with the SEC will automatically update and supersede this information.

We incorporate by reference the documents listed below and any future filings made with the SEC under Sections 13(a), 13(c), 14, or 15(d) of the Exchange Act made subsequent to the date of this prospectus until the termination of the offering of the securities described in this prospectus (other than information in such filings that was "furnished," under applicable SEC rules, rather than "filed"). We incorporate by reference the following documents or information that we have filed with the SEC:

- our Annual Report on [Form 10-K](#) for the year ended December 31, 2022, filed with the SEC on March 31, 2023;
- our Definitive Proxy Statement on [Schedule 14A](#), filed with the SEC on August 7, 2023 (other than the portions thereof that are furnished and not filed);
- our Quarterly Reports on Form 10-Q for the fiscal quarters ended [March 31, 2023](#), [June 30, 2023](#) and [September 30, 2023](#), filed with the SEC on May 10, 2023, August 14, 2023 and November 13, 2023 respectively; and
- our Current Reports on Form 8-K filed with the SEC on [April 5, 2023](#), [April 13, 2023](#), [May 11, 2023](#), [May 17, 2023](#), [May 22, 2023](#), [June 5, 2023](#), [July 7, 2023](#), [July 14, 2023](#), [July 28, 2023](#), [September 6, 2023](#), [September 14, 2023](#), [September 21, 2023](#), [October 2, 2023](#), [November 2, 2023](#) and [November 27, 2023](#) (other than any portions thereof deemed furnished and not filed).

Any statement contained in this prospectus or contained in a document incorporated or deemed to be incorporated by reference into this prospectus will be deemed to be modified or superseded to the extent that a statement contained in this prospectus or any subsequently filed supplement to this prospectus, or document deemed to be incorporated by reference into this prospectus, modifies or supersedes such statement. Any statements so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

You may request a copy of these filings at no cost, by writing or telephoning us at the following address:

Motus GI Holdings, Inc.  
Attn: Mark Pomeranz, Chief Executive Officer  
1301 East Broward Boulevard, 3rd Floor  
Ft. Lauderdale, FL 33301

You may also access these filings on our website at [www.motusgi.com](http://www.motusgi.com). You should rely only on the information incorporated by reference or provided in this prospectus. We have not authorized anyone else to provide different or additional information on our behalf. An offer of these securities is not being made in any jurisdiction where the offer or sale is not permitted. You should not assume that the information in this prospectus is accurate as of any date other than the date of those respective documents.

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### **WHERE YOU CAN FIND MORE INFORMATION**

This prospectus is part of a registration statement we filed with the SEC. This prospectus does not contain all of the information set forth in the registration statement and the exhibits to the registration statement. For further information with respect to us and the securities we are offering under this prospectus, we refer you to the registration statement and the exhibits and schedules filed as a part of the registration statement. You should rely only on the information contained in this prospectus or incorporated by reference into this prospectus. We have not authorized anyone else to provide you with different information. We are not making an offer of these securities in any jurisdiction

where the offer is not permitted. You should assume that the information contained in this prospectus, or any document incorporated by reference in this prospectus, is accurate only as of the date of those respective documents, regardless of the time of delivery of this prospectus or any sale of our securities.

We file annual, quarterly and current reports, proxy statements and other information with the SEC. Our SEC filings are available to the public from commercial document retrieval services and over the Internet at the SEC's website at <http://www.sec.gov>.

We maintain a website at [www.motusgi.com](http://www.motusgi.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 into, and is not part of, this prospectus.

## LEGAL MATTERS

The validity of the common stock and certain other legal matters will be passed upon for us by Lowenstein Sandler LLP, New York, New York. Thompson Hine LLP, New York, New York, has acted as counsel to the placement agent in connection with this offering.

## EXPERTS

The consolidated balance sheets of Motus GI Holdings, Inc. and Subsidiaries (the "Company") as of December 31, 2022 and 2021, and the related consolidated statements of comprehensive loss, changes in shareholders' equity, and cash flows for each of the years then ended, have been audited by EisnerAmper LLP, independent registered public accounting firm, as stated in their report which is incorporated herein by reference, which report includes an explanatory paragraph about the existence of substantial doubt concerning the Company's ability to continue as a going concern. Such financial statements have been incorporated herein by reference in reliance on the report of such firm given upon their authority as experts in accounting and auditing.

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Up to 1,500,000 Shares of Common Stock  
Up to 1,500,000 Pre-Funded Warrants to Purchase up to 1,500,000 Shares of Common Stock  
Up to 1,500,000 Common Warrants to Purchase up to 1,500,000 Shares of Common Stock  
Up to 1,500,000 Shares of Common Stock issuable upon exercise of the Pre-Funded Warrants  
Up to 1,500,000 Shares of Common Stock issuable upon exercise of the Common Warrants

## PROSPECTUS

*Sole Placement Agent*

**A.G.P.**

The date of this prospectus is \_\_\_\_\_, 2023.

## PART II

### INFORMATION NOT REQUIRED IN PROSPECTUS

#### Item 13. Other Expenses of Issuance and Distribution.

The following table sets forth the costs and expenses, other than placement agent fees, payable by us in connection with the sale and distribution of the securities being registered. All of the amounts shown are estimates, except for the SEC registration fee and the FINRA filing fee:

	<b>Amount to be paid</b>
SEC registration fee	\$ 1,771
FINRA filing fee	2,300
Legal fees and expenses	250,000
Accounting fees and expenses	50,000
Miscellaneous	20,929
Total expenses	<u>\$ 325,000</u>

#### Item 14. Indemnification of Directors and Officers.

Section 145 of the Delaware General Corporation Law (the "DGCL") provides, in general, that a corporation incorporated under the laws of the State of Delaware, as we are, may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding (other than a derivative action by or in the right of the corporation) by reason of the fact that such person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the corporation and, with respect to any criminal action or proceeding, had no reasonable cause to believe such person's conduct was unlawful. In the case of a derivative action, a Delaware corporation may indemnify any such person against expenses (including attorneys' fees) actually and reasonably incurred by such person in connection with the defense or settlement of such action or suit if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the corporation, except that no indemnification will be made in respect of any claim, issue or matter as to which such person will have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery of the State of Delaware or any other court



in which such action was brought determines such person is fairly and reasonably entitled to indemnity for such expenses.

Our certificate of incorporation and bylaws provide that we will indemnify our directors, officers, employees and agents to the extent and in the manner permitted by the provisions of the DGCL, as amended from time to time, subject to any permissible expansion or limitation of such indemnification, as may be set forth in any amendment by stockholders or directors resolution. Any repeal or modification of these provisions approved by our stockholders will be prospective only and will not adversely affect any limitation on the liability of any of our directors or officers existing as of the time of such repeal or modification

We have director and officer liability insurance to cover liabilities our directors and officers may incur in connection with their services to us, including matters arising under the Securities Act.

We have entered into indemnification agreements with all of our directors and named executive officers whereby we have agreed to indemnify those directors and officers to the fullest extent permitted by law, including indemnification against expenses and liabilities incurred in legal proceedings to which the director or officer was, or is threatened to be made, a party by reason of the fact that such director or officer is or was a director, officer, employee or agent of the Company provided that such director or officer acted in good faith and in a manner that the director or officer reasonably believed to be in, or not opposed to, the best interests of the Company.

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**Item 15. Recent Sales of Unregistered Securities.**

In the three years preceding the filing of this registration statement, the Company made sales of the following unregistered securities:

*Royalty Exchange*

As previously reported, the Company issued certain (i) Royalty Payment Rights Certificates, as amended (“Royalty Payment Rights Certificates”) to the former holders of the Company’s shares of Series A Convertible Preferred Stock, par value \$0.0001 per share (the “Series A Convertible Preferred Stock” and such holders, the “Certificate Holders”), with the right to receive certain single digit royalties for the achievement of certain commercialization milestones (the “Royalty Amount”), and (ii) Placement Agent Royalty Payment Rights Certificates dated December 22, 2016 (the “Placement Agent Payment Rights Certificates”) to Aegis Capital Corp., a New York corporation (the “Placement Agent”) or its designees, with the right to receive a payment equal to a percentage of the aggregate Royalty Amount paid to the Certificate Holders (the “Certificate Payment”).

On September 12, 2023 (the “Effective Date”), the Company, entered into an Amendment Agreement (the “Amendment Agreement”) with the holders of a majority of the Royalty Payment Rights Certificates to cancel the rights of all Certificate Holders to receive the Royalty Amounts in exchange for an aggregate of 88,221 shares of the Company’s common stock (the “Certificate Holder Securities”). As a result, the right of the holders of the Placement Agent Payment Rights Certificates to receive the Certificate Payment was also cancelled, in exchange for an aggregate of 8,821 shares (such shares, together with the Certificate Holder Securities, the “Exchange Securities”). The Company issued the applicable number of Exchange Securities in exchange for cancellation of all Royalty Payment Right Certificates held by the Certificate Holders (as well as the Placement Agent Payment Rights Certificates held by the Placement Agent or its designees) as of September 12, 2023. As part of the amendment, the Exchange Securities are also subject to a 180-day lock-up from the Effective Date. The Exchange Securities are being issued in a cashless exchange, exempt from registration pursuant to Section 3(a)(9) of the Securities Act of 1933, as amended.

*Private Placement*

On May 17, 2023, the Company entered into a Securities Purchase Agreement (the “Securities Purchase Agreement”) with an institutional and accredited investor (the “Purchaser”), pursuant to which the Company issued and sold to the Purchaser in a private placement (the “Private Placement”) an aggregate of (i) 35,000 shares (the “Shares”) of the Company’s common stock, \$0.0001 par value per share (“Common Stock”), (ii) pre-funded warrants (the “Pre-Funded Warrants”) to purchase up to an aggregate of 241,134 shares of Common Stock and (iii) common warrants (the “Common Warrants”) to purchase up to an aggregate of 276,134 shares of Common Stock, in each case, in accordance with the terms and conditions of the Securities Purchase Agreement, at a combined offering price of \$12.675 per Share and accompanying Common Warrant to purchase one share of Common Stock and \$0.12.6735 per Pre-Funded Warrant to purchase one share of Common Stock and accompanying Common Warrant to purchase one share of Common Stock, for gross proceeds of approximately \$3.5 million.

The Common Warrants have an exercise price of \$10.80 per share. The Common Warrants are immediately exercisable and may be exercised at any time after their original issuance until November 20, 2028. The Pre-Funded Warrants have an exercise price of \$0.0015 per share. The Pre-Funded Warrants are immediately exercisable and may be exercised at any time until the Pre-Funded Warrants are exercised in full. A holder of Common Warrants or Pre-Funded Warrants may not exercise any portion of such holder’s Common Warrants or Pre-Funded Warrants to the extent that the holder, together with its affiliates, would beneficially own more than 4.99% (or, at the election of the holder, 9.99%) of the Company’s outstanding shares of Common Stock immediately after exercise, except that upon at least 61 days’ prior notice from the holder to the Company, the holder may increase the beneficial ownership limitation to up to 9.99% of the number of shares of Common Stock outstanding immediately after giving effect to the exercise.

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The net proceeds to the Company from the Private Placement were approximately \$3.0 million, after deducting placement agent fees and expenses and estimated offering expenses payable by the Company. The Company used the net proceeds from the Private Placement for general corporate purposes. The Private Placement closed on May 19, 2023.

In connection with the Private Placement, the Company entered into a registration rights agreement, dated May 17, 2023 (the “Registration Rights Agreement”), with the Purchaser, pursuant to which, among other things, the Company will prepare and file with the Securities and Exchange Commission a registration statement on Form S-3 (the “Registration Statement”) to register for resale the Shares and the shares of Common Stock issuable upon the exercise of the Common Warrants and Pre-Funded Warrants by June 1, 2023.

In connection with the Private Placement, the Company entered into a warrant amendment (the “Warrant Amendment”), dated May 17, 2023 with the holder named therein, pursuant to which the Company agreed to amend certain existing warrants to purchase up to an aggregate of 19,999 shares of Common Stock that were previously issued in January 2021 through February 2021 at an exercise price of \$636.00 per share, such that effective upon the closing of the Private Placement the amended warrants have a reduced exercise price of \$10.80 per share, at an additional offering price of \$0.1875 per amended warrant.

Pursuant to the Securities Purchase Agreement, the Company agreed that for a period of 60 days following the date that the Registration Statement is declared effective (the “Effective Date”), the Company shall not issue, enter into an agreement to issue or announce the issuance or proposed issuance of Common Stock or any other securities convertible into, or exercisable or exchangeable for, Common Stock or file any registration statement or any amendment or supplement thereto, in each case other than as contemplated pursuant to the Registration Rights Agreement. The Company also agreed not to enter into any Variable Rate Transaction (as defined in the Securities Purchase Agreement) for a period of one year following the Effective Date, subject to certain exceptions.

H.C. Wainwright & Co., LLC (“Wainwright”) acted as the exclusive placement agent for the Private Placement. The Company paid Wainwright a cash fee equal to 7.0% of the aggregate gross proceeds of the Private Placement and a management fee equal to 1.0% of the gross proceeds of the Private Placement, and paid Wainwright a non-accountable expense allowance of \$75,000. Additionally, the Company issued to Wainwright, or its designees, warrants to purchase up to an aggregate of 13,806 shares of Common Stock,



equal to 5.0% of the aggregate number of Shares and shares of Common Stock underlying the Pre-Funded Warrants placed in the Private Placement (the "Placement Agent Warrants"). The Placement Agent Warrants are exercisable immediately, expire on November 20, 2028 and have an exercise price of \$15.8445 per share (equal to 125% of the combined offering price per Share and accompanying Common Warrant).

The Shares, Pre-Funded Warrants, Common Warrants, Placement Agent Warrants and the shares of Common Stock issuable upon the exercise of the Common Warrants, Pre-Funded Warrants and Placement Agent Warrants have not been registered under the Securities Act of 1933, as amended, and were offered pursuant to the exemption from registration provided in Section 4(a)(2) under the Securities Act of 1933, as amended, and Rule 506(b) promulgated thereunder.

#### 2021 Loan

On July 16, 2021 (the "Effective Date"), the Company and its wholly owned subsidiaries, Motus GI, LLC (the "US Subsidiary") and Motus GI Medical Technologies, LTD (the "IL Subsidiary" together with the Company and the US Subsidiary, the "Borrower"), entered into that certain Agreement for the Provision of a Loan Facility (the "Loan Agreement") with a private institutional lender ("Lender"), a limited partnership incorporated in Jersey. Under the Loan Agreement, Lender will provide the Company with access to term loans in an aggregate principal amount of up to \$12.0 million in three tranches as follows: (a) on the Effective Date, a loan in the aggregate principal amount of \$4.0 million (the "Convertible Bullet Loan" or the "Convertible Note"), (b) on the Effective Date, a loan in the aggregate principal amount of \$5.0 million ("Tranche B"), and (c) available until December 31, 2021, a loan in the aggregate principal amount of \$3.0 million ("Tranche C", together with the Convertible Bullet Loan and Tranche B, the "Loan" or "Loans"). The Convertible Bullet Loan and Tranche B were funded on the Effective Date.

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The Company intends to use the proceeds of the Loans to refinance the Company's existing indebtedness in the amount of approximately \$8.2 million, and to enhance the Company's product development and commercial growth plans, and for general corporate purposes.

The Convertible Bullet Loan requires forty-eight (48) monthly interest only payments commencing after the Effective Date and thereafter full payment of the then outstanding principal balance of the Bullet Loan on July 1, 2025. The Tranche B loan requires interest only monthly payments commencing on the Effective Date until September 30, 2022 and, thereafter, thirty-three (33) monthly payments of principal and interest accrued thereon until June 1, 2025. The Tranche C loan, to the extent drawn on or prior to December 31, 2021, requires monthly payments of interest only commencing on the date drawn until September 30, 2022 and, thereafter, thirty-three (33) monthly payments of principal and interest accrued thereon until June 1, 2025. Notwithstanding the foregoing, in the event the Borrower completes a capital raise of a minimum of \$20.0 million prior to September 30, 2022, the repayment terms of the Tranche B and Tranche C loans shall automatically be amended so that the interest only period will be extended to June 30, 2023, and, thereafter, the Borrower shall pay twenty-four (24) monthly payments of principal and interest accrued thereon until June 1, 2025.

Interest on the Convertible Bullet Loan accrues at 7.75% per annum. Interest on the Tranche B and Tranche C loans accrues at 9.5% per annum.

The Borrower may prepay all, but not less than all, of the outstanding principal balance of any of the Loans. In case of prepayment within 6 months of the Effective Date, the Borrower will pay a sum equal to (i) the principal balance then outstanding, plus (ii) an aggregate of all remaining interest payments discounted to present value at the then-applicable Wall Street Journal Prime Rate less 3%, with a floor of 0%. In case of prepayment within 7-24 months of the Effective Date, the Borrower will pay a sum equal to 102% of principal balance then outstanding. In case of prepayment within 25-36 months of the Effective Date, the Borrower will pay a sum equal to 101% of the principal balance then outstanding. If prepayment is made after 36 months of the Effective Date, the Borrower will pay a sum equal to the principal balance then outstanding. In connection with any prepayment, the Borrower will also pay the End of Loan Payment (as defined below) and any other unpaid fees or costs, if any.

The Loans are subject to mandatory accelerated repayment provisions that require repayment of the outstanding principal amount of the Loan, and all accrued and unpaid interest thereon, upon the occurrence of an event of default, subject to certain limitations and cure rights. In addition, in the event of acceleration upon an event of default (a) the Borrower will be required to pay the aggregate of the monthly interest payments scheduled to be paid by the Borrower for the period from the date of acceleration to the expiry of the applicable Loan, in each case discounted from the applicable monthly repayment date to the date of prepayment at the rate of 2% per annum and (b) the other prepayment penalty obligations described above will not apply.

The Lender may elect to convert all or part of the Convertible Bullet Loan into shares of the Company's common stock, par value \$0.0001 per share (the "Common Stock") at the Conversion Price (as defined below) at any time while the Convertible Bullet Loan remains outstanding. The "Conversion Price" is set at \$420.00, subject to certain customary adjustments for stock splits, combinations, stock dividends or similar events as specified in the Loan Agreement. Should the Lender elect to convert the Convertible Bullet Loan, the End of Loan Fee for the portion of loan converted would not be payable by the Borrower.

The Company may elect to convert all or part of the Convertible Bullet Loan into shares of Common Stock at the Conversion Price at any time while the Convertible Bullet Loan remains outstanding, if the average closing price per share of Common Stock for twenty (20) consecutive trading days, including the day of the actual conversion, is greater than 200% of the Conversion Price.

In connection with entering into the Loan Agreement, the Company will pay Lender a fee of up to \$50,000 for legal and other ancillary fees. Pursuant to the Loan Agreement, upon the execution of the agreement, the Company paid Lender (a) a transaction fee equal to \$150,000 and (b) an advance payment in the amount of \$171,406.21 which reflects the last month's payment of principal and interest for Tranche B. Additionally, Borrower will be required to pay Lender an end of loan payment equal to 1.75% of the amount of each tranche drawn down upon the expiration of each such tranche (each "End of Loan Payment"). If the Lender elects to convert any part of the Convertible Bullet Loan, then the aforementioned End of Loan Payment shall not apply with respect to such converted part of the Convertible Bullet Loan.

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Outstanding borrowings under the Loan Agreement are secured by a first priority security interest on substantially all of the personal property assets of the Borrower, including Borrower's material intellectual property and equity interests in its subsidiaries. In conjunction with the security interests granted under the Loan Agreement, the Borrower's obligations are further secured, pursuant to the terms of (A) a Security Agreement (the "Company Security Agreement"), between the Company and the Lender, (B) a Security Agreement, between the US Subsidiary and the Lender (the "US Subsidiary Security Agreement"), (C) a Debenture – Fixed Charge, between the IL Subsidiary and the Lender (the "IL Subsidiary Debenture – Fixed Charge"), (D) a Debenture – Floating Charge, between the IL Subsidiary and the Lender (the "IL Subsidiary Debenture – Floating Charge"), and (E) a US Intellectual Property Security Agreement, between the IL Subsidiary and the Lender (the "IL Subsidiary US IP Security Agreement", together with the Company Security Agreement, the US Subsidiary Security Agreement, the IL Subsidiary Debenture – Fixed Charge, and the IL Subsidiary Debenture – Floating Charge, the "Initial Security Documents"), each dated as of the Effective Date.

The Loan Agreement contains customary representations and warranties, indemnification provisions in favor of Lender, events of default and affirmative and negative covenants, including, among others, covenants that limit or restrict the Company's ability to, among other things, incur additional indebtedness, merge or consolidate, make acquisitions, pay dividends or other distributions or repurchase equity, make investments, dispose of assets and enter into certain transactions with affiliates, in each case subject to certain exceptions. There are no liquidity or financial covenants. Borrower has also granted Lender certain information rights.

In connection with the Loan Agreement, the Company also issued to Lender a warrant ("Warrant"), dated July 16, 2021, to purchase up to 636 shares of the Company's common stock, at an exercise price of \$314.22 per share, payable in cash or on a cashless basis according to the formula set forth in the Warrant. The exercise price of the Warrant and the number of shares issuable upon exercise of the Warrant are subject to adjustments for stock splits, combinations, stock dividends or similar events. The Warrant is exercisable until the date that is ten (10) years after the date of issuance.

On November 28, 2023, we and the Lender entered into a First Amendment to the 2021 Loan Agreement (the “Amendment”), pursuant to which, among other things, (a)(i) on the effective date of the Amendment, we paid to the Lender a sum of \$750,000 in cash via wire transfer in immediately available funds (the “Amendment Execution Date Payment”), and (ii) upon consummation of a First Amendment Capital Raise (as defined below) and immediately following the Convertible Note Securities Exchange (as defined below), we will prepay to the Lender a sum of \$1,500,000 in cash via wire transfer in immediately available funds (the “Closing Payment”), which sums set forth in (i) and (ii) shall be applied towards partial prepayment of the outstanding principal balance of the Term Loan; and (b) subject to the satisfaction (or waiver by Lender) of certain Exchange Conditions (as defined in the Amendment), immediately following the consummation of a First Amendment Capital Raise, which we assume this offering will be, the Lender will be deemed to have surrendered to us securities representing \$4.0 million (the “Conversion Amount”) of the outstanding aggregate principal balance of the Convertible Note (“Convertible Loan Securities”) and we will deliver to the Lender, for no additional consideration, in exchange for the surrender of the Convertible Loan Securities, such number of shares of our common stock (the “Convertible Note Securities Exchange”) at a price per share equal to the public offering price per share in the First Amendment Capital Raise representing the Conversion Amount; provided, that, (A) the Lender shall have executed a customary lock-up agreement for a 90-day period following the Convertible Note Securities Exchange, (B) the Lender shall receive the same warrant coverage (the “Conversion Common Warrants”) per share of common stock, if any, as investors purchasing securities in the First Amendment Capital Raise and (C) the Lender shall receive a pre-funded warrant (the “Conversion Pre-Funded Warrant”) in lieu of shares of common stock otherwise issuable upon the Convertible Note Securities Exchange for such number of shares that would represent more than 4.5% of the pre-exercise outstanding shares of common stock, providing that the Lender will not own (x) more than 4.99% of the post-exercise outstanding shares of common stock at any time and (y) to the extent required under the rules of The Nasdaq Capital Market, more than 19.99% of the shares of common stock outstanding immediately prior to the Convertible Note Securities Exchange (but after the consummation of the First Amendment Capital Raise) unless applicable shareholder approval is obtained. “First Amendment Capital Raise” means the Company raising additional cash through one equity financing registered under the Securities Act (to be consummated no later than December 29, 2023) with gross proceeds of at least \$5.0 million. The securities issued to Lender in the Convertible Note Securities Exchange will be issued in reliance on the exemption from registration set forth in Section 3(a)(9) of the Securities Act. We also agreed to file a resale registration statement to register the securities being issued to Lender in the Convertible Note Securities Exchange as promptly as practicable (and in no event later than 91 calendar days after the closing of the Convertible Note Securities Exchange).

The Company will issue the Convertible Bullet Loan, the Warrant and the shares of Common Stock underlying the Convertible Bullet Loan and the Warrant to Lender in reliance on the exemption from registration provided for under Section 4(a)(2) of the Securities Act.

#### *Exercise Agreement*

As previously reported, on August 28, 2020, the Company entered into a Securities Purchase Agreement (the “Purchase Agreement”) with an institutional investor (the “Holder”), pursuant to which the Company issued to the Investor, securities of the Company, including warrants (the “Existing Warrants”) to purchase up to 29,112 shares of common stock, par value \$0.0001 per share (the “Common Stock”), of the Company (the “Warrant Shares”). The Existing Warrants were immediately exercisable at an exercise price of \$390.00 per share and expired on the fifth anniversary of the date of issuance.

On January 27, 2021, the Company entered into a Warrant Exercise Agreement (the “Exercise Agreement”) with the Holder. Pursuant to the Exercise Agreement, in order to induce the Holder to exercise all of the remaining 26,666 outstanding Existing Warrants for cash, pursuant to the terms of and subject to beneficial ownership limitations contained in the Existing Warrants, the Company agreed to issue to the Holder, new warrants (the “New Warrants”) to purchase 0.75 shares of Common Stock for each share of Common Stock issued upon such exercise of the remaining 26,666 outstanding Existing Warrants pursuant to the Exercise Agreement or an aggregate of 20,000 New Warrants. The terms of the New Warrants will be substantially similar to those of the Existing Warrants, except that the New Warrants will have an exercise price of \$636.00 (a 20% premium to the closing price of the Company’s Common Stock on The Nasdaq Capital Market on January 26, 2021), will be immediately exercisable and will expire five years from the date of the Exercise Agreement. The Holder will pay an aggregate of \$600,000 to the Company for the purchase of the New Warrants. The Company expects to receive aggregate gross proceeds before expenses of approximately \$11.0 million from the exercise of all of the remaining 400,000 outstanding Existing Warrants held by the Holder and the payment of the purchase price for the New Warrants.

Pursuant to the Exercise Agreement, the Holder has agreed, until the date that no Existing Warrants are held by such Holder (i) not to purchase any shares of Common Stock, other than pursuant to exercises of the Existing Warrants and (ii) not to transfer any Existing Warrants other than to transferees who assume the obligations under the Exercise Agreement.

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The Company will issue the New Warrants and the shares of Common Stock underlying the New Warrants to the Holder in reliance on the exemption from registration provided for under Section 4(a)(2) of the Securities Act. The Company relied on this exemption from registration for private placements based in part on the representations made by the Holder, including the representations with respect to the Holder’s status as an “accredited investor,” as such term is defined in Rule 501(a) of the Securities Act, and the Holder’s investment intent.

#### **Item 16. Exhibits.**

The list of exhibits following the signature page of this registration statement is incorporated by reference herein.

#### **Item 17. Undertakings.**

(1) The undersigned registrant hereby undertakes:

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

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

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent change in the maximum aggregate offering price set forth in the “Calculation of Registration Fee” table in the effective registration statement; and

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

(b) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(c) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(d) That, for the purpose of determining liability of the registrant under the Securities Act to any purchaser in the initial distribution of the securities, the undersigned

registrant hereby undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

- (i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;
- (ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
- (iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
- (iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

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- (2) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (3) The undersigned registrant hereby undertakes that:
  - (a) For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this registration statement in reliance on Rule 430A and contained in a form of prospectus filed by the undersigned registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective; and
  - (b) For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (4) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

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**SIGNATURES**

Pursuant to the requirements of the Securities Act of 1933, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized in the City of Ft. Lauderdale, State of Florida, on November 30, 2023.

**MOTUS GI HOLDINGS, INC.**

By: /s/ Mark Pomeranz  
 Mark Pomeranz  
 Chief Executive Officer

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities on November 30, 2023.

<u>Signature</u>	<u>Title</u>
<u>/s/ Mark Pomeranz</u> Mark Pomeranz	Chief Executive Officer and Director <i>(Principal Executive Officer)</i>
<u>/s/ Ravit Ram</u> Ravit Ram	Chief Financial Officer <i>(Principal Financial Officer)</i>
<u>/s/ Elad Amor</u> Elad Amor	Chief Accounting Officer <i>(Principal Accounting Officer)</i>
<u>*</u> Timothy P. Moran	Director and Chairman of the Board of Directors
<u>*</u> Sonja Nelson	Director
<u>*</u> Gary J. Pruden	Director
<u>*</u> Scott Durbin	Director

\* By: /s/ Mark Pomeranz  
 Mark Pomeranz  
 Attorney-in-fact

## EXHIBIT INDEX

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
2.1#	<a href="#">Share Exchange Agreement, dated December 1, 2016</a>	S-1	333-222441	2.1	1/5/2018	
3.1	<a href="#">Certificate of Incorporation</a>	S-1	333-222441	3.1	1/5/2018	
3.2	<a href="#">Certificate of Amendment to the Certificate of Incorporation</a>	S-1	333-222441	3.2	1/5/2018	
3.3	<a href="#">Certificate of Amendment to the Certificate of Incorporation, dated August 13, 2020</a>	8-K	001-38389	3.1	8/14/2020	
3.4	<a href="#">Certificate of Amendment of Certificate of Incorporation of Motus GI Holdings, Inc. dated July 25, 2022</a>	8-K	001-38389	3.1	7/26/2022	
3.5	<a href="#">Bylaws, as amended</a>	10-Q	001-38389	3.1	11/14/2022	
3.6	<a href="#">Certificate of Designations of Series A Convertible Preferred Stock</a>	S-1	333-222441	3.4	1/5/2018	
3.7	<a href="#">Certificate of Amendment of Certificate of Designations of Series A Convertible Preferred Stock</a>	10-Q	001-38389	3.1	5/14/2018	
4.1	<a href="#">Form of Common Stock Certificate</a>	S-1	333-222441	4.1	1/5/2018	
4.2	<a href="#">Form of Series A Convertible Preferred Stock Certificate</a>	S-1	333-222441	4.2	1/5/2018	
4.3	<a href="#">Form of Exchange Warrant</a>	S-1	333-222441	4.3	1/5/2018	
4.4	<a href="#">Form of Placement Agent Warrant</a>	S-1	333-222441	4.4	1/5/2018	
4.5	<a href="#">Form of Registration Rights Agreement</a>	S-1	333-222441	4.5	1/5/2018	
4.6	<a href="#">Form of May 2017 Consultant Warrant</a>	S-1	333-222441	4.6	1/5/2018	
4.7	<a href="#">Form of Placement Agent Royalty Payment Rights Certificate</a>	S-1	333-222441	4.7	1/5/2018	
4.8	<a href="#">Form of Amendment to Registration Rights Agreement</a>	S-1	333-222441	4.8	1/5/2018	
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4.9	<a href="#">Form of Ten Percent Warrant</a>	S-1	333-222441	4.9	1/5/2018	
4.10	<a href="#">Form of Royalty Payment Rights Certificate</a>	S-1/A	333-222441	4.10	1/31/2018	
4.11	<a href="#">Form of June 2018 Consultant Warrant</a>	10-Q	001-38389	4.1	8/13/2018	
4.12	<a href="#">Form of May 2017 Additional Consultant Warrant</a>	10-Q	001-38389	4.2	8/13/2018	
4.13	<a href="#">Form of July 2018 Consultant Warrant</a>	10-Q	001-38389	4.3	8/13/2018	
4.14	<a href="#">Form of November 2018 Consultant Warrant</a>	10-Q	001-38389	4.4	11/14/2018	
4.15	<a href="#">Form of Pre-Funded Warrant</a>	8-K	001-38389	4.1	8/28/2020	
4.16	<a href="#">Form of Common Warrant</a>	8-K	001-38389	4.2	8/28/2020	
4.17	<a href="#">Form of New Warrant</a>	8-K	001-38389	4.1	1/27/2021	
4.18	<a href="#">Form of Common Stock Purchase Warrant</a>	8-K	001-38389	4.1	5/22/2023	
4.19	<a href="#">Form of Pre-Funded Common Stock Purchase Warrant</a>	8-K	001-38389	4.2	5/22/2023	
4.20	<a href="#">Form of Placement Agent Warrant</a>	8-K	001-38389	4.3	5/22/2023	
4.21	<a href="#">Form of Amendment Agreement, dated September 12, 2023</a>	8-K	001-38389	4.1	9/14/2023	
4.19*	Form of Pre-Funded Warrant					
4.20*	Form of Common Warrant					
5.1*	Opinion of Lowenstein Sandler LLP					
10.1	<a href="#">Placement Agency Agreement, dated December 1, 2016, between the Company and Placement Agent</a>	S-1	333-222441	10.1	1/5/2018	
10.2	<a href="#">Form of Subscription Agreement</a>	S-1	333-222441	10.2	1/5/2018	

10.3	<a href="#">Form of Voting Agreement, dated December 1, 2016, by and among the Company and the stockholders named therein</a>	S-1	333-222441	10.3	1/5/2018
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10.4	<a href="#">2016 Equity Incentive Plan and 2016 Israel Sub-Plan</a>	S-1	333-222441	10.4	1/5/2018
10.5	<a href="#">Amendment to the Motus GI Holdings, Inc. 2016 Equity Incentive Plan, dated February 6, 2020</a>	8-K	001-38389	10.1	8/14/2020
10.6	<a href="#">Form of Incentive Stock Option Agreement</a>	S-1	333-222441	10.5	1/5/2018
10.7	<a href="#">Form of Non-Qualified Stock Option Agreement</a>	S-1	333-222441	10.6	1/5/2018
10.8	<a href="#">Form of Restricted Stock Agreement</a>	S-1	333-222441	10.7	1/5/2018
10.9	<a href="#">Form of Assumed Options to Israeli Employees and Directors Agreement</a>	S-1	333-222441	10.8	1/5/2018
10.10	<a href="#">Form of Assumed Options to Israeli Non-Employees and Controlling Shareholders Agreement</a>	S-1	333-222441	10.9	1/5/2018
10.11	<a href="#">Form of Israeli Option Grant to Israeli Employees and Directors Agreement</a>	S-1	333-222441	10.10	1/5/2018
10.12	<a href="#">Form of Israeli Option Grant to Israeli Non-Employees and Controlling Shareholders Agreement</a>	S-1	333-222441	10.11	1/5/2018
10.13	<a href="#">Employment Agreement, dated December 22, 2016, between the Company and Mark Pomeranz</a>	S-1	333-222441	10.12	1/5/2018
10.14	<a href="#">Lease, dated April 13, 2017, between Company and Victoriana Building, LLC</a>	S-1	333-222441	10.13	1/5/2018
10.15	<a href="#">Form of Subscription Agreement for Convertible Notes Offering</a>	S-1	333-222441	10.14	1/5/2018
10.16	<a href="#">Finders Agreement, dated October 14, 2016, between the Company and Aegis Capital Corporation</a>	S-1	333-222441	10.15	1/5/2018
10.17	<a href="#">Finders Agreement, dated December 22, 2016, between the Company and Aegis Capital Corporation</a>	S-1	333-222441	10.16	1/5/2018
10.18	<a href="#">Form of Indemnification Agreement</a>	S-1	333-22241	10.17	1/5/2018
10.19	<a href="#">Employment Agreement, dated August 16, 2017, between the Company and Andrew Taylor</a>	S-1	333- 22241	10.18	1/5/2018
10.20	<a href="#">Supply Agreement, dated September 1, 2017, between Motus GI Technologies Ltd. and Polyzen, Inc.</a>	10-K	001-38389	10.20	3/29/2022
10.21	<a href="#">Amended and Restated Employment Agreement, effective September 24, 2018, between the Company and Mark Pomeranz</a>	8-K	001-38389	10.2	9/25/2018

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10.22	<a href="#">Employment Agreement, effective October 1, 2018, between the Company and Timothy P. Moran</a>	8-K	001- 38389	10.1	9/25/2018
10.23	<a href="#">Form of Restricted Stock Unit Award Agreement</a>	10-K	001-38389	10.22	3/26/2019
10.24	<a href="#">Amended and Restated Employment Agreement, effective March 26, 2019, between the Company and Andrew Taylor</a>	10-K	001-38389	10.23	3/26/2019
10.25	<a href="#">First Amendment to Amended and Restated Employment Agreement, dated March 15, 2021, between the Company and Andrew Taylor</a>	10-K	001-38389	10.25	3/16/2021
10.26	<a href="#">Loan and Security Agreement, dated as of December 13, 2019 between Silicon Valley Bank and Motus GI Holdings, Inc.</a>	8-K	001-38389	10.1	12/18/2019
10.27	<a href="#">Joinder and First Amendment to Loan and Security Agreement, dated as of February 7, 2020 between Silicon Valley Bank and Motus GI Holdings, Inc.</a>	10-K	001-38389	10.25	3/30/2020
10.28	<a href="#">Second Amendment to Loan and Security Agreement, dated as of February 25, 2020 between Silicon Valley Bank and Motus GI Holdings, Inc.</a>	10-K	001- 38389	10.26	3/30/2020
10.29	<a href="#">Third Amendment to Loan and Security Agreement, dated as of January 4, 2021 between Silicon Valley Bank and Motus GI Holdings, Inc.</a>	10-K	001- 38389	10.25	3/16/2021

10.30	<a href="#">Deferral Agreement, dated as of April 10, 2020, effective as of April 2, 2020, by and between Silicon Valley Bank, Motus GI Holdings, Inc. and Motus GI, Inc</a>	8-K	001- 38389	10.1	4/13/2020
10.31	<a href="#">Placement Agency Agreement, dated August 28, 2020, by and between A.G.P./Alliance Global Partners and Motus GI Holdings, Inc.</a>	8-K	001- 38389	10.1	8/28/2020
10.32	<a href="#">Form of Securities Purchase Agreement, dated August 28, 2020, by and between Motus GI Holdings, Inc., and each Purchaser thereto</a>	8-K	001- 38389	10.2	8/28/2020
10.33	<a href="#">Form of Warrant Exercise Agreement, dated January 27, 2021, by and between Motus GI Holdings, Inc. and the Holder</a>	8-K	001-38389	10.1	1/27/2021
10.34	<a href="#">Letter Agreement, dated January 27, 2021, by and between A.G.P./Alliance Global Partners and the Company</a>	8-K	001- 38389	10.2	1/27/2021
10.35	<a href="#">Loan Agreement, dated July 16, 2021, by and between the Lender, Motus GI Holdings, Inc., Motus GI, LLC and Motus GI Medical Technologies, LTD.</a>	8-K	001- 38389	10.1	7/21/2021

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10.36	<a href="#">Security Agreement, dated July 16, 2021 between the Lender and Motus GI Holdings, Inc.</a>	8-K	001- 38389	10.2	7/21/2021
10.37	<a href="#">Security Agreement, dated July 16, 2021 between the Lender and Motus GI, LLC.</a>	8-K	001- 38389	10.3	7/21/2021
10.38	<a href="#">Debenture – Fixed Charge dated July 16, 2021, between the Lender and Motus GI Medical Technologies, LTD.</a>	8-K	001- 38389	10.4	7/21/2021
10.39	<a href="#">Debenture – Floating Charge dated as of July 16, 2021, between the Lender and Motus GI, LLC.</a>	8-K	001- 38389	10.5	7/21/2021
10.40	<a href="#">US Intellectual property Security Agreement, dated July 16, 2021, between the Lender and Motus GI Medical Technologies, LTD.</a>	8-K	001- 38389	10.6	7/21/2021
10.41	<a href="#">Master Supply Agreement, dated April 1, 2021, between J. Sterling Industries LLC and Motus GI Holdings, Inc.</a>	10-K	001- 38389	10.41	3/29/2022
10.42	<a href="#">Form of Securities Purchase Agreement</a>	8-K	001- 38389	10.1	5/22/2023
10.43	<a href="#">Form of Registration Rights Agreement</a>	8-K	001- 38389	10.2	5/22/2023
10.44	<a href="#">Form of Warrant Amendment</a>	8-K	001- 38389	10.3	5/22/2023
10.45	<a href="#">Employment Agreement, dated April 1, 2018, between the Company and Ravit Ram</a>	8-K	001- 38389	10.1	6/5/2023
10.46	<a href="#">Employment Agreement, dated December 23, 2019, between the Company and Elad Amor</a>	8-K	001- 38389	10.3	6/5/2023
10.47*	Form of Placement Agency Agreement, between the Company and A.G.P.				
10.48*	Form of Securities Purchase Agreement				
21.1	<a href="#">List of Subsidiaries of the Registrant</a>	10-K	001-3839	21.1	3/16/2021
23.1	<a href="#">Consent of EisnerAmper LLP</a>				X
23.2	Consent of Lowenstein Sandler LLP (included as part of Exhibit 5.1 hereto)				X
24.1**	<a href="#">Power of attorney (included in the signature page to this registration statement)</a>	S-1	333-275121	24.1	10/20/2023
107	<a href="#">Filing Fee Table</a>				X

\* To be filed by amendment.

\*\* Previously filed.

# The schedules and exhibits to this agreement have been omitted pursuant to Item 601(b)(2) of Regulation S-K. A copy of any omitted schedule and/or exhibit will be furnished to the Securities and Exchange Commission upon request.

**CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

We consent to the incorporation by reference in this Amendment No. 1 to the Registration Statement of Motus GI Holdings, Inc. on Form S-1 (No. 333-275121) to be filed on or about November 30, 2023 of our report dated March 31, 2023, on our audits of the financial statements as of December 31, 2022 and 2021 and for each of the years then ended, which report was included in the Annual Report on Form 10-K filed March 31, 2023. Our report includes an explanatory paragraph about the existence of substantial doubt concerning the Company's ability to continue as a going concern. We also consent to the reference to our firm under the caption "Experts" in this Registration Statement.

*/s/ EisnerAmper LLP*

EISNERAMPER LLP  
Iselin, New Jersey  
November 30, 2023

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## Calculation of Filing Fee Tables

Form S-1  
(Form Type)

Motus GI Holdings, Inc.  
(Exact Name of Registrant as Specified in its Charter)

Table 1: Newly Registered and Carry Forward Securities

	Security Type	Security Class Title	Fee Calculation or Carry Forward Rule	Amount Registered	Proposed Maximum Offering Price Per Share	Maximum Aggregate Offering Price(1)	Fee Rate	Amount of Registration Fee
Fees to Be Paid	Equity	Common Stock, \$0.0001 par value per share <sup>(2)(3)</sup>	457(o)			\$ 6,000,000	0.0001476	885.60
Fees to Be Paid	Equity	Pre-Funded Warrants <sup>(3)</sup>	457(g)					(4)
Fees to Be Paid	Equity	Common Warrants <sup>(3)</sup>	457(g)					(4)
Fees to Be Paid	Equity	Common Stock underlying Pre-Funded Warrants <sup>(2)(3)</sup>	457(o)			(3)	0.0001476	(3)
Fees to Be Paid	Equity	Common Stock underlying Common Warrants <sup>(2)</sup>	457(o)			\$ 6,000,000	0.0001476	885.60
		<b>Total Offering Amounts</b>				\$ 12,000,000		1,771.20
		<b>Total Fees Previously Paid</b>						2,952.00
		<b>Total Fee Offsets</b>						\$ —
		<b>Net Fee Due</b>						\$ —

(1) Estimated solely for the purpose of calculating the amount of the registration fee in pursuant to Rule 457(o) under the Securities Act of 1933, as amended (the “Securities Act”).

(2) Pursuant to Rule 416(a) under the Securities Act, this registration statement shall also cover an indeterminate number of shares that may be issued and resold resulting from stock splits, stock dividends or similar transactions.

(3) The proposed maximum aggregate offering price of the common stock will be reduced on a dollar-for-dollar basis based on the offering price of any pre-funded warrants issued in the offering, and the proposed maximum aggregate offering price of the pre-funded warrants to be issued in the offering will be reduced on a dollar-for-dollar basis based on the offering price of any common stock issued in the offering. Accordingly, the proposed maximum aggregate offering price of the common stock, pre-funded warrants and accompanying common warrants (including the common stock issuable upon exercise of the pre-funded warrants), if any, is \$6,000,000.

(4) No separate registration fee is payable pursuant to Rule 457(g) under the Securities Act.