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UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-1 REGISTRATION STATEMENT

UNDER
THE SECURITIES ACT OF 1933

	Motus GI Holdings, Inc. (Exact name of registrant as specified in its charter)	
Delaware	3841	81-4042793
(State or other jurisdiction of incorporation or organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification No.)
	1301 East Broward Boulevard, 3rd Floor Ft. Lauderdale, FL, 33301 Telephone: (954) 541-8000 (Address, including zip code, and telephone number, including area code, of principal executive offices)	
	Timothy P. Moran Chief Executive Officer Motus GI Holdings, Inc.	
	1301 East Broward Boulevard, 3 rd Floor Ft. Lauderdale, FL 33301 Telephone: (954) 541-8000 (Address, including zip code, and telephone number, including area code, of agent for service)	
	Copy to:	
	Steven M. Skolnick, Esq. Michael J. Lerner, Esq. Lowenstein Sandler LLP 1251 Avenue of the Americas New York, New York 10020 Telephone: (212) 262-6700	
Approximate date of commencement of proposed	sale to the public: From time to time after the effective date of this regi	stration statement.
If any of the securities being registered on this Form following box. \boxtimes	are to be offered on a delayed or continuous basis pursuant to Rule 415	under the Securities Act of 1933, check the
If this Form is filed to register additional securities for registration statement number of the earlier effective	or an offering pursuant to Rule 462(b) under the Securities Act, check the registration statement for the same offering. \Box	e following box and list the Securities Act
If this Form is a post-effective amendment filed pursu number of the earlier effective registration statement	nant to Rule 462(c) under the Securities Act, check the following box are for the same offering. \Box	nd list the Securities Act registration statement
If this Form is a post-effective amendment filed pursu	uant to Rule 462(d) under the Securities Act, check the following box as	nd list the Securities Act registration number of the

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. \boxtimes

Accelerated Filer

Smaller Reporting Company

Emerging Growth Company

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of

"large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 under the Securities Exchange Act of 1934. (Check one):

earlier effective registration statement for the same offering. \Box

Large Accelerated Filer

Non-accelerated Filer

CALCULATION OF REGISTRATION FEE

		Prop	osed		Proposed		
	Amount to	Maxi	mum		Maximum		
	be	Offerir	g Price		Aggregate	Am	ount of
Title of Each Class of Securities to be Registered	Registered (1)	per Si	are (2)	Off	ering Price (2)	Regist	ration Fee
Common stock, \$0,0001 par value per share	8,733,625	\$	0.947	\$	8,270,742.88	\$	902.34

- (1) Pursuant to Rule 416 under the Securities Act, there is also being registered hereby such indeterminate number of additional shares of common stock as may be issued or issuable because of stock splits, stock dividends stock distributions, and similar transactions.
- (2) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(c) under the Securities Act of 1933, as amended. The proposed maximum offering price per share and proposed maximum aggregate offering price are based upon the average of the high \$0.964 and low \$0.930 sale prices of our common stock on October 15, 2020, as reported on the Nasdaq Capital Market.

The Registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment that specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until 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 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 prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED OCTOBER 20, 2020

PRELIMINARY PROSPECTUS



8,733,625 Shares of Common Stock

Issuable upon Exercise of Outstanding Warrants

This prospectus relates to the resale from time to time, by the selling stockholder identified in this prospectus under the caption "Selling Stockholder," of up to 8,733,625 shares of our common stock, par value \$0.0001 per share, it may acquire upon the exercise of outstanding warrants, which we refer to as the "Warrants". We issued the Warrants to the selling stockholder in a private placement concurrent with a registered direct offering of 3,200,000 shares of our common stock and pre-funded warrants to purchase up to an aggregate of 5,533,625 shares of common stock, which was completed on September 1, 2020.

The selling stockholder may, from time to time, sell, transfer or otherwise dispose of any or all of their shares of common stock or interests in their shares of common stock on any stock exchange, market or trading facility on which the shares of common stock are traded or in private transactions. These dispositions may be at fixed prices, at prevailing market prices at the time of sale, at prices related to the prevailing market price, at varying prices determined at the time of sale, or at negotiated prices. See "Plan of Distribution" in this prospectus for more information. We will not receive any proceeds from the resale or other disposition of the common stock by the selling stockholder. However, we will receive the proceeds of any cash exercise of the Warrants. See "Use of Proceeds" beginning on page 6 and "Plan of Distribution" beginning on page 10 of this prospectus for more information.

Our common stock is listed on the Nasdaq Capital Market under the symbol "MOTS." On October 19, 2020, the last reported sale price of our common stock as reported on the Nasdaq Capital Market was \$0.9209 per share.

We are an "emerging growth company" as that term is used in the Jumpstart Our Business Startups Act of 2012, and, as such, we have elected to take advantage of certain reduced public company reporting requirements for this prospectus and future filings.

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.

An investment in our securities involves a high degree of risk. Before deciding whether to invest in our securities, you should consider carefully the risks and uncertainties described in the section captioned "Risk Factors" contained in our Annual Report on Form 10-K for the fiscal year ended December 31, 2019 filed with the Securities and Exchange Commission on March 30, 2020 and our Quarterly Reports on Form 10-Q for the fiscal quarters ended March 31, 2020 and June 30, 2020, filed with the Securities and Exchange Commission on May 14, 2020 and August 11, 2010, respectively and other filings we make with the Securities and Exchange Commission from time to time, which are incorporated by reference herein in their entirety, together with other information in this prospectus and the information incorporated by reference herein.

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

The date of this Prospectus is , 2020

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ABOUT THIS PROSPECTUS

We have not authorized anyone to provide you with information that is different from that contained in this prospectus or in any free writing prospectus we may authorize to be delivered or made available to you. When you make a decision about whether to invest in our securities, you should not rely upon any information other than the information in this prospectus or in any free writing prospectus that we may authorize to be delivered or made available to you. Neither the delivery of this prospectus nor the sale of our securities means that the information contained in this prospectus or any free writing prospectus is correct after the date of this prospectus or such free writing prospectus. This prospectus is not an offer to sell or the solicitation of an offer to buy our securities in any circumstances under which the offer or solicitation is unlawful.

For investors outside the United States: We have not taken any action that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than in the United States. Persons outside the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of the securities covered hereby and the distribution of this prospectus outside the United States.

This prospectus contain summaries of certain provisions contained in some of the documents described herein, but reference is made to the actual documents for complete information. All of the summaries are qualified in their entirety by the full text of the actual documents, some of which have been filed or will be filed and incorporated by reference herein. See "Information Incorporated by Reference" and "Where You Can Find More Information" in this prospectus. We further note that the representations, warranties and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference into this prospectus were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreements, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties or covenants were accurate only as of the date when made. Accordingly, such representations, warranties and covenants should not be relied on as accurately representing the current state of our affairs.

This prospectus contains and incorporates by reference certain market data and industry statistics and forecasts that are based on studies sponsored by us, independent industry publications and other publicly available information. Although we believe these sources are reliable, estimates as they relate to projections involve numerous assumptions, are subject to risks and uncertainties, and are subject to change based on various factors, including those discussed under "Risk Factors" in this prospectus and under similar headings in the documents incorporated by reference herein and therein. Accordingly, investors should not place undue reliance on this information.

SUMMARY

This summary highlights information contained elsewhere in this prospectus and the documents incorporated by reference herein and therein. This summary does not contain all of the information that you should consider before deciding to invest in our securities. You should read this entire prospectus carefully, including the section entitled "Risk Factors" beginning on page 4 and our consolidated financial statements and the related notes and the other information incorporated by reference into this prospectus before making an investment decision.

When used herein, unless the context requires otherwise, references to the "Company," "Holdings," "we," "our" and "us" refer to Motus GI Holdings, Inc., a Delaware corporation, collectively with our direct wholly-owned subsidiaries, Motus GI Medical Technologies, Ltd., an Israeli corporation, and Motus GI, Inc., a Delaware corporation.

All trademarks or trade names referred to in this prospectus and the information incorporated by reference herein are the property of their respective owners. Solely for convenience, the trademarks and trade names in this prospectus 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.

Overview

We have developed the Pure-Vu System (the "Pure-Vu System"), a medical device that has received 510(k) clearance from the U.S. Food and Drug Administration (the "FDA"). In June 2019, the 510(k) premarket notification for the second-generation of the Pure-Vu System was reviewed and cleared by the FDA. The second-generation of our Pure-Vu System has received CE Mark approval in the European Economic Area. The Pure-Vu System is indicated to help facilitate the cleaning of a poorly prepared colon during the colonoscopy procedure. The device integrates with standard and slim colonoscopes to enable safe and rapid cleansing during the procedure while preserving established procedural workflow and techniques by irrigating the colon and evacuating the irrigation fluid (water), feces and other bodily fluids and matter. We 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. Challenges with bowel preparation for inpatient colonoscopy represent a significant area of unmet need that directly affects clinical outcomes and increases the cost of care for a hospital in a market segment where most of the reimbursement is under a bundle payment based on a Medicare Severity Diagnostic Related Group (a "MS-DRG"), comprising approximately 1.5 million annual inpatient colonoscopy procedures in the U.S. and approximately 3.8 million annual inpatient colonoscopy procedures worldwide. The Pure-Vu System does not currently have a unique reimbursement code with any private or governmental third-party payors in any country. We began commercialization in October 2019, with the first commercial placements of our second generation Pure-Vu System as part of our initial U.S. market launch targeting early adopter hospitals. We do not expect to generate significant revenue from product sales until we expand our commercialization efforts for the Pure-Vu System, which is subject to significant uncertainty.

Recent Developments

Registered Direct Offering and Private Placement

On August 28, 2020, we entered into a securities purchase agreement with the selling stockholder for the issuance and sale of 3,200,000 shares of common stock and prefunded warrants to purchase up to an aggregate of 5,533,625 shares of common stock in a registered direct offering (the "RD Offering") and warrant (the "Warrants") to purchase 8,733,625 shares of common stock in a concurrent private placement (the "2020 Private Placement"). The public offering price was \$1.145 for each share of common stock and related Warrant and \$1.144 for each pre-funded warrant and related Warrant. The Warrants have an exercise price of \$1.30 per share, were immediately exercisable upon issuance and have a term of exercise of five years. The closing of the issuance and sale of these securities was consummated on September 1, 2020. The gross proceeds from the offering, prior to deducting offering expenses and placement agent fees and expenses payable by us, were approximately \$10.0 million. This prospectus covers the resale or other disposition by the selling stockholder of the shares of common stock issuable upon the exercise of the Warrants.

Implications of Being an Emerging Growth Company

We are an "emerging growth company," as defined in the Jumpstart Our Business Startups Act of 2012 (the "JOBS Act"), and, for as long as we continue to be an "emerging growth company," we may choose to take advantage of exemptions from various reporting requirements applicable to other public companies but not to "emerging growth companies," including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002, as amended, (the "Sarbanes-Oxley Act"), reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved. We could be an "emerging growth company" for up to five years from the date of our initial public offering in February 2018, or until the earliest of (i) the last day of the first fiscal year in which our annual gross revenues exceed \$1.07 billion, (ii) the date that we become a "large accelerated filer" as defined in Rule 12b-2 under the Exchange Act, which would occur if the market value of our Common Stock that is held by non-affiliates exceeds \$700 million as of the last business day of our most recently completed second fiscal quarter, or (iii) the date on which we have issued more than \$1 billion in non-convertible debt during the preceding three-year period. We intend to take advantage of these reporting exemptions described above until we are no longer an "emerging growth company." Under the JOBS Act, "emerging growth companies" can also delay adopting new or revised accounting standards until such time as those standards apply to private companies. We have irrevocably elected not to avail ourselves of this exemption from new or revised accounting standards and, therefore, we will be subject to the same new or revised accounting standards as other public companies that are not "emerging gr

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, Inc. a Delaware corporation.

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. 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 our website or any such information in making your decision whether to purchase our securities.

The Offering

This prospectus relates to the resale or other disposition from time to time by the selling stockholder identified in this prospectus of up to 8,733,625 shares of our common stock issuable upon exercise of the Warrants. None of the shares registered hereby are being offered for sale by us.

Common stock offered by the selling stockholder

Up to 8,733,625 shares of common stock issuable upon exercise of the Warrants.

Common stock outstanding after this offering

40,916,214 shares, assuming the exercise in full of the Warrants.

Use of proceeds

We will not receive any proceeds from the sale of shares of common stock offered by the selling stockholder under this prospectus. However, we will receive the proceeds of any cash exercise of the Warrants. We intend to use the net proceeds from any cash exercise of the Warrants to fund commercialization activities for our Pure-Vu System, to continue research and development activities, including clinical and regulatory development and for the continued development and enhancement of the Pure-Vu System and potential debt repayment. We intend to use the remaining net proceeds for working capital and other general corporate purposes. See "Use of Proceeds."

Listing Information

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

Risk Factors

An investment in our securities involves a high degree of risk. Before deciding whether to invest in our securities, you should consider carefully the risks and uncertainties described in the section captioned "Risk Factors" contained in our Annual Report on Form 10-K for the fiscal year ended December 31, 2019 filed with the Securities and Exchange Commission on March 30, 2020 and our Quarterly Reports on Form 10-Q for the fiscal quarters ended March 31, 2020 and June 30, 2020, filed with the Securities and Exchange Commission on May 14, 2020 and August 11, 2010, respectively and other filings we make with the Securities and Exchange Commission from time to time, which are incorporated by reference herein in their entirety, together with other information in this prospectus and the information incorporated by reference herein.

The number of shares of our common stock to be outstanding upon completion of this offering is based on 32,182,589 shares of our common stock outstanding as of September 27, 2020 and excludes:

- 4,488,831 shares of our common stock issuable upon the exercise of outstanding stock options issued under our equity incentive plan as of September 27, 2020, with a weighted average exercise price of \$3.35 per share;
- 368,841 shares of our common stock subject to outstanding restricted stock units issued under our 2016 Equity Incentive Plan as of September 27, 2020;
- 599,479 additional shares of our common stock reserved for future issuance under our 2016 Equity Incentive Plan as of September 27, 2020;
- 17,058,051 shares of our common stock issuable upon the exercise of outstanding warrants with a weighted average exercise price of \$1.86 per share as of September 27, 2020; and
- any future automatic increases in the number of shares of our common stock reserved for future issuance under our 2016 Equity Incentive Plan.

RISK FACTORS

An investment in our securities involves a high degree of risk. Before deciding whether to invest in our securities, you should consider carefully the risks and uncertainties described in the section captioned "Risk Factors" contained in our Annual Report on Form 10-K for the fiscal year ended December 31, 2019 filed with the Securities and Exchange Commission on March 30, 2020 and our Quarterly Reports on Form 10-Q for the fiscal quarters ended March 31, 2020 and June 30, 2020, filed with the Securities and Exchange Commission on May 14, 2020 and August 11, 2010, respectively and other filings we make with the Securities and Exchange Commission from time to time, which are incorporated by reference herein in their entirety, together with other information in this prospectus and the information incorporated by reference herein. If any of these risks actually occurs, our business, financial condition, results of operations or cash flow could suffer materially. In such event, the trading price of our common stock could decline, and you might lose all or part of your investment.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the documents incorporated by reference herein contain, and our officers and representatives may from time to time make, "forward-looking statements," which include information relating to future events, future financial performance, financial projections, strategies, expectations, competitive environment and regulation. Words such as "may," "should," "could," "would," "predicts," "potential," "continue," "expects," "anticipates," "future," "intends," "plans," "believes," "estimates," "goal," "seek," "project," "strategy," "likely," and similar expressions, as well as statements in future tense, identify forward-looking statements. Forward-looking statements are neither historical facts, nor should they be read as a guarantee of future performance or results and may not be accurate indications of when such performance or results will be achieved. Forward-looking statements are based on information we have when those statements are made or management's good faith belief as of that time with respect to future events, and are subject to risks and uncertainties that could cause actual performance or results to differ materially from those expressed in or suggested by the forward-looking statements. Important factors that could cause such differences include, but are not limited to:

- our limited operating history;
- our history of operating losses in each year since inception and expectation that we will continue to incur operating losses for the foreseeable future;
- our current and future capital requirements to support our development and commercialization efforts for the Pure-Vu System and our ability to satisfy our capital needs;
- our dependence on the Pure-Vu System, our sole product;
- our ability to obtain approval from regulatory agents in different jurisdictions for the Pure-Vu System;
- our Pure-Vu System and the procedure to cleanse the colon in preparation for colonoscopy are not currently separately reimbursable through private or governmental third-party payors;
- our lack of a developed sales and marketing organization and our ability to commercialize the Pure-Vu System;
- our dependence on third-parties to manufacture the Pure-Vu System;
- our ability to maintain or protect the validity of our patents and other intellectual property;
- our ability to retain key executives and medical and science personnel;
- our ability to internally develop new inventions and intellectual property;
- interpretations of current laws and the passages of future laws;
- acceptance of our business model by investors;
- the accuracy of our estimates regarding expenses and capital requirements;
- · our ability to adequately support growth; and
- our ability to project in the short term the hospital medical device environment considering the global pandemic and strains on hospital systems.

These forward-looking statements, which are subject to risks, uncertainties and assumptions about us, may include projections of our future financial performance, our anticipated growth strategies and anticipated trends in our business. These statements are only predictions based on our current expectations and projections about future events. There are important factors that could cause our actual results, level of activity, performance or achievements to differ materially from the results, level of activity, performance or achievements expressed or implied by the forward-looking statements, including those factors discussed under the caption entitled "Risk Factors" in our Annual Report on Form 10-K for the fiscal year ended December 31, 2019 filed with the Securities and Exchange Commission on March 30, 2020 and our Quarterly Reports on Form 10-Q for the fiscal quarters ended March 31, 2020 and June 30, 2020, filed with the Securities and Exchange Commission on May 14, 2020 and August 11, 2010, respectively and other filings we make with the Securities and Exchange Commission from time to time.

Although we believe the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, level of activity, performance or achievements. Moreover, neither we nor any other person assumes responsibility for the accuracy and completeness of any of these forward-looking statements. We are under no duty to update any of these forward-looking statements after the date of this prospectus to conform our prior statements to actual results or revised expectations.

USE OF PROCEEDS

We will not receive any proceeds from the sale of shares of common stock offered by the selling stockholder under this prospectus. However, we will receive the proceeds of any cash exercise of the Warrants. If all of the Warrants were exercised for cash, we would receive aggregate proceeds of approximately \$11.35 million. We intend to use the net proceeds from any cash exercise of the Warrants to fund commercialization activities for our Pure-Vu System, to continue research and development activities, including clinical and regulatory development and for the continued development and enhancement of the Pure-Vu System and potential debt repayment. We intend to use the remaining net proceeds for working capital and other general corporate purposes.

SELLING STOCKHOLDER

This prospectus covers the resale or other disposition by the selling stockholder identified in the table below of up to an aggregate of 8,733,625 shares of our common stock issuable upon the exercise of our outstanding Warrants.

The selling stockholder acquired its securities in the transactions described above under the heading "Prospectus Summary – Recent Developments - Registered Direct Offering and Private Placement."

The Warrants held by the selling stockholder contain limitations which prevent the holder from exercising those warrants if such exercise would cause the selling stockholder, together with certain related parties, to beneficially own a number of shares of common stock which would exceed 4.99% of our then outstanding common stock following such exercise, excluding for purposes of such determination, common stock issuable upon exercise of the Warrants which have not been exercised.

The table below sets forth, as of September 27, 2020, the following information regarding the selling stockholder:

- the name of the selling stockholder;
- the number of shares of common stock owned by the selling stockholder prior to this offering, without regard to any beneficial ownership limitations contained in the Warrants and the Pre-funded Warrants (as defined below);
- the number of shares of common stock to be offered by the selling stockholder in this offering;
- the number of shares of common stock to be owned by the selling stockholder assuming the sale of all of the shares of common stock covered by this prospectus;
- the percentage of our issued and outstanding shares of common stock to be owned by the selling stockholder assuming the sale of all of the common stock covered by this prospectus based on the number of shares of common stock issued and outstanding as of September 27, 2020.

Except as described above, the number of shares of common stock beneficially owned by the selling stockholder has been determined in accordance with Rule 13d-3 under the Exchange Act and includes, for such purpose, shares of common stock that the selling stockholder has the right to acquire within 60 days of September 27, 2020.

All information with respect to the common share ownership of the selling stockholder has been furnished by or on behalf of the selling stockholder. We believe, based on information supplied by the selling stockholder, that except as may otherwise be indicated in the footnotes to the table below, the selling stockholder has sole voting and dispositive power with respect to the shares of common stock reported as beneficially owned by it. Because the selling stockholder identified in the table may sell some or all of the shares of common stock beneficially owned by it and covered by this prospectus, and because there are currently no agreements, arrangements or understandings with respect to the sale of any of the shares of common stock, no estimate can be given as to the number of shares of common stock available for resale hereby that will be held by the selling stockholder upon termination of this offering. In addition, the selling stockholder may have sold, transferred or otherwise disposed of, or may sell, transfer or otherwise dispose of, at any time and from time to time, the shares of common stock they beneficially own in transactions exempt from the registration requirements of the Securities Act after the date on which they provided the information set forth in the table below. We have, therefore, assumed for the purposes of the following table, that the selling stockholder will sell all of the shares of common stock owned beneficially by it that are covered by this prospectus, but will not sell any other shares of common stock that they presently own. The selling stockholder has not held any position or office, or has otherwise had a material relationship, with us or any of our subsidiaries within the past three years other than as a result of the ownership of our common stock or other securities.

				Percentage of
	Shares	Shares		Shares
	Owned	Offered	Shares	Beneficially
	prior to	by this	Owned after	Owned after
Name of Selling Stockholder	Offering	Prospectus	Offering	Offering (1)
Armistice Capital Master Fund Ltd. (2)	17,161,048	8,733,625	8,427,423	4.99%

- (1) Percentage is based on 32,182,589 shares of common stock outstanding as of September 27, 2020, assuming the resale of all common stock covered by this prospectus and giving effect to the 4.99% beneficial ownership blockers in the Warrants and Pre-Funded Warrants (as defined below).
- (2) Consists of (i) 2,893,798 shares of common stock, (ii) Warrants to purchase up to 5,533,625 shares of common stock, and (iii) pre-funded warrants to purchase up to 5,533,625 shares of common stock (the "Pre-Funded Warrants"). The exercise of the Warrants and the Pre-Funded Warrants held by Armistice Capital Master Fund Ltd. ("Armistice") are subject to a 4.99% beneficial ownership blocker. The number of shares listed in the second and fourth columns are based on the number of shares of common stock, Warrants and Pre-Funded Warrants held by Armistice, assuming exercise in full of the Warrants and Pre-Funded Warrants without regard to any limitations on exercise, but the percentages set forth in the fifth column is limited by the 4.99% beneficial ownership blockers in the Warrants and Pre-Funded Warrants. Armistice Capital, LLC, the investment manager of Armistice and Steven Boyd, the managing member of Armistice Capital, LLC, hold shared voting and dispositive power over the shares held by Armistice. Each of Armistice Capital, LLC and Steven Boyd disclaims beneficial ownership of the securities listed except to the extent of their pecuniary interest therein. The address of Armistice Capital Master Fund Ltd. is c/o Armistice Capital, LLC, 510 Madison Avenue, 7th Floor, New York, NY 10022.

DESCRIPTION OF SECURITIES

Capital Stock

For a description of our capital stock, please see the Description of Securities included as Exhibit 4.15 to our Annual Report on Form 10-K for the year ended December 31, 2019, filed with the SEC on March 30, 2020, which is incorporated by reference herein. See "Information Incorporated by Reference" and "Where You Can Find More Information."

Warrants

The Warrants were issued in the 2020 Private Placement on August 28, 2020 in connection with a registered direct offering of our common stock and pre-funded warrants to purchase shares of common stock. As of October 15, 2020, the Warrants were exercisable for an aggregate of 8,733,625 shares of common stock.

Duration and Exercise Price

The Warrants have an exercise price of \$1.30 per share. The Warrants were immediately exercisable upon issuance and have a term of five years. The exercise price and number of shares of common stock issuable upon exercise are subject to appropriate adjustment in the event of share dividends, share splits, reorganizations or similar events affecting our shares of common stock. The Warrants were be issued in certificated form only.

Exercisability

The Warrants are exercisable, at the option of each holder, in whole or in part, by delivering to us a duly executed exercise notice accompanied by payment in full for the number of shares of common stock purchased upon such exercise (except in the case of a cashless exercise as discussed below). A holder (together with its affiliates) may not exercise any portion of such holder's Warrants to the extent that the holder would own more than 4.99% (or, at the election of the purchaser, 9.99%) of our outstanding shares of 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 shares of common stock after exercising the holder's Private Placement Warrants up to 9.99% of the number of shares of common stock outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the Warrants.

Cashless Exercise

If after the six month anniversary of the issue date of the Warrants there is no effective registration statement registering, or the prospectus contained therein is not available for the resale of the shares of common stock issuable upon exercise of the Warrants, then the Warrants will also be exercisable on a "cashless exercise" basis under which the holder will receive upon such exercise a net number of common shares determined according to a formula set forth in the Warrants.

Fundamental Transactions

In the event of any fundamental transaction, as described in the Warrants and generally including any merger with or into another entity, sale of all or substantially all of our assets, tender offer or exchange offer, or reclassification of our shares of common stock, then upon any subsequent exercise of a Warrant, the holder will have the right to receive as alternative consideration, for each share of common stock that would have been issuable upon such exercise immediately prior to the occurrence of such fundamental transaction, the number of shares of common stock of the successor or acquiring corporation or of our company, if it is the surviving corporation, and any additional consideration receivable upon or as a result of such transaction by a holder of the number of shares of common stock for which the Warrant is exercisable immediately prior to such event.

Transferability

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

Fractional Shares

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

Trading Market

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

Rights as a Shareholder

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

Amendment and Waiver.

A Warrant may be modified or amended or the provisions thereof waived with the written consent of our company and the holder of the Warrant.

Registration Rights.

We have filed this registration statement with the SEC that includes this prospectus to register for resale under the Securities Act of 1933, the shares of common stock issuable upon exercise of the Warrants to satisfy our obligations in connection with the private placement. We will use commercially reasonable efforts to keep such registration statement effective at all times until the selling stockholder no longer owns any Warrants or shares issuable upon exercise thereof.

PLAN OF DISTRIBUTION

The selling stockholder, which as used herein includes donees, pledgees, transferees or other successors-in-interest selling the shares of common stock, or interests in the shares of common stock received after the date of this prospectus from a selling stockholder as a gift, pledge, partnership distribution or other transfer, may, from time to time, sell, transfer or otherwise dispose of any or all of their shares of common stock or interests in the shares of common stock on any stock exchange, market or trading facility on which the shares are traded or in private transactions. The selling stockholder may sell all or a portion of the shares of common stock held by it and offered hereby from time to time directly or through one or more underwriters, broker-dealers or agents. If the shares of common stock are sold through underwriters or broker-dealers, the selling stockholder will be responsible for underwriting discounts or commissions or agent's commissions. The shares of common stock may be sold in one or more transactions at fixed prices, at prevailing market prices at the time of the sale, at varying prices determined at the time of sale or at negotiated prices. These sales may be effected in transactions, which may involve crosses or block transactions, pursuant to one or more of the following methods:

- on any national securities exchange or quotation service on which the securities may be listed or quoted at the time of sale;
- in the over-the-counter market;
- in transactions otherwise than on these exchanges or systems or in the over-the-counter market;
- through the writing or settlement of options or other hedging transactions, whether such options are listed on an options exchange or otherwise;
- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- · privately negotiated transactions;
- short sales effected after the date the registration statement of which this prospectus is a part was declared effective by the SEC;
- · broker-dealers may agree with a selling stockholder to sell a specified number of such shares at a stipulated price per share;
- · a combination of any such methods of sale; and
- any other method permitted pursuant to applicable law.

The aggregate proceeds to the selling stockholder from the sale of the shares of common stock offered by it will be the purchase price of the shares of common stock less discounts or commissions, if any. The selling stockholder reserves the right to accept and, together with their agents from time to time, to reject, in whole or in part, any proposed purchase of shares of common stock to be made directly or through agents. We will not receive any of the proceeds from sales of shares by the selling stockholder.

The selling stockholder may also sell shares of common stock under Rule 144 promulgated under the Securities Act, if available, rather than under this prospectus. In addition, the selling stockholder may transfer the shares of common stock by other means not described in this prospectus. If the selling stockholder effects such transactions by selling shares of common stock to or through underwriters, broker-dealers or agents, such underwriters, broker-dealers or agents may receive commissions in the form of discounts, concessions or commissions from the selling stockholders or commissions from purchasers of the shares of common stock for whom they may act as agent or to whom they may sell as principal (which discounts, concessions or commissions as to particular underwriters, broker-dealers or agents may be in excess of those customary in the types of transactions involved but, except as set forth in a supplement to this prospectus to the extent required, in the case of an agency transaction will not be in excess of a customary brokerage commission in compliance with FINRA Rule 5110).

In connection with sales of the shares of common stock or otherwise, the selling stockholder may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the shares of common stock in the course of hedging in positions they assume. The selling stockholder may also sell shares of common stock short and deliver shares of common stock covered by this prospectus to close out short positions and to return borrowed shares in connection with such short sales. The selling stockholder may also loan or pledge shares of common stock to broker-dealers that in turn may sell such shares. The selling stockholder may also enter into option or other transactions with broker-dealers or other financial institution of shares of common stock offered by this prospectus, which shares of common stock such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

The selling stockholder may pledge or grant a security interest in some or all of the shares of common stock owned by it and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell the shares of common stock from time to time pursuant to this prospectus or any amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act amending, if necessary, the list of selling stockholders to include the pledgee, transferee or other successors in interest as selling stockholders under this prospectus. The selling stockholder also may transfer and donate the shares of common stock in other circumstances as permitted by applicable law, in which case the transferees, donees, pledgees or other successors in interest will be the selling beneficial owners for purposes of this prospectus.

To the extent required by the Securities Act and the rules and regulations thereunder, the selling stockholder and any broker-dealer participating in the distribution of the shares of common stock may be deemed to be "underwriters" within the meaning of the Securities Act. In such event, any commission paid, or any discounts or concessions allowed to, any such broker-dealer may be deemed to be underwriting commissions or discounts under the Securities Act. Selling stockholders who are deemed to be "underwriters" under the Securities Act (if any) will be subject to the prospectus delivery requirements of the Securities Act and may be subject to certain statutory liabilities of, including but not limited to, Sections 11, 12 and 17 of the Securities Act and Rule 10b-5 under the Exchange Act.

Each selling stockholder has informed us that it is not a registered broker-dealer and does not have any written or oral agreement or understanding, directly or indirectly, with any person to engage in a distribution of the shares of common stock. Upon us being notified in writing by a selling stockholder that any material arrangement has been entered into with a broker-dealer for the distribution of shares of common stock, a prospectus supplement, if required, will be distributed, which will set forth the aggregate amount of shares of common stock being distributed and the terms of the offering, including the name or names of any broker-dealers or agents, any discounts, commissions and other terms constituting compensation from the selling stockholder and any discounts, commissions or concessions allowed or re-allowed or paid to broker-dealers.

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

The selling stockholder may sell all, some or none of the shares of common stock registered pursuant to the registration statement of which this prospectus forms a part. If sold under the registration statement of which this prospectus forms a part, the shares of common stock registered hereunder will be freely tradable in the hands of persons other than our affiliates that acquire such shares.

We have advised the selling stockholder that the anti-manipulation rules of Regulation M under the Exchange Act may apply to sales of shares of common stock in the market and to the activities of the selling stockholder and its affiliates. In addition, to the extent applicable, we will make copies of this prospectus (as it may be supplemented or amended from time to time) available to the selling stockholder for the purpose of satisfying the prospectus delivery requirements of the Securities Act. The selling stockholder may indemnify any broker-dealer that participates in transactions involving the sale of the shares of common stock against certain liabilities, including liabilities arising under the Securities Act.

LEGAL MATTERS

The validity of the securities offered hereby will be passed upon for us by Lowenstein Sandler LLP, New York, New York.

EXPERTS

The consolidated balance sheets of Motus GI Holdings, Inc. and Subsidiaries as of December 31, 2019 and 2018, and the related consolidated statements of comprehensive loss, 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 explanatory paragraphs about the existence of substantial doubt concerning the Company's ability to continue as a going concern and a change in the Company's method of accounting for leases. 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.

INFORMATION INCORPORATED BY REFERENCE

The SEC allows us to "incorporate by reference" information that we file with it into this prospectus, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is an important part of this prospectus. The information incorporated by reference is considered to be a part of this prospectus, and information that we file later with the SEC will automatically update and supersede information contained in this prospectus.

We incorporate by reference the documents listed below that we have previously filed with the SEC:

- our Annual Report on Form 10-K for the fiscal year ended December 31, 2019, filed with the SEC on March 30, 2020;
- our Quarterly Reports on Form 10-Q for the periods ended March 31, 2020 and June 30, 2020, filed with the SEC on May 14, 2020 and August 11, 2020, respectively;
- our Current Reports on Form 8-K filed with the SEC on January 9, 2020, March 12, 2020, April 13, 2020, April 13, 2020, May 11, 2020, June 12, 2020 August 14, 2020 and August 28, 2020 (other than information "furnished" under Items 2.02 or 7.01, or corresponding information furnished under Item 9.01 or included as an exhibit):
- our definitive Proxy Statement on Schedule 14A filed with the SEC on July 2, 2020; and
- the description of our common stock contained in our Registration Statement on Form 8-A, filed on February 6, 2018, including any amendments thereto or reports filed for the purposes of updating this description, including the Description of Securities filed as Exhibit 4.15 to our Annual Report on Form 10-K for the fiscal year ended December 31, 2019.

All reports and other documents that we file with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of this prospectus but prior to the termination of the offering of the securities hereunder will also be considered to be incorporated by reference into this prospectus from the date of the filing of these reports and documents, and will supersede the information herein; provided, however, that all reports, exhibits and other information that we "furnish" to the SEC will not be considered incorporated by reference into this prospectus. Any statement contained in a document incorporated by reference in this prospectus shall be deemed to be modified or superseded to the extent that a statement contained herein, therein or in any other subsequently filed document that also is incorporated by reference herein or therein modifies or supersedes such statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus or the registration statement.

We will provide you without charge, upon your oral or written request, with a copy of any or all reports, proxy statements and other documents we file with the SEC, as well as any or all of the documents incorporated by reference in this prospectus or the registration statement (other than exhibits to such documents unless such exhibits are specifically incorporated by reference into such documents). Requests for such copies should be directed to Motus GI Holdings, Inc., Attn: Chief Financial Officer, 1301 East Broward Boulevard, 3rd Floor, Ft. Lauderdale, FL, 33301. You may also direct any requests for documents to us by telephone at (954) 541-8000 or e-mail at IR@MotusGI.com.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-1 under the Securities Act with respect to the common stock offered by this prospectus. This prospectus, which is part of the registration statement, omits certain information, exhibits, schedules and undertakings set forth in the registration statement. For further information pertaining to us and our common stock, reference is made to our SEC filings and the registration statement and the exhibits and schedules to the registration statement. Statements contained in this prospectus as to the contents or provisions of any documents referred to in this prospectus are not necessarily complete, and in each instance where a copy of the document has been filed as an exhibit to the registration statement, reference is made to the exhibit for a more complete description of the matters involved.

In addition, registration statements and certain other filings made with the SEC electronically are publicly available through the SEC's web site at http://www.sec.gov. The registration statement, including all exhibits and amendments to the registration statement, has been filed electronically with the SEC.

We are subject to the information and periodic reporting requirements of the Securities Exchange Act of 1934, as amended, and, in accordance with such requirements, will file periodic reports, proxy statements, and other information with the SEC. These periodic reports, proxy statements, and other information will be available for inspection and copying at the web site of the SEC referred to above. We also maintain a website at http://www.motusgi.com, at which you may access these materials free of charge as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC. The information contained in, or that can be accessed through, our website is not part of, and is not incorporated into, this prospectus. We have included our website address in this prospectus solely as an inactive textual reference.



8,733,625 Shares of Common Stock

PRELIMINARY PROSPECTUS

, 2020

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, paid or payable by Motus GI Holdings, Inc., or the Registrant, in connection with the sale and distribution of the securities being registered. All amounts are estimated except the SEC registration fee.

Item	 Amount
SEC registration fee	\$ 902.34
Legal fees and expenses	25,000
Accounting fees and expenses	10,000
Printing and engraving expenses	5,000
Transfer agent and registrar fees and expenses	5,000
Miscellaneous fees and expenses	 5,097.66
Total	\$ 51,000

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.

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:

Original Issuances of Stock, Warrants and Payment Rights Certificates

Service Provider Stock and Warrants

During August, September, and October of 2017, we issued a service provider an aggregate of 4,167 shares, pursuant to the terms of the agreement with such service provider.

On March 27, 2018, we issued a service provider 15,000 shares of our common stock, subject to a lock-up agreement, as partial payment for services pursuant to a consulting agreement between the service provider and us.

In June 2018, we entered into a consultant agreement pursuant to which we (a) issued a warrant, on June 6, 2018, to purchase 10,000 shares of our common stock, with an exercise price of \$5.25 per share, (b) issued a warrant, on October 6, 2018, to purchase 10,000 shares of our common stock, with an exercise price of \$6.25 per share, and (c) agreed to issue a warrant to purchase 10,000 shares of our common stock, with an exercise price of \$7.25 per share, issuable on February 6, 2019, provided the consultant is still engaged at that time, as payment for services pursuant to the consulting agreement. Each warrant (each a "June 2018 Consultant Warrant") issued or issuable under the consultant agreement has or will have a five year term and a cashless exercise provision.

In July 2018, we entered into a consulting agreement pursuant to which we (a) issued a warrant on July 2, 2018 to purchase 25,000 shares of our common stock with an exercise price of \$7.39 per share, which warrant has an exercise period of 12 months from the date of agreement, (b) issued a warrant on July 2, 2018 to purchase 25,000 shares of our common stock with an exercise price of 7.39 per share, which warrant has an exercise period of 18 months from the date of the agreement, (c) issued a warrant on October 2, 2018 to purchase 25,000 shares of our common stock with an exercise price of 8.75 per share, which warrant has an exercise period of 18 months from the date of the agreement and (d) agreed to issue upon the six month anniversary of the date of the agreement, provided the consultant is still engaged at the respective time of issuance, a warrant to purchase 25,000 shares of our common stock with an exercise price of \$10.00 per share, which warrant has an exercise period of 24 months from the date of the agreement. The warrants (each a "July 2018 Consultant Warrant") issued under this agreement are callable by us.

In July 2018, we entered into a consulting agreement with an executive search firm pursuant to which we issued a warrant on November 8, 2018 to purchase 7,917 shares of our common stock, with an exercise price of \$5.00 per share. The warrant (the "November 2018 Consultant Warrant") issued under the consultant agreement has a three (3) year term. An additional warrant is issuable by us pursuant to the consulting agreement to purchase an estimated 6,380 shares of our common stock, subject to adjustment, with an estimated exercise price of \$3.23 per share, subject to adjustment. The warrant (the "Contingent Consultant Warrant") to be issued under the consulting agreement is expected to have a three (3) year term and is expected to be issued October 2019.

In January 2019, in connection with an agreement entered into on July 2, 2018, we issued, to one of our consultants, a warrant to purchase 25,000 shares of our common stock, with an exercise price of \$10.00 per share. The warrant has a two (2) year term and a cashless exercise provision. The warrant was issued on our Form of July 2018 Consultant Warrant

In February 2019, in connection with an agreement entered into on June 6, 2018, we issued, to one of our consultants, a warrant to purchase 10,000 shares of our common stock, with an exercise price of \$7.25 per share. The warrant has a five (5) year term and a cashless exercise provision. The warrant was issued on our Form of June 2018 Consultant Warrant.

In March 2019, we issued, to two of our investor relations service provider consultants, warrants to purchase an aggregate of 80,000 shares of our common stock, with an exercise price of \$5.00 per share. The warrants (the "March 2019 Consultant Warrants") have a three (3) year term and a cashless exercise provision. The March 2019 Consultant Warrants were issued on substantially the same form as our June 2018 Consultant Warrants.

In August 2019, we entered into a consulting agreement with an investor relations firm, pursuant to which we issued two warrants on August 8, 2019 to purchase 20,000 shares of our common stock in the aggregate, with an exercise price of \$2.66 per share (the "August 2019 Consultant Warrants"). The August 2019 Consultant Warrants have a three (3) year term and a cashless exercise provision. The August 2019 Consultant Warrants were amended on November 13, 2019 to accelerate the original vesting terms therein such that all warrant shares are exercisable on November 30, 2019, and remain exercisable through the three (3) year term. The August 2019 Consultant Warrants were issued on substantially the same form as our Form of June 2018 Consultant Warrant.

In August 2019, we entered into a consulting agreement with an executive search firm, which superseded the July 2018 consulting agreement with the same executive search firm, pursuant to which we issued a warrant on November 13, 2019 to purchase 6,333 shares of our common stock, with an exercise price of \$3.00 per share (the "November 2019 Consultant Warrant"). The November 2019 Consultant Warrant has a three (3) year term. The November 2019 Consultant Warrant was issued on substantially the same form as our Form of November 2018 Consultant Warrant.

In February 2020, we entered into a services agreement pursuant to which we issued warrants on February 6, 2020 to purchase 120,000 shares of our common stock (the "February 2020 Warrants"). 60,000 of the granted warrants are exercisable at a price equal to \$2.16 per share of common stock, and 60,000 of the remaining warrants granted are exercisable at a price equal to \$3.50 per share of common stock. The February 2020 Warrants will vest over a one-year period on a monthly basis and expire three years from the date of issuance. The February 2020 Warrants were issued on substantially the same form as our Form of November 2018 Consultant Warrant.

In June 2020, we entered into a services agreement pursuant to which we issued warrants on June 11, 2020 to purchase 50,000 shares of our common stock (the "June 2020 Warrants"). 50,000 of the granted warrants are exercisable at a price equal to \$1.17 per share of common stock. The June 2020 Warrants immediately vested on the date of issuance. The June 2020 Warrants were issued on substantially the same form as our Form of November 2018 Consultant Warrant.

Ten Percent Warrants

Simultaneously with the closing of our initial public offering (the "IPO"), on February 16, 2018, we issued warrants to purchase an aggregate of 1,095,682 shares of our common stock (the "Ten Percent Warrants") to certain of the holders of our formerly outstanding Series A Convertible Preferred Stock, pursuant to an amendment to the Registration Rights Agreement entered into with the investors in our 2017 Private Placement offering and an amendment to the Certificate of Designation of Preferences, Rights and Limitations of Series A Convertible Preferred Stock. The Ten Percent Warrants are exercisable for our common stock at an exercise price of \$5.00 per share. The Ten Percent Warrants are exercisable any time on or after the 180 day anniversary of the completion of our IPO, have a five year term, and provide for cashless exercise. No fractional shares will be issued upon the exercise of the Ten Percent Warrants.

Conversion of Series A Convertible Preferred Stock

Simultaneously with the closing of our IPO, on February 16, 2018, all 1,581,128 previously outstanding shares of our Series A Convertible Preferred Stock were converted, on a one-to-one basis, into shares of our common stock. At such time we issued (i) 1,581,128 shares of our common stock and (ii) Royalty Payment Rights Certificates (the "Royalty Payment Rights") to each former holder of our Series A Convertible Preferred Stock, entitling the holders of such Royalty Payment Rights Certificates to the same Royalty Payment Rights as were included in the Series A Convertible Preferred Stock.

Issuance Pursuant to Exercise of Stock Option

From September 2016 (date of inception) to March 29, 2018, the date of the filing of our registration statement on Form S-8 (File No. 333-224003), we issued 1,148 shares of our common stock pursuant the exercise of stock options.

Stock Options

From September 2016 (date of inception) to March 29, 2018, the date of the filing of our registration statement on Form S-8 (File No. 333-224003) we granted stock options under our 2016 Equity Incentive Plan to purchase an aggregate of 2,114,769 shares of our common stock, with a weighted average exercise price of \$4.51 per share.

Unrestricted Stock Awards

From September 2016 (date of inception) to March 29, 2018, the date of the filing of our registration statement on Form S-8 (File No. 333-224003), we granted unrestricted stock awards under our 2016 Equity Incentive Plan for an aggregate of 5,000 shares of our common stock.

2020 Private Placement

In connection with a registered direct offering of our common stock and pre-funded warrants to purchase shares of common stock, on August 28, 2020, we entered into a securities purchase agreement with an institutional investor (the "Purchaser"), pursuant to which, among other things, we sold to the Purchaser warrants (the "Warrants") to purchase up to 8,733,625 shares of our common stock in a private placement. No separate consideration was paid for the issuance of the Warrants.

Securities Act Exemptions

We deemed the offers, sales and issuances of the securities described above under "2020 Private Placement" to be exempt from registration under the Securities Act of 1933, as amended (the "Securities Act"), in reliance on Section 4(a)(2) of the Securities Act, including Regulation D and Rule 506 promulgated thereunder, relative to transactions by an issuer not involving a public offering. All purchasers of securities in transactions exempt from registration pursuant to Regulation D represented to us that they were accredited investors and were acquiring the securities for investment purposes only and not with a view to, or for sale in connection with, any distribution thereof and that they could bear the risks of the investment and could hold the securities for an indefinite period of time. The purchasers received written disclosures that the securities had not been registered under the Securities Act and that any resale must be made pursuant to a registration statement or an available exemption from such registration.

We deemed the grants of stock options and issuances of our common stock upon exercise of such options, and the restricted share awards, described above to be exempt from registration under the Securities Act in reliance on Section 4(a)(2) of the Securities Act, including Regulation D and Rule 506 promulgated thereunder and Rule 701 of the Securities Act as offers and sales of securities under compensatory benefit plans and contracts relating to compensation in compliance with Rule 701. Each of the recipients of securities in any transaction exempt from registration either received or had adequate access, through employment, business or other relationships, to information about us.

All certificates representing the securities issued in the transactions described in this Item 15 included appropriate legends setting forth that the securities had not been offered or sold pursuant to a registration statement and describing the applicable restrictions on transfer of the securities. There were no underwriters employed in connection with any of the transactions set forth in this Item 15. All recipients had adequate access, through their relationships with us, to information about us. The sales of these securities were made without any general solicitation or advertising.

Item 16. Exhibits and Financial Statement Schedules.

(a) Exhibits

See the Exhibit Index attached to this Registration Statement, which is incorporated by reference herein.

(b) Financial Statement Schedules

No financial statement schedules are provided because the information called for is not required or is shown either in the financial statements or the notes thereto.

Item 17. Undertakings

The undersigned registrant hereby undertakes:

- 1. To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
 - i. To include any prospectus required by section 10(a)(3) of the Securities Act of 1933;
 - ii. To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Securities and Exchange Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement.
 - iii. To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement, *provided, however*, that paragraphs (1)(i), (1)(ii) and (1)(iii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or 15(d) of the Exchange Act that are incorporated by reference in the registration statement.
- 2. That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- 3. To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- 4. That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.
- 5. That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities, 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 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 registrant relating to the offering filed pursuant to Rule 424;
 - (ii) any free writing prospectus relating to the offering prepared by or on behalf of the registrant or used or referred to by the registrant;
 - (iii) the portion of any other free writing prospectus relating to the offering containing material information about the registrant or its securities provided by or on behalf of the registrant; and
 - (iv) any other communication that is an offer in the offering made by the registrant to the purchaser.
- 6. That, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference 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.
- 7. Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the 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 Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-1 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the Ft. Lauderdale, State of Florida on October 20, 2020.

MOTUS GI HOLDINGS, INC.

By: /s/ Timothy P. Moran
Timothy P. Moran
Chief Executive Officer

POWER OF ATTORNEY AND SIGNATURES

Each person whose signature appears below constitutes and appoints Timothy P. Moran and Andrew Taylor and each of them singly, his or her true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments (including, without limitation, post-effective amendments) to this registration statement and any and all additional registration statements pursuant to Rule 462(b) of the Securities Act and to file the same, with all exhibits thereto and all other documents in connection therewith, with the SEC, granting unto each said attorney-in-fact and agent full power and authority to do and perform each and every act in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or either of them or their, his or her substitute or substitutes may lawfully do or cause to be done by virtue hereof.

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

Person	Capacity	Date
/s/ Timothy P. Moran Timothy P. Moran	Chief Executive Officer and Director (Principal Executive Officer)	October 20, 2020
/s/ Andrew Taylor Andrew Taylor	Chief Financial Officer (Principal Financial and Accounting Officer)	October 20, 2020
/s/ David Hochman David Hochman	Chairman of the Board	October 20, 2020
/s/ Mark Pomeranz Mark Pomeranz	President, Chief Operating Officer, and Director	October 20, 2020
/s/ Darren Sherman Darren Sherman	Director	October 20, 2020
/s/ Samuel Nussbaum Samuel Nussbaum	Director	October 20, 2020
/s/ Shervin Korangy Shervin Korangy	Director	October 20, 2020
/s/ Gary Pruden Gary Pruden	Director	October 20, 2020
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EXHIBIT INDEX

Exhibit		Incorporated by Reference			Filed	
Number	Exhibit Description	Form	File No.	Exhibit	Filing Date	Herewith
2.1 +	Share Exchange Agreement, dated December 1, 2016	S-1	333-222441	2.1	1/5/2018	
3.1	Certificate of Incorporation	S-1	333-222441	3.1	1/5/2018	
3.2	Certificate of Amendment to the Certificate of Incorporation	S-1	333-222441	3.2	1/5/2018	
3.3	Certificate of Amendment to the Certificate of Incorporation	8-K	001-38389	3.1	8/14/2020	
3.4	Bylaws	S-1	333-222441	3.3	1/5/2018	
3.5	Certificate of Designations of Series A Convertible Preferred Stock	S-1	333-222441	3.4	1/5/2018	
3.6	Certificate of Amendment of Certificate of Designations of Series A Convertible Preferred Stock	10-Q	001-38389	3.1	5/14/2018	
4.1	Form of Common Stock Certificate	S-1	333-222441	4.1	1/5/2018	
4.2	Form of Series A Convertible Preferred Stock Certificate	S-1	333-222441	4.2	1/5/2018	
4.3	Form of Exchange Warrant	S-1	333-222441	4.3	1/5/2018	
4.4	Form of Placement Agent Warrant	S-1	333-222441	4.4	1/5/2018	
4.5	Form of Registration Rights Agreement	S-1	333-222441	4.5	1/5/2018	
4.6	Form of May 2017 Consultant Warrant	S-1	333-222441	4.6	1/5/2018	
4.7	Form of Placement Agent Royalty Payment Rights Certificate	S-1	333-222441	4.7	1/5/2018	
4.8	Form of Amendment to Registration Rights Agreement	S-1	333-222441	4.8	1/5/2018	
4.9	Form of Ten Percent Warrant	S-1	333-222441	4.9	1/5/2018	
4.10	Form of Royalty Payment Rights Certificate	S-1/A	333-222441	4.10	1/31/2018	
4.11	Form of June 2018 Consultant Warrant	10-Q	001-38389	4.1	8/13/2018	
4.12	Form of May 2017 Additional Consultant Warrant	10-Q	001-38389	4.2	8/13/2018	
4.13	Form of July 2018 Consultant Warrant	10-Q	001-38389	4.3	8/13/2018	
4.14	Form of November 2018 Consultant Warrant	10-Q	001-38389	4.4	11/14/2018	
4.15	Form of Pre-Funded Warrant	8-K	001-38389	4.1	8/28/2020	
4.16	Form of Common Stock Purchase Warrant	8-K	001-38389	4.2	8/28/2020	
5.1	Opinion of Lowenstein Sandler LLP					X

10.1	Placement Agency Agreement, dated December 1, 2016, between the Company and Placement Agent	S-1	333-222441	10.1	1/5/2018
10.2	Form of Subscription Agreement	S-1	333-222441	10.2	1/5/2018
10.3	Form of Voting Agreement, dated December 1, 2016, by and among the Company and the stockholders named therein	S-1	333-222441	10.3	1/5/2018
10.4 †	2016 Equity Incentive Plan and 2016 Israel Sub-Plan	S-1	333-222441	10.4	1/5/2018
10.5 †	Form of Incentive Stock Option Agreement	S-1	333-222441	10.5	1/5/2018
10.6 †	Form of Non-Qualified Stock Option Agreement	S-1	333-222441	10.6	1/5/2018
10.7 †	Form of Restricted Stock Agreement	S-1	333-222441	10.7	1/5/2018
10.8 †	Form of Assumed Options to Israeli Employees and Directors Agreement	S-1	333-222441	10.8	1/5/2018
10.9	Form of Assumed Options to Israeli Non-Employees and Controlling Shareholders Agreement	S-1	333-222441	10.9	1/5/2018
10.10 †	Form of Israeli Option Grant to Israeli Employees and Directors Agreement	S-1	333-222441	10.10	1/5/2018
10.11	Form of Israeli Option Grant to Israeli Non-Employees and Controlling Shareholders Agreement	S-1	333-222441	10.11	1/5/2018
10.12 †	Employment Agreement, dated December 22, 2016, between the Company and Mark Pomeranz	S-1	333-222441	10.12	1/5/2018
10.13	Lease, dated April 13, 2017, between Company and Victoriana Building, LLC	S-1	333-222441	10.13	1/5/2018
10.14	Form of Subscription Agreement for Convertible Notes Offering	S-1	333-222441	10.14	1/5/2018
10.15	Finders Agreement, dated October 14, 2016, between the Company and Aegis Capital Corporation	S-1	333-222441	10.15	1/5/2018
10.16	Finders Agreement, dated December 22, 2016, between the Company and Aegis Capital Corporation	S-1	333-222441	10.16	1/5/2018
10.17 †	Form of Indemnification Agreement	S-1	333-222441	10.17	1/5/2018
10.18 †	Employment Agreement, dated August 16, 2017, between the Company and Andrew Taylor	S-1	333-222441	10.18	1/5/2018
10.19 #	Supply Agreement, dated September 1, 2017, between Motus GI Technologies Ltd. and Polyzen, Inc.	S-1/A	333-222441	10.19	2/7/2018
10.20 †	Amended and Restated Employment Agreement, effective September 24, 2018, between the Company and Mark Pomeranz	8-K	001-38389	10.2	9/25/2018
10.21 †	Employment Agreement, effective October 1, 2018, between the Company and Timothy P. Moran	8-K	001-38389	10.1	9/25/2018
10.22	Form of Restricted Stock Unit Award Agreement	10-K	001-38389	10.22	3/26/2019

10.23 †	Amended and Restated Employment Agreement, effective March 26, 2019, between the Company and Andrew Taylor	10-K	001-38389	10.23	3/26/2019	
10.24	Loan and Security Agreement, dated as of December 13, 2019 between Silicon Valley Bank and Motus GI Holdings, Inc.	8-K	001-38389	10.1	12/18/2019	
10.25	Joinder and First Amendment to Loan and Security Agreement, dated as of February 7, 2020 between Silicon Valley Bank and Motus GI Holdings, Inc.	10-K	001-38389	10.25	3/30/2020	
10.26	Second Amendment to Loan and Security Agreement, dated as of February 25, 2020 between Silicon Valley Bank and Motus GI Holdings, Inc.	10-K	001-38389	10.26	3/30/2020	
10.27	Lease Agreement, effective as of March 11, 2020, by and between Motus GI Holdings, Inc. and 720 UNIVERSITY PROPERTY, LLC.	8-K	001-38389	10.1	3/11/2020	
10.28	Lease Termination Agreement, effective as of March 30, 2020, by and between Motus GI Holdings, Inc. and 720 UNIVERSITY PROPERTY, LLC.	10-K	001-38389	10.28	3/30/2020	
10.29	Deferral Agreement, dated as of April 10, 2020, effective as of April 2, 2020, between Silicon Valley Bank, Motus GI Holdings, Inc. and Motus GI, Inc.	8-K	001-38389	10.1	4/13/2020	
10.30	Placement Agency Agreement, dated as of August 28, 2020, by and between A.G.P./Alliance Global Partners	8-K	001-38389	10.1	8/28/2020	
10.31	Form of Securities Purchase Agreement, dated August 28, 2020, by and between the Company and each Purchaser thereto	8-K	001-38389	10.2	8/28/2020	
21.1	List of Subsidiaries of the Company	S-1	333-222441	21.1	1/5/2018	
23.1	Consent of Independent Registered Public Accounting Firm					X
23.2	Consent of Lowenstein Sandler LLP (included in Exhibit 5.1)					X
24.1	Power of Attorney (contained in the signature page of this registration statement)					X

As permitted by Item 601(b)(2) of Regulation S-K, certain schedules to this agreement have not been filed herewith. The company will furnish supplementally a copy of any omitted schedule to the SEC upon request.

[†] Indicates management contract or compensatory plan.

[#] Confidential treatment has been granted with respect to certain portions of this exhibit. Omitted portions have been submitted separately to the SEC.

October 20, 2020

Motus GI Holdings, Inc. 1301 East Broward Boulevard, 3rd Floor Ft. Lauderdale, FL

Ladies and Gentlemen:

We have acted as counsel for Motus GI Holdings, Inc., a Delaware corporation (the "Company"), in connection with the preparation and filing of a Registration Statement on Form S-1 (the "Registration Statement"), including a related prospectus filed with the Registration Statement (the "Prospectus"), with the Securities and Exchange Commission (the "Commission") pursuant to the Securities Act of 1933, as amended (the "Securities Act"). The Registration Statement relates to the offer and sale by the selling stockholder identified therein of up to 8,733,625 shares of the Company's common stock, par value \$0.0001 per share (the "Common Stock"). Such shares of Common Stock consist of 8,733,625 shares of Common Stock (the "Warrant Shares") issuable upon exercise of certain warrants to purchase Common Stock (the "Warrants") described in the Registration Statement, which are currently issued and outstanding.

In connection with rendering this opinion, we have examined the Certificate of Incorporation and the Bylaws of the Company, the forms of the Warrants and such other corporate records, agreements, documents and instruments, and such certificates or comparable documents of public officials and of officers and representatives of the Company, and we have made such inquiries of such officers and representatives, as we have deemed necessary or appropriate for the purposes of this opinion.

In such examination, we have assumed the genuineness of all signatures, the legal capacity of all natural persons, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as certified, conformed or photostatic copies, and the authenticity of the originals of such latter documents. As to certain questions of fact material to this opinion, we have relied upon certificates or comparable documents of officers and representatives of the Company and have not sought to independently verify such facts.

Based on the foregoing, and subject to the qualifications stated herein, we are of the opinion that, when issued in accordance with the terms of the respective Warrants, the Warrant Shares will be duly authorized, validly issued, fully paid and non-assessable.

The opinion expressed herein is limited to the General Corporation Law of the State of Delaware (including reported judicial decisions interpreting the General Corporation Law of the State of Delaware), and we express no opinion as to the effect on the matters covered by this letter of the laws of any other jurisdiction.

We hereby consent to the filing of this letter as an exhibit to the Registration Statement and to the reference to our firm under the caption "Legal Matters" in the Prospectus which is a part of the Registration Statement. In giving such consents, we do not thereby admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the Rules and Regulations of the Commission promulgated thereunder.

Very truly yours,

/s/ Lowenstein Sandler LLP

Lowenstein Sandler LLP

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in this Registration Statement of Motus GI Holdings, Inc. on Form S-1 to be filed on or about October 20, 2020 of our report dated March 30, 2020, on our audits of the consolidated financial statements as of December 31, 2019 and 2018 and for each of the years then ended, which report was included in the Annual Report on Form 10-K filed March 30, 2020. Our report includes explanatory paragraphs about the existence of substantial doubt concerning the Company's ability to continue as a going concern and a change in the Company's method of accounting for leases. We also consent to the reference to our firm under the caption "Experts" in this Registration Statement.

/s/ EisnerAmper LLP

EISNERAMPER LLP Philadelphia, PA October 19, 2020