

The information in this preliminary prospectus supplement is not complete and may be changed. This preliminary prospectus supplement and the accompanying prospectus are not offers to sell these securities, and we are not soliciting offers to buy these securities in any jurisdiction where the offer or sale is not permitted.

PRELIMINARY PROSPECTUS SUPPLEMENT
(To Prospectus dated August 17, 2022)

SUBJECT TO COMPLETION

DATED AUGUST 22, 2022

• Shares of Common Stock



ASSURE HOLDINGS CORP.

We are offering • shares of our common stock pursuant to this prospectus supplement and the accompanying prospectus.

Our shares of common stock are listed on the Nasdaq Capital Market under the symbol "IONM." The closing price of our shares of common stock on August 19, 2022 on the Nasdaq Capital Market was \$1.40.

As of August 21, 2022, the aggregate market value of our outstanding common shares held by non-affiliates, or the public float, was \$21,589,014, based on 12,936,518 common shares outstanding, of which 8,499,612 shares were held by non-affiliates, and a price of \$2.54 per share, which was the last reported sale price of our common shares on the Nasdaq Capital Market on August 5, 2022. Pursuant to General Instruction I.B.6 of Form S-3, in no event will we sell shares pursuant to this prospectus with a value of more than one-third of the aggregate market value of our common shares held by non-affiliates in any 12-month period, so long as the aggregate market value of our common shares held by non-affiliates is less than \$75,000,000. During the 12 calendar months prior to, and including, the date of this prospectus supplement, we have not sold any securities pursuant to General Instruction I.B.6 of Form S-3.

Investing in our shares involves risks as described under the heading "Risk Factors" beginning on page S-4 of this prospectus supplement, page 9 of the accompanying prospectus and under similar headings in the other documents that are incorporated by reference in this prospectus supplement and the accompanying prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of the shares of common stock being offered by this prospectus supplement or accompanying prospectus, or determined if this prospectus supplement or accompanying prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

	<u>Per Share</u>	<u>Total</u>
Public offering price		
Underwriting discounts and commissions ⁽¹⁾		
Proceeds, before expenses, to us		

(1) We have agreed to reimburse the underwriter for certain expenses. See "Underwriting" for a description of the compensation payable to the underwriter.

We have granted the underwriter an option to purchase up to an additional • shares of our common stock from us, at a price of \$• per share, for 45 days after the date of this prospectus supplement.

Delivery of the shares of our common stock against payment is expected to be made on or about August •, 2022.

AEGIS CAPITAL CORP.

The date of this prospectus supplement is August 22, 2022.

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ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement relates to the offering of our shares of common stock. Before buying any of the shares of common stock that we are offering, we urge you to carefully read this prospectus supplement, together with the accompanying prospectus and information incorporated by reference herein and therein as described under the headings “Where You Can Find More Information” and “Documents Incorporated by Reference” in this prospectus supplement, and any free writing prospectus or prospectus supplement that we have authorized for use in connection with this offering. These documents contain important information that you should consider when making your investment decision.

This document is part of the registration statement that we filed with the Securities and Exchange Commission, or the SEC, using a “shelf” registration process and consists of two parts. The first part, this prospectus supplement, describes the terms of this offering of shares of common stock and also adds to and updates information contained in the documents incorporated by reference into this prospectus supplement and the accompanying prospectus. The second part, the accompanying prospectus, including the documents incorporated by reference therein, provides more general information about securities we may offer from time to time. To the extent there is a conflict between the information contained in this prospectus supplement, on the one hand, and the information contained in any document incorporated by reference into this prospectus supplement that was filed with the SEC, before the date of this prospectus supplement, on the other hand, you should rely on the information in this prospectus supplement. If any statement in one of these documents is inconsistent with a statement in another document having a later date—for example, a document incorporated by reference into this prospectus supplement—the statement in the document having the later date modifies or supersedes the earlier statement.

You should rely only on the information contained in this prospectus supplement, the accompanying prospectus, any document incorporated by reference herein or therein, or any free writing prospectuses we may provide to you in connection with this offering. We have not authorized anyone to provide you with any different information. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may provide to you. The information contained in this prospectus supplement, and in the documents incorporated by reference herein, is accurate only as of the date such information is presented. Our business, financial condition, results of operations and future prospects may have changed since those respective dates.

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 herein 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 supplement does not constitute an offer to sell or the solicitation of an offer to buy any securities other than the shares of common stock to which it relates, nor does this prospectus supplement constitute an offer to sell or the solicitation of an offer to buy securities in any jurisdiction to any person to whom it is unlawful to make such offer or solicitation in such jurisdiction.

Unless otherwise indicated, information contained in or incorporated by reference into this prospectus supplement concerning our industry and the markets in which we operate, including market opportunity, market position and competitive landscape, is based on information from our management’s estimates, as well as from industry publications, surveys and studies conducted by third parties. Management estimates are derived from publicly available information, our knowledge of our industry, and assumptions based on such information and knowledge, which we believe to be reasonable. In addition, while we believe that information contained in the industry publications, surveys and studies has been obtained from reliable sources, the accuracy and completeness of such information is not guaranteed, and we have not independently verified any of the data contained in these third-party sources.

This prospectus supplement, the accompanying prospectus, including the documents incorporated by reference herein and therein, includes statements that are based on various assumptions and estimates that are subject to numerous known and unknown risks and uncertainties. Some of these risks and uncertainties are described in the section entitled “Risk Factors” beginning on page S-4 of this prospectus supplement and page 9 of the accompanying prospectus, as well as the other documents we file with the SEC. These and other important factors could cause our future results to be materially different from the results expected as a result of, or implied by, these assumptions and estimates. You should read the information contained in, or incorporated by reference into, this prospectus supplement and the accompanying prospectus completely and with the understanding that future results may be materially different from and worse than what we expect. See the information included under the heading “Forward-Looking Statements.”

This prospectus supplement does not contain all of the information included in the registration statement of which this prospectus supplement is a part. For a more complete understanding of this offering of shares of common stock, you should refer to the registration statement, including its exhibits. The registration statement containing the accompanying prospectus, including the exhibits to the registration statement, provides additional information about us and the shares of common stock offered pursuant to this prospectus supplement. The registration statement, including the exhibits, can be read on the SEC’s website or at the SEC’s offices mentioned under the headings “Where You Can Find More Information” and “Documents Incorporated by Reference.”

Unless otherwise indicated, any reference to “Assure”, “IONM”, the “Company”, or as “we”, “us”, or “our” refers to Assure Holdings Corp. and its consolidated subsidiaries.

PROSPECTUS SUPPLEMENT SUMMARY

The following highlights certain information contained elsewhere in this prospectus supplement. It does not contain all the details concerning the Offering, including information that may be important to you. You should carefully review this entire prospectus including the section entitled "Risk Factors" and the financial statement incorporated herein by reference. See "Documents Incorporated by Reference" and "Where You Can Find More Information."

Summary of Our Business

Assure provides outsourced intraoperative neurophysiological monitoring ("IONM") and remote neurology services that help make surgeries safer. The Company delivers a turnkey suite of clinical and operational services to support surgeons and medical facilities during invasive procedures. IONM has been well established as a standard of care and risk mitigation tool for various surgical verticals such as neurosurgery, spine, cardiovascular, orthopedic, ear, nose, and throat ("ENT"), and other surgical procedures that place the nervous system at risk. Accredited by The Joint Commission, Assure's mission is to provide exceptional surgical care and help make invasive surgeries safer. Our strategy focuses on utilizing personnel and partners to deliver outcomes that are beneficial to all stakeholders including patients, surgeons, hospitals, insurers, and shareholders.

During each procedure, Assure provides two types of services, the Technical Component and Professional Component of IONM. Our in-house Interoperative Neurophysiologists ("INPs") provide Technical Component IONM services from the operating room throughout the procedure, while the telehealth-oriented supervising practitioners provide a level of redundancy and risk mitigation, the Professional Component, in support of the onsite INPs and surgical team. In addition, Assure offers a comprehensive suite of IONM services, including scheduling the INP and supervising practitioner, real time monitoring, patient advocacy and subsequent billing and collecting for services provided.

Historically, the foundation of Assure's business has been providing the Technical Component of IONM via our INP staff. We employ highly trained INPs, which provide a direct point of contact in the operating room during the surgeries to relay critical information to the surgical team. In our one-to-one model, Assure pairs a surgeon with a team of INPs to promote a level of familiarity, comfort and efficiency between the surgeon and the INP. Each INP has the ability to handle approximately 200 cases annually. Our INPs monitor the surgical procedure using state of the art, commercially available, diagnostic medical equipment. Assure INPs are certified by a third-party accreditation agency. The success of our service depends upon the timely and successful interpretation of the data signals by our INPs and thereafter to quickly determine if there is a deficiency and the surgical intervention required to positively impact the patient and surgery. Employing this model, Assure has rapidly expanded its operational footprint from a home base in Colorado and increased its number of managed cases from approximately 1,600 in 2017 to approximately 17,400 in 2021.

Beginning in the second quarter of 2021, Assure began executing on its long-term vertical integration plan by expanding into remote neurology services. As a result, Assure began delivering remote neurology services in support of the surgical team and INPs rather than exclusively relying on third-party supervising practitioners as it had previously. We currently have supervising practitioners employed and working with surgical teams and our INPs. They are utilizing equipment and training to monitor electroencephalographic ("EEG") and electromyography ("EMG") and several complex modalities during surgical procedures to pre-emptively notify the underlying surgeon of any nerve related issues that are identified.

Remote neurology services is a one-to-many model, as one supervising practitioner is able to monitor multiple patients simultaneously. As a result, the Professional Component has a different financial profile than the Technical Component. Supervising practitioners provide remote neurology services from an off-site location and maintain the ability to manage multiple cases simultaneously. In 2021, Assure performed approximately 17,400 total managed cases including managing approximately 2,100 remote neurology cases with employed supervising practitioners. The number of remote neurology managed cases is expected to expand significantly as our supervising practitioners increase the volume of cases supervised and additional neurologists are added to the team.

Bringing the Professional Component of IONM in house generates a number of positives for Assure. First, we will be able to oversee quality of service for providing remote neurology services. This commitment to quality supports our efforts to sign new in-network agreements with insurance payors and facility-wide agreements with hospitals. Second, by bringing the remote neurology function in-house, we are able to significantly reduce cost of delivery, allowing the Company to improve our profitability on every case we perform. Our objective is to significantly reduce the cost of delivery for remote neurology services going forward. Additional scale will serve as a catalyst for margin expansion in the future. Third, for most of the cases we perform, remote neurology services represent the creation of a new revenue stream. Fourth, providing remote neurology services for IONM creates opportunities in adjacent markets where similar remote neurology services are utilized. The shift to providing remote neurology services ourselves was a natural progression of the business. We already built the platform and maintained patient volume; insourcing remote neurology was simply a matter of replacing contractors with Assure supervising practitioners to service this volume, with the long-term goal of increased margins, a new revenue stream and improved cash receipts from commercial payors.

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Collectively, support from Assure's high quality Technical and Professional IONM services results in decreased hospital and surgeon liability, abbreviated patient stays, fewer readmissions, reduced hospital costs, enhanced overall patient satisfaction and the efficient achievement of better clinical outcomes.

Over the past two years Assure has built a platform to support our future growth and development across multiple verticals. The attributes of our platform include: maintaining exceptional clinical operations, automating our revenue cycle management function and collecting cash faster, boosting managed care through the signing of in-network agreements with insurance payors, minimizing operational bottlenecks, particularly around onboarding and credentialing, instituting an ongoing training and development program for clinical staff to ensure we maintain industry-leading skills and performance, and successful execution on an M&A strategy in a highly fragmented market that has led to three accretive transactions over the past two years. This platform was built with the intent of having these key functional areas support IONM in our key surgical verticals including spine, neurosurgery, vascular, ENT and orthopedic. As we transition to becoming a provider of remote neurology services, we believe our expertise in IONM will assist us in entering adjacent markets in which Assure supervising practitioners can also provide patient services. We expect to begin providing services in new verticals including EEG, epilepsy, sleep study and stroke by leveraging key competencies we have built over the past two years.

In 2022, Assure provided IONM services for approximately 185 surgeons in approximately 115 hospitals and surgery centers. The Company operates in: Arizona, Colorado, Kansas, Louisiana, Michigan, Minnesota, Missouri, Nebraska, Nevada, Texas and Utah. Our continued geographic expansion initiatives, including facility-wide outsourcing agreements with medical facilities and hospital networks, coupled with the surgical vertical expansion efforts, extending the Company's reach into remote neurology services and selective acquisitions are expected to generate substantial growth opportunities going forward.

Clinical leadership, surgeon support and patient care are Assure's cornerstones. We make substantial ongoing investments in our training and development of clinical staff and have created a fellowship program to rigorously train new INPs to cost-effectively join the Assure team. In addition, we have partnered with the internationally renowned Texas Back Institute on clinical research relating to IONM safety and efficacy. Isador Lieberman, M.D., the president and director of the scoliosis and spine

tumor program at the Texas Back Institute, is a member of Assure's Medical Advisory Committee.

Our strategy is to build a telehealth remote neurology services company with exceptional capabilities in IONM and numerous adjacent markets

Our executive office address is 7887 E. Belleview Ave., Suite 500, Englewood, Colorado 80111. The telephone number for our executive office is (720) 287-3093 and our Internet website address is <https://www.assureneuromonitoring.com/>. The information on our website is not a part of, or incorporated in, this prospectus supplement.

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THE OFFERING

Issuer:	Assure Holdings Corp.
Shares of common stock offered by us:	<ul style="list-style-type: none">• shares of our common stock, par value \$0.001 per share.
Shares of common stock to be outstanding after this offering:	<ul style="list-style-type: none">• shares of our common stock.
Option to purchase additional shares:	We have granted the underwriter an option for a period of up to 45 days from the date of this prospectus supplement to purchase up to an aggregate of <ul style="list-style-type: none">• additional shares of our common stock at the price set forth on the cover page of this prospectus supplement.
Use of proceeds:	We currently intend to use the net proceeds of this offering, if any, for general corporate purposes, including working capital, marketing, product development and capital expenditures. See "Use of Proceeds" on page S-6 of this prospectus supplement.
Risk factors:	Investing in our shares of common stock involves a high degree of risk. You should review carefully the risks and uncertainties described under the heading "Risk Factors" beginning on page S-4 of this prospectus supplement, page 9 of the accompanying prospectus and other information included or incorporated into this prospectus supplement, as well as the risks and uncertainties described in the other documents we file with the SEC.
Nasdaq Capital Market symbol:	"IONM"

Unless otherwise indicated, the number of our shares of common stock to be outstanding immediately after this offering as shown above is based on 12,936,518 shares of common stock outstanding as of August 21, 2022, but excluding the following as of such date:

- 3,940,006 shares of common stock issuable upon the exercise of warrants outstanding at a weighted average exercise price of \$4.49 per share;
- 1,305,000 shares of common stock issuable upon the exercise of outstanding stock options with an average weighted exercise price of \$5.56; and
- 753,024 shares of common stock issuable upon conversion of convertible notes.

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RISK FACTORS

An investment in our common stock involves a high degree of risk. You should carefully consider the risks described below, the risks under the section "Risk Factors" in the accompanying prospectus, and discussed under the section captioned "Risk Factors" contained in our annual report on Form 10-K for the fiscal years ended December 31, 2021 and 2020, and in our quarterly reports on Form 10-Q for the period ended March 31, 2022 and June 30, 2022, which reports are incorporated by reference in this prospectus supplement, together with all of the other information included in this prospectus supplement, the accompanying prospectus or incorporated by reference herein or therein, including any documents subsequently filed and incorporated by reference, before making an investment decision with regard to our securities. See "Documents Incorporated by Reference" and "Where You Can Find More Information" below.

Risks Related to this Offering

Management will have broad discretion as to the use of the net proceeds from this offering, and we may not use the proceeds effectively.

Our management will have broad discretion as to the application of the net proceeds and could use them for purposes other than those contemplated at the time of this offering. Our stockholders may not agree with the manner in which our management chooses to allocate and spend the net proceeds. Moreover, our management may use the net proceeds for corporate purposes that may not increase our results of operations or the market value of our common stock. Our failure to apply these funds effectively could have a material adverse effect on our business, delay the development and approval of our products and cause the price of our common stock to decline.

If you purchase shares of our common stock in this offering, you will experience immediate dilution as a result of this offering.

Because the price per share of our common stock being offered is substantially higher than the net tangible book value per share of our common stock, you will suffer substantial dilution in the net tangible book value of the common stock you purchase in this offering. If you purchase shares of common stock in this offering, you will suffer immediate and substantial dilution of \$● per share in the net tangible book value of the common stock. In addition, we may issue additional securities in the future, including shares of common stock, securities that are convertible into or exchangeable for, or that represent the right to receive, common stock or substantially similar securities. The issuance of these securities may cause further dilution to our stockholders. The exercise of outstanding stock options and warrants may also result in further dilution of your investment. See "Dilution" on page S-6 of this prospectus supplement for a more detailed illustration of the dilution you may incur if you participate in this offering.

If you purchase shares of our common stock in this offering, you may experience future dilution as a result of future equity offerings or other equity issuances.

In order to raise additional capital, we may in the future offer and issue additional shares of our common stock or other securities convertible into or exchangeable for our common stock. We cannot assure you that we will be able to sell shares or other securities in any offering at a price per share that is equal to or greater than the price per share paid by investors in previous offerings, and investors purchasing shares or other securities in the future could have rights superior to existing stockholders. The price per share at which we sell additional shares of our common stock or other securities convertible into or exchangeable for our common stock in future transactions may be higher or lower than the price per share in previous offerings. Further, we may choose to raise additional capital due to market conditions or strategic considerations, even if we believe we have sufficient funds for our current or future operating plans. In addition, the exercise of outstanding stock options and warrants or the settlement of outstanding restricted stock units would result in further dilution of your investment.

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Proposed legislation in the U.S. Congress, including changes in U.S. tax law, and the recently enacted Inflation Reduction Act of 2022 may adversely impact the Company and the value of shares of our common stock.

Changes to U.S. tax laws (which changes may have retroactive application) could adversely affect the Company or holders of our common stock. In recent years, many changes to U.S. federal income tax laws have been proposed and made, and additional changes to U.S. federal income tax laws are likely to continue to occur in the future.

The U.S. Congress is currently considering numerous items of legislation which may be enacted prospectively or with retroactive effect, which legislation could adversely impact the Company's financial performance and the value of shares of our common stock. Additionally, states in which we operate or own assets may impose new or increased taxes. If enacted, most of the proposals would be effective for 2022 or later years. The proposed legislation remains subject to change, and its impact on the Company and purchasers of our common stock is uncertain.

In addition, the Inflation Reduction Act of 2022 was recently signed into law and includes provisions that will impact the U.S. federal income taxation of corporations. Among other items, this legislation includes provisions that will impose a minimum tax on the book income of certain large corporations and an excise tax on certain corporate stock repurchases that would be imposed on the corporation repurchasing such stock. It is unclear how this legislation will be implemented by the U.S. Department of the Treasury and we cannot predict how this legislation or any future changes in tax laws might affect the Company or purchasers of our common stock.

FORWARD-LOOKING STATEMENTS

This prospectus supplement, the accompanying prospectus, the documents incorporated by reference herein and therein and the exhibits attached hereto and thereto contain "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995, including statements regarding future events or our future results of operations, financial condition, business, strategies, financial needs, and the plans and objectives of management, are forward-looking statements. Forward-looking statements include all statements that do not relate solely to historical or current facts and may be identified by the use of words including, but not limited to the following; "may," "believe," "will," "expect," "project," "estimate," "anticipate," "plan," "continue," or the negative thereof or other variations thereon or comparable terminology, or by discussions of strategy. These forward-looking statements are based on the Company's current plans and expectations and are subject to a number of risks, uncertainties and other factors which could significantly affect current plans and expectations and our future financial condition and results. These factors, which could cause actual results, performance and achievements to differ materially from those anticipated.

You should read this prospectus supplement along with the accompanying prospectus and the documents incorporated by reference herein and therein completely and with the understanding that actual future results may materially differ from expectations set forth in forward looking statements. Readers are cautioned not to place undue reliance on forward-looking statements, which speak only as of the date hereof, when evaluating the information presented in this prospectus supplement, the accompanying prospectus or our other disclosures because current plans, anticipated actions, and future financial conditions and results may differ from those expressed in any forward-looking statements made by or on behalf of the Company.

We have not undertaken any obligation to publicly update or revise any forward-looking statements. All of our forward-looking statements speak only as of the date of the document in which they are made or, if a date is specified, as of such date. Subject to mandatory requirements of applicable law, we disclaim any obligation or undertaking to provide any updates or revisions to any forward-looking statement to reflect any change in expectations or any changes in events, conditions, circumstances or information on which the forward-looking statement is based. All subsequent written and oral forward-looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by the risk factors set forth in the section entitled "Risk Factors" in this prospectus supplement.

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USE OF PROCEEDS

We estimate that the net proceeds from the sale of our shares of common stock that we are offering will be approximately \$● million or \$● million if the underwriter's option to purchase additional shares is exercised in full), after deducting underwriting discounts, commissions and estimated offering expenses payable by us.

We intend to use the net proceeds from the sale of our shares of common stock, if any, for general corporate purposes, including payment of an advisory fee equal to 3.5% of the aggregate gross proceeds from this offering to an advisor bank that is not part of the offering syndicate in this offering pursuant to a financial advisor agreement with the Company, working capital, marketing, product development and capital expenditures. As of the date of this prospectus supplement, we cannot predict with certainty all of the particular uses for the net proceeds to be received upon the completion of this offering or the amounts that we will actually spend on the uses set forth above. The amounts and timing of our actual use of proceeds will vary depending on numerous factors, including the factors described under the heading "Risk Factors" beginning on page S-4 of this prospectus supplement, page 9 of the accompanying prospectus and page 19 of our Annual Report, as well as the other documents we file with the SEC. As a result, management will retain broad discretion over the allocation of the net proceeds from this offering, and investors will be relying on the judgment of our management regarding the application of the net proceeds.

DIVIDEND POLICY

We do not intend to pay dividends for the foreseeable future. In addition, our ability to pay dividends is restricted by agreements governing Assure's and its subsidiaries' debt, including the Company's convertible notes. See "Risk Factors" above.

DESCRIPTION OF CAPITAL STOCK

The material terms and provisions of our common stock are described under the caption "Description of Capital Stock" beginning on page 15 of the accompanying prospectus. As of August 21, 2022, our authorized capital consists of 180,000,000 shares of common stock, \$0.001 par value per share, of which 12,936,518 shares of common stock are issued and outstanding. Our common stock is listed on the Nasdaq Capital Market under the symbol "IONM." Our transfer agent is Computershare Trust Company of Canada.

DILUTION

If you purchase common stock in this offering, your interest may be diluted to the extent of the difference between the offering price of the shares of common stock offered hereby and the as-adjusted net tangible book value per share of common stock after this offering.

The net tangible book value of our common stock as of June 30, 2022 was approximately \$14.5 million, or approximately \$1.12 per share.

Dilution per share to new investors represents the difference between the amount per share paid by purchasers for our common stock in this offering from time to time and the net tangible book value per share of our common stock immediately following the completion of this offering.

After giving effect to the sale of ● shares of common stock offered by this prospectus supplement at the public offering price of \$● per share, excluding the exercise of the underwriter's option to purchase additional shares, and after deducting the underwriting discounts, commissions and estimated offering expenses payable by us, estimated to be \$●, our as adjusted net tangible book value as of June 30, 2022 would have been approximately \$● million, or approximately \$● per share. This represents an immediate increase in net tangible book value of approximately \$● per share to our existing stockholders and an immediate dilution in as adjusted net tangible book value of approximately \$● per share to purchasers of our common stock in this offering, as illustrated by the following table:

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Public offering price per share		\$	●
Net tangible book value per share at June 30, 2022		\$	●
Increase in net tangible book value per share attributable to existing shareholders		\$	●
As adjusted net tangible book value per share as of June 30, 2022 after giving effect to this offering		\$	●
Dilution per share to investors purchasing our common stock in this offering		\$	●

Based on 12,919,666 shares of common stock outstanding as of June 30, 2022 and ● on an as adjusted basis after giving effect to the issuance of ● shares of common stock offered by this prospectus supplement. The number of shares of common stock outstanding excludes:

- 3,940,006 shares of common stock issuable upon the exercise of warrants outstanding at a weighted average exercise price of \$4.49 per share;
- 1,305,500 shares of common stock issuable upon the exercise of outstanding stock options with an average weighted exercise price of \$5.56; and
- 753,024 shares of common stock issuable upon conversion of convertible notes.

To the extent that outstanding options or warrants are exercised, you will experience further dilution. In addition, we may choose to raise additional capital due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. To the extent that additional capital is raised through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our stockholders.

UNDERWRITING

Aegis Capital Corp. is acting as the underwriter of the offering. We have entered into an underwriting agreement dated August ●, 2022, with Aegis. Subject to the terms and conditions of the underwriting agreement, we have agreed to sell to the underwriter named below and the underwriter named below have agreed to purchase, at the public offering price less the underwriting discounts and commissions set forth on the cover page of this prospectus, the following number of shares of our common stock:

Underwriter	Number of Shares
Aegis Capital Corp.	

The underwriter is committed to purchase all the shares of common stock offered by us other than those covered by the option to purchase additional shares described below, if they purchase any shares. The obligations of the underwriter may be terminated upon the occurrence of certain events specified in the underwriting agreement. Furthermore, pursuant to the underwriting agreement, the underwriter's obligations are subject to customary conditions, representations and warranties contained in the underwriting agreement, such as receipt by the underwriter of officers' certificates and legal opinions.

We have agreed to indemnify the underwriter against specified liabilities, including liabilities under the Securities Act of 1933, as amended (the "Securities Act"), and to contribute to payments the underwriter may be required to make in respect thereof.

The underwriter is offering the common stock, subject to prior sale, when, as and if issued to and accepted by them, subject to approval of legal matters by their counsel and other conditions specified in the underwriting agreement. The underwriter reserves the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part.

The underwriter proposes to offer the common stock offered by us to the public at the public offering price set forth on the cover of this prospectus. In addition, the underwriter may offer some of the common stock to other securities dealers at such price less a concession of \$● per share. After the initial offering, the public offering price and concession to dealers may be changed.

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We have granted the underwriter an over-allotment option. This option, which is exercisable for up to 45 days after the date of this prospectus, permits the underwriter to purchase a maximum of additional shares of common stock from us to cover over-allotments. If the underwriter exercises all or part of this option, they will purchase shares of common stock covered by the option at the public offering price that appears on the cover page of this prospectus, less the underwriting discount. If this option is exercised in full, the total price to the public will be \$●

Discounts and Commissions. The following table shows the public offering price, underwriting discount, non-accountable underwriter's expense allowance and proceeds, before expenses, to us. The information assumes either no exercise or full exercise by the underwriter of its over-allotment option.

	Per Share	Total	
		Without Over-Allotment	With Over-Allotment
Public offering price	\$	\$	\$

Underwriting discount (7.0%)	\$			
Proceeds, before expenses, to us	\$	\$	\$	\$

We have also agreed to pay all expenses relating to the offering, including (a) all filing fees and expenses relating to the registration of the shares to be sold in the offering (including shares sold upon exercise of the underwriter's over-allotment option) with the Securities and Exchange Commission; (b) all fees associated with the review of the offering by FINRA and all fees and expenses relating to the listing of such shares on the Nasdaq Capital Market; (c) all fees, expenses and disbursements relating to the registration, qualification or exemption of securities offered under the "blue sky" securities laws designated by the underwriter; (d) all fees, expenses and disbursements relating to the registration, qualification or exemption of securities offered under the securities laws of foreign jurisdictions designated by the underwriter; (e) transfer and/or stamp taxes, if any, payable upon the transfer of the shares from the Company to underwriter; (f) fees and expenses of our accountants; and (g) fees and expenses of the underwriter, including underwriter's legal counsel, of \$50,000.

We estimate that the total expenses of the offering, excluding underwriting discount and non-accountable expense allowance, will be approximately \$●.

Discretionary Accounts. The underwriter does not intend to confirm sales of the securities offered hereby to any accounts over which they have discretionary authority.

Lock-Up Agreements and Company Standstill. Pursuant to certain "lock-up" agreements, (a) our executive officers and directors as of the pricing date of the offering, have agreed, subject to certain exceptions, not to offer, issue, sell, contract to sell, encumber, grant any option for the sale of or otherwise dispose of any securities of the Company without the prior written consent of the underwriter, for a period of ninety (90) days from the date of the offering, and (b) we, and any successor, have agreed, subject to certain exceptions, not to for a period of ninety (90) days from the date of the closing of the offering (1) offer, sell or otherwise transfer or dispose of, directly or indirectly, any shares of capital stock of the Company or (2) file or caused to be filed any registration statement with the SEC relating to the offering of any shares of our capital stock or any securities convertible into or exercisable or exchangeable for shares of our capital stock.

The lock-up provision applies to common stock and to securities convertible into or exchangeable or exercisable for common stock. It also applies to common stock owned now or acquired later by the person executing the agreement or for which the person executing the agreement later acquires the power of disposition. The exceptions permit, among other things and subject to restrictions, the issuance of common stock upon the exercise of outstanding stock options and warrants or other outstanding convertible securities.

Right of First Refusal. The underwriter shall have a right of first refusal to act as sole book-running manager for any and all future public equity offerings of the Company or any successor until six (6) months after the closing date of the offering.

Electronic Offer, Sale and Distribution of Shares. A prospectus in electronic format may be made available on the websites maintained by one or more of the underwriters or selling group members, if any, participating in this offering and the underwriter may distribute prospectuses electronically. The underwriter may agree to allocate a number of shares to selling group members for sale to their online brokerage account holders. Internet distributions will be allocated by the underwriter and selling group members that will make internet distributions on the same basis as other allocations. Other than the prospectus in electronic format, the information on these websites is not part of this prospectus or the registration statement of which this prospectus forms a part, has not been approved or endorsed by us or any underwriter in its capacity as underwriter, and should not be relied upon by investors.

Other Relationships. Certain of the underwriter and its affiliates have provided, and may in the future provide, various investment banking, commercial banking and other financial services for us and our affiliates for which they have received, and may in the future receive, customary fees; however, except as disclosed in this prospectus, we have no present arrangements with the underwriter for any further services.

Stabilization. In connection with this offering, the underwriter may engage in stabilizing transactions, overallotment transactions, syndicate covering transactions, penalty bids and purchases to cover positions created by short sales.

- Stabilizing transactions permit bids to purchase shares so long as the stabilizing bids do not exceed a specified maximum, and are engaged in for the purpose of preventing or retarding a decline in the market price of the shares while the offering is in progress.
- Overallotment transactions involve sales by the underwriter of shares in excess of the number of shares the underwriter are obligated to purchase. This creates a syndicate short position which may be either a covered short position or a naked short position. In a covered short position, the number of shares over-allotted by the underwriter is not greater than the number of shares that they may purchase in the overallotment option. In a naked short position, the number of shares involved is greater than the number of shares in the overallotment option. The underwriter may close out any short position by exercising their overallotment option and/or purchasing shares in the open market.
- Syndicate covering transactions involve purchases of shares in the open market after the distribution has been completed in order to cover syndicate short positions. In determining the source of shares to close out the short position, the underwriter will consider, among other things, the price of shares available for purchase in the open market as compared with the price at which they may purchase shares through exercise of the overallotment option. If the underwriter sells more shares than could be covered by exercise of the overallotment option and, therefore, have a naked short position, the position can be closed out only by buying shares in the open market. A naked short position is more likely to be created if the underwriter is concerned that after pricing there could be downward pressure on the price of the shares in the open market that could adversely affect investors who purchase in the offering.
- Penalty bids permit the underwriter to reclaim a selling concession from a syndicate member when the shares originally sold by that syndicate member are purchased in stabilizing or syndicate covering transactions to cover syndicate short positions.

These stabilizing transactions, syndicate covering transactions and penalty bids may have the effect of raising or maintaining the market price of our shares or common stock or preventing or retarding a decline in the market price of our shares or common stock. As a result, the price of our common stock in the open market may be higher than it would otherwise be in the absence of these transactions. Neither we nor the underwriter makes any representation or prediction as to the effect that the transactions described above may have on the price of our common stock. These transactions may be effected on the Nasdaq Capital Market.

Passive Market Making. In connection with this offering, the underwriter and selling group members may engage in passive market making transactions in our common stock on the Nasdaq Capital Market in accordance with Rule 103 of Regulation M under the Exchange Act, during a period before the commencement of offers or sales of the shares and extending through the completion of the distribution. A passive market maker must display its bid at a price not in excess of the highest independent bid of that security. However, if all independent bids are lowered below the passive market maker's bid, that bid must then be lowered when specified purchase limits are exceeded.

Other than in the United States, no action has been taken by us or the underwriter which would permit a public offering of the securities offered by this prospectus in any jurisdiction where action for that purpose is required. The securities offered by this prospectus may not be offered or sold, directly or indirectly, nor may this prospectus or any other offering material or advertisements in connection with the offer and sale of any such securities be distributed or published in any jurisdiction, except under circumstances that will result in compliance with the applicable rules and regulations of that jurisdiction. Persons into whose possession this prospectus comes are advised to inform themselves about and to observe any restrictions relating to the offering and the distribution of this prospectus. This prospectus does not constitute an offer to sell or a solicitation of an offer to buy any securities offered by this prospectus in any jurisdiction in which such an offer or a solicitation is unlawful.

CERTAIN MATERIAL U.S. FEDERAL INCOME TAX CONSIDERATIONS

The following is a general discussion of certain material U.S. federal income tax considerations relating to the purchase, ownership and disposition of our common stock acquired pursuant to this prospectus supplement. This discussion is based on current provisions of the Internal Revenue Code of 1986, as amended (the "Internal Revenue Code"), existing and proposed U.S. Treasury Regulations promulgated or proposed thereunder and current administrative and judicial interpretations thereof, all as in effect as of the date of this prospectus supplement and all of which are subject to change or to differing interpretation, possibly with retroactive effect. We have not sought and will not seek any rulings from the Internal Revenue Service (the "IRS") regarding the matters discussed below. There can be no assurance that the IRS or a court will not take a contrary position.

This discussion is limited to U.S. holders and non-U.S. holders who hold our common stock as a capital asset within the meaning of Section 1221 of the Internal Revenue Code (generally, as property held for investment). This discussion does not address all aspects of U.S. federal income taxation, such as the U.S. alternative minimum income tax and the additional tax on net investment income, nor does it address any aspect of state, local or non-U.S. taxes, or U.S. federal taxes other than income taxes, such as federal estate and gift taxes. Except as provided below, this summary does not address tax reporting requirements. And, except as provided herein, this summary does not discuss the potential effects, whether adverse or beneficial, of any proposed legislation that, if enacted, could be applied on a retroactive or prospective basis. This discussion does not consider any specific facts or circumstances that may apply to a holder and does not address the special tax considerations that may be applicable to particular holders, such as:

- insurance companies;
- tax-exempt organizations;
- banks or other financial institutions;
- brokers or dealers in securities or foreign currency;
- traders in securities who elect to apply a mark-to-market method of accounting;
- real estate investment trusts, regulated investment companies or mutual funds;
- pension plans;
- controlled foreign corporations;
- passive foreign investment companies;
- corporations organized outside the United States, any state thereof, or the District of Columbia that are nonetheless treated as U.S. persons for U.S. federal income tax purposes;

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- persons that own (directly, indirectly or constructively) more than 5% of the total voting power or total value of our common stock;
- corporations that accumulate earnings to avoid U.S. federal income tax;
- certain former citizens or long-term residents of the United States;
- U.S. holders (as defined below) that hold our common stock in connection with a trade or business, permanent establishment, or fixed base outside the United States;
- persons that have a "functional currency" other than the U.S. dollar;
- persons that acquire our common stock as compensation for services;
- owners that hold our stock as part of a straddle, hedge, conversion transaction, synthetic security or other integrated investment;
- holders subject to special accounting rules;
- S corporations; and
- partnerships or other entities treated as partnerships for U.S. federal income tax purposes.

If an entity or arrangement that is classified as a partnership (or other "pass-through" entity) for U.S. federal income tax purposes holds our common stock, the U.S. federal income tax consequences to such entity or arrangement and the partners (or other owners or participants) of such entity or arrangement generally will depend on the activities of the entity or arrangement and the status of such partners (or owners or participants). This summary does not address the tax consequences to any such partner (or owner or participant). Partners (or other owners or participants) of entities or arrangements that are classified as partnerships or as "pass-through" entities for U.S. federal income tax purposes should consult their own tax advisors regarding the U.S. federal income tax consequences arising from and relating to the purchase, ownership and disposition of our common stock.

For purposes of this discussion, the term "U.S. holder" means a beneficial owner of our common stock that is, for U.S. federal income tax purposes:

- an individual who is a citizen or resident of the United States;
- a corporation created or organized in or under the laws of the United States, any state thereof or the District of Columbia;
- an estate the income of which is subject to U.S. federal income taxation regardless of its source; or

- a trust, if (1) a U.S. court is able to exercise primary supervision over the administration of the trust and one or more U.S. persons have authority to control all substantial decisions of the trust or (2) the trust has a valid election to be treated as a U.S. person under applicable U.S. Treasury Regulations.

A “non-U.S. holder” is a beneficial owner of our common stock that is neither a U.S. holder nor a partnership (or other entity treated as a partnership for U.S. federal income tax purposes).

Prospective investors should consult their own tax advisors regarding the U.S. federal, state, local and non-U.S. income and other tax considerations of the purchase, ownership and disposition of our common stock.

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U.S. Holders

Distributions on Common Stock

If we pay distributions of cash or property with respect to our common stock, those distributions generally will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. If a distribution exceeds our current and accumulated earnings and profits, the excess will be treated as a tax-free return of the U.S. holder’s investment, up to such holder’s adjusted tax basis in its shares of our common stock. Any remaining excess will be treated as capital gain, subject to the tax treatment described below under the heading “U.S. Holders—Gain on Sale, Exchange or Other Taxable Disposition.”

Dividends we pay to a U.S. holder that is a taxable corporation generally will qualify for the dividends received deduction if the requisite holding period is satisfied. With certain exceptions (including, but not limited to, dividends treated as investment income for purposes of investment interest deduction limitations), and provided certain holding period requirements are met, dividends we pay to a non-corporate U.S. holder generally will constitute “qualified dividends” that will be subject to tax at the maximum tax rate accorded to long-term capital gains.

Gain on Sale, Exchange or Other Taxable Disposition

Upon the sale or other taxable disposition of common shares, a U.S. holder generally will recognize capital gain or loss in an amount equal to the difference between (a) the amount of cash plus the fair market value of any property received and (b) such U.S. holder’s tax basis in such common shares sold or otherwise disposed of. Such gain or loss generally will be long-term capital gain or loss if, at the time of the sale or other disposition, the common shares have been held by the U.S. holder for more than one year. Preferential tax rates may apply to long-term capital gain of a U.S. holder that is an individual, estate, or trust. Deductions for capital losses are subject to significant limitations.

Non-U.S. Holders

Distributions on Common Stock

If we pay distributions of cash or property with respect to our common stock, those distributions generally will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. If a distribution exceeds our current and accumulated earnings and profits, the excess will be treated as a tax-free return of the non-U.S. holder’s investment, up to such holder’s tax basis in its shares of our common stock. Any remaining excess will be treated as capital gain, subject to the tax treatment described below under the heading “Non-U.S. Holders —Gain on Sale, Exchange or Other Taxable Disposition.” Dividends paid to a non-U.S. holder generally will be subject to withholding of U.S. federal income tax at a 30% rate, or such lower rate as may be specified by an applicable income tax treaty between the United States and such holder’s country of residence. In the case of any constructive distribution, it is possible that this tax would be withheld from any amount owed to the non-U.S. holder, including, but not limited to, distributions of cash, common stock or sales proceeds subsequently paid or credited to that holder. If we are unable to determine, at the time of payment of a distribution, whether the distribution will constitute a dividend, we may nonetheless choose to withhold any U.S. federal income tax on the distribution as permitted by U.S. Treasury Regulations.

Distributions that are treated as effectively connected with a trade or business conducted by a non-U.S. holder within the United States are generally not subject to the 30% (or lower rate as may be specified by an applicable tax treaty) withholding tax if the non-U.S. holder provides a properly executed IRS Form W-8ECI stating that the distributions are not subject to withholding because they are effectively connected with the non-U.S. holder’s conduct of a trade or business in the United States. If a non-U.S. holder is engaged in a trade or business in the United States and the distribution is effectively connected with the conduct of that trade or business, the distribution will generally have the consequences described above for a U.S. holder (subject to any modification provided under an applicable income tax treaty). Any U.S. effectively connected income received by a non-U.S. holder that is treated as a corporation for U.S. federal income tax purposes may also, under certain circumstances, be subject to an additional “branch profits tax” at a 30% rate (or such lower rate as may be specified by an applicable income tax treaty).

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A non-U.S. holder who claims the benefit of an applicable income tax treaty between the United States and such holder’s country of residence generally will be required to provide a properly executed IRS Form W-8BEN or W-8BEN-E, as applicable, and satisfy applicable certification and other requirements. A non-U.S. holder that is eligible for a reduced rate of U.S. withholding tax under an income tax treaty generally may obtain a refund or credit of any excess amounts withheld by timely filing an appropriate claim with the IRS. Non-U.S. holders should consult their own tax advisors regarding their entitlement to benefits under a relevant income tax treaty.

Gain on Sale, Exchange or Other Taxable Disposition

Subject to the discussions below in “—Information Reporting and Backup Withholding” and “—Foreign Account Tax Compliance Act,” a non-U.S. holder generally will not be subject to U.S. federal income tax on gain recognized on a sale, exchange or other taxable disposition of our common stock unless:

- the gain is effectively connected with the non-U.S. holder’s conduct of a trade or business in the United States and, if an applicable income tax treaty so provides, the gain is attributable to a permanent establishment maintained by the non-U.S. holder in the United States; in these cases, the non-U.S. holder will be taxed on a net income basis at the regular graduated rates and in the manner applicable to a U.S. holder, and, if the non-U.S. holder is a corporation, an additional branch profits tax at a rate of 30%, or a lower rate as may be specified by an applicable income tax treaty, may also apply;
- the non-U.S. holder is an individual present in the United States for 183 days or more in the taxable year of the disposition and certain other conditions are met, in which case the non-U.S. holder will be subject to a 30% tax (or such lower rate as may be specified by an applicable income tax treaty) on the amount by which such non-U.S. holder’s capital gains allocable to U.S. sources exceed capital losses allocable to U.S. sources during the taxable year of the disposition; or

- our common stock constitutes “U.S. real property interests” by reason of our being or having been a “U.S. real property holding corporation” during the shorter of the five-year period ending on the date of the disposition or the period that the non-U.S. holder held our common stock. Generally, a domestic corporation is a “U.S. real property holding corporation” if the fair market value of its “U.S. real property interests” (within the meaning of the Internal Revenue Code) equals or exceeds 50% of the sum of the fair market value of its U.S. and worldwide real property interests plus its other assets used or held for use in a trade or business. We believe that we are not currently, and we do not anticipate becoming, a “U.S. real property holding corporation” for U.S. federal income tax purposes. However, because the determination of whether we are a U.S. real property holding corporation depends on the fair market value of our U.S. real property interests relative to the fair market value of our U.S. and worldwide real property interests plus our other assets used or held for use in a trade or business, there can be no assurance that we will not become a U.S. real property holding corporation in the future. Even if we become a U.S. real property holding corporation, as long as our common stock is regularly traded on an established securities market under the rules set forth in the Treasury Regulations, common stock held by a non-U.S. holder will be treated as U.S. real property interests only if such non-U.S. holder actually (directly or indirectly) or constructively holds more than five percent of the total voting power or total value of such regularly traded common stock at any time during the shorter of the five-year period preceding such non-U.S. holder’s disposition of, or such non-U.S. holder’s holding period for, our common stock.

Information Reporting and Backup Withholding

Distributions on, and the payment of the proceeds of a disposition of, our common stock generally will be subject to information reporting if made within the United States or through certain U.S.-related financial intermediaries. Information returns are required to be filed with the IRS and copies of information returns may be made available to the tax authorities of the country in which a holder resides or is incorporated under the provisions of a specific treaty or agreement.

Backup withholding may also apply if the holder fails to provide certification of exempt status or a correct U.S. taxpayer identification number and otherwise comply with the applicable backup withholding requirements. Generally, a holder will not be subject to backup withholding if it provides a properly completed and executed IRS Form W-9 or appropriate IRS Form W-8, as applicable. Backup withholding is not an additional tax. Amounts withheld under the backup withholding rules may be refunded or credited against the holder’s U.S. federal income tax liability, if any, provided certain information is timely filed with the IRS.

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Foreign Account Tax Compliance Act

Sections 1471 through 1474 of the Code (commonly referred to as “FATCA”) impose a separate reporting regime and potentially a 30% withholding tax on certain payments, including payments of dividends on our common shares. Withholding under FATCA generally applies to payments made to or through a foreign entity if such entity fails to satisfy certain disclosure and reporting rules. These rules generally require (i) in the case of a foreign financial institution, that the financial institution agree to identify and provide information in respect of financial accounts held (directly or indirectly) by U.S. persons and U.S.-owned entities, and, in certain instances, to withhold on payments to account holders that fail to provide the required information, and (ii) in the case of a non-financial foreign entity, that the entity either identify and provide information in respect of its substantial U.S. owners or certify that it has no such U.S. owners.

FATCA withholding also potentially applies to payments of gross proceeds from the sale or other disposition of our common stock. Proposed regulations, however, would eliminate FATCA withholding on such payments, and the U.S. Treasury Department has indicated that taxpayers may rely on this aspect of the proposed regulations until final regulations are issued.

Non-U.S. holders typically will be required to furnish certifications (generally on the applicable IRS Form W-8) or other documentation to provide the information required by FATCA or to establish compliance with or an exemption from withholding under FATCA. FATCA withholding may apply where payments are made through a non-U.S. intermediary that is not FATCA compliant, even where the non-U.S. holder satisfies the holder’s own FATCA obligations.

The United States and a number of other jurisdictions have entered into intergovernmental agreements to facilitate the implementation of FATCA. Any applicable intergovernmental agreement may alter one or more of the FATCA information reporting and withholding requirements. Prospective investors are encouraged to consult with their own tax advisors regarding the possible implications of FATCA on their investment in our common shares, including the applicability of any intergovernmental agreements.

LEGAL MATTERS

The validity of the securities offered by this prospectus supplement and other legal matters concerning this offering relating to United States federal law and New York law has been passed upon for us by Dorsey & Whitney LLP, Denver, Colorado. The underwriter is being represented in connection with this offering by Kaufman & Canoles, P.C., Richmond, Virginia.

EXPERTS

The audited consolidated financial statements of Assure and its subsidiaries, as of and for the years ended December 31, 2021 and 2020 included in this prospectus have been so included in reliance upon the report of Baker Tilly US LLP, independent registered public accountants, upon the authority of said firm as experts in accounting and auditing.

DOCUMENTS INCORPORATED BY REFERENCE

The SEC allows us to “incorporate by reference” information we file with the SEC. This means that we can disclose important information to you by referring you to those documents. Any information we reference in this manner is considered part of this prospectus supplement. Information we file with the SEC after the date of this prospectus supplement will automatically update and, to the extent inconsistent, supersede the information contained in this prospectus supplement.

The following documents have been filed by us with the SEC, are specifically incorporated by reference into, and form an integral part of, this prospectus supplement.

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- (a) our Annual Report on [Form 10-K](#) for the fiscal year ended December 31, 2021, which report contains our audited consolidated financial statements and the notes thereto as of December 31, 2021 and 2020 and for the fiscal years ended December 31, 2021 and 2020, together with the auditors’ report thereon and the related management’s discussion and analysis of financial condition and results of operations for the fiscal years ended December 31, 2021 and 2020, as filed with the SEC on March 14, 2022;
- (b) our Quarterly Report on Form 10-Q for the three month period ended March 31, 2022, which report contains our unaudited condensed consolidated financial statements and the notes thereto as of March 31, 2022 and for the periods ended March 31, 2022 and 2021, and the related management’s discussion and analysis of financial condition and results of operations for the periods ended March 31, 2022 and 2021, as filed with the SEC on [May 16, 2022](#);

- (c) our Quarterly Report on Form 10-Q for the six month period ended June 30, 2022, which report contains our unaudited condensed consolidated financial statements and the notes thereto as of June 30, 2022 and for the periods ended June 30, 2022 and 2021, and the related management’s discussion and analysis of financial condition and results of operations for the periods ended June 30, 2022 and 2021, as filed with the SEC on [August 15, 2022](#);
- (d) Our Current Reports on Form 8-K as filed with the SEC on [April 20, 2022](#), [July 6, 2022](#) and August ●, 2022;
- (e) The description of the common stock contained in the registration statement on [Form 8-A](#) of the Company filed with the SEC on September 7, 2021, including any amendment or report filed for purposes of updating such description; and
- (f) all other documents filed by us with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, (the “Exchange Act”) (excluding, unless otherwise provided therein or herein, information furnished pursuant to Item 2.02 and Item 7.01 on any Current Report on Form 8-K), after the date of this prospectus but before the end of the offering of the securities made by this prospectus.

We also hereby specifically incorporate by reference all filings by us pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of this prospectus supplement until we sell all of the securities under this prospectus supplement, except that we do not incorporate any document or portion of a document that is “furnished” to the SEC, but not deemed “filed.”

You may obtain copies of any of these documents by contacting us at the address and telephone number indicated below or by contacting the SEC as described below. You may request a copy of these documents, and any exhibits that have specifically been incorporated by reference as an exhibit in this prospectus supplement, at no cost, by writing or telephoning to:

ASSURE HOLDINGS CORP.
7887 East Belleview Avenue, Suite 500
Greenwood Village, Colorado 80111
Attention: Corporate Secretary
Telephone: (720) 287-3093

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WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-3 under the Securities Act relating to the offering of these securities. The registration statement, including the attached exhibits and schedules, contains additional relevant information about us and the securities. This prospectus supplement does not contain all of the information set forth in the registration statement and the exhibits and schedules thereto. For further information respecting our company and the shares offered by this prospectus supplement, you should refer to the registration statement, including the exhibits and schedules thereto.

We file annual, quarterly and other reports, proxy statements and other information with the SEC. Our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, and Current Reports on Form 8-K, including any amendments to those reports, and other information that we file with or furnish to the SEC pursuant to Section 13(a) or 15(d) of the Exchange Act can be accessed free of charge through the Internet. The SEC maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC at <http://www.sec.gov>. You may access the registration statement, of which this prospectus supplement is a part, and the documents incorporated by reference herein, at the SEC’s Internet site. You may also access these documents at the Company’s website at www.assureneuromonitoring.com.

For further information about Assure, please visit our main corporate website located at www.assureneuromonitoring.com, or our Assure’s profile on www.sedar.com (“SEDAR”) or www.sec.gov. Information contained on these websites is not a part of this prospectus.

You should rely only on the information contained in this prospectus supplement. We have not authorized anyone to provide you with different information. Therefore, if anyone gives you different or additional information, you should not rely on it. The information contained in this prospectus supplement is correct as of its date. It may not continue to be correct after this date.

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PROSPECTUS



ASSURE HOLDINGS CORP.

\$100,000,000 Shares of Common Stock Warrants Units
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Assure Holdings Corp. (the “Company”) may offer and sell, from time to time, up to [\$100,000,000] aggregate initial offering price of shares of common stock, par value \$0.001, in the capital of the Company, (which we refer to herein as “Common Stock”), warrants to purchase shares of Common Stock (which we refer to herein as “Warrants”) or any combination thereof (which we refer to herein as “Units”) in one or more transactions under this base prospectus (which we refer to herein as the “prospectus”). This prospectus also covers (i) Common Stock that may be issued upon exercise of Warrants and (ii) such indeterminate amount of securities as may be issued in exchange for the securities registered hereunder, including, in each case, an indeterminate number of Common Stock that may be issued pursuant to anti-dilution or adjustment provisions in Warrants issuable hereunder.

This prospectus provides you with a general description of the securities that we may offer. Each time we offer securities, we will provide you with a prospectus supplement

(which we refer to herein as the “prospectus supplement”) that describes specific information about the particular securities being offered and may add, update or change information contained in this prospectus. You should read both this prospectus and the prospectus supplement, together with any additional information which is incorporated by reference into this prospectus. **This prospectus may not be used to offer or sell securities without the prospectus supplement which includes a description of the method and terms of that offering.**

We may sell the securities on a continuous or delayed basis to or through underwriters, dealers or agents or directly to purchasers. The prospectus supplement, which we will provide to you each time we offer securities, will set forth the names of any underwriters, dealers or agents involved in the sale of the securities, and any applicable fee, commission or discount arrangements with them. For additional information on the methods of sale, you should refer to the section entitled “[Plan of Distribution](#)” in this prospectus.

Our Common Stock trades on the NASDAQ Capital Market (the “**NASDAQ**”) under the symbol “**IONM**”. On August 15, 2022, the last reported sale price of the Common Stock on the Nasdaq was \$1.52 per share. **There is currently no market through which the securities, other than the Common Stock, may be sold and purchasers may not be able to resell the securities purchased under this prospectus. This may affect the pricing of the securities, other than the Common Stock, in the secondary market, the transparency and availability of trading prices, the liquidity of these Securities and the extent of issuer regulation.** See “[Risk Factors](#)”.

As of August 5, 2022, the aggregate market value of our outstanding common shares held by non-affiliates, or the public float, was \$21,546,210, based on 12,919,666 common shares outstanding, of which 8,482,760 shares were held by non-affiliates, and a price of \$2.54 per share, which was the last reported sale price of our common shares on the Nasdaq Capital Market on August 5, 2022. Pursuant to General Instruction I.B.6 of Form S-3, in no event will we sell shares pursuant to this prospectus with a value of more than one-third of the aggregate market value of our common shares held by non-affiliates in any 12-month period, so long as the aggregate market value of our common shares held by non-affiliates is less than \$75,000,000. During the 12 calendar months prior to, and including, the date of this prospectus, we have not sold securities pursuant to General Instruction I.B.6 of Form S-3.

Investing in the securities involves risks. See “[Risk Factors](#)” on page 9.

These Securities have not been approved or disapproved by the U.S. Securities and Exchange Commission (“SEC”) or any state securities commission nor has the SEC or any state securities commission passed upon the accuracy or adequacy of this Prospectus. Any representation to the contrary is a criminal offense.

PROSPECTUS DATED AUGUST 17, 2022

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ABOUT THIS PROSPECTUS

This prospectus is a part of a registration statement that we filed with the SEC utilizing a “shelf” registration process. Under this shelf registration process, we may sell any combination of the securities described in this prospectus in one or more offerings up to a total dollar amount of initial aggregate offering price of \$100,000,000. This prospectus provides you with a general description of the securities that we may offer. The specific terms of the securities in respect of which this prospectus is being delivered will be set forth in a prospectus supplement and may include, where applicable: (i) in the case of Common Stock, the number of shares of Common Stock offered, the offering price and any other specific terms of the offering; (ii) in the case of Warrants, the designation, number and terms of the Common Stock purchasable upon exercise of the Warrants, any procedures that will result in the adjustment of those numbers, the exercise price, dates and periods of exercise, and the currency or the currency unit in which the exercise price must be paid and any other specific terms; and (iii) in the case of Units, the designation, number and terms of the Common Stock and Warrants comprising the Units. A prospectus supplement may include specific variable terms pertaining to the securities that are not within the alternatives and parameters set forth in this prospectus.

In connection with any offering of the securities (unless otherwise specified in a prospectus supplement), the underwriters or agents may over-allot or effect transactions which stabilize or maintain the market price of the securities offered at a higher level than that which might exist in the open market. Such transactions, if commenced, may be interrupted or discontinued at any time. See “[Plan of Distribution](#)”.

Please carefully read both this prospectus and any prospectus supplement together with the documents incorporated herein by reference under “[Documents Incorporated by Reference](#)” and the additional information described below under “[Where You Can Find More Information](#)”.

Owning securities may subject you to tax consequences in the United States. This prospectus or any applicable prospectus supplement may not describe these tax consequences fully. You should read the tax discussion in any prospectus supplement with respect to a particular offering and consult your own tax advisor with respect to your own particular circumstances.

You should rely only on the information contained in this prospectus. We have not authorized anyone to provide you with information different from that contained in this prospectus. The distribution or possession of this prospectus in or from certain jurisdictions may be restricted by law. This prospectus is not an offer to sell these securities and is not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted or where the person making the offer or sale is not qualified to do so or to any person to whom it is not permitted to make such offer or sale. The information contained in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or of any sale of the securities. Our business, financial condition, results of operations and prospects may have changed since that date.

References in this prospectus to “\$” are to United States dollars.

Unless otherwise indicated, any reference to Assure, or as “we”, “us”, or “our” refers to Assure Holdings Corp. and its consolidated subsidiaries (“Assure” or the “Company”).

SUMMARY

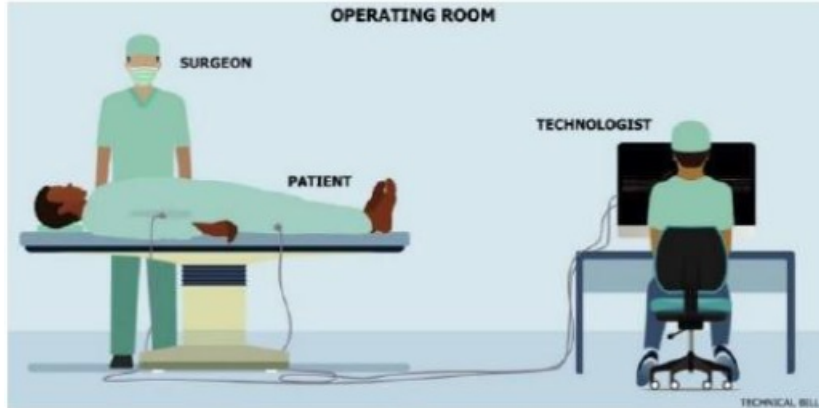
The following highlights certain information contained elsewhere in this prospectus. It does not contain all the details concerning the Offering, including information that may be important to you. You should carefully review this entire prospectus including the section entitled “Risk Factors” and the financial statement incorporated herein by reference. See “Documents Incorporated by Reference” and “Where You Can Find More Information.”

Our Business

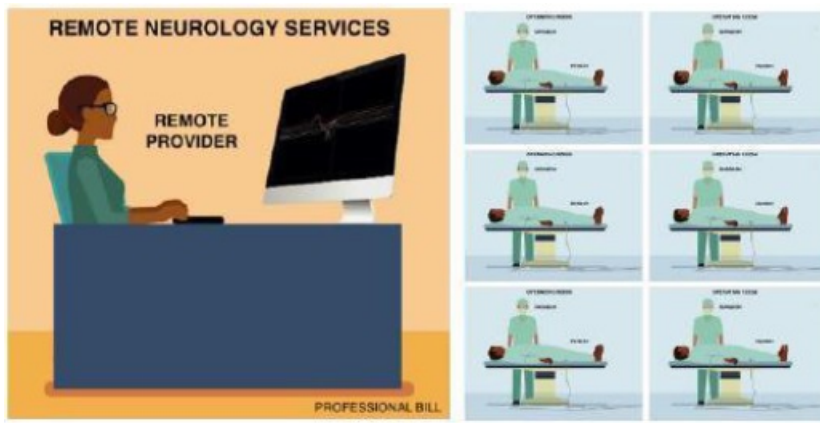
Overview

Assure is a best-in-class provider of outsourced Intraoperative Neurophysiological Monitoring (“IONM”) and an emerging provider of remote neurology services. The Company delivers a turnkey suite of clinical and operational services to support surgeons and medical facilities during invasive procedures. IONM has been well established as a standard of care and risk mitigation tool for various surgical verticals such as neurosurgery, spine, cardiovascular, orthopedic, ear, nose, and throat (“ENT”), and other surgical procedures that place the nervous system at risk. Accredited by The Joint Commission, Assure’s mission is to provide exceptional surgical care and help make invasive surgeries safer. Our strategy focuses on utilizing best of class personnel and partners to deliver outcomes that are beneficial to all stakeholders including patients, surgeons, hospitals, insurers, and shareholders.

During each procedure, Assure provides two types of services, the Technical Component and Professional Component of IONM. Our in-house Interoperative Neurophysiologists (“INP”) provide Technical Component IONM services from the operating room throughout the procedure, while the telehealth-oriented supervising practitioners provide a level of redundancy and risk mitigation in support of the onsite INPs and surgical team. In addition, Assure offers a comprehensive suite of IONM services, including scheduling the INP and supervising practitioner, real time monitoring, patient advocacy and subsequent billing and collecting for services provided.



Historically, the foundation of Assure’s business has been providing the Technical Component of IONM via our INP staff. We employ highly trained INPs, which provide a direct point of contact in the operating room during the surgeries to relay critical information to the surgical team. In our one-to-one model, Assure pairs a surgeon with a team of INPs to promote a level of familiarity, comfort and efficiency between the surgeon and the INP. Each INP has the ability to handle approximately 200 cases annually. Our INPs monitor the surgical procedure using state of the art, commercially available, diagnostic medical equipment. Assure INP’s are certified by a third-party accreditation agency. The success of our service depends upon the timely and successful interpretation of the data signals by our INPs and thereafter to quickly determine if there is a deficiency and the surgical intervention required to positively impact the patient and surgery. Employing this model, Assure has rapidly expanded its operational footprint from a home base in Colorado and increased its number of managed cases from approximately 1,600 in 2017 to approximately 17,400 in 2021.



Beginning in the second quarter of 2021, Assure began executing on its long-term vertical integration plan by expanding into remote neurology services. As a result, Assure began delivering remote neurology services in support of the surgical team and INPs rather than exclusively relying on third-party supervising practitioners as it had previously. Assure is transitioning the Professional Component of its IONM service offering. We currently have supervising practitioners employed and working with surgical teams and our INPs from remote locations. They are utilizing equipment and training to monitor electroencephalographic (“EEG”) and electromyography (“EMG”) and a number of complex modalities during surgical procedures to pre-emptively notify the underlying surgeon of any nerve related issues that are identified.

Remote neurology services is a one-to-many model, and as a result, has a different financial profile than the Technical Component. Supervising practitioners provide remote neurology services from an off-site location and maintain the ability to manage multiple cases simultaneously. As a result, each supervising practitioner has the ability to handle 2,500 or more cases annually. Patient volume for Assure supervising practitioners are plentiful as they are simply consuming the managed cases created by our INPs performing the Technical Component of IONM. In 2021, Assure performed 17,436 total managed cases including managing approximately 2,100 remote neurology cases. The number of remote neurology managed cases is expected to expand significantly as our supervising practitioners’ ramp-up and more are added to the team.

Bringing the Professional Component of IONM in-house generates a number of positives for Assure. First, we will be able to oversee quality of service for providing remote neurology services. This commitment to quality supports our efforts to sign new in-network agreements with insurance payors and facility-wide agreements with hospitals. Second, by bringing the remote neurology function in-house, we are able to significantly reduce cost of delivery, allowing the Company to improve our profitability on every case we perform. Our objective is to cut the cost of delivery for remote neurology services by 50% going forward. Additional scale will serve as a catalyst for margin expansion in the future. Third, for most of the cases we perform, remote neurology services represent the creation of a new revenue stream. Fourth, providing remote neurology services for IONM creates opportunities in adjacent markets where similar remote neurology services are utilized. The shift to providing remote neurology ourselves was straightforward. We had already built the platform and maintained the patient volume. Insourcing this process is simply a matter of replacing contractors with Assure supervising practitioners to service this volume. The result will be higher margins, a new revenue stream and turning cash over more quickly.

Collectively, support from Assure’s high quality Technical and Professional IONM services results in decreased hospital and surgeon liability, abbreviated patient stays, fewer readmissions, reduced hospital costs, enhanced overall patient satisfaction and the efficient achievement of better clinical outcomes.



Over the past two years Assure has built a platform to support our future growth and development across multiple verticals. The attributes of our platform detailed in the graphic above include: maintaining exceptional clinical operations, automating our revenue cycle management function and collecting cash faster, boosting managed care through the signing of in-network agreements with insurance payors, minimizing operational bottlenecks, particularly around onboarding and credentialing, instituting an ongoing training and development program for clinical staff to ensure we maintain industry-leading skills and performance, and successful execution on an M&A strategy in a highly fragmented market that has led to three accretive transactions over the past two years. This platform was built with the intent of having these key functional areas support IONM in our key surgical verticals including: spine, neurosurgery, vascular, ENT and orthopedic. As we transition to becoming a provider of remote neurology services, we believe our expertise in IONM will assist us in entering adjacent markets in which Assure supervising practitioners can also provide patient services. We expect to begin providing services in new verticals including EEG, epilepsy, sleep study and stroke by leveraging key competencies we have built over the past two years.

In 2021, Assure provided IONM services for approximately 258 surgeons in 150 hospitals and surgery centers (which we refer to as “Procedure Facilities”)

located in: Colorado, Texas, Louisiana, Pennsylvania, Michigan, South Carolina, Arizona, Kansas, Missouri, Nebraska, Nevada and Utah. Our continued organic geographic expansion initiatives, including facility-wide outsourcing agreements with medical facilities and hospital networks, potential for selective acquisitions, and the extension of our platform into remote neurology services, is expected to generate substantial growth opportunities going forward.

Clinical leadership, surgeon support and patient care are Assure's cornerstones. We make substantial ongoing investments in our training and development of clinical staff and have created a fellowship program to rigorously train new INPs to cost-effectively join the Assure team. In addition, we have partnered with the internationally renowned Texas Back Institute on clinical research relating to IONM safety and efficacy. Isador Lieberman, M.D., the president and director of the scoliosis and spine tumor program at the Texas Back Institute, is a member of Assure's Medical Advisory Committee.

Our Strategy

Our strategy is to build a telehealth remote neurology services company with exceptional capabilities in IONM and numerous adjacent markets

Our Responsibilities

Assure offers a turnkey full suite of IONM services including scheduling of the INP and supervising practitioner, real time monitoring and subsequent billing for services provided.

Prior to a patient's procedure, Assure will coordinate with the surgeon's office to obtain the necessary information and documentation to provide IONM services, such as the patients' insurance information, patients' demographic information and office/clinic notes. We provide educational materials to the surgeons office for inclusion in each surgical patient's pre-operative packets to educate and provide comfort to the patient about IONM services. Prior to the surgery, an Assure patient advocate connects with the patient to explain our role during the surgery, the benefits of IONM and billing issues that may affect the patient. Assure's INP will arrive at the hospital with an IONM unit and disposable supplies and electrodes. The INP meets with the patient to explain their role during the surgery, discuss the patients' pertinent past medical history, explain the risks and benefits associated with IONM and have the patient sign consenting forms for IONM to be utilized on their procedure.

All IONM procedures include both technical services (performed by INPs) and professional services (performed by supervising practitioners). During the surgery, the INP will continuously monitor the functional integrity of the peripheral or central nervous system by recording, troubleshooting, documenting and communicating activity arising from the brain, spinal cord, peripheral nerves, somatosensory or motor nerve systems using the IONM unit provided by Assure and communicating results in real-time to the surgeon. The INP and surgeon are supported by an off-site supervising practitioner providing remote neurology oversight services. The supervising practitioner also monitors the functional integrity of the peripheral or central nervous system throughout the procedure communicating in real-time with the surgeon and INP throughout the process. In some cases (and increasingly), remote neurology services are performed directly by Assure's supervising practitioners. In other instances, these services are provided by and through subsidiaries, which owns interest in entities that either directly perform the Professional Component through third party contracted neurologists or oversight reading physicians.

Assure Intraoperative Neurophysiologists

Assure currently employs specialized IONM INPs that are board certified CNIM or board eligible CNIM by ABRET. ABRET seeks to encourage, establish and maintain standards of clinical EEG, Evoked Potential Technology, and Neurophysiologic Intraoperative and long-term monitoring, by offering credentialing exams to evaluate the skills and knowledge of technologists, and by supporting lab accreditation.

Assure has developed an Intraoperative Neurophysiologist Fellowship program. This Fellowship program trains new INPs from start to board certification, allowing for consistently high caliber well trained professional INPs for placement into emerging and growing markets. Training and developing our own talent pool allow for more flexible scalability.

Assure Supervising Practitioners

Assure currently employ supervising practitioners performing remote neurology services. These physicians are highly trained and are specialized in providing off-site tele neurology services. Multiple Assure supervising practitioners have already received the training necessary to provide remote neurology services in targeted expansion markets including EEG.

We have a history of providing industry-leading IONM services with an emphasis on clinical excellence and patient well-being, and we are in the midst of a significant transformation to position ourselves for growth. With our focus on execution and providing a high level of patient care, we are transforming from being a provider of the Technical Component of IONM utilizing a one-to-one model of INPs in the operating room to a business that also provides the Professional Component of IONM via off-site remote neurology services in a far more scalable one-to-many model. The next step in our development will be expanding into adjacent remote neurology markets while utilizing the same platform and employees. This will extend our reach and redefine our position in the industry. We are thoughtfully deploying capital and focusing our investment in high potential growth initiatives including: organically expanding into new states, growing our remote neurology platform, signing new IONM outsourcing agreements with hospitals and medical facilities, as well as opportunistic M&A. In addition, we are investing to make our revenue cycle management function more automated, improving the velocity of our cash collections. The data and analytics-driven Company we are building will play a bigger role in the success of our key stakeholder groups: surgeons, hospitals, insurance companies and patients, and in turn deliver attractive returns to our stockholders.

Commercial Insurance

Following the procedure, assuming the patient has health care insurance under a commercial health care policy, we will invoice the insurance company directly for IONM services. The invoice provided to the insurance company will detail each modality monitored by the INP for the neural protection of the patient during the procedure. After we have submitted the claim to the private insurance company, our patient advocate will contact the patient to further explain the details on the explanation of benefits insurance form and to ensure the patient was satisfied with the level of service provided by us.

Facility Billing

In the event a patient is uninsured or has insurance coverage under a government health care policy (Medicare, Medicaid, Tricare or Veterans Administration) the facility where the procedure took place will be billed for the IONM services for the patient, as agreed to in each facility service contract.

Hospital Agreements

Assure Neuromonitoring must enter into a contracted services agreement with each procedure facility it provides IONM services prior to initiating IONM services. The purpose of these agreements is to ensure that Assure provides its services in accordance with all regulatory and accreditation standards, including those requirements imposed by The Joint Commission, the Centers for Medicare and Medicaid Services and all applicable federal, state and local laws.

Pursuant to these agreements, Assure Neuromonitoring has agreed to provide IONM services and shall ensure the real-time interpretation of such monitoring to patients.

Each INP is required to be approved and decreed privileges to practice IONM by each of the contracted facilities. All INP who are performing onsite monitoring must be certified or board eligible from one of the following organizations (i) American Board of Neurophysiologic Monitoring; (ii) American Board of Electrodiagnostic Technologists; or (iii) ABRET.

Payment for services, revenue mix and seasonality

Over half of Assure's patients commonly have commercial health insurance coverage ("Commercial Payor") and we are compensated via their health insurance plan. Assure's commercial insurance patients represent the significant majority of our revenue and profit margin. We produce separate bills for the Technical Component and the Professional Component of the IONM services we perform. The remainder of our patients, who do not have commercial insurance coverage, compensate us via hospital agreements. Regardless of type of payment and whether the patient has commercial insurance coverage, Assure provides the same high level of service and quality of care.

The majority of our commercial payors are billed out-of-network and we negotiate payment for each claim. The remainder of commercial payors utilize a contracted rate. The majority of contracted rates are via indirect agreements with third-party organizations or related entities of the commercial payor with a smaller portion in direct agreements with contracted rates.

We bill, collect and keep 100% of the revenue associated with the Technical Component of the services we provide. For the Professional Component, when the supervising practitioner is an Assure employee or where we 100% own the entity managing the procedure the Company bills, collects and keeps 100% of the revenue. In instances in which the Professional Component are provided via Managed Service Agreements ("MSAs") with surgeons or through agreements with Professional Entities ("PEs"), we engage in a revenue share based on percent of revenue and net income.

In addition, the surgical segment of the health care industry tends to be impacted by seasonality due to the nature of most benefit plans resetting on a calendar year basis. As patients utilize and reduce their remaining deductible throughout the year, we typically see an increase in volume throughout the year with the biggest impact coming in the fourth quarter. Historically, our annual revenues are overweighted in the fourth quarter.

Seasonality impacts our revenue mix for similar reasons. As patients with commercial insurance utilize and reduce their remaining deductible throughout the year, we typically see an increase in volume with the biggest impact coming in the fourth quarter. Historically, our revenue mix is relatively overweighted to patients with commercial insurance in the second half of the year and to patients with government insurance in the first half of the year.

Impact of the Covid-19 Pandemic

Our business and results of operations have been, and continues to be, adversely affected by the global COVID-19 pandemic and related events and we expect its impact to continue. Although a significant portion of our anticipated revenue for 2022 is derived from fixed-fee and minimum-guarantee arrangements, primarily from large, well-capitalized customers which we believe somewhat mitigates the risks to our business, our per-unit and variable-fee based revenue will continue to be susceptible to the volatility, supply chain disruptions, microchip shortages and potential market downturns induced by the COVID-19 pandemic. See "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations" for a more detailed discussion of the impact of COVID-19 on our operations

Corporate Development

Assure Holdings Corp.

Assure Holdings Corp., formerly Montreux Capital Corp, a Canadian Capital Pool Company ("Montreux"), was formed under the British Columbia Business Corporations Act in British Columbia, Canada on September 24, 2007, is a Nevada corporation, existing under the laws of the State of Nevada pursuant to its Articles of Domestication filed with the Nevada Secretary of State on May 15, 2017. A Canadian Capital Pool Company is a special purpose acquisition company organized for the purposes of completing acquisition transactions, known as "qualifying transactions," with operating companies for the purposes of taking the operating companies public in Canada. Qualifying transactions are subject to Canadian securities laws and exchange listing requirements.

Assure Holdings, Inc.

Our direct subsidiary is Assure Holdings, Inc., a Colorado corporation, formed under the laws of the State of Colorado on November 7, 2016. Assure Holdings, Inc. became a wholly owned subsidiary of Assure Holdings Corp. on May 15, 2017 when Assure Holdings Inc. and its shareholders and Montreux and its shareholders entered into a Share Exchange Agreement pursuant to which the shareholders of Assure Holdings, Inc. received shares of Montreux as consideration for their assignment of their shares in Assure Holdings, Inc. to Montreux in the "Qualifying Transaction" under the rules of the TSX Venture Exchange ("TSX-V"). One of the primary objectives of the Qualifying Transactions was to facilitate our going public and listing on the TSX-V.

Assure Holdings, Inc. is the sole member of Assure Neuromonitoring, LLC ("Assure Neuromonitoring"), a Colorado limited liability company formed under the laws of the state of Colorado on August 25, 2015. Prior to the Qualifying Transaction, Preston Parsons owned a controlling ownership interest in Assure Neuromonitoring. Upon closing of the Qualifying Transaction, Preston Parsons was appointed as a member of the Board of Directors and Chief Executive Officer and held a controlling interest in Assure Holdings Corp. On May 15, 2018, Mr. Parsons resigned as Chief Executive Officer and was appointed as Founder. Mr. Parsons continues to serve as a member of the Board of Directors of Assure Holdings Corp. and is employed by the entity to focus on growth initiatives. Assure Neuromonitoring became a wholly owned subsidiary of Assure Holdings, Inc. on November 7, 2016, when its members assigned their

interest in Assure Neuromonitoring to Assure Holdings, Inc. for shares of Assure Holdings, Inc.

Assure Holdings, Inc. is the sole member of Assure Networks, LLC (“Assure Networks”), a Colorado limited liability company formed under the laws of the state of Colorado on November 2, 2016. Prior to the Reorganization and Qualifying Transaction, Preston Parsons owned a controlling ownership interest in Assure Networks. Assure Networks became a wholly owned subsidiary of Assure Holdings, Inc. on November 7, 2016, when its members assigned their interest in Assure Networks to Assure Holdings, Inc. for shares of Assure Holdings, Inc.

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Assure Holdings, Inc. is the sole member of Assure Equipment Leasing, LLC (“Assure Equipment Leasing”), a Colorado limited liability company formed under the laws of the state of Colorado on April 20, 2020.

Our Common Stock

Our common stock is listed on the NASDAQ under the symbol “IONM”.

Available Information

Our executive office address is 7887 E. Belleview Ave., Suite 500, Englewood, Colorado 80111. The telephone number for our executive office is (720) 287-3093.

We make available, free of charge, on or through our Internet website, at www.assureneuromonitoring.com, our annual reports on Form 10-K, our quarterly reports on Form 10-Q and our current reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act. Our Internet website and the information contained therein or connected thereto are not intended to be, and are not, incorporated into this prospectus.

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The Securities being Offered under this Prospectus

We may offer the Common Stock, Warrants or Units with a total value of up to \$100,000,000 from time to time under this prospectus, together with any applicable prospectus supplement, at prices and on terms to be determined by market conditions at the time of offering. This prospectus provides you with a general description of the securities we may offer. Each time we offer securities, we will provide a prospectus supplement that will describe the specific amounts, prices and other important terms of the securities, including, to the extent applicable:

- designation or classification;
- aggregate offering price;
- original issue discount, if any;
- rates and times of payment of dividends, if any;
- redemption, conversion or exchange terms, if any;
- conversion or exchange prices, if any, and, if applicable, any provisions for changes to or adjustments in the conversion or exchange prices and in the securities or other property receivable upon conversion or exchange;
- restrictive covenants, if any;
- voting or other rights, if any; and
- important United States federal income tax considerations.

A prospectus supplement may also add, update or change information contained in this prospectus or in documents we have incorporated by reference. However, no prospectus supplement will offer a security that is not described in this prospectus.

Common Stock

We may issue shares of our Common Stock from time to time. The holders of our Common Stock are entitled to one vote per share. Our certificate of incorporation does not provide for cumulative voting. Our directors are divided into three classes. At each annual meeting of stockholders, directors elected to succeed those directors whose terms expire are elected for a term of office to expire at the third succeeding annual meeting of stockholders after their election. The holders of our Common Stock are entitled to receive ratably such dividends, if any, as may be declared by our board of directors out of legally available funds; however, the current policy of our board of directors is to retain earnings, if any, for operations and growth. Upon liquidation, dissolution or winding-up, the holders of our Common Stock are entitled to share ratably in all assets that are legally available for distribution. The holders of our Common Stock have no preemptive, subscription, redemption or conversion rights.

Warrants

We may issue Warrants for the purchase of Common Stock in one or more series. We may issue Warrants independently or together with Common Stock and the Warrants may be attached to or separate from these securities. We will evidence each series of Warrants by warrant certificates that we will issue under a separate agreement. We may enter into warrant agreements with a bank or trust company that we select to be our warrant agent. We will indicate the name and address of the warrant agent in the applicable prospectus supplement relating to a particular series of Warrants.

In this prospectus, we have summarized certain general features of the Warrants. We urge you, however, to read the applicable prospectus supplement related to the particular series of Warrants being offered, as well as the warrant agreements and warrant certificates that contain the terms of the Warrants. We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file with the SEC, the form of warrant agreement or warrant certificate containing the terms of the Warrants we are offering before the issuance of the Warrants.

Units

We may issue Units consisting of Common Stock and/or Warrants for the purchase of Common Stock in one or more series. In this prospectus, we have summarized certain general features of the Units. We urge you, however, to read the applicable prospectus supplement related to the series of Units being offered, as well as the Unit agreements that contain the terms of the Units. We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference reports that we file with the SEC, the form of unit agreement and any supplemental agreements that describe the terms of the series of Units we are offering before the issuance of the related series of Units.

THIS PROSPECTUS MAY NOT BE USED TO OFFER OR SELL ANY SECURITIES UNLESS ACCOMPANIED BY A PROSPECTUS SUPPLEMENT

RISK FACTORS

An investment in our common stock involves a high degree of risk. You should carefully consider the risks described below and discussed under the section captioned “Risk Factors” contained in our annual report on Form 10-K for the fiscal years ended [December 31, 2021](#) and [2020](#), which reports are incorporated by reference in this prospectus, together with all of the other information included in this prospectus or incorporated by reference herein, including any documents subsequently filed and incorporated by reference, before making an investment decision with regard to our securities. See “Documents Incorporated by Reference” and “Where You Can Find More Information” below.

The statements contained in this prospectus that are not historic facts are forward-looking statements that are subject to risks and uncertainties that could cause actual results to differ materially from those set forth in or implied by forward-looking statements. If any of the following risks actually occurs, our business, financial condition or results of operations could suffer.

Summary of Risk Factors

The following is a short description of the risks and uncertainties you should carefully consider in evaluating our business and us which are more fully described in our transition report on Form 10-K for the fiscal years ended [December 31, 2021](#) and [2020](#), which reports are incorporated by reference in this prospectus. The factors listed below and in the transition report and quarterly report, represent certain important factors that we believe could cause our business results to differ. These factors are not intended to represent a complete list of the general or specific risks that may affect us. It should be recognized that other risks may be significant, presently or in the future, and the risks set forth below may affect us to a greater extent than indicated. If any of the following risks occur, our business, financial condition or results of operations could be materially and adversely affected.

Business Related Risks

- Our business and operations are subject to risks and uncertainty surrounding the future spread of COVID-19 and related variants as well as the potential impact that these may have on our future operations.
- We have incurred operating losses in some of our historical periods and we could incur additional losses until we successfully integrate acquired practices, improve collections for managed cases and reduce operating expenses.
- We may need to raise additional funds to finance our operations and our expansion and growth plans; we may not be able to do so when necessary, and/or the terms of any financings may not be advantageous to us.
- Our business is not highly diversified and approximately 75% of our case volume is currently concentrated in Colorado and Texas where we are susceptible to local and regional fluctuations in demand for our service, downturns in the economy, adverse weather conditions, changes in local or state regulations, and other localized market changes.
- We are expanding our offering beyond our legacy provision of the Technical Component of Intraoperative Neurophysiological Monitoring (“IONM”) to provide the Professional Component by delivering remote neurology services provided as part of IONM. We face significant competition from other health care providers for patients, physicians, nurses and technical staff. Some of our competitors are larger and have longstanding and well-established relationships with physicians and third-party payors in the community.
- Our founder and director, Preston Parsons, is our single largest shareholder and beneficially owns approximately 4.3 million shares or 33% of our issued and outstanding shares of common stock. Mr. Parsons has the ability to influence the outcome of matters submitted to our shareholders for approval.
- Our development will depend on the efforts of key management, key personnel and our relationships with medical partners in the surgical industry, and the loss of any of these people and partnerships, particularly to competitors, could have a material adverse effect on our business.
- We depend on payments from third-party payors, including private insurers, managed care organizations and hospitals, which may cause fluctuations in our revenue and delays and uncertainties in the reimbursement rate and the timing of reimbursement.
- State and Federal surprise billing legislation could lead to lower reimbursement rates.

- Value-based purchasing initiatives of both governmental and private payors tying financial incentives to quality and efficiency of care will increasingly affect the results of operations of hospitals and other health care facilities where we operate and may negatively impact our revenues.
- Public scrutiny of the intraoperative neuromonitoring industry in general could have a material adverse effect on our business and results of operations.
- Accounting adjustments due to changes in circumstances or estimates may require us to write-off accounts receivables or write-down intangible assets, such as goodwill, may have a material impact on our financial reporting and results of operations.
- Our business strategy has been to grow through expansion. Our efforts to execute our acquisition strategy may be affected by our ability to identify suitable candidates and negotiate and close acquisition transactions on acceptable terms.
- Our success, in large part, is dependent upon referrals to our physicians from other physicians, systems, health plans and others in the communities in which we operate, and upon our medical staff’s ability to maintain good relations with these referral sources.
- We may be involved in lawsuits, claims, audits and investigations, including those arising out of services provided, personal injury claims, professional liability claims, billing and marketing practices, employment disputes and contractual claims.
- We are subject to rising costs, including malpractice insurance premiums or claims may adversely affect our business.

- We are reliant on Software-as-a-Service (SaaS) technologies from third parties, which could adversely affect our business.
- Our business depends on network and mobile infrastructure developed and maintained by third-party providers. Any significant interruptions in service could result in limited capacity, processing delays and loss of customers.
- Cybersecurity incidents could disrupt business operations, result in the loss of critical and confidential information, and adversely impact our reputation and results of operations.
- We rely on 3rd party software-as-a-service vendors for certain operational and administrative functions.
- There is currently a shortage of certified, interoperative neurophysiologists in the United States.

Health Care Industry Regulatory Risks

- The health care industry is heavily regulated, and we are required to comply with extensive and complex laws and regulations at the federal, state and local government levels. These regulations include:
 - o Anti-Kickback Statute, a provision of the Social Security Act of 1972
 - o Stark Law, 42 U.S.C. 1395nn, also known as the physician self-referral law
 - o Health Insurance Portability and Accountability Act of 1996
 - o Affordable Care Act
 - o Health Care and Education Reconciliation Act of 2010
 - o Health Insurance Portability and Accountability Act of 1996 (“HIPAA”)
- If we fail to comply with applicable laws and regulations, we could suffer penalties or be required to make significant changes to our operations.
- As a health care provider, we are subject to professional liability claims both directly via our neurophysiologic (“INP”) staff and indirectly through the malpractice of our reading partners and surgical partners.
- Political and regulatory changes, including insurance options, billing restrictions, patient rights and reimbursement regulation, may have a negative impact on the health care industry and our business.

Risk Related to our Debenture

- Restrictive covenants in our loan agreements with Centurion Financial Trust may restrict our ability to pursue our business strategies.

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- Our obligations to Centurion Financial Trust are secured by a security interest in substantially all of our assets, if we default on those obligations, the lender could foreclose on our assets.

Risk Related to our Stock

- We qualify as an “emerging growth company” under the JOBS Act. As a result, we are permitted to, and intend to, rely on exemptions from certain disclosure requirements.
- Broad market and industry factors may affect the price of our common shares, regardless of our actual operating performance.
- Our common stock is listed in the U.S. on the NASDAQ Capital Markets.
- The issuance of shares of common stock upon exercise of outstanding warrants could result in substantial dilution to our stockholders, which may have a negative effect on the price of our common stock.

FORWARD-LOOKING STATEMENTS

This prospectus, the documents incorporated by reference herein and the exhibits attached hereto contain “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995, including statements regarding future events or our future results of operations, financial condition, business, strategies, financial needs, and the plans and objectives of management, are forward-looking statements. In some cases forward-looking statements can be identified because they contain words such as “anticipate,” “believe,” “continue,” “could,” “estimate,” “expect,” “intend,” “may,” “might,” “likely,” “plan,” “potential,” “predict,” “project,” “seek,” “should,” “target,” “will,” “would,” or similar expressions and the negatives of those terms. Forward-looking statements are based on information available to our management as of the date of this prospectus and our management’s good faith belief as of such date with respect to future events and are subject to a number of risks, uncertainties, and assumptions that could cause actual performance or results to differ materially from those expressed in or suggested by the forward-looking statements, in particular the substantial risks and uncertainties related to the ongoing COVID-19 pandemic. Important factors that could cause such differences include, but are not limited to those factors set forth above under the heading “Risk Factors” and other factors discussed in our annual report for the fiscal year ended December 31, 2021 on Form 10-K, incorporated herein by reference, including the section titled “Risk Factors” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations.”

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Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those anticipated, believed, estimated or expected. We caution readers not to place undue reliance on any such forward-looking statements, which speak only as of the date made. We disclaim any obligation subsequently to revise any forward-looking statements to reflect events or circumstances after the date of such statements or to reflect the occurrence of anticipated or unanticipated events.

We qualify all the forward-looking statements contained in this prospectus by the foregoing cautionary statements.

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RECENT DEVELOPMENTS

On February 17, 2022, we announced that we had appointed Mr. Brian McDonald a vice president of business operations.

On March 24, 2022, we announced the appointment of a new Vice-President of Sales, Mr. Kelly Shelton, and Vice-President of Human Resources, Ms. Sherri Wagner.

On April 12, 2022, we announced a new partnership with Yankee Alliance, a member-driven healthcare group purchasing organization.

On April 19, 2022, we announced that we had ended our employment relationship with Mr. Preston Parsons as Founder.

On April 26, 2022 we announced the appointment of James Watt to the position of national technologist director.

In April 2022, the U.S. Department of Justice (DOJ) issued Civil Investigative Demands which seek information with respect to a civil investigation under the Anti-kickback Statute and the False Claims Act. We voluntarily contacted the DOJ offering to provide any materials needed in the investigation and to answer any questions. While our policy during the relevant time was to not seek payments from federal health care programs, the third-party billing company we used at that time submitted some claims to Medicare Advantage plans administered by commercial insurance companies. We have worked diligently to ensure that payments from Medicare Advantage plans have been returned to the commercial insurance companies and we believe we have returned substantially all such payments that we have discovered to date, totaling approximately \$450,000. The DOJ has not made any allegations in the investigation, and we are currently unable to predict the eventual scope, ultimate timing, or outcome of this investigation. As a result, we are unable to estimate the amount or range of any potential loss, if any, arising from this investigation.

On June 2, 2022, we announced the execution of strategic actions to make our business leaner and more profitable. These actions included the streamlining of operations and salary deferrals for the executive management team which prioritize resources for growth, accelerate the Company's path to profitability and create stakeholder value. We estimate that the steps we have taken and are taking will reduce our monthly operating costs by greater than \$200,000 per month.

On July 6, 2022, we announced we had retained Hayden IR, LLC to broaden our awareness within the investor and financial community and support our investor relations program.

On July 14, 2022, we announced an update on our plan to continue streamlining operations that prioritize reaching positive operating cash flow. The plan to becoming operating cash flow positive utilizes four key levers:

- We estimate that cash cutting measures will realize approximately \$4 million of savings on an annualized basis. This was achieved through a trimming of the workforce, salary reductions for the management team, limiting the use of outside consultants and reducing operating expenses.
- We rationalized our operational footprint by withdrawing from certain low performing markets thereby enabling Assure to focus on its fast-growing profitable core.
- We are continuing to invest in our managed care and revenue cycle management functions and tools as we accelerate collections and sign new in-network agreements.
- We are prioritizing growth resources in markets with substantial existing operational density, servicing facility-wide outsourcing agreements and entering new markets with very strong profitability profiles.

USE OF PROCEEDS

Unless we specify another use in the applicable prospectus supplement, we will use the net proceeds from the sale of the securities offered by us for general corporate purposes, which may include, among other things, working capital, capital expenditures, and to the extent we have any debt, debt repayment.

We may also use such proceeds to fund acquisitions of businesses, product candidates or technologies that complement our current business. We may set forth additional information on the use of net proceeds from the sale of the securities we offer under this prospectus in a prospectus supplement related to a specific offering.

Investors are cautioned, however, that expenditures may vary substantially from these uses. Investors will be relying on the judgment of our management, who will have broad discretion regarding the application of the proceeds of this offering. The amounts and timing of our actual expenditures will depend upon numerous factors, including the amount of cash generated by our operations, the amount of competition and other operational factors. We may find it necessary or advisable to use portions of the proceeds from this offering for other purposes.

From time to time, we evaluate these and other factors and we anticipate continuing to make such evaluations to determine if the existing allocation of resources, including the proceeds of this offering, is being optimized. Circumstances that may give rise to a change in the use of proceeds include:

- a change in development plan or strategy;
- the addition of new products or applications;
- technical delays;
- delays or difficulties with our clinical trials;
- negative results from our clinical trials;
- difficulty obtaining regulatory approval;
- failure to achieve sales as anticipated;
- the availability and terms of debt financing to fund a portion of the purchase price(s) for potential acquisitions; and
- the availability of other sources of cash including cash flow from operations and new bank debt financing arrangements, if any.

Pending other uses, we intend to invest the proceeds to us in investment-grade, interest-bearing securities such as money market funds, certificates of deposit, or direct or guaranteed obligations of the U.S. government, or hold as cash. We cannot predict whether the proceeds invested will yield a favorable, or any, return.

MARKET FOR COMMON SHARES

Our shares of Common Stock trade on the NASDAQ under the symbol "IONM". On August 5, 2022, the last reported sale price of the Common Stock on the Nasdaq was \$2.54 per share, there were 12,919,666 shares of Common Stock issued and outstanding.

DIVIDEND POLICY

We do not intend to pay dividends for the foreseeable future. In addition, our ability to pay dividends is restricted by agreements governing Assure's and its subsidiaries' debt, including the Company's senior secured convertible notes. See "Risk Factors" above.

CERTAIN INCOME TAX CONSIDERATIONS

The applicable prospectus supplement will also describe certain U.S. federal income tax consequences of the acquisition, ownership and disposition of Securities by an initial investor who is a U.S. person (within the meaning of the U.S. Internal Revenue Code), if applicable, including, to the extent applicable, any such consequences relating to Securities payable in a currency other than the U.S. dollar, issued at an original issue discount for U.S. federal income tax purposes or containing early redemption provisions or other special terms.

DESCRIPTION OF CAPITAL STOCK

Authorized Capital Stock

Our authorized capital stock consists of 180,000,000 shares of common stock, par value \$0.001 per share. As of August 5, 2022 there were 12,919,666 shares of our common stock issued and outstanding, warrants to acquire 3,940,006 shares at a weighted average exercise price of \$4.49, options to acquire 1,305,500 shares at a weighted average exercise price of \$5.20, and convertible debt convertible into 753,024 shares at a conversion price of \$5.80.

Common Stock

Holders of our common stock are entitled to one vote for each share held on all matters submitted to a vote of our stockholders. Holders of our common stock have no cumulative voting rights. Further, holders of our common stock have no preemptive or conversion rights or other subscription rights. Upon our liquidation, dissolution or winding-up, holders of our common stock are entitled to share in all assets remaining after payment of all liabilities. Holders of our common stock are entitled to receive dividends, if any, as may be declared from time to time by our Board out of our assets which are legally available. Such dividends, if any, are payable in cash, in property or in shares of capital stock.

The holders of shares of our common stock entitled to cast at least a majority of the total votes entitled to be cast by the holders of all of our outstanding capital stock, present in person or by proxy, are necessary to constitute a quorum at any meeting. If a quorum is present, an action by stockholders entitled to vote on a matter is approved if the number of votes cast in favor of the action exceeds the number of votes cast in opposition to the action. The vote of a majority of our stock held by shareholders present in person or represented by proxy and entitled to vote at the Meeting will be sufficient to elect Directors or to approve a proposal.

Anti-Takeover Provisions of Nevada State Law

Certain anti-takeover provisions of Nevada law could have the effect of delaying or preventing a third party from acquiring us, even if the acquisition arguably could benefit our stockholders.

Nevada's "combinations with interested stockholders" statutes, Nevada Revised Statutes ("NRS") 78.411 through 78.444, inclusive, prohibit specified types of business "combinations" between certain Nevada corporations and any person deemed to be an "interested stockholder" for two years after such person first becomes an "interested stockholder" unless the corporation's board of directors approves the combination, or the transaction by which such person becomes an "interested stockholder", in advance, or unless the combination is approved by the board of directors and sixty percent of the corporation's voting power not beneficially owned by the interested stockholder, its affiliates and associates. Further, in the absence of prior approval certain restrictions may apply even after such two-year period. However, these statutes do not apply to any combination of a corporation and an interested stockholder after the expiration of four years after the person first became an interested stockholder. For purposes of these statutes, an "interested stockholder" is any person who is (1) the beneficial owner, directly or indirectly, of ten percent or more of the voting power of the outstanding voting shares of the corporation, or (2) an affiliate or associate of the corporation and at any time within the two previous years was the beneficial owner, directly or indirectly, of ten percent or more of the voting power of the then outstanding shares of the corporation. The definition of the term "combination" is sufficiently broad to cover most significant transactions between a corporation and an "interested stockholder." These statutes generally apply to Nevada corporations with 200 or more stockholders of record. However, a Nevada corporation may elect in its articles of incorporation not to be governed by these particular laws, but if such election is not made in the corporation's original articles of incorporation, the amendment (1) must be approved by the affirmative vote of the holders of stock representing a majority of the outstanding voting power of the corporation not beneficially owned by interested stockholders or their affiliates and associates, and (2) is not effective until 18 months after the vote approving the amendment and does not apply to any combination with a person who first became an interested stockholder on or before the effective date of the amendment. We have made such an election in our original articles of incorporation.

Nevada's "acquisition of controlling interest" statutes, NRS 78.378 through 78.379, inclusive, contain provisions governing the acquisition of a controlling interest in certain Nevada corporations. These "control share" laws provide generally that any person that acquires a "controlling interest" in certain Nevada corporations may be denied voting rights, unless a majority of the disinterested stockholders of the corporation elects to restore such voting rights. Absent such provision in our bylaws, these laws would apply to us as of a particular date if we were to have 200 or more stockholders of record (at least 100 of whom have addresses in Nevada appearing on our stock ledger at all times during the 90 days immediately preceding that date) and do business in the State of Nevada directly or through an affiliated corporation, unless our articles of incorporation or bylaws in effect on the tenth day after the acquisition of a controlling interest provide otherwise. These laws provide that a person acquires a "controlling interest" whenever a person acquires shares of a subject corporation that, but for the application of these provisions of the NRS, would enable that person to exercise (1) one fifth or more, but less than one third, (2) one third or more, but less than a majority or (3) a majority or more, of all of the voting power of the corporation in the election of directors. Once an acquirer crosses one of these thresholds, shares which it acquired in the transaction taking it over the threshold and within the 90 days immediately preceding the date when the acquiring person acquired or offered to acquire a controlling interest become "control shares" to which the voting restrictions described above apply.

Nevada law also provides that directors may resist a change or potential change in control if the directors determine that the change is opposed to, or not in the best interests of, the corporation. The existence of the foregoing provisions and other potential anti-takeover measures could limit the price that investors might be willing to pay in the future for shares of our common stock. They could also deter potential acquirers of our Company, thereby reducing the likelihood that you could receive a premium for your common stock in an acquisition.

Anti-Takeover Effects of Our Articles of Incorporation and Bylaws

The following provisions of our articles of incorporation and bylaws could have the effect of delaying or discouraging another party from acquiring control of us and could encourage persons seeking to acquire control of us to first negotiate with our board of directors:

- no cumulative voting in the election of directors, which limits the ability of minority stockholders to elect director candidates;
- the right of our board of directors to elect a director to fill a vacancy created by the expansion of the board of directors or the resignation, death or removal of a director, with our stockholders only allowed to fill such a vacancy if not filled by the board;
- the ability of our board of directors to alter our bylaws without obtaining shareholder approval; and

- the requirement that a special meeting of stockholders may be called only by either (i) the directors; (ii) the chairman of the board; or (iii) the chief executive officer.

Forum Selection and Jurisdiction

Our bylaws provides that unless we consent in writing to the selection of an alternative forum, the applicable court of competent jurisdiction shall be the state and federal courts located in Denver, Colorado (the “**Colorado Court**”), which Colorado Court shall, to the fullest extent permitted by law, be the sole and exclusive forum for actions or other proceedings relating to:

- (i) a derivative action;
- (ii) an application for an oppression remedy, including an application for leave to commence such a proceeding;

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- (iii) an action asserting a claim of breach of the duty of care owed by us; any director, officer or other employee or any shareholder;
- (iv) an action asserting a claim of breach of fiduciary duty owed by any director, officer or other employee or any shareholder;
- (v) an action or other proceeding asserting a claim or seeking a remedy pursuant to any provision of the Nevada Revised Statute or our articles or bylaws; and
- (vi) an action or other proceeding asserting a claim against us or any director or officer or other employee of the Corporation regarding a matter of the regulation of our business and affairs.

The choice of forum provision may limit a shareholder’s ability to bring a claim in a judicial forum that it finds favorable for disputes, which may discourage such lawsuits. We interpret the forum selection clauses in our bylaws to be limited to specified actions and not to apply to actions arising under the Exchange Act or the Securities Act. Section 27 of the Exchange Act provides that, United States federal courts shall have jurisdiction over all suits and any action brought to enforce any duty or liability created by the Exchange Act or the rules and regulations thereunder and Section 22 of the Securities Act provides that, United States federal and state courts shall have concurrent jurisdiction over all suits brought to enforce any duty or liability created by the U.S. Securities Act or the rules and regulations thereunder.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Computershare Trust Company of Canada.

Indemnification of Directors and Officers

The NRS empower us to indemnify our directors and officers against expenses relating to certain actions, suits or proceedings as provided for therein. In order for such indemnification to be available, the applicable director or officer must not have acted in a manner that constituted a breach of his or her fiduciary duties and involved intentional misconduct, fraud or a knowing violation of law, or must have acted in good faith and reasonably believed that his or her conduct was in, or not opposed to, our best interests. In the event of a criminal action, the applicable director or officer must not have had reasonable cause to believe his or her conduct was unlawful.

Pursuant to our articles, we may indemnify each of our present and future directors, officers, employees or agents who becomes a party or is threatened to be made a party to any suit or proceeding, whether pending, completed or merely threatened, and whether said suit or proceeding is civil, criminal, administrative, investigative, or otherwise, except an action by or in the right of the Company, by reason of the fact that he is or was a director, officer, employee, or agent of the Company, or is or was serving at the request of the Company as a director, officer, employee, or agent of another corporation, partnership, joint venture, trust, or other enterprise, against expenses, including, but not limited to, attorneys’ fees, judgments, fines, and amounts paid in settlement actually and reasonably incurred by him in connection with the action, suit, proceeding or settlement, provided such person acted in good faith and in a manner which he reasonably believed to be in or not opposed to the best interest of the Company, and, with respect to any criminal action or proceeding, had no reasonable cause to believe his conduct was unlawful.

The expenses of directors, officers, employees or agents of the Company incurred in defending a civil or criminal action, suit, or proceeding may be paid by the Company as they are incurred and in advance of the final disposition of the action, suit, or proceeding, if and only if the director, officer, employee or agent undertakes to repay said expenses to the Company if it is ultimately determined by a court of competent jurisdiction, after exhaustion of all appeals therefrom, that he is not entitled to be indemnified by the corporation.

No indemnification shall be applied, and any advancement of expenses to or on behalf of any director, officer, employee or agent must be returned to the Company, if a final adjudication establishes that the person’s acts or omissions involved a breach of any fiduciary duties, where applicable, intentional misconduct, fraud or a knowing violation of the law which was material to the cause of action.

The NRS further provides that a corporation may purchase and maintain insurance or make other financial arrangements on behalf of any person who 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 corporation, partnership, joint venture, trust or other enterprise for any liability asserted against him and liability and expenses incurred by him in his capacity as a director, officer, employee or agent, or arising out of his status as such, whether or not the corporation has the authority to indemnify him against such liability and expenses. We have secured a directors’ and officers’ liability insurance policy. We expect that we will continue to maintain such a policy.

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Disclosure of Commission Position on Indemnification for Securities Act Liabilities

Insofar as indemnification for liabilities under the Securities Act may be permitted to officers, directors or persons controlling the Company pursuant to the foregoing provisions, the Company has been informed that it is the opinion of the SEC that such indemnification is against public policy as expressed in such Securities Act and is, therefore, unenforceable.

DESCRIPTION OF WARRANTS

We may issue Warrants for the purchase of Common Stock in one or more series. We may issue Warrants independently or together with Common Stock, and the Warrants may be attached to or separate from these securities.

We will evidence each series of Warrants by warrant certificates that we may issue under a separate agreement. We may enter into a warrant agreement with a warrant agent. Each warrant agent may be a bank that we select which has its principal office in the United States. We may also choose to act as our own warrant agent. We will indicate the name and address of any such warrant agent in the applicable prospectus supplement relating to a particular series of Warrants.

We will describe in the applicable prospectus supplement the terms of the series of Warrants, including:

- the offering price and aggregate number of Warrants offered;
- if applicable, the designation and terms of the securities with which the Warrants are issued and the number of Warrants issued with each such security or each principal amount of such security;
- if applicable, the date on and after which the Warrants and the related securities will be separately transferable;
- in the case of Warrants to purchase Common Stock, the number or amount of shares of Common Stock purchasable upon the exercise of one Warrant and the price at which and currency in which these shares may be purchased upon such exercise;
- the manner of exercise of the Warrants, including any cashless exercise rights;
- the warrant agreement under which the Warrants will be issued, if any;
- the effect of any merger, consolidation, sale or other disposition of our business on the warrant agreement and the Warrants;
- anti-dilution provisions of the Warrants, if any;
- the terms of any rights to redeem or call the Warrants;
- any provisions for changes to or adjustments in the exercise price or number of securities issuable upon exercise of the Warrants;
- the dates on which the right to exercise the Warrants will commence and expire or, if the Warrants are not continuously exercisable during that period, the specific date or dates on which the Warrants will be exercisable;
- the manner in which the warrant agreement and Warrants may be modified;

- the identities of the warrant agent and any calculation or other agent for the Warrants;
- federal income tax consequences of holding or exercising the Warrants;
- the terms of the securities issuable upon exercise of the Warrants;
- any securities exchange or quotation system on which the Warrants or any securities deliverable upon exercise of the Warrants may be listed or quoted; and
- any other specific terms, preferences, rights or limitations of or restrictions on the Warrants.

Before exercising their Warrants, holders of Warrants may not have any of the rights of holders of the securities purchasable upon such exercise, including, in the case of Warrants to purchase Common Stock, the right to receive dividends, if any, or, payments upon our liquidation, dissolution or winding up or to exercise voting rights, if any.

Exercise of Warrants

Each Warrant will entitle the holder to purchase the securities that we specify in the applicable prospectus supplement at the exercise price that we describe in the applicable prospectus supplement. Unless we otherwise specify in the applicable prospectus supplement, holders of the Warrants may exercise the warrants at any time up to 5:00 P.M. mountain time, the close of business, on the expiration date that we set forth in the applicable prospectus supplement. After the close of business on the expiration date, unexercised Warrants will become void.

Holders of the Warrants may exercise the Warrants by delivering the warrant certificate representing the Warrants to be exercised together with specified information, and paying the required exercise price by the methods provided in the applicable prospectus supplement. We will set forth on the reverse side of the warrant certificate, and in the applicable prospectus supplement, the information that the holder of the Warrant will be required to deliver to the warrant agent.

Upon receipt of the required payment and the warrant certificate properly completed and duly executed at the corporate trust office of the warrant agent or any other office indicated in the applicable prospectus supplement, we will issue and deliver the securities purchasable upon such exercise. If fewer than all of the Warrants represented by the warrant certificate are exercised, then we will, if required by the terms of the warrant, issue a new warrant certificate for the remaining amount of Warrants.

Enforceability of Rights By Holders of Warrants

Any warrant agent will act solely as our agent under the applicable warrant agreement and will not assume any obligation or relationship of agency or trust with any holder of any Warrant. A single bank or trust company may act as warrant agent for more than one issue of Warrants. A warrant agent will have no duty or responsibility in case of any default by us under the applicable warrant agreement or Warrant, including any duty or responsibility to initiate any proceedings at law or otherwise, or to make any demand upon us. Any holder of a Warrant may, without the consent of the related warrant agent or the holder of any other Warrant, enforce by appropriate legal action the holder's right to exercise, and receive the securities purchasable upon exercise of, its Warrants in accordance with their terms.

Warrant Agreement Will Not Be Qualified Under Trust Indenture Act

No warrant agreement will be qualified as an indenture, and no warrant agent will be required to qualify as a trustee, under the Trust Indenture Act. Therefore, holders of Warrants issued under a warrant agreement will not have the protection of the Trust Indenture Act with respect to their Warrants.

Governing Law

Unless we provide otherwise in the applicable prospectus supplement, each warrant agreement and any Warrants issued under the warrant agreements will be governed by Delaware law.

DESCRIPTION OF UNITS

We may issue Units comprised of one or more of the other securities described in this prospectus or any prospectus supplement in any combination. Each Unit will be issued so that the holder of the unit is also the holder, with the rights and obligations of a holder, of each security included in the Unit. The unit agreement under which a Unit is issued may provide that the securities included in the unit may not be held or transferred separately, at any time or at any times before a specified date or upon the occurrence of a specified event or occurrence.

The applicable prospectus supplement will describe:

- the designation and the terms of the Units and of the securities comprising the Units, including whether and under what circumstances those securities may be held or transferred separately;
- any unit agreement under which the Units will be issued;
- any provisions for the issuance, payment, settlement, transfer or exchange of the Units or of the securities comprising the Units; and
- whether the Units will be issued in fully registered or global form.

PLAN OF DISTRIBUTION

General

We may offer and sell the securities on a continuous or delayed basis, separately or together: (a) to one or more underwriters or dealers; (b) through one or more agents; or (c) directly to one or more other purchasers. The securities offered pursuant to any prospectus supplement may be sold from time to time in one or more transactions at: (i) a fixed price or prices, which may be changed from time to time; (ii) market prices prevailing at the time of sale; (iii) prices related to such prevailing market prices; or (iv) other negotiated prices.

The distribution of securities may be effected, from time to time, in one or more transactions, including:

- block transactions (which may involve crosses) and transactions on The Nasdaq Capital Market or any other organized market where the securities may be traded;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its own account pursuant to a prospectus supplement or free writing prospectus;
- ordinary brokerage transactions and transactions in which a broker-dealer solicits purchasers;
- sales “at the market” to or through a market maker or into an existing trading market, on an exchange or otherwise; and
- sales in other ways not involving market makers or established trading markets, including direct sales to purchasers.

We may only offer and sell the securities pursuant to a prospectus supplement during the 36-month period that this prospectus, including any amendments hereto, remains effective. The prospectus supplement for any of the securities being offered thereby will set forth the terms of the offering of such securities, including the type of security being offered, the name or names of any underwriters, dealers or agents, the purchase price of such securities, the proceeds to us from such sale, any underwriting commissions or discounts and other items constituting underwriters’ compensation and any discounts or concessions allowed or re-allowed or paid to dealers. Only underwriters so named in the prospectus supplement are deemed to be underwriters in connection with the securities offered thereby.

By Underwriters

If underwriters are used in the sale, the securities will be acquired by the underwriters for their own account and may be resold from time to time in one or more transactions, including negotiated transactions, at a fixed public offering price or at varying prices determined at the time of sale. Unless otherwise set forth in the prospectus supplement relating thereto, the obligations of underwriters to purchase the securities will be subject to certain conditions, but the underwriters will be obligated to purchase all of the securities offered by the prospectus supplement if any of such securities are purchased. We may agree to pay the underwriters a fee or commission for various services relating to the offering of any securities. Any such fee or commission will be paid out of the proceeds of the offering or our general corporate funds.

By Dealers

If dealers are used, and if so specified in the applicable prospectus supplement, we will sell such securities to the dealers as principals. The dealers may then resell such securities to the public at varying prices to be determined by such dealers at the time of resale. Any public offering price and any discounts or concessions allowed or re-allowed or paid to dealers may be changed from time to time.

By Agents

The securities may also be sold through agents designated by us. Any agent involved will be named, and any fees or commissions payable by us to such agent will be set forth, in the applicable prospectus supplement. Any such fees or commissions will be paid out of the proceeds of the offering or our general corporate funds. Unless otherwise indicated in the prospectus supplement, any agent will be acting on a best efforts basis for the period of its appointment.

Direct Sales

Securities may also be sold directly by us at such prices and upon such terms as agreed to by us and the purchaser. In this case, no underwriters, dealers or agents would be involved in the offering.

General Information

Underwriters, dealers and agents that participate in the distribution of the securities offered by this prospectus may be deemed underwriters under the U.S. Securities Act, and any discounts or commissions they receive from us and any profit on their resale of the securities may be treated as underwriting discounts and commissions under the U.S.

Securities Act.

With respect to the sale of securities under this prospectus and any prospectus supplement, No Financial Industry Regulatory Authority, Inc. (“FINRA”) member firm may receive compensation in excess of that allowable under FINRA rules, including Rule 5110, in connection with the offering of the securities.

Underwriters, dealers or agents who participate in the distribution of securities may be entitled under agreements to be entered into with us to indemnification by us against certain liabilities, including liabilities under United States securities legislation, or to contribution with respect to payments which such underwriters, dealers or agents may be required to make in respect thereof. Such underwriters, dealers or agents may be customers of, engage in transactions with, or perform services for, us in the ordinary course of business.

We may enter into derivative transactions with third parties, or sell securities not covered by this prospectus to third parties in privately negotiated transactions. If the applicable prospectus supplement indicates, in connection with those derivatives, the third parties may sell securities covered by this prospectus and the applicable prospectus supplement, including in short sale transactions. If so, the third parties may use securities pledged by us or borrowed from us or others to settle those sales or to close out any related open borrowings of stock, and may use securities received from us in settlement of those derivatives to close out any related open borrowings of stock. The third parties in such sale transactions will be identified in the applicable prospectus supplement.

One or more firms, referred to as “remarketing firms,” may also offer or sell the securities, if the prospectus supplement so indicates, in connection with a remarketing arrangement upon their purchase. Remarketing firms will act as principals for their own accounts or as agents for us. These remarketing firms will offer or sell the Securities in accordance with the terms of the securities. The prospectus supplement will identify any remarketing firm and the terms of its agreement, if any, with us and will describe the remarketing firm’s compensation. Remarketing firms may be deemed to be underwriters in connection with the securities they remarket.

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To facilitate the public offering of a series of securities, persons participating in the offering may engage in transactions in accordance with Regulation M under the Exchange Act that stabilize, maintain, or otherwise affect the market price of the securities. This may include over-allotments or short sales of the securities, which involves the sale by persons participating in the offering of more securities than have been sold to them by us. In addition, those persons may stabilize or maintain the price of the securities by bidding for or purchasing securities in the open market or by imposing penalty bids, whereby selling concessions allowed to underwriters or dealers participating in any such offering may be reclaimed if securities sold by them are repurchased in connection with stabilization transactions. The effect of these transactions may be to stabilize or maintain the market price of the securities at a level above that which might otherwise prevail in the open market. Such transactions, if commenced, may be discontinued at any time. We make no representation or prediction as to the direction or magnitude of any effect that the transactions described above, if implemented, may have on the price of our securities.

Unless otherwise specified in the applicable prospectus supplement or free writing prospectus, any common stock sold pursuant to a prospectus supplement will be eligible for trading as listed on The NASDAQ Capital Market. Any underwriters who are qualified market makers to whom securities are sold by us for public offering and sale may make a market in the securities in accordance with Rule 103 of Regulation M, but such underwriters will not be obligated to do so and may discontinue any market making at any time without notice.

EXPERTS

The audited consolidated financial statements of Assure and its subsidiaries, as of and for the years ended December 31, 2021 and 2020 included in this prospectus have been so included in reliance upon the report of Baker Tilly US, LLP, independent registered public accountants, upon the authority of said firm as experts in accounting and auditing.

LEGAL MATTERS

The validity of the securities offered hereby have been passed upon for Assure by Dorsey & Whitney LLP.

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DOCUMENTS INCORPORATED BY REFERENCE

The SEC allows us to “incorporate by reference” information we file with the SEC. This means that we can disclose important information to you by referring you to those documents. Any information we reference in this manner is considered part of this prospectus. Information we file with the SEC after the date of this prospectus will automatically update and, to the extent inconsistent, supersede the information contained in this prospectus.

The following documents have been filed by us with the SEC, are specifically incorporated by reference into, and form an integral part of, this prospectus.

- (a) [our Annual Report on Form 10-K for the fiscal year ended December 31, 2021, which report contains our audited consolidated financial statements and the notes thereto as of December 31, 2021 and 2020 and for the fiscal years ended December 31, 2021 and 2020, together with the auditors’ report thereon and the related management’s discussion and analysis of financial condition and results of operations for the fiscal years ended December 31, 2021 and 2020, as filed with the SEC on March 14, 2022;](#)
- (b) [our Quarterly Report on Form 10-Q for the three month period ended March 31, 2022, which report contains our unaudited condensed consolidated financial statements and the notes thereto as of March 31, 2022 and for the periods ended March 31, 2022 and 2021, and the related management’s discussion and analysis of financial condition and results of operations for the periods ended March 31, 2022 and 2021, as filed with the SEC on May 16, 2022;](#)
- (c) [our Quarterly Report on Form 10-Q for the six month period ended June 30, 2022, which report contains our unaudited condensed consolidated financial statements and the notes thereto as of June 30, 2022 and for the periods ended June 30, 2022 and 2021, and the related management’s discussion and analysis of financial condition and results of operations for the periods ended June 30, 2022 and 2021, as filed with the SEC on August 15, 2022](#)
- (c) Our Current Reports on Form 8-K as filed with the SEC on [April 20, 2022](#) and [July 6, 2022](#);
- (d) [The description of the common stock contained in the registration statement on Form 8-A of the Company filed with the SEC on September 7, 2021, including any amendment or report filed for purposes of updating such description; and](#)
- (e) all other documents filed by us with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act (excluding, unless otherwise provided therein or herein, information furnished pursuant to Item 2.02 and Item 7.01 on any Current Report on Form 8-K), after the date of this prospectus but before the end of the offering of the securities made by this prospectus.

We also hereby specifically incorporate by reference all filings by us pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of the filing of the initial registration statement on Form S-3 to which this prospectus relates and prior to effectiveness of such registration statement.

You may obtain copies of any of these documents by contacting us at the address and telephone number indicated below or by contacting the SEC as described below. You may request a copy of these documents, and any exhibits that have specifically been incorporated by reference as an exhibit in this prospectus, at no cost, by writing or telephoning to:

ASSURE HOLDINGS CORP.
7887 East Belleview Avenue, Suite 500
Greenwood Village, Colorado 80111
Attention: Corporate Secretary
Telephone: (720) 287-3093

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WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-3 under the Securities Act relating to the offering of these securities. The registration statement, including the attached exhibits and schedules, contains additional relevant information about us and the securities. This prospectus does not contain all of the information set forth in the registration statement and the exhibits and schedules thereto. For further information respecting our company and the shares offered by this prospectus, you should refer to the registration statement, including the exhibits and schedules thereto.

We file annual, quarterly and other reports, proxy statements and other information with the SEC. Our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, and Current Reports on Form 8-K, including any amendments to those reports, and other information that we file with or furnish to the SEC pursuant to Section 13(a) or 15(d) of the Exchange Act can be accessed free of charge through the Internet. The SEC maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC at <http://www.sec.gov>. You may access the registration statement, of which this prospectus is a part, and the documents incorporated by reference herein, at the SEC's Internet site. You may also access these documents at the Company's website at www.assureneuromonitoring.com.

For further information about Assure, please visit our main corporate website located at www.assureneuromonitoring.com, or our Assure's profile on www.sedar.com ("SEDAR") or www.sec.gov. Information contained on these websites is not a part of this prospectus.

You should rely only on the information contained in this prospectus. We have not authorized anyone to provide you with different information. Therefore, if anyone gives you different or additional information, you should not rely on it. The information contained in this prospectus is correct as of its date. It may not continue to be correct after this date.

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• Shares of common stock



PROSPECTUS SUPPLEMENT

AEGIS CAPITAL CORP.

August •, 2022
