Prospectus



LENSAR, Inc.

UP TO 7,940,446 SHARES OF COMMON STOCK ISSUABLE UPON CONVERSION OF SERIES A CONVERTIBLE PREFERRED STOCK,

UP TO 2,183,623 SHARES OF COMMON STOCK ISSUABLE UPON EXERCISE OF CLASS A WARRANTS, AND UP TO 2,183,623 SHARES OF COMMON STOCK ISSUABLE UPON EXERCISE OF CLASS B WARRANTS OF LENSAR, INC.

On May 18, 2023, we consummated an offering (the "Offering") contemplated by that certain Securities Purchase Agreement (the "Purchase Agreement"), dated May 12, 2023, by and between us and NR-GRI Partners, LP, a Delaware limited partnership and an affiliate of North Run Capital, LP (the "Registered Holder").

This prospectus relates to the resale of up to 12,307,692 shares of our common stock, par value \$0.01 (the "Common Stock") comprised of an aggregate of up to (i) 7,940,446 shares (the "Conversion Shares") of our Common Stock issuable upon the conversion of Series A Convertible Preferred Stock, par value \$0.01 per share (the "Preferred Shares"), (ii) 2,183,623 shares of Common Stock ("Class A Warrant Shares") issuable upon the exercise of Class A Common Stock Purchase Warrants (the "Class A Warrants") and (iii) 2,183,623 shares of Common Stock (together with the Class A Warrant Shares, the "Warrant Shares") issuable upon the exercise of Class B Common Stock Purchase Warrants (together with the Class A Warrants, the "Warrants") sold pursuant to the Purchase Agreement.

This registration statement is being filed due to registration rights set forth in (i) the Registration Rights Agreement dated May 12, 2023 (the "Registration Rights Agreement") between us and the Registered Holder and (ii) the Purchase Agreement.

We will not receive any proceeds from the resale of the shares of Common Stock issued upon such conversions or exercises. We will bear all costs, expenses and fees in connection with the registration of the shares of Common Stock described above. The Registered Holder will bear all commissions and discounts, if any, attributable to its sales of the Conversion Shares and the Warrant Shares.

Our Common Stock trades on The Nasdaq Stock Market LLC ("Nasdaq") under the ticker symbol "LNSR". On August 9, 2023, the closing sale price of our Common Stock as reported by Nasdaq was \$3.72 per share.

Investing in shares of our Common Stock involves risks that are described in the "Risk Factors" section beginning on page 5 of this prospectus.

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

The date of this prospectus is August 10, 2023.

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the U.S. Securities and Exchange Commission (the "SEC") using a "shelf" registration process. By using a shelf registration statement, we or the Registered Holder named in this prospectus may sell securities from time to time and in one or more offerings as described in this prospectus. To the extent necessary, we and the Registered Holder may also authorize one or more prospectus supplements or free writing prospectuses to be provided to you that may contain material information relating to these offerings. Such prospectus supplements or free writing prospectus may also add, update or change information contained in this prospectus with respect to that offering. If there is any inconsistency between the information in this prospectus and any subsequent prospectus supplement or free writing prospectus, you should rely on the prospectus supplement or free writing prospectus, as applicable. Before purchasing any securities, you should carefully read both this prospectus and any applicable prospectus supplement (and any applicable free writing prospectuses), together with the additional information described under the heading "Where You Can Find More Information; Incorporation by Reference."

Neither we nor the Registered Holder have authorized anyone to provide you with any information or to make any representations other than those contained in this prospectus, any applicable prospectus supplement or any free writing prospectuses prepared by or on behalf of us or the Registered Holder or to which we have referred you. Neither we nor the Registered Holder take any responsibility for, nor provide any assurance as to the reliability of, any other information that others may give you. Neither we nor the Registered Holder will make an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information appearing in this prospectus is accurate only as of the date of this prospectus, that the information appearing in any applicable prospectus supplement or free writing prospectus is accurate only as of the date of such prospectus supplement or free writing prospectus and that any information incorporated by reference is accurate only as of the date of the document incorporated by reference or, in each case, any earlier date specified for such information, unless we indicate otherwise. Our business, financial condition, results of operations and prospects may have changed since those dates. This prospectus incorporates by reference, and any prospectus supplement or free writing prospectus may contain and incorporate by reference, market data and industry statistics and forecasts that are based on independent industry publications and other publicly available information. Although we believe these sources are reliable, we do not guarantee the accuracy or completeness of this information and we have not independently verified this information. In addition, the market and industry data and forecasts that may be included or incorporated by reference in this prospectus, any prospectus supplement or any applicable free writing prospectus may involve estimates, assumptions and other risks and uncertainties and are subject to change based on various factors, including those discussed under the heading "Risk Factors" contained in this prospectus, the applicable prospectus supplement and any applicable free writing prospectus, and under similar headings in other documents that are incorporated by reference into this prospectus. Accordingly, investors should not place undue reliance on this

When we refer to "we," "our," "us" and the "Company" in this prospectus, we mean LENSAR, Inc., unless otherwise specified. When we refer to "you," we mean the potential holders of the applicable series of securities.

WHERE YOU CAN FIND MORE INFORMATION; INCORPORATION BY REFERENCE

Available Information

We file reports, proxy statements and other information with the SEC. The SEC maintains a web site that contains reports, proxy and information statements and other information about issuers, such as us, who file electronically with the SEC. The address of that website is http://www.sec.gov. You may access these materials free of charge as soon as reasonably practicable after they are electronically filed with or furnished to the SEC.

Our web site address is www.lensar.com. The information on our web site, however, is not, and should not be deemed to be, a part of, or incorporated by reference into, this prospectus.

This prospectus and any prospectus supplement are part of a registration statement that we filed with the SEC and do not contain all of the information in the registration statement. The full registration statement may be obtained from the SEC or us, as provided above. Certain documents establishing the terms of any offered securities are or may be filed as exhibits to the registration statement or documents incorporated by reference in the registration statement. Statements in this prospectus or any prospectus supplement about these documents are summaries and each statement is qualified in all respects by reference to the document to which it refers. You should refer to the actual documents for a more complete description of the relevant matters. You may inspect a copy of the registration statement through the SEC's website, as provided above.

Incorporation by Reference

The SEC's rules allow us to "incorporate by reference" information into this prospectus, which means that we can disclose important information to you by referring you to another document filed separately with the SEC. The information incorporated by reference is deemed to be part of this prospectus, and subsequent information that we file with the SEC will automatically update and supersede that information. Any statement contained in this prospectus or a previously filed document incorporated by reference will be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus or a subsequently filed document incorporated by reference modifies or replaces that statement.

This prospectus and any accompanying prospectus supplement incorporate by reference the documents set forth below that have previously been filed with the SEC:

- our Annual Report on Form 10-K for the year ended December 31, 2022, filed with the SEC on March 16, 2023;
- the information specifically incorporated by reference into our Annual Report on Form 10-K for the year ended December 31, 2022, from
 our Definitive Proxy Statement on Schedule 14A, filed with the SEC on <u>April 12, 2023</u>;
- our Quarterly Report on Form 10-Q for the three months ended March 31, 2023 and June 30, 2023, filed with the SEC on May 15, 2023 and August 9, 2023, respectively;
- our Current Reports on Form 8-K filed with the SEC on <u>January 13, 2023, May 15, 2023</u> (relating to Items 1.01, 3.02, 3.03, 5.02 and 9.01), <u>May 18, 2023</u>, <u>May 30, 2023</u> and <u>August 4, 2023</u>; and
- the description of our capital stock contained in our registration statement on Form 10, filed with the SEC on <u>September 14, 2020</u> and the description of our registered securities contained in Exhibit 4.2 to our Annual Report on Form 10-K for the year ended December 31, 2020, filed with the SEC on <u>March 12, 2021</u>.

All reports and other documents we subsequently file pursuant to Section 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, which we refer to as the "Exchange Act" in this prospectus, prior

to the termination of this offering, including all such documents we may file with the SEC after the date of the initial registration statement and prior to the effectiveness of the registration statement, but excluding any information furnished to, rather than filed with, the SEC, will also be incorporated by reference into this prospectus and deemed to be part of this prospectus from the date of the filing of such reports and documents.

You may request a free copy of any of the documents incorporated by reference in this prospectus by writing or telephoning us at the following address:

LENSAR, Inc. 2800 Discovery Drive, Suite 100 Orlando, Florida 32826 (888) 536-7271

Exhibits to the filings will not be sent, however, unless those exhibits have specifically been incorporated by reference in this prospectus or any accompanying prospectus supplement.

THE COMPANY

Overview

We are a commercial-stage medical device company focused on designing, developing and marketing an advanced femtosecond laser system for the treatment of cataracts and the management of pre-existing or surgically induced corneal astigmatism. Our systems incorporate a range of proprietary technologies designed to assist the surgeon in obtaining better visual outcomes, efficiency and reproducibility by providing advanced imaging, simplified procedure planning, efficient design and precision. We believe the cumulative effect of these technologies results in a laser system that can be quickly and efficiently integrated into a surgeon's existing practice, is easy to use and provides surgeons the ability to deliver improved visual outcomes with enhanced precision.

Corporate Information

We were initially formed on August 20, 2004 as a Delaware corporation under the name LaserSoft Vision, Inc. We became a direct subsidiary of PDL BioPharma, Inc., or PDL, on May 11, 2017. On October 1, 2020, we completed a separation and distribution (the "Spin-Off") from PDL, in connection with which PDL distributed all of its outstanding shares of our Common Stock on a pro rata basis to holders of PDL common stock. We have been an independent publicly traded company since immediately after completing the Spin-Off.

Our principal executive offices are located at 2800 Discovery Drive, Suite 100, Orlando, Florida 32826, and our telephone number is (888) 536-7271. Our website is www.lensar.com. Information contained on our website is not a part of this prospectus, and the inclusion of our website address in this prospectus is an inactive textual reference only.

RISK FACTORS

Investing in our securities involves risks. You should carefully consider the risk factors described below and incorporated by reference from our most recent Annual Report on Form 10-K, and any subsequent Quarterly Reports on Form 10-Q or Current Reports on Form 8-K, and all other information contained or incorporated by reference into this prospectus, as updated by our subsequent filings under the Exchange Act, and the risk factors and other information contained in any applicable prospectus supplement and any applicable free writing prospectus before acquiring any of such securities. The risks and uncertainties we have described are not the only ones facing our company. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also affect our business operations. The occurrence of any of these risks might cause you to lose all or part of your investment in the offered securities. The discussion of risks includes or refers to forward-looking statements. You should read the explanation of the qualifications and limitations on such forward-looking statements contained or incorporated by reference into this prospectus and in any applicable prospectus supplement.

The Common Stock being offered in this prospectus represents a substantial percentage of our outstanding Common Stock, and the sales of such securities could cause the market price of our Common Stock to decline significantly.

This prospectus relates to the offer and sale from time to time by the Registered Holder up to 12,307,692 shares of our Common Stock comprised of an aggregate of up to (i) 7,940,446 Preferred Shares and (ii) 4,367,246 Warrant Shares. The total number of shares of Common Stock being offered in this prospectus would represent approximately 52.3% of our total outstanding shares of Common Stock based on our shares outstanding as of August 2, 2023, assuming full conversion of the Series A Convertible Preferred Stock and full exercise of the Warrants for cash. The market price for shares of our Common Stock could decline as a result of the sales of our Common Stock being offered in this prospectus, and such declines could be significant.

Future sales of substantial amounts of our Common Stock, or the perception that future sales could occur, could cause the market price for our Common Stock to decline significantly or result in material changes to the ownership of, and voting power in relation to, our Common Stock.

The sale of substantial amounts of shares of our Common Stock, including the Common Stock being offered in this prospectus, or the perception that such sales could occur, could harm the prevailing market price of shares of our Common Stock. These sales, or the possibility that these sales may occur, also might make it more difficult for us to sell equity securities in the future at a time and at a price that we deem appropriate.

Additionally, North Run and its affiliates hold 47.1% of the voting power of our capital stock based on shares outstanding as of August 2, 2023, in addition to shares of Common Stock and voting power they may acquire upon exercise of the Warrants. For as long as North Run and its affiliates hold a significant amount of our Series A Convertible Preferred Stock and Common Stock, they will be able to exert significant control over us. North Run and its affiliates may also determine to sell substantial amounts of our securities in one or more transactions, including to one or several private parties in negotiated transactions. In that case, those buyers may subsequently be able to exert significant control over us.

USE OF PROCEEDS

All of the shares of Common Stock offered by the Registered Holder will be sold by it for its account. We will not receive any of the proceeds from these sales.

The Registered Holder will pay any underwriting fees, discounts, selling commissions, stock transfer taxes and certain legal expenses incurred by the Registered Holder in disposing of its shares of Common Stock, and we will bear all other costs, fees and expenses incurred in effecting the registration of such securities covered by this prospectus, including, without limitation, all registration and filing fees, Nasdaq listing fees and expenses of our counsel and our independent registered public accountants. In addition, we will reimburse the Registered Holder for some or all of its legal costs in the event of an underwritten offering through the use of a prospectus supplement.

DESCRIPTION OF CAPITAL STOCK

The following description of our capital stock is not complete and may not contain all the information you should consider before investing in our capital stock. This description is summarized from, and qualified in its entirety by reference to, our amended and restated certificate of incorporation and amended and restated bylaws, both of which are attached as exhibits to the registration statement of which this prospectus forms a part.

Authorized Capital Stock

Our authorized capital stock consists of 150,000,000 shares of common stock, par value \$0.01 per share, and 10,000,000 shares of preferred stock, par value \$0.01 per share, all of which are undesignated.

Common Stock

Holders of our Common Stock are entitled to one vote for each share held on all matters submitted to a vote of stockholders and do not have cumulative voting rights. An election of directors by our stockholders shall be determined by a plurality of the votes cast. All other elections and questions presented to the stockholders shall be decided by the affirmative vote of the holders of a majority in voting power of the votes cast affirmatively or negatively (excluding abstentions and broker non-votes) at the meeting by the holders entitled to vote thereon. Holders of Common Stock are entitled to receive proportionately any dividends as may be declared by our board of directors, subject to any preferential dividend rights of any series of preferred stock that we may designate and issue in the future.

In the event of our liquidation or dissolution, the holders of our Common Stock are entitled to receive proportionately our net assets available for distribution to stockholders after the payment of all debts and other liabilities and subject to the prior rights of any outstanding preferred stock. Holders of our Common Stock have no preemptive, subscription, redemption or conversion rights. Our outstanding shares of Common Stock are, and the shares offered by us in this offering will be, when issued and paid for, validly issued, fully paid and nonassessable. The rights, preferences and privileges of holders of Common Stock are subject to and may be adversely affected by the rights of the holders of shares of any series of preferred stock that we may designate and issue in the future.

Preferred Stock

Under the terms of our amended and restated certificate of incorporation, our board of directors is authorized to direct us to issue shares of preferred stock in one or more series without stockholder approval. Our board of directors has the discretion to determine the rights, preferences, privileges and restrictions, including voting rights, dividend rights, conversion rights, redemption privileges and liquidation preferences, of each series of preferred stock.

The issuance of preferred stock, while providing flexibility in connection with possible acquisitions, future financings and other corporate purposes, could have the effect of making it more difficult for a third-party to acquire, or could discourage a third-party from seeking to acquire, a majority of our outstanding voting stock.

Series A Convertible Preferred Stock

On May 18, 2023, we issued an aggregate of 20,000 shares of the Series A Convertible Preferred Stock, par value \$0.01 per share (the "Preferred Shares"), which have a stated value of \$1,000 per share and are initially convertible into 7,940,446 shares of Common Stock at the election of the Registered Holder, subject to a restriction preventing the Registered Holder and its affiliates from beneficially owning more than 19.99% of our outstanding shares of Common Stock (the "Ownership Blocker").

General

Each Preferred Share has the powers, designations, preferences and other rights as are set forth in the Certificate of Designations, Preferences and Rights of Series A Convertible Preferred Stock filed with the Delaware Secretary of State on May 18, 2023 (the "Certificate of Designations").

The Preferred Shares rank senior to the Common Stock with respect to dividends, distributions and payments on liquidation, winding-up and dissolution.

Voting

Pursuant to the Certificate of Designations, holders of Preferred Shares will be entitled to vote on an as-converted basis with the Common Stock, after taking into account the Ownership Blocker.

Liquidation

The Preferred Shares will be subject to automatic redemption for cash upon a "Fundamental Transaction" by us, which includes a merger, sale of all or substantially all our assets, recapitalization, or the sale by us of shares resulting in more than 50% ownership by a person or group. In such event, the redemption price would be equal to the greater of the stated value of the Preferred Shares or the consideration per share of Common Stock in the Fundamental Transaction (or in the absence of such consideration, the volume-weighted average price of the Common Stock immediately preceding the closing of the Fundamental Transaction).

Dividends

The Preferred Shares will participate with the holders of the Common Stock on an as-converted basis to the extent any dividends are declared on Common Stock, although the Preferred Shares will not accrue a fixed dividend.

Anti-takeover Provisions

Some provisions of Delaware law and our amended and restated certificate of incorporation and our amended and restated bylaws could make the following transactions more difficult: an acquisition of us by means of a tender offer; an acquisition of us by means of a proxy contest or otherwise; or the removal of our incumbent officers and directors. It is possible that these provisions could make it more difficult to accomplish or could deter transactions that stockholders may otherwise consider to be in their best interests or in our best interests, including transactions that provide for payment of a premium over the market price for our shares.

Undesignated Preferred Stock

The ability of our board of directors, without action by our stockholders, to issue up to 10,000,000 shares of undesignated preferred stock with voting or other rights or preferences as designated by our board of directors could impede the success of any attempt to effect a change in control of the Company. These and other provisions may have the effect of deferring hostile takeovers or delaying changes in control or management of the Company.

Stockholder Meetings

Our amended and restated bylaws provide that a special meeting of stockholders may be called only by the chairman of our board of directors, our chief executive officer or by our board of directors.

Requirements for Advance Notification of Stockholder Nominations and Proposals

Our amended and restated bylaws establish advance notice procedures with respect to stockholder proposals to be brought before a stockholder meeting and the nomination of candidates for election as directors, other than nominations made by or at the direction of our board of directors or a committee of our board of directors.

Elimination of Stockholder Action by Written Consent

Our amended and restated certificate of incorporation eliminates the right of stockholders to act by written consent without a meeting.

Staggered Board

In accordance with our amended and restated certificate of incorporation, our board of directors is divided into three classes. The directors in each class serve for a three-year term, with one class being elected each year by our stockholders. Our amended and restated certificate of incorporation and amended and restated bylaws provide that the authorized number of directors may be changed only by resolution of the board of directors. This system of electing and removing directors may delay or prevent a change of our management or a change in control of our company and may tend to discourage a third party from making a tender offer or otherwise attempting to obtain control of us, because it generally makes it more difficult for stockholders to replace a majority of the directors.

Removal of Directors

Our amended and restated certificate of incorporation provides that no member of our board of directors may be removed from office by our stockholders except for cause and, in addition to any other vote required by law, upon the approval of the holders of at least two-thirds in voting power of all of the then outstanding shares of voting stock entitled to vote in the election of directors.

Stockholders not Entitled to Cumulative Voting

Our amended and restated certificate of incorporation does not permit stockholders to cumulate their votes in the election of directors. Accordingly, the holders of a majority of the shares of our Common Stock entitled to vote in any election of directors will be able to elect all of the directors standing for election, if they choose, other than any directors elected by the separate vote of one or more outstanding series of preferred stock may be entitled to elect.

Choice of Forum

Our amended and restated certificate of incorporation provides that, unless we consent in writing to the selection of an alternative forum to the fullest extent permitted by law, the Court of Chancery of the State of Delaware will be the sole and exclusive forum for (1) any derivative action or proceeding brought on our behalf, (2) any action asserting a claim of breach of a fiduciary duty or other wrongdoing by any of our directors, officers, employees or agents to us or our stockholders, (3) any action asserting a claim against us arising pursuant to any provision of the General Corporation Law of the State of Delaware or our certificate of incorporation or bylaws, or (4) any action asserting a claim governed by the internal affairs doctrine. Under our amended and restated certificate of incorporation, this exclusive forum provision does not apply to claims which are vested in the exclusive jurisdiction of a court or forum other than the Court of Chancery of the State of Delaware, or for which the Court of Chancery of the State of Delaware does not have subject matter jurisdiction. For instance, the provision would not apply to actions arising under suits brought to enforce any liability or duty created by the Exchange Act or the rules and regulations thereunder. This provision would not apply to suits brought to enforce a duty or liability created by the Exchange Act. Our amended and restated certificate of

incorporation further provides that, unless we consent in writing to the selection of an alternative forum, the federal district courts of the United States will be the exclusive forum for the resolution of any complaint asserting a cause of action against the Company or any director, officer, employee or agent of the Corporation and arising under the Securities Act of 1933, as amended. Our amended and restated certificate of incorporation also provides that any person or entity holding, purchasing or otherwise acquiring any interest in shares of our capital stock will be deemed to have notice of and to have consented to this choice of forum provision. It is possible that a court of law could rule that the choice of forum provision contained in our amended and restated certificate of incorporation is inapplicable or unenforceable if it is challenged in a proceeding or otherwise.

Amendment of Charter Provisions

The amendment of any of the above provisions, except for the provision making it possible for our board of directors to issue preferred stock, the provision regarding increases or decreases to our authorized capital stock and the provision prohibiting cumulative voting, would require approval by holders of at least two-thirds in voting power of the outstanding shares of stock entitled to vote thereon.

Section 203 of the Delaware General Corporation Law

We are subject to Section 203 of the DGCL, which prohibits persons deemed to be "interested stockholders" from engaging in a "business combination" with a publicly held Delaware corporation for three years following the date these persons become interested stockholders unless the business combination is, or the transaction in which the person became an interested stockholder was, approved in a prescribed manner or another prescribed exception applies. Generally, an "interested stockholder" is a person who, together with affiliates and associates, owns, or within three years prior to the determination of interested stockholder status did own, 15% or more of a corporation's voting stock. Generally, a "business combination" includes a merger, asset or stock sale, or other transaction resulting in a financial benefit to the interested stockholder. The existence of this provision may have an anti-takeover effect with respect to transactions not approved in advance by our board of directors.

Transfer Agent

The transfer agent for our Common Stock and Series A Preferred Stock is Computershare Trust Company, N.A.

REGISTERED HOLDER

Subject to the terms of the Purchase Agreement, the Registered Holder may from time to time offer and sell any or all of the shares of our Common Stock set forth below pursuant to this prospectus and any accompanying prospectus supplement. The Registered Holder will pay any underwriting discounts and commissions and expenses incurred by the Registered Holder for brokerage, accounting, tax or legal services or any other expenses incurred by the Registered Holder in disposing of the securities. We will bear the costs, fees and expenses incurred in effecting the registration of the securities covered by this prospectus, including all registration and filing fees, listing fees and fees and expenses of our counsel and our independent registered public accounting firm.

The following table sets forth, as of August 2, 2023, the name of the Registered Holder, the aggregate number of shares of our Common Stock beneficially owned by the Registered Holder, the number of shares of our Common Stock that may be sold by the Registered Holder under this prospectus and the number of shares of our Common Stock that the Registered Holder will beneficially own after this offering. For purposes of the table below, we have assumed that after this offering, none of the shares of Common Stock covered by this prospectus will be beneficially owned by the Registered Holder. In addition, we assume that the Registered Holder has not sold, transferred or otherwise disposed of, our securities in transactions exempt from the registration requirements of the Securities Act.

We have determined beneficial ownership in accordance with the rules of the SEC and the information is not necessarily indicative of beneficial ownership for any other purpose. Unless otherwise indicated below, to our knowledge, the entity named in the table has sole voting and sole investment power with respect to all securities that it beneficially owns.

The Registered Holder may sell or otherwise transfer all, some or none of such shares in this offering. See "Plan of Distribution."

		Number of		
		Shares of		
Beneficially O	wned	Common	Number of Shares I	Beneficially
Before Sale o	of All	Stock to be	Owned After Sa	le of All
Shares of Con	nmon	Sold in the	Shares of Comm	on Stock
Stock Offered 1	Hereby	Offering	Offered Her	eby
Number	%(1)	Number(2)	Number	%
12,307,692	52.3%	12,307,692	_	_
	Beneficially O Before Sale o Shares of Con Stock Offered I Number	` ,	Number of Shares Beneficially Owned Before Sale of All Shares of Common Stock to be Stock Offered Hereby Number Stock Offering Number Shares of Common Stock to be Stock to be Offering Number Number Number Stock Offered Hereby Number Number(2)	Number of Shares Beneficially Owned Common Before Sale of All Shares of Common Shares of Common Stock Offered Hereby Number Number Shares of Common Number Number Number Number Number Number Number Number Number

- (1) The percentage of beneficial ownership before this offering is calculated based on 11,246,205 shares of our Common Stock outstanding as of August 2, 2023.
- (2) Shares beneficially owned consists of (i) 7,940,446 Preferred Shares exercisable within 60 days of August 2, 2023, (ii) 2,183,623 Class A Warrant Shares exercisable within 60 days of August 2, 2023 and (iii) 2,183,623 shares of Common Stock issuable upon the exercise of Class B Common Stock Purchase Warrants that are exercisable within 60 days of August 2, 2023.
- (3) Thomas Ellis and Todd Hammer, members of our board of directors, are principals and sole members of NR-GRI Partners, LP, as well as of North Run Advisors, which as of August 2, 2023 owned 1,100,592 shares of our Common Stock. Mr. Ellis and Mr. Hammer also may each be deemed to directly beneficially own 5,529 shares of Common Stock issuable pursuant to stock options exercisable within 60 days of August 2, 2023.

Information for any additional Registered Holder, if any, will be set forth by prospectus supplement to the extent required prior to the time of any offer or sale of such Registered Holder's shares pursuant to this prospectus. To the extent permitted by law, a prospectus supplement may add, update, substitute or change the information contained in this prospectus, including the identity of each Registered Holder and the number of shares of Common Stock registered on its behalf. A Registered Holder may sell or otherwise transfer all, some or none of such shares of Common Stock in this offering. See "Plan of Distribution."

PLAN OF DISTRIBUTION

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

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

The Registered Holders may also sell securities under Rule 144 or any other exemption from registration under the Securities Act of 1933, as amended (the "Securities Act"), if available, rather than under this prospectus.

Broker-dealers engaged by the Registered Holders may arrange for other brokers-dealers to participate in sales. Broker-dealers may receive commissions or discounts from the Registered Holders (or, if any broker-dealer acts as agent for the purchaser of securities, from the purchaser) in amounts to be negotiated, but, except as set forth in a supplement to this Prospectus, in the case of an agency transaction not in excess of a customary brokerage commission in compliance with FINRA Rule 2121; and in the case of a principal transaction a markup or markdown in compliance with FINRA Rule 2121.

In connection with the sale of the securities or interests therein, the Registered Holders may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the securities in the course of hedging the positions they assume. The Registered Holders may also sell securities short and deliver these securities to close out their short positions, or loan or pledge the securities to broker-dealers that in turn may sell these securities. The Registered Holders may also enter into option or other transactions with broker-dealers or other financial institutions or create one or more derivative securities which require the delivery to such broker-dealer or other financial institution of securities offered by this prospectus, which securities such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

The Registered Holders and any broker-dealers or agents that are involved in selling the securities may be deemed to be "underwriters" within the meaning of the Securities Act in connection with such sales. In such event, any commissions received by such broker-dealers or agents and any profit on the resale of the securities purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act. Each

Registered Holder has informed the Company that it does not have any written or oral agreement or understanding, directly or indirectly, with any person to distribute the securities.

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

We agreed to keep this prospectus effective until the earlier of (i) the date on which the securities may be resold by the Registered Holders without registration and without regard to any volume or manner-of-sale limitations by reason of Rule 144, without the requirement for the Company to be in compliance with the current public information under Rule 144 under the Securities Act or any other rule of similar effect or (ii) all of the securities have been sold pursuant to this prospectus or Rule 144 under the Securities Act or any other rule of similar effect. The resale securities will be sold only through registered or licensed brokers or dealers if required under applicable state securities laws. In addition, in certain states, the resale securities covered hereby may not be sold unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and is complied with.

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

LEGAL MATTERS

Latham & Watkins LLP has passed upon the validity of the securities of LENSAR, Inc. offered by this prospectus and certain other legal matters related to this prospectus.

EXPERTS

The financial statements incorporated in this Prospectus by reference to the Annual Report on Form 10-K for the year ended December 31, 2022 have been so incorporated in reliance on the report (which contains an emphasis of matter paragraph relating to the Company's ability to fund its future operations as described in Note 1 to the financial statements) of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.