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

FORM S-3
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

CALCIMEDICA, INC.
(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

45-2120079
(I.R.S. Employer
Identification Number)

505 Coast Boulevard South, Suite 307
La Jolla, CA 92037
(858) 952-5500

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

A. Rachel Leheny, Ph.D.
Chief Executive Officer
CalciMedica, Inc.

505 Coast Boulevard South, Suite 307
La Jolla, CA 92037
(858) 952-5500

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Thomas A. Coll, Esq.
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San Diego, CA 92121
(858) 550-6000

From time to time after the effective date of this Registration Statement.
(Approximate date of commencement of proposed sale to the public)

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box:

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, as amended, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box:

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

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

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

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

Large accelerated filer	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input checked="" type="checkbox"/>	Smaller reporting company	<input checked="" type="checkbox"/>
		Emerging growth company	<input checked="" type="checkbox"/>

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

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

The information in this prospectus is not complete and may be changed. These securities may not be sold until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and it is not soliciting offers to buy these securities in any state where such offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED January 31, 2024

PROSPECTUS



10,735,725 shares of Common Stock

This prospectus covers the offer and resale by the selling stockholders identified in this prospectus of up to an aggregate of 10,735,725 shares of our common stock, par value \$0.0001 per share, which consists of (a) (i) 4,985,610 shares of our common stock, (ii) 306,506 shares of our common stock issuable upon the exercise of pre-funded warrants (the "Pre-Funded Warrants") to purchase shares of our common stock, (iii) 2,646,058 shares of our common stock issuable upon the exercise of Tranche A common warrants (the "Tranche A Common Warrants") to purchase shares of our common stock (or Pre-Funded Warrants in lieu thereof and, in such case, shares of our common stock issuable upon exercise of such Pre-Funded Warrants); and (iv) 2,646,058 shares of our common stock issuable upon the exercise of Tranche B common warrants (the "Tranche B Common Warrants" and together with the Tranche A Common Warrants, the "Common Warrants") to purchase shares of our common stock (or Pre-Funded Warrants in lieu thereof and, in such case, shares of our common stock issuable upon exercise of such Pre-Funded Warrants), all of which were or will be issued by us in a private placement transaction (the "Private Placement") pursuant to that certain Securities Purchase Agreement, dated as of January 19, 2024, by and among us and the purchasers named therein, and (b) (i) 75,747 shares of common stock issuable upon exercise of placement agent warrants (the "Placement Agent Warrants") to purchase shares of our common stock, (ii) 37,873 shares of common stock issuable upon exercise of Tranche A Common Warrants (or if such Tranche A Common Warrants are exercised for Pre-Funded Warrants in lieu of shares of our common stock, shares of our common stock issuable upon exercise of such Pre-Funded Warrants) and (iii) 37,873 shares of common stock issuable upon exercise of Tranche B Common Warrants (or if such Tranche B Common Warrants are exercised for Pre-Funded Warrants in lieu of shares of our common stock, shares of our common stock issuable upon exercise of such Pre-Funded Warrants), all of which were or will be issued by us to the placement agent of the Private Placement as compensation for its services.

We are not selling any shares of common stock under this prospectus and will not receive any proceeds from the sale by the selling stockholders of such shares. We will, however, receive the net proceeds of any warrants exercised for cash.

Sales of the shares by the selling stockholders may occur at fixed prices, at market prices prevailing at the time of sale, at prices related to prevailing market prices or at negotiated prices. The selling stockholders may sell shares to or through underwriters, broker-dealers or agents, who may receive compensation in the form of discounts, concessions or commissions from the selling stockholders, the purchasers of the shares, or both.

We are paying the cost of registering the shares of common stock covered by this prospectus as well as various related expenses. The selling stockholders are responsible for all broker or similar commissions related to the offer and sale of their shares.

Our common stock is listed on the Nasdaq Capital Market under the trading symbol "CALC." On January 30, 2024, the last reported sale price of our common stock was \$7.23 per share.

Investing in our securities involves a high degree of risk. You should review carefully the risks and uncertainties described under the heading "[Risk Factors](#)" on page 9 of this prospectus and any similar section contained in any amendment or supplement to this prospectus and under similar headings in the documents that are incorporated by reference into this prospectus.

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

The date of this prospectus is _____, 2024.

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission (the “SEC”). Under this registration statement, the selling stockholders may, from time to time, sell in one or more offerings the common stock described in this prospectus.

We have not authorized anyone to provide you with information other than the information that we have provided or incorporated by reference in this prospectus and your reliance on any unauthorized information or representation is at your own risk. This prospectus may be used only in jurisdictions where offers and sales of these securities are permitted. You should assume that the information appearing in this prospectus is accurate only as of the date of this prospectus and that any information we have incorporated by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus, or any sale of our common stock. Our business, financial condition and results of operations may have changed since those dates.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and any applicable prospectus supplement or free writing prospectus, including the documents we have filed with the SEC that are incorporated by reference herein and therein, contain “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933, as amended, (the “Securities Act”) and Section 21E of the Securities Exchange Act of 1934, as amended (the “Exchange Act”). These statements relate to future events or to our future operating or financial performance and involve known and unknown risks, uncertainties and other factors which may cause our actual results, performance or achievements to be materially different from any future results, performances or achievements expressed or implied by the forward-looking statements.

In some cases, you can identify forward-looking statements by terms such as “may,” “will,” “should,” “could,” “would,” “expects,” “plans,” “anticipates,” “believes,” “estimates,” “projects,” “predicts,” “potential” and similar expressions intended to identify forward-looking statements. These statements reflect our current views with respect to future events and are based on assumptions and are subject to risks and uncertainties. As such, our actual results may differ significantly from those expressed in any forward-looking statements. Given these uncertainties, you should not place undue reliance on these forward-looking statements.

We discuss many of these risks in greater detail under “Risk Factors” in this prospectus, in the “Business” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” sections incorporated by reference from our most recent Annual Report on Form 10-K and in our Quarterly Reports on Form 10-Q for the quarterly periods ended subsequent to our filing of such Annual Report on Form 10-K, as well as any amendments thereto reflected in subsequent filings with the SEC.

Also, these forward-looking statements represent our estimates and assumptions only as of the date of the document containing the applicable statement. Unless required by law, we undertake no obligation to update or revise any forward-looking statements to reflect new information or future events or developments. Thus, you should not assume that our silence over time means that actual events are bearing out as expressed or implied in such forward-looking statements. You should read this prospectus, any applicable prospectus supplement, together with the documents that we have filed with the SEC that are incorporated by reference and any free writing prospectus we have authorized for use in connection with this offering, completely and with the understanding that our actual future results may be materially different from what we expect. We qualify all of the forward-looking statements in the foregoing documents by these cautionary statements.

PROSPECTUS SUMMARY

This summary highlights selected information contained elsewhere in this prospectus or incorporated by reference in this prospectus, and does not contain all of the information that you need to consider in making your investment decision. For a more complete understanding of our company, you should carefully read and consider the more detailed information included or incorporated by reference in this prospectus and, any applicable prospectus supplement and any related free writing prospectus, including the risks of investing in our securities discussed under the heading “Risk Factors” on page 9 of this prospectus, and under similar headings in the other documents that are incorporated by reference into this prospectus. You should also carefully read the information incorporated by reference into this prospectus, including our financial statements, and the exhibits to the registration statement of which this prospectus is a part.

Unless the context requires otherwise, references in this prospectus to “CalciMedica,” “we,” “us,” “the Company” and “our” refer to CalciMedica, Inc.

Overview

We are a clinical-stage biopharmaceutical company focused on developing therapeutics that treat serious illnesses driven by inflammatory and immunologic processes and direct cellular damage. Our product candidates act upon calcium released-activated calcium (“CRAC”) channels and would constitute a new class of drugs. We are a company focused on the discovery and development of CRAC channel inhibitors. Clinical and preclinical data have demonstrated that the inhibition of CRAC channels may have a therapeutic effect based on a dual mechanism involving both anti-inflammatory and tissue cell protective activities. Our work has shown compelling evidence of the involvement of CRAC channels in a broad spectrum of both acute critical illnesses and chronic diseases that have the common thread of inflammation or immunologic activity in their pathogenesis. We intend to leverage our CRAC channel inhibitor platform to develop therapeutics for indications where this dual mechanism of action has the potential for clinical benefit.

Private Placement

On January 19, 2024, we entered into a Securities Purchase Agreement (the “Purchase Agreement”) with certain of the selling stockholders named in this prospectus, pursuant to which we sold the following securities to such selling stockholders in a private placement transaction (the “Private Placement”) (i) an aggregate of 4,985,610 shares (the “Shares”) of our common stock, par value \$0.0001 per share; (ii) to certain selling stockholders, in lieu of Shares, pre-funded warrants (the “Pre-Funded Warrants”) to purchase an aggregate of 306,506 shares of our common stock; (iii) Tranche A Common Warrants (the “Tranche A Common Warrants”) to purchase an aggregate of up to 2,646,058 shares of our common stock (or Pre-Funded Warrants in lieu thereof and, in such case, shares of our common stock issuable upon exercise of such Pre-Funded Warrants); and (iv) Tranche B Common Warrants (the “Tranche B Common Warrants” and together with the Tranche A Common Warrants, the “Common Warrants”) to purchase an aggregate of up to 2,646,058 shares of our common stock (or Pre-Funded Warrants in lieu thereof and, in such case, shares of our common stock issuable upon exercise of such Pre-Funded Warrants). The Purchase Price per Share and accompanying Common Warrants is \$3.827 (or \$4.3915 for directors, employees or consultants participating in the Private Placement) (or \$3.8269 per Pre-Funded Warrant and accompanying Common Warrants, which represents the price of \$3.827 per Share and accompanying Common Warrants minus the \$0.0001 per share exercise price of each such Pre-Funded Warrant).

The Pre-Funded Warrants have an exercise price of \$0.0001 per share, are exercisable immediately upon issuance and remain exercisable until exercised in full.

The Tranche A Common Warrants are exercisable immediately upon issuance and will expire on the earlier of (i) 5:00 p.m. (New York City time) on December 31, 2024 and (ii) 30 days following our public disclosure of

topline results from our Phase 2b clinical trial in patients with acute pancreatitis (“AP”) (also referred to as the “CARPO” trial). The Tranche A Common Warrants may be exercised to purchase shares of our common stock (or, for certain selling stockholders, in lieu of shares, Pre-Funded Warrants) at an exercise price per share equal to \$5.36 (or \$5.3599 per Pre-Funded Warrant).

The Tranche B Common Warrants are exercisable immediately upon issuance and will expire on the earlier of (i) 5:00 p.m. (New York City time) on December 31, 2026 and (ii) 30 days following our public disclosure of topline results from our planned Phase 2 clinical trial in patients with acute kidney injury (“AKI”). The Tranche B Common Warrants may be exercised to purchase shares of our common stock (or, for certain selling stockholders, in lieu of shares, Pre-Funded Warrants) at an exercise price per share equal to \$7.15 (or \$7.1499 per Pre-Funded Warrant).

A holder of Warrants may not exercise any portion of such Warrants to the extent that the holder would beneficially own more than 4.99% (or, at the election of the holder 9.99% or 19.99%) of the outstanding shares of our common stock immediately after exercise.

The initial closing of the Private Placement occurred on January 23, 2024 and the second closing is expected to occur on February 5, 2024. The purchasers in the second closing are irrevocably bound to purchase a set number of securities for a set purchase price as described above. The second closing is not subject to any closing conditions on the purchaser’s obligation to purchase the Shares and Common Warrants except our delivery of the Shares and Common Warrants to the purchasers at the second closing.

In connection with the Private Placement, we entered into a registration rights agreement (“the Registration Rights Agreement”) with certain of the selling stockholders named in this prospectus pursuant to which we agreed to prepare and file, within 30 days after the date of the Registration Rights Agreement, a registration statement with the SEC to register the resale of (i) the Shares and (ii) shares of our common stock issuable upon exercise of Common Warrants and Pre-Funded Warrants issued in the Private Placement, and to use commercially reasonable efforts to cause such registration statement to become effective within 75 days after the date of the Registration Rights Agreement.

JonesTrading Institutional Services LLC (“JonesTrading”) served as our exclusive placement agent in connection with the Private Placement and is entitled to a transaction fee of up to 5.00% of the aggregate gross proceeds of each closing of the Private Placement, payable in cash and/or, upon mutual agreement of us and JonesTrading, securities of us at each closing of the Private Placement. We agreed to pay certain expenses of JonesTrading and to issue to JonesTrading or its designees warrants (the “Placement Agent Warrants”) to purchase up to an aggregate of 67,908 shares of our common stock at the initial closing of the Private Placement and 7,839 shares of our common stock at the second closing of the Private Placement, in each case, at an exercise price equal to \$0.0001 per share. The Placement Agent Warrants are exercisable immediately upon issuance and remain exercisable until exercised in full. Each Placement Agent Warrant will be accompanied by one Tranche A Common Warrant to purchase one half of a share of our common stock and one Tranche B Common Warrant to purchase one half of a share of our common stock, for an aggregate of 75,746 shares of our common stock underlying the Common Warrants (or Pre-Funded Warrants in lieu of shares of our common stock and, in such case, shares of our common stock issuable upon exercise of such Pre-Funded Warrants). A holder of Placement Agent Warrants may not exercise any portion of such Placement Agent Warrants to the extent that the holder would beneficially own more than 9.99% (or, at the election of the holder 19.99%) of the outstanding shares of our common stock immediately after exercise. The issuance of the Placement Agent Warrants and the Common Warrants at the second closing is not subject to any closing conditions other than the occurrence of the second closing of the Private Placement.

For more information regarding the Private Placement, see our Current Report on Form 8-K filed with the SEC on [January 22, 2024](#) and incorporated herein by reference.

Corporate Information

We were incorporated in Delaware in February 2015, upon conversion of Graybug, LLC, which was organized in May 2011. On March 20, 2023, we completed a merger transaction in accordance with the terms and conditions of that certain Agreement and Plan of Merger and Reorganization, dated as of November 21, 2022, as amended on February 10, 2023, by and among us (formerly, Graybug Vision, Inc., “Graybug”), Camaro Merger Sub, Inc. (“Merger Sub”) and CalciMedica Subsidiary Inc. (formerly, CalciMedica, Inc., “Private CalciMedica”), pursuant to which Merger Sub merged with and into Private CalciMedica with Private CalciMedica surviving the merger as a wholly owned subsidiary of us (the “Merger”). In connection with the Merger, we changed our name to CalciMedica, Inc. Our principal executive offices are located at 505 Coast Boulevard South, Suite 307, La Jolla, CA 92037, and our telephone number is (858) 952-5500. Our corporate website address is www.calcimedica.com. Information contained on or accessible through our website is not a part of this prospectus, the accompanying prospectus or any related free writing prospectus, and the inclusion of our website address in this prospectus is an inactive textual reference only.

This prospectus contains references to our trademarks and to trademarks belonging to other entities. Solely for convenience, trademarks and trade names referred to in this prospectus, including logos, artwork and other visual displays, may appear without the ® or TM symbols, but such references are not intended to indicate, in any way, that their respective owners will not assert, to the fullest extent under applicable law, their rights thereto. We do not intend our use or display of other companies’ trade names or trademarks to imply a relationship with, or endorsement or sponsorship of us by, any other companies.

Implications of Being an Emerging Growth Company and Smaller Reporting Company

We are an “emerging growth company” as defined in the Jumpstart Our Business Startups Act of 2012 (the “JOBS Act”). For as long as we continue to be an emerging growth company, we may take advantage of exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies, including (1) not being required to comply with the independent auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002, as amended, (2) reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements and (3) exemptions from the requirements of holding nonbinding advisory stockholder votes on executive compensation and stockholder approval of any golden parachute payments not approved previously. In addition, as an emerging growth company, we are only required to provide two years of audited financial statements and two years of selected financial data in our periodic reports. We may take advantage of these exemptions until December 31, 2025 or until we are no longer an “emerging growth company,” whichever is earlier. We will cease to be an emerging growth company prior to the end of such period if certain earlier events occur, including if we become a “large accelerated filer” as defined in Rule 12b-2 under the Securities Exchange Act of 1934, as amended, (the “Exchange Act”), our annual gross revenues exceed \$1.235 billion or we issue more than \$1.0 billion of non-convertible debt in any three-year period.

In addition, the JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. This provision allows an emerging growth company to delay the adoption of accounting standards that have different effective dates for public and private companies until those standards would otherwise apply to private companies. We have elected to take advantage of the benefits of this extended transition period. Our financial statements may therefore not be comparable to those of companies that comply with such new or revised accounting standards. Until the date that we are no longer an emerging growth company, or we affirmatively and irrevocably opt out of the exemption provided by Section 7(a)(2)(B) of the Securities Act, upon issuance of a new or revised accounting standard that applies to our financial statements and that has a different effective date for public and private companies, we will disclose the date on which adoption is required for non-emerging growth companies and the date on which we will adopt the recently issued accounting standard.

We are also a “smaller reporting company” as defined in the Exchange Act. We may continue to be a smaller reporting company even after we are no longer an emerging growth company. We may take advantage of certain of the scaled disclosures available to smaller reporting companies and will be able to take advantage of these scaled disclosures for so long as our voting and non-voting common stock held by non-affiliates is less than \$250.0 million measured on the last business day of our second fiscal quarter, or our annual revenue is less than \$100.0 million during the most recently completed fiscal year and our voting and non-voting common stock held by non-affiliates is less than \$700.0 million measured on the last business day of our second fiscal quarter.

The Offering

Common stock offered by the selling stockholders	10,735,725 shares of our common stock, consisting of (a) (i) 4,985,610 Shares, (ii) 306,506 shares of our common stock issuable upon the exercise of the Pre-Funded Warrants, (iii) 2,646,058 shares of our common stock issuable upon the exercise of the Tranche A Common Warrants (or if such Tranche A Common Warrants are exercised for Pre-Funded Warrants in lieu of shares of our common stock, shares of our common stock issuable upon exercise of such Pre-Funded Warrants), and (iv) 2,646,058 shares of our common stock issuable upon the exercise of the Tranche B Common Warrants (or if such Tranche B Common Warrants are exercised for Pre-Funded Warrants in lieu of shares of our common stock, shares of our common stock issuable upon exercise of such Pre-Funded Warrants), all of which were or will be issued by us in the Private Placement pursuant to the Purchase Agreement, and (b) (i) 75,747 shares of common stock issuable upon exercise of Placement Agent Warrants, (ii) 37,873 shares of common stock issuable upon exercise of Tranche A Common Warrants (or if such Tranche A Common Warrants are exercised for Pre-Funded Warrants in lieu of shares of our common stock, shares of our common stock issuable upon exercise of such Pre-Funded Warrants) and (iii) 37,873 shares of common stock issuable upon exercise of Tranche B Common Warrants (or if such Tranche B Common Warrants are exercised for Pre-Funded Warrants in lieu of shares of our common stock, shares of our common stock issuable upon exercise of such Pre-Funded Warrants), all of which were or will be issued by us to JonesTrading as compensation for its services as placement agent of the Private Placement.
Terms of the offering	Each selling stockholder will determine when and how it will sell the common stock offered in this prospectus, as described in “Plan of Distribution.”
Use of proceeds	We will not receive any proceeds from the sale of the shares of common stock covered by this prospectus. We will, however, receive the net proceeds of any warrants exercised for cash.
Risk factors	See “Risk Factors” on page 9 for a discussion of factors you should carefully consider before deciding to invest in our common stock.
Nasdaq symbol	“CALC”

The selling stockholders named in this prospectus may offer and sell up to 10,735,725 shares of our common stock. Our common stock is currently listed on Nasdaq under the symbol “CALC.” Shares of our common stock that may be offered under this prospectus will be fully paid and non-assessable. We will not receive any of the proceeds of sales by the selling stockholders of any of the common stock covered by this prospectus. We will, however, receive the exercise price of \$0.0001 per share of any of the Pre-Funded Warrants or Placement Agent Warrants exercised for cash, the exercise price of \$5.36 per share (or \$5.3599 per Pre-Funded Warrant) of any of the Tranche A Common Warrants exercised for cash and the exercise price of \$7.15 per share (or \$7.1499 per Pre-Funded Warrant) of any of the Tranche B Common Warrants exercised for

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cash. Throughout this prospectus, when we refer to the shares of our common stock being registered on behalf of the selling stockholders for offer and resale, we are referring to the Shares and the shares of common stock issuable upon exercise of the Pre-Funded Warrants, Placement Agent Warrants and Common Warrants were or will be issued in connection with the Private Placement as described above. When we refer to the selling stockholders in this prospectus, we are referring to the selling stockholders identified in this prospectus and, as applicable, their permitted transferees or other successors-in-interest that may be identified in a supplement to this prospectus or, if required, a post-effective amendment to the registration statement of which this prospectus is a part.

RISK FACTORS

Investing in our securities involves a high degree of risk. Before deciding whether to invest in our securities, you should consider carefully the risks and uncertainties described under the heading “Risk Factors” contained in our most recent Annual Report on Form 10-K and in our subsequent Quarterly Reports on Form 10-Q, as filed with the SEC, as well as any amendments thereto reflected in subsequent filings with the SEC, which are incorporated by reference into this prospectus in their entirety, together with other information in this prospectus, the documents incorporated by reference and any free writing prospectus that we may authorize for use in connection with this offering. The risks described in these documents are not the only ones we face, but those that we consider to be material. There may be other unknown or unpredictable economic, business, competitive, regulatory or other factors that could have material adverse effects on our future results. Past financial performance may not be a reliable indicator of future performance, and historical trends should not be used to anticipate results or trends in future periods. If any of these risks actually occurs, our business, financial condition, results of operations or cash flow could be seriously harmed. This could cause the trading price of our common stock to decline, resulting in a loss of all or part of your investment. Please also read carefully the section below titled “Special Note Regarding Forward-Looking Statements.”

USE OF PROCEEDS

We will not receive any of the proceeds from the sale or other disposition of shares of our common stock held by the selling stockholders pursuant to this prospectus. Upon any exercise of the Pre-Funded Warrants, Placement Agent Warrants or Common Warrants for cash, the applicable selling stockholder would pay us the exercise price set forth in the Pre-Funded Warrants, Placement Agent Warrants or Common Warrants, as applicable.

We will bear the out-of-pocket costs, expenses and fees incurred in connection with the registration of shares of our common stock to be sold by the selling stockholders pursuant to this prospectus. Other than registration expenses, the selling stockholders will bear their own broker or similar commissions payable with respect to sales of shares of our common stock.

SELLING STOCKHOLDERS

The shares of our common stock being offered by the selling stockholders are those (i) that were or will be issued to the selling stockholders in connection with the Private Placement and (ii) issuable to the selling stockholders upon exercise of the Pre-Funded Warrants, Placement Agent Warrants and Common Warrants that were or will be issued to the selling stockholders in connection with the Private Placement. For additional information regarding the issuance of Shares, Pre-Funded Warrants, Placement Agent Warrants and Common Warrants, see the section “Prospectus Summary—Private Placement” above. We are registering the resale of Shares and shares of our common stock issuable upon exercise of the Pre-Funded Warrants, Placement Agent Warrants and Common Warrants in order to permit the selling stockholders to offer the shares of our common stock for resale from time to time. Except for the ownership of the Shares, Pre-Funded Warrants, Placement Agent Warrants and Common Warrants and for the selling stockholders whose other relationships are provided in “Certain Relationships and Related Party Transactions,” the selling stockholders have not had any material relationship with us within the past three years.

Beneficial ownership is determined in accordance with the rules of the SEC and includes voting or investment power with respect to our common stock. Generally, a person “beneficially owns” shares of our common stock if the person has or shares with others the right to vote those shares or to dispose of them, or if the person has the right to acquire voting or disposition rights within 60 days.

The table below lists the selling stockholders and other information regarding the beneficial ownership of the shares of common stock by each of the selling stockholders. This information has been obtained from the selling stockholders or in Schedules 13G or 13D and other public documents filed with the SEC. The second column lists the number of shares of common stock beneficially owned by each selling stockholder, based on its ownership of Shares, Pre-Funded Warrants, Placement Agent Warrants and Common Warrants, as of January 25, 2024, assuming exercise of the Pre-Funded Warrants, Placement Agent Warrants and Common Warrants held by the selling stockholders on that date (or acquirable upon the second closing of the Private Placement), without regard to any limitations on exercises. The percentage of shares owned after the offering in the fifth column is based on 10,257,077 shares of common stock outstanding as of January 25, 2024. The fourth column assumes the sale of all of the shares offered by the selling stockholders pursuant to this prospectus.

In accordance with the terms of the Registration Rights Agreement, this prospectus generally covers the resale of the sum of (i) the Shares and (ii) the maximum number of shares of our common stock issuable upon exercise of the Pre-Funded Warrants and Common Warrants that were or will be issued to the purchasers in the Private Placement. In addition, this prospectus generally covers the resale of the maximum number of shares of our common stock issuable upon exercise of the Placement Agent Warrants and Common Warrants that were or will be issued to JonesTrading as compensation for its services as placement agent in the Private Placement. In each case, this maximum amount is determined as if (x) all of the Shares, Pre-Funded Warrants, Placement Agent Warrants and Common Warrants issuable on the second closing have been issued and (y) the outstanding Pre-Funded Warrants, Placement Agent Warrants and Common Warrants were exercised in full for shares of our common stock, in each case, as of the trading day immediately preceding the date this registration statement was initially filed with the SEC, subject to adjustment as provided in the Registration Rights Agreement and without regard to any limitations on the exercise of the Pre-Funded Warrants, Placement Agent Warrants and Common Warrants. Under the terms of the Pre-Funded Warrants, Placement Agent Warrants and Common Warrants, a selling stockholder may not exercise the Pre-Funded Warrants, Placement Agent Warrant or Common Warrants to the extent such exercise would cause such selling stockholder, together with its affiliates and attribution parties, to beneficially own a number of shares of our common stock which would exceed 4.99%, 9.99% or 19.99%, as applicable to each holder, of the number of shares of our common stock outstanding following such exercise (for purposes of the denominator, immediately after giving effect to the issuance of shares of our common stock to be issued upon the applicable exercise of such Pre-Funded Warrant, Placement Agent Warrant or Common Warrant). The number of shares in the second and third columns do not reflect this limitation. The selling stockholders may sell all, some or none of their shares in this offering. See the section “Plan of Distribution.”

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Name of Selling Stockholder(1)	Beneficial Ownership Prior to This Offering	Maximum Number of Shares Being Offered	Beneficial Ownership After This Offering	
	Shares		Shares	% of Total Voting Power After This Offering
A. Rachel Leheny ⁽¹⁾	1,163,310	182,172	981,138	9.4%
Aisling Capital V, LP ⁽²⁾	1,042,228	1,042,228	—	—
Alafi Capital Co. LLC ⁽³⁾	522,604	522,604	—	—
Alyeska Master Fund, LP ⁽⁴⁾	522,604	522,604	—	—
Bering Partners II, L.P. ⁽⁵⁾	604,715	522,604	82,111	*
Bigger Capital Fund, LP ⁽⁶⁾	130,652	130,652	—	—
Deerfield Partners, L.P. ⁽⁷⁾	2,613,012	2,613,012	—	—
District 2 Capital Fund LP ⁽⁸⁾	130,652	130,652	—	—
Entities affiliated with Sanderling Ventures ⁽⁹⁾	3,073,207	1,358,768	1,714,439	16.6%
Entities affiliated with Soleus Capital ⁽¹⁰⁾	1,567,808	1,567,808	—	—
Eric W. Roberts ⁽¹¹⁾	1,135,460	182,172	953,288	9.2%
Lytton-Kambara Foundation ⁽¹²⁾	522,604	522,604	—	—
Mesa Verde Venture Partners III, LP ⁽¹³⁾	176,119	104,520	71,599	*
Robert N. Wilson ⁽¹⁴⁾	381,317	136,628	244,689	2.4%
Stonepine Capital, LP ⁽¹⁵⁾	1,045,204	1,045,204	—	—
JonesTrading Institutional Services LLC ⁽¹⁶⁾	151,493	151,493	—	—

* Denotes less than 1%.

- (1) Consists of (i) 356,989 shares of common stock held by Valence Investments SPV IV, LLC (Valence IV), (ii) 66,228 shares of common stock and 19,870 shares of common stock issuable upon exercise of warrants held by Valence Investments SPV V, LLC (Valence V), (iii) 316,109 shares of common stock held by Valence Investments SPV VI, LLC (Valence VI), (iv) 1,000 shares held by Dr. Leheny’s spouse, (v) 109,926 shares of common stock held directly by Dr. Leheny, (vi) 91,086 shares of common stock issuable upon exercise of Common Warrants held by Dr. Leheny, and (vii) 202,102 shares of common stock Dr. Leheny has the right to acquire within 60 days of January 25, 2024 pursuant to the exercise of stock options. The number in the column “Maximum Number of Shares Being Offered” consists of (i) 91,086 Shares and (ii) 91,086 shares of common stock issuable upon exercise of Common Warrants. Dr. Leheny and Mr. Roberts are the co-founders and managing directors of Valence IV, Valence V and Valence VI, have shared voting and dispositive power with respect to shares held by such entities, and disclaim beneficial ownership of such shares except to the extent of her pecuniary interest therein. The principal business address of Valence Investment LLC is 590 Madison Avenue, 21st Floor, New York, NY 10022.
- (2) Consists of (i) 521,114 Shares and (ii) 521,114 shares of common stock issuable upon exercise of Common Warrants held directly by Aisling Capital V, LP (“Aisling V”) and held indirectly by Aisling Capital Partners V, LP (“Aisling GP V”), as general partner of Aisling V, Aisling Capital Partners V LLC (“Aisling Partners V”), as general partner of Aisling GP V, and each of the individual managing members of Aisling Partners V. The individual managing members (collectively, the “Managers”) of Aisling Partners V are Dr. Andrew Schiff and Steve Elms. Aisling GP V, Aisling Partners V and the Managers share voting and dispositive power over the shares directly held by Aisling V. Each of Aisling GP V, Aisling Partners V and the Managers may be deemed to be the beneficial owner of the securities listed above only to the extent of its pecuniary interest therein. The above information shall not be deemed an admission that any of Aisling GP V, Aisling Partners V or any of the Managers is the beneficial owner of any securities reported herein. The address of the principal business offices of each of these entities and persons is 489 Fifth Avenue, 10th Floor, New York, NY 10017. The shares of common stock issuable upon exercise of the Common Warrants held by Aisling V are subject to a beneficial ownership limitation of 4.99%.
- (3) Consists of (i) 261,302 Shares and (ii) 261,302 shares of common stock issuable upon exercise of Common Warrants.

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- (4) Consists of (i) 261,302 Shares and (ii) 261,302 shares of common stock issuable upon exercise of Common Warrants. Alyeska Investment Group, L.P., the investment manager of Alyeska Master Fund, L.P. (the “Selling Securityholder”), has voting and investment control of the shares held by the Selling Securityholder. Anand Parekh is the Chief Executive Officer of Alyeska Investment Group, L.P. and may be deemed to be the beneficial owner of such shares. Mr. Parekh, however, disclaims any beneficial ownership of the shares held by the Selling Securityholder. The registered address of Alyeska Master Fund, L.P. is at c/o Maples Corporate Services Limited, P.O. Box 309, Ugland House, South Church Street George Town, Grand Cayman, KY1-1104, Cayman Islands. Alyeska Investment Group, L.P. is located at 77 W. Wacker, Suite 700, Chicago IL 60601.
- (5) Consists of (i) 82,111 shares of common stock, (ii) 261,302 Shares and (iii) 261,302 shares of common stock issuable upon exercise of Common Warrants. The number in the column “Maximum Number of Shares Being Offered” consists of (i) 261,302 Shares and (ii) 261,302 shares of common stock issuable upon exercise of Common Warrants.
- (6) Consists of (i) 65,326 Shares and (ii) 65,326 shares of common stock issuable upon exercise of Common Warrants.
- (7) Consists of (i) 1,000,000 Shares, (ii) 306,506 shares of common stock issuable upon exercise of Pre-Funded Warrants and (iii) 1,306,506 shares of common stock issuable upon exercise of Common Warrants held by Deerfield Partners, L.P. The general partner of Deerfield Partners, L.P. is Deerfield Mgmt, L.P. Deerfield Management Company, L.P. is the investment manager of Deerfield Partners, L.P. James E. Flynn is the sole member of the general partner of each of Deerfield Mgmt, L.P. and Deerfield Management Company, L.P. Under the terms of the Pre-Funded Warrants and Common Warrants, the selling stockholder may not exercise the Pre-Funded Warrants or Common Warrants to the extent such exercise would cause such selling stockholder, together with its affiliates and attribution parties, to beneficially own a number of shares of common stock which would exceed 9.99% of the number of shares of common stock outstanding following such exercise (for purposes of the denominator, immediately after giving effect to the issuance of shares of common stock to be issued upon the applicable exercise of such Pre-Funded Warrant or Common Warrant) (the “Ownership Cap”). Accordingly, notwithstanding the number of shares reported, the selling stockholder disclaims beneficial ownership of the shares of common stock issuable upon exercise of such Pre-Funded Warrants and Common Warrants to the extent that upon such exercise the number of shares beneficially owned by the selling stockholder would exceed the Ownership Cap.
- (8) Consists of (i) 65,326 Shares and (ii) 65,326 shares of common stock issuable upon exercise of Common Warrants.
- (9) Consists of (i) 946,744 shares of common stock and 265,252 shares of common stock issuable upon exercise of warrants held by Sanderling Venture Partners VI, LP, (ii) 727,433 shares of common stock and 168,841 shares of common stock issuable upon exercise of warrants held by Sanderling Venture Partners VI Co-Investment Fund, L.P., (iii) 21,602 shares of common stock and 4,340 shares of common stock issuable upon exercise of warrants held by Sanderling Ventures Management VI, (iv) 30,292 shares of common stock and 29,024 shares of common stock issuable upon exercise of warrants held by Sanderling Ventures Management VII, (v) 114,260 shares of common stock and 56,484 shares of common stock issuable upon exercise of warrants held by Sanderling Ventures VII (Canada), LP, (vi) 27,609 shares of common stock and 14,593 shares of common stock issuable upon exercise of warrants held by Sanderling Ventures VII Annex Fund, L.P., (vii) 435,148 shares of common stock and 215,245 shares of common stock issuable upon exercise of warrants held by Sanderling Ventures VII, L.P., (viii) 7,456 shares of the common stock held by Sanderling VI Beteiligungs GmbH & Co KG and (ix) 8,884 shares of common stock held by Sanderling VI Limited Partnership. Mr. Middleton is a managing director at Sanderling Ventures. Mr. Middleton has shared voting and dispositive power with respect to the foregoing shares beneficially owned by Sanderling Ventures and disclaims beneficial ownership of such shares except to the extent of his respective pecuniary interest therein. The address of Sanderling Ventures is 1300 S. El Camino Real, Suite 203, San Mateo, CA 94402.
- (10) Consists of (i) 391,952 Shares held by Soleus Capital Master Fund, L.P. (“Soleus Master Fund”), (ii) 391,952 shares of common stock issuable upon exercise of Common Warrants held by Soleus Master Fund, (iii) 391,952 Shares that will be issued to Soleus Private Equity Fund III, L.P. (“Soleus PE Fund III”) on the second closing of the Private Placement and (iv) 391,952 shares of common stock issuable upon exercise of Common Warrants that will be issued to Soleus PE Fund III on the second closing of the Private Placement.

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Soleus Capital, LLC (“Soleus Capital”) is the sole general partner of Soleus Master Fund and thus holds voting and dispositive power over the shares held by Soleus Master Fund. Soleus Capital Group, LLC (“SCG”) is the sole managing member of Soleus Capital. Guy Levy is the sole managing member of SCG. Each of SCG, Soleus Capital and Mr. Levy disclaims beneficial ownership of these securities held by Soleus Master Fund, except to the extent of his or their respective pecuniary interests therein. Soleus Private Equity GP III, LLC is the sole general partner of Soleus PE Fund III. Soleus PE GP III, LLC is the sole manager of Soleus Private Equity GP III, LLC. Mr. Levy is the sole managing member of Soleus PE GP III, LLC. Each of Mr. Levy, Soleus PE GP III, LLC and Soleus Private Equity GP III, LLC disclaims beneficial ownership of the securities held by the Soleus PE Fund III, except to the extent of their respective pecuniary interests therein.

- (11) Consists of (i) 356,989 shares of common stock held by Valence Investments SPV IV, LLC (Valence IV), (ii) 66,228 shares of common stock and 19,870 shares of common stock issuable upon exercise of warrants held by Valence Investments SPV V, LLC (Valence V), (iii) 316,109 shares of common stock held by Valence Investments SPV VI, LLC (Valence VI), (iv) 111,373 shares of common stock held directly by Mr. Roberts, 91,086 of which will be issued on the second closing of the Private Placement, (v) 10,661 shares of common stock held by IRA Financial Trust Company, CFBO Eric W. Roberts, (vi) 5,223 shares of common stock held by FMTC Custodian—Roth IRA FBO Eric W. Roberts, (vii) 35,894 shares of common stock held by Oppenheimer & Co Inc. Custodian FBO Eric W Roberts Roth IRA, (viii) 2,142 shares of common stock that Mr. Roberts has the right to acquire within 60 days of January 25, 2024 pursuant to the exercise of warrants held by Mr. Roberts, (ix) 91,086 shares of common stock issuable upon exercise of Common Warrants that will be issued to Mr. Roberts on the second closing of the Private Placement, and (x) 119,885 shares of common stock Mr. Roberts has the right to acquire within 60 days of January 25, 2024 pursuant to the exercise of stock options. The number in the column “Maximum Number of Shares Being Offered” consists of (i) 91,086 Shares that will be issued on the second closing and (ii) 91,086 shares of common stock issuable upon exercise of Common Warrants that will be issued on the second closing. Dr. Leheny and Mr. Roberts are the co-founders and managing directors of Valence IV, Valence V and Valence VI, have shared voting and dispositive power with respect to shares held by such entities, and disclaim beneficial ownership of such shares except to the extent of his pecuniary interest therein. The principal business address of Valence Investment LLC is 590 Madison Avenue, 21st Floor, New York, NY 10022.
- (12) Consists of (i) 261,302 Shares and (ii) 261,302 shares of common stock issuable upon exercise of Common Warrants.
- (13) Consists of (i) 71,599 shares of common stock, (ii) 52,260 Shares and (iii) 52,260 shares of common stock issuable upon exercise of Common Warrants. The number in the column “Maximum Number of Shares Being Offered” consists of (i) 52,260 Shares and (ii) 52,260 shares of common stock issuable upon exercise of Common Warrants.
- (14) Consists of (i) 250,475 shares of common stock held by Mr. Wilson, (ii) 17,184 shares of common stock that Mr. Wilson has the right to acquire within 60 days of January 25, 2024 pursuant to the exercise of warrants held by Mr. Wilson, (iii) 68,314 shares of common stock issuable upon exercise of Common Warrants held by Mr. Wilson, and (iv) 45,344 shares of common stock that Mr. Wilson has the right to acquire within 60 days of January 25, 2024 pursuant to the exercise of stock options. The number in the column “Maximum Number of Shares Being Offered” consists of (i) 68,314 Shares and (ii) 68,314 shares of common stock issuable upon exercise of Common Warrants.
- (15) Consists of (i) 522,602 Shares and (ii) 522,602 shares of common stock issuable upon exercise of Common Warrants.
- (16) Consists of (i) 67,908 shares of common stock issuable upon exercise of a Placement Agent Warrant, (ii) 7,839 shares of common stock issuable upon exercise of a Placement Agent Warrant that will be issued on the second closing of the Private Placement; (iii) 67,908 shares of common stock issuable upon exercise of Common Warrants and (iv) 7,838 shares of common stock issuable upon exercise of Common Warrants that will be issued on the second closing of the Private Placement.

Certain Relationships and Related Party Transactions

The description set forth above under “Prospectus Summary—Private Placement” is incorporated herein by reference.

Other than (i) A. Rachel Leheny, who is our Chief Executive Officer and a member of our board of directors; (ii) Eric W. Roberts, who is our Chief Business Officer and a member of our board of directors, (iii) Robert N. Wilson, who is the chairman of our board of directors; and (iv) Fred Middleton, who is a member of our board of directors and a director and managing member of entities affiliated with Sanderling Ventures as described above in footnote (9), none of the selling stockholders or any persons having control over such selling stockholders has held any position or office with us or our affiliates within the last three years or has had a material relationship with us or any of our predecessors or affiliates within the past three years, other than as a result of the ownership of our shares or other securities or, in the case of JonesTrading, its service to us as placement agent in the Private Placement as described under “Prospectus Summary—Private Placement”.

PLAN OF DISTRIBUTION

Each selling stockholder and any of their pledgees, assignees and successors-in-interest may, from time to time, sell any or all of their respective shares of our common stock covered hereby on Nasdaq 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 selling stockholder 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 shares of our common stock 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;
- in transactions through broker-dealers that agree with the selling stockholders to sell a specified number of such shares of our common stock at a stipulated price per security;
- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;
- settlement of short trades entered into after the date of this prospectus;
- by pledge to secure debts and other obligations;
- a combination of any such methods of sale; or
- any other method permitted pursuant to applicable law.

A selling stockholder may also sell securities under Rule 144 or any other exemption from registration under the Securities Act, if available, rather than under this prospectus.

Broker-dealers engaged by a selling stockholder may arrange for other brokers-dealers to participate in sales. Broker-dealers may receive commissions or discounts from a selling stockholder (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.

A selling stockholder may 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 the shares of our common stock offered by this prospectus, which shares such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

A selling stockholder and any broker-dealers or agents that are involved in selling the shares of our common stock 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 selling stockholder has informed us that it does not have any written or oral agreement or understanding, directly or indirectly, with any person to distribute the shares of common stock.

We are required to pay certain fees and expenses incurred by us incident to the registration of the shares of our common stock covered hereby. We have agreed to indemnify any selling stockholder against certain losses, claims, damages and liabilities, including liabilities under the Securities Act.

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We agreed to keep this prospectus effective until the earlier of (i) the date on which the securities may be resold by the selling stockholder without registration and without regard to any volume or manner-of-sale limitations by reason of Rule 144, without the requirement for us 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.

Under applicable rules and regulations under the Exchange Act, any person engaged in the distribution of the shares of our common stock covered hereby may not simultaneously engage in market making activities with respect to our common stock for the applicable restricted period, as defined in Regulation M, prior to the commencement of the distribution. In addition, the selling stockholder 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 our common stock by a selling stockholder or any other person. We will make copies of this prospectus available to a selling stockholder 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 and reliance on Rule 172 under the Securities Act).

LEGAL MATTERS

Cooley LLP, San Diego, California, will pass upon the validity of the shares of our common stock offered by this prospectus.

EXPERTS

Ernst & Young LLP, independent registered public accounting firm, has audited the consolidated financial statements of CalciMedica, Inc. (formerly Graybug Vision, Inc.) included in our Annual Report on Form 10-K for the year ended December 31, 2022, as amended by Amendment No. 1 on Form 10-K/A, as set forth in their report, which is incorporated by reference in this prospectus and elsewhere in the registration statement. Our financial statements are incorporated by reference in reliance on Ernst & Young LLP's report, given on their authority as experts in accounting and auditing.

The financial statements of CalciMedica, Inc. at December 31, 2022 and 2021, and for each of the two years in the period ended December 31, 2022, appearing in CalciMedica, Inc.'s Current Report on Form 8-K, dated August 11, 2023 have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their report thereon, included therein, and incorporated herein by reference. Such financial statements are incorporated herein by reference in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

This prospectus is part of the registration statement on Form S-3 we filed with the SEC under the Securities Act and does not contain all the information set forth in the registration statement. Whenever a reference is made in this prospectus to any of our contracts, agreements or other documents, the reference may not be complete and you should refer to the exhibits that are a part of the registration statement or the exhibits to the reports or other documents incorporated by reference into this prospectus for a copy of such contract, agreement or other document. Because we are subject to the information and reporting requirements of the Exchange Act, we file annual, quarterly and current reports, proxy statements and other information with the SEC. Our SEC filings are available to the public over the Internet at the SEC's website at <http://www.sec.gov>. Our website address is <http://www.calcimedica.com>. Information contained on or accessible through our website is not a part of this prospectus and is not incorporated by reference herein, and the inclusion of our website address in this prospectus is an inactive textual reference only.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to “incorporate by reference” information from other documents that we file with it, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus. Information in this prospectus supersedes information incorporated by reference that we filed with the SEC prior to the date of this prospectus, while information that we file later with the SEC will automatically update and supersede the information in this prospectus. We incorporate by reference into this prospectus and the registration statement of which this prospectus is a part the information or documents listed below that we have filed with the SEC (other than current reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits filed on such form that are related to such items unless such Form 8-K expressly provides to the contrary):

- our Definitive Proxy Statement on Schedule 14A, filed with the SEC on [March 3, 2023](#);
- our Annual Report on Form 10-K for the year ended December 31, 2022, filed with the SEC on [March 9, 2023](#), as amended by Amendment No. 1 to our Annual Report on Form 10-K/A for the year ended December 31, 2022, filed with the SEC on [April 4, 2023](#);
- our Quarterly Reports of Form 10-Q for the quarterly periods ended March 31, 2023, June 30, 2023 and September 30, 2023, filed with the SEC on [May 12, 2023](#), [August 11, 2023](#) and [November 9, 2023](#), respectively;
- our Current Reports on Form 8-K (other than information furnished rather than filed), which were filed with the SEC on [February 9, 2023](#), [February 16, 2023](#), [March 3, 2023](#), [March 15, 2023](#), [March 22, 2023](#), [April 4, 2023](#) (as amended [May 12, 2023](#)), [May 5, 2023](#), [May 12, 2023](#), [May 15, 2023](#), [June 27, 2023](#), [August 10, 2023](#), [August 11, 2023](#), [November 2, 2023](#), and [January 22, 2024](#) (as amended [January 24, 2024](#)); and
- the description of our common stock in our registration statement on Form 8-A filed with the SEC on [September 21, 2020](#), including any amendments or reports filed for the purpose of updating such description.

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

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

CalciMedica, Inc.
505 Coast Boulevard South, Suite 307
La Jolla, California 92037
Attn: Investor Relations
(858) 952-5500

PART II
INFORMATION NOT REQUIRED IN THE PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution

The following table sets forth an estimate of the fees and expenses, other than the underwriting discounts and commissions, payable by us in connection with the issuance and distribution of the securities being registered. All the amounts shown are estimates, except for the SEC registration fee.

	Amount
SEC registration fee	\$ 8,239.89
Financial Industry Regulatory Authority filing fee	(1)
Accounting fees and expenses	10,000.00
Legal fees and expenses	50,000.00
Miscellaneous fees and expenses	6,760.11
Total	<u>\$ 75,000.00</u>

(1) This fee is calculated based on the securities offered and the number of issuances and accordingly cannot be estimated at this time.

Item 15. Indemnification of Directors and Officers

Section 145 of the Delaware General Corporation Law (the “DGCL”), empowers a Delaware corporation to indemnify any persons who are, or are threatened to be made, parties to any threatened, pending, or completed legal action, suit, or proceeding, whether civil, criminal, administrative, or investigative (other than an action by or in the right of such corporation), by reason of the fact that such person was an officer or director of such corporation, or is or was serving at the request of such corporation as a director, officer, employee, or agent of another corporation or enterprise. The indemnity may include expenses (including attorneys’ fees), judgments, fines, and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit, or proceeding, provided that such officer or director acted in good faith and in a manner he reasonably believed to be in or not opposed to the corporation’s best interests, and, for criminal proceedings, had no reasonable cause to believe his conduct was illegal. A Delaware corporation may indemnify officers and directors in an action by or in the right of the corporation under the same conditions, except that no indemnification is permitted without judicial approval if the officer or director is adjudged to be liable to the corporation in the performance of his duty. Where an officer or director is successful on the merits or otherwise in the defense of any action referred to above, the corporation must indemnify him against the expenses which such officer or director actually and reasonably incurred.

Our certificate of incorporation and bylaws provide that we will have the power to indemnify, to the extent permitted by the DGCL, as it presently exists or may hereafter be amended from time to time, any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (a “Proceeding”) by reason of the fact that he or she is or was a director, officer, employee or agent of the Corporation 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, including service with respect to employee benefit plans, against expenses (including attorneys’ fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with any such Proceeding. The bylaws also provide that the right of directors and officers to indemnification shall be a contract right and shall not be exclusive of any other right now possessed or hereafter acquired under any statute, provision of the certificate of incorporation, bylaw, agreement, vote of stockholders or disinterested directors or otherwise. The bylaws also permit us to secure insurance on behalf of any officer, director, employee, or other agent for any liability arising out of his or her actions in such capacity, regardless of whether the bylaws would permit indemnification of any such liability.

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Section 102(b)(7) of the DGCL provides that directors shall not be personally liable for monetary damages for breaches of their fiduciary duty as directors except for (i) breaches of their duty of loyalty to us or our stockholders, (ii) acts or omissions not in good faith or which involve intentional misconduct or knowing violations of law, (iii) certain transactions under Section 174 of the DGCL (unlawful payment of dividends or unlawful stock purchases or redemptions), or (iv) transactions from which a director derives an improper personal benefit. Our certificate of incorporation includes such a provision. The effect of this provision is to eliminate the personal liability of directors for monetary damages or actions involving a breach of their fiduciary duty of care, including any actions involving gross negligence.

In addition, we have entered into indemnification agreements with our directors and officers that require us, among other things, to indemnify them against certain liabilities that may arise by reason of their status or service, so long as the indemnitee acted in good faith and in a manner the indemnitee reasonably believed to be in or not opposed to the best interests of us, and, with respect to any criminal action or proceeding, the indemnitee had no reasonable cause to believe his or her conduct was unlawful. We also maintain director and officer liability insurance to insure our directors and officers against the cost of defense, settlement or payment of a judgment under specified circumstances.

Item 16. Exhibits

<u>Exhibit Number</u>	<u>Description</u>	<u>Form</u>	<u>File No.</u>	<u>Exhibit Filing Date</u>	<u>Exhibit No.</u>	<u>Filed/ Furnished Herewith</u>
4.1	<u>Amended and Restated Certificate of Incorporation of the Registrant.</u>	8-K	001-39538	March 22, 2023	3.1	
4.2	<u>Certificate of Amendment, dated March 20, 2023 to Amended and Restated Certificate of Incorporation of the Registrant.</u>	8-K	001-39538	March 22, 2023	3.2	
4.3	<u>Restated Bylaws of the Registrant.</u>	10-Q	001-39538	November 12, 2020	3.2	
4.4	<u>Form of Common Stock Certificate of the Registrant.</u>	S-1/A	333-248611	September 21, 2020	4.1	
4.5	<u>Form of Registration Rights Agreement, dated November 21, 2022, by and among CalciMedica, Inc. and the several purchasers signatory thereto.</u>	8-K	001-39538	March 22, 2023	4.1	
4.6	<u>Form of Warrant to Purchase Shares of Series D Convertible Preferred Stock of CalciMedica, Inc.</u>	8-K	001-39538	March 22, 2023	4.2	
4.7	<u>Warrant to Purchase Common Stock dated as of November 9, 2020, issued by CalciMedica, Inc. to SG Dan Equity Holdings, LLC.</u>	8-K	001-39538	March 22, 2023	4.3	
4.8	<u>Warrant to Purchase Common Stock, dated as of October 18, 2022, issued by CalciMedica, Inc. to SG Dan Equity Holdings, LLC.</u>	8-K	001-39538	March 22, 2023	4.4	

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<u>Exhibit Number</u>	<u>Description</u>	<u>Form</u>	<u>File No.</u>	<u>Exhibit Filing Date</u>	<u>Exhibit No.</u>	<u>Filed/ Furnished Herewith</u>
4.9	Warrant to Purchase Common Stock, dated as of October 18, 2022, issued by CalciMedica, Inc. to Eric Roberts.	8-K	001-39538	March 22, 2023	4.5	
4.10	Warrant to Purchase Common Stock, dated as of October 25, 2022, issued by CalciMedica, Inc. to Fred Middleton.	8-K	001-39538	March 22, 2023	4.6	
4.11	Form of Warrant to Purchase Shares of Series B Convertible Preferred Stock of CalciMedica, Inc.	S-3	333-271115	April 4, 2023	4.9	
4.12*	Securities Purchase Agreement, dated January 19, 2024, by and among CalciMedica, Inc. and the persons party thereto (Corrected).	8-K	001-39538	January 24, 2024	10.1	
4.13	Form of Registration Rights Agreement by and among CalciMedica, Inc. and the persons party thereto	8-K	001-39538	January 24, 2024	10.2	
4.14	Form of Tranche A Common Warrant.	8-K	001-39538	January 24, 2024	4.1	
4.15	Form of Tranche B Common Warrant.	8-K	001-39538	January 24, 2024	4.2	
4.16	Form of Pre-Funded Warrant.	8-K	001-39538	January 24, 2024	4.3	
4.17	Form of Placement Agent Warrant.	8-K	001-39538	January 24, 2024	4.4	
5.1	Opinion of Cooley LLP.					X
23.1	Consent of Independent Registered Public Accounting Firm.					X
23.2	Consent of Independent Registered Public Accounting Firm.					X
23.3	Consent of Cooley LLP (included in Exhibit 5.1).					X
24.1	Power of Attorney (included on signature page).					X
107	Filing Fee Table					X

* Schedules and exhibits have been omitted pursuant to Item 601(a)(5) of Regulation S-K. A copy of any omitted schedule and/or exhibit will be furnished to the SEC upon request.

Item 17. Undertakings

The undersigned registrant hereby undertakes:

(a) (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) to include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;

(ii) to reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a

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fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

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

provided, however, that paragraphs (a)(1)(i), (a)(1)(ii) and (a)(1)(iii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

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

(4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:

(i) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

(ii) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.

(b) That, for the purpose of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

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(c) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act of 1933 and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of La Jolla, State of California, on January 31, 2024.

CALCIMEDICA, INC.

By: /s/ A. Rachel Leheny, Ph.D.

A. Rachel Leheny, Ph.D.

Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints A. Rachel Leheny, Ph.D. and Daniel Geffken, and each of them, as true and lawful attorneys-in-fact and agents, with full powers of substitution and resubstitution, for them and in their name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this registration statement, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, and generally to do all such things in their names and behalf in their capacities as officers and directors to enable CalciMedica, Inc. to comply with the provisions of the Securities Act of 1933, as amended, and all requirements of the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he might or could do in person, ratifying and confirming all that said attorneys-in-fact and agents, or any of them, or their or his substitutes or substitute, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed below by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
<u>/s/ A. RACHEL LEHENY, PH.D.</u> A. Rachel Leheny, Ph.D.	Chief Executive Officer and Director (<i>Principal Executive Officer</i>)	January 31, 2024
<u>/s/ DANIEL GEFFKEN</u> Daniel Geffken	Interim Chief Financial Officer (<i>Principal Financial and Accounting Officer</i>)	January 31, 2024
<u>/s/ ROBERT N. WILSON</u> Robert N. Wilson	Chairman	January 31, 2024
<u>/s/ ERIC BJERKHOLT</u> Eric Bjerkholt	Director	January 31, 2024
<u>/s/ FREDERIC GUERARD, PHARM.D.</u> Frederic Guerard, Pharm.D.	Director	January 31, 2024

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Signature

Title

Date

/s/ ERIC W. ROBERTS
Eric W. Roberts

Director

January 31, 2024

/s/ ALLAN SHAW
Allan Shaw

Director

January 31, 2024

II-7



Carlos A. Ramirez
T: +1 858 550 6157
cramirez@cooley.com

January 31, 2024

CalciMedica, Inc.
505 Coast Boulevard South, Suite 307
La Jolla, CA 92037

Re: CalciMedica, Inc. – Registration Statement on Form S-3

Ladies and Gentlemen:

We have acted as counsel to CalciMedica, Inc., a Delaware corporation (the “*Company*”), in connection with the filing by the Company under the Securities Act of 1933, as amended (the “*Securities Act*”) of a Registration Statement on Form S-3 (the “*Registration Statement*”) with the Securities and Exchange Commission (the “*Commission*”), including the prospectus included in the Registration Statement (the “*Prospectus*”), covering the registration for resale of up to 10,735,725 shares of the Company’s common stock, par value \$0.0001 per share (the “*Common Stock*”), consisting of:

(a) up to 10,584,232 shares of Common Stock, consisting of (i) 4,985,610 (the “*Shares*”) shares of Common Stock, 4,502,572 of which are outstanding and 483,038 of which are to be issued on the second closing of the Private Placement (as defined below) (the “*Second Closing Shares*”), (ii) up to 306,506 shares of Common Stock (the “*Purchaser Pre-Funded Warrant Shares*”) issuable upon the exercise of outstanding pre-funded warrants to purchase shares of Common Stock (the “*Pre-Funded Warrants*”); (iii) up to 2,646,058 shares of Common Stock (the “*Purchaser Tranche A Warrant Shares*”) issuable upon the exercise of Tranche A common warrants (the “*Tranche A Warrants*”) to purchase shares of Common Stock (or pre-funded warrants in lieu thereof and, in such case, shares of Common Stock issuable upon exercise of such pre-funded warrants), 2,404,539 of which are outstanding and 241,519 of which are to be issued on the second closing of the Private Placement and (iv) up to 2,646,058 shares of Common Stock (the “*Purchaser Tranche B Warrant Shares*”) issuable upon the exercise of Tranche B common warrants (the “*Tranche B Warrants*”) and, together with the Tranche A Warrants, the “*Common Warrants*”) to purchase shares of Common Stock (or pre-funded warrants in lieu thereof and, in such case, shares of Common Stock issuable upon exercise of such pre-funded warrants), 2,404,539 of which are outstanding and 241,519 of which are to be issued on the second closing of the Private Placement, all of which shares and warrants specified in clauses (i), (ii), (iii) and (iv) of this paragraph (a) were issued or are to be issued pursuant to that certain Securities Purchase Agreement, dated as of January 19, 2024 (the “*Purchase Agreement*”), by and among the Company and the investors identified therein (such transaction, the “*Private Placement*”); and

(b) up to 151,493 shares of Common Stock, consisting of (i) up to 75,747 shares of Common Stock (the “*Agent Warrant Shares*”) issuable upon exercise of placement agent warrants (together with the Common Warrants and the Pre-Funded Warrants, the “*Warrants*”) to purchase shares of Common Stock, 67,908 of which are outstanding and 7,839 of which are to be issued on the second closing of the Private Placement; (ii) up to 37,873 shares of Common Stock (together with the Purchaser Tranche A Warrant Shares, the “*Tranche A Warrant Shares*”) issuable upon exercise of Tranche A Warrants (or if such Tranche A Warrants are exercised for pre-funded warrants in lieu of shares of Common Stock, shares of Common Stock issuable upon exercise of such pre-funded

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warrants), 33,954 of which warrants are outstanding and 3,919 of which are to be issued on the second closing of the Private Placement; and (iii) up to 37,873 shares of Common Stock (together with the Purchaser Pre-Funded Warrant Shares, the Agent Warrant Shares, the Tranche A Warrant Shares and the Purchaser Tranche B Warrant Shares, the “*Warrant Shares*”) issuable upon exercise of Tranche B Warrants (or if such Tranche B Warrants are exercised for pre-funded warrants in lieu of shares of Common Stock, shares of Common Stock issuable upon exercise of such pre-funded warrants), 33,954 of which warrants are outstanding and 3,919 of which are to be issued on the second closing of the Private Placement, all of which warrants specified in clauses (i), (ii) and (iii) of this paragraph (b) were or are to be issued to the placement agent of the Private Placement as compensation for its services pursuant to that certain Engagement Letter, dated as of December 8, 2023 (the “*Engagement Letter*”), by and among the Company and JonesTrading Institutional Services LLC.

In connection with this opinion, we have examined and relied upon the Registration Statement, the Prospectus, the Warrants, the Purchase Agreement, the Engagement Letter, the Company’s certificate of incorporation and bylaws, each as currently in effect, and such other records, documents, opinions, certificates, memoranda and instruments as in our judgment are necessary or appropriate to enable us to render the opinion expressed below. We have assumed the genuineness of all signatures; the authenticity of all documents submitted to us as originals; the conformity to originals of all documents submitted to us as copies; the accuracy, completeness and authenticity of certificates of public officials and the due authorization, execution and delivery of all documents by all persons other than the Company where authorization, execution and delivery are prerequisites to the effectiveness thereof. As to certain factual matters, we have relied upon a certificate of an officer of the Company and have not independently verified such matters.

Our opinion is expressed solely with respect to the General Corporation Law of the State of Delaware. We express no opinion to the extent that any other laws are applicable to the subject matter hereof and express no opinion and provide no assurance as to compliance with any federal or state antifraud law, rule or regulation relating to securities or to the sale or issuance thereof.

With respect to the Warrant Shares, we express no opinion to the extent that future issuances of securities of the Company, adjustments to outstanding securities of the Company or other matters cause the Warrants to be exercisable for more shares of Common Stock than the number available for issuance by the Company. Further, we have assumed the exercise price of the Warrants will not be adjusted to an amount below the par value per share of the Common Stock.

On the basis of the foregoing, and in reliance thereon, we are of the opinion that (i) the Shares (other than the Second Closing Shares) are validly issued, fully paid and nonassessable, (ii) the Second Closing Shares, when sold and issued in accordance with the Purchase Agreement, will be validly issued, fully paid and nonassessable and (iii) the Warrant Shares, when sold and issued in accordance with the terms of the Warrants, will be validly issued, fully paid and nonassessable.

Our opinion is limited to the matters expressly set forth in this letter, and no opinion should be implied, or may be inferred, beyond the matters expressly stated. This opinion speaks only as to law and facts in effect or existing as of the date hereof, and we undertake no obligation or responsibility to update or supplement this letter to reflect any facts or circumstances that may hereafter come to our attention or any changes in law that may hereafter occur.



January 31, 2024

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We hereby consent to the reference to our firm under the caption “Legal Matters” in the Prospectus and to the filing of this opinion as an exhibit to the Registration Statement. In giving such consent, we do not thereby admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission thereunder.

Sincerely,

COOLEY LLP

By: /s/ Carlos A. Ramirez

Carlos A. Ramirez

Cooley LLP 10265 Science Center Drive San Diego, CA 92121-1117
t: +1 858 550 6000 f: +1 858 550-6420 cooley.com

Consent of Independent Registered Public Accounting Firm

We consent to the reference to our firm under the caption “Experts” in the Registration Statement (Form S-3) and related Prospectus of CalciMedica, Inc. (formerly Graybug Vision, Inc.) for the registration of up to 10,735,725 shares of its common stock and to the incorporation by reference therein of our report dated March 8, 2023, with respect to the consolidated financial statements of CalciMedica, Inc. (formerly Graybug Vision, Inc.) included in its Annual Report (Form 10-K) for the year ended December 31, 2022, as amended on April 4, 2023 by Amendment No.1 on Form 10-K/A, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

San Mateo, California
January 31, 2024

Consent of Independent Registered Public Accounting Firm

We consent to the reference to our firm under the caption “Experts” in the Registration Statement (Form S-3) and related Prospectus of CalciMedica, Inc. for the registration of up to 10,735,725 shares of its common stock and to the incorporation by reference therein of our report dated April 4, 2023 (except for Note 2, as to which the date is May 12, 2023, and the effects of the exchange ratio described in Note 3, as to which the date is August 11, 2023), with respect to the financial statements of CalciMedica, Inc. included in its Current Report (Form 8-K) dated August 11, 2023, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

San Diego, California
January 31, 2024

Calculation of Filing Fee Tables

Form S-3
(Form Type)

CalciMedica, Inc.
(Exact Name of Registrant as Specified in its Charter)

Table 1: Newly Registered Securities

	Security Type	Security Class Title	Fee Calculation or Carry Forward Rule	Amount Registered(1)	Proposed Maximum Offering Price Per Unit	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee
Fees to Be Paid	Equity	Common stock, par value \$0.0001 per share	Other	10,735,725(2)	\$5.20(3)	\$55,825,770.00	\$0.00014760	\$8,239.89
		Total Offering Amounts				\$55,825,770.00		\$8,239.89
		Total Fee Offsets						—
		Net Fee Due						\$8,239.89

- (1) The shares of common stock will be offered for resale by the selling stockholders pursuant to the prospectus contained herein. Pursuant to Rule 416 under the Securities Act of 1933, as amended (the "Securities Act"), this registration statement also covers any additional number of shares of common stock issuable upon stock splits, stock dividends, or other distribution, recapitalization or similar events with respect to the shares of common stock being registered pursuant to this registration statement.
- (2) This registration statement registers the resale of (a) (i) 4,985,610 shares of common stock of the Registrant, (ii) 306,506 shares of common stock of the Registrant issuable upon the exercise of Pre-Funded Warrants to purchase shares of common stock, (iii) 2,646,058 shares of common stock of the Registrant issuable upon the exercise of Tranche A Common Warrants to purchase shares of common stock and (iv) 2,646,058 shares of common stock of the Registrant issuable upon the exercise of Tranche B Common Warrants to purchase shares of common stock, and (b) (i) 75,747 shares of common stock of the Registrant issuable upon exercise of Placement Agent Warrants to purchase shares of common stock, (ii) 37,873 shares of common stock of the Registrant issuable upon the exercise of Tranche A Common Warrants to purchase shares of common stock and (iii) 37,873 shares of common stock of the Registrant issuable upon the exercise of Tranche B Common Warrants to purchase shares of common stock.
- (3) Estimated solely for the purposes of calculating the registration fee pursuant to Rule 457(c) under the Securities Act, based on the average of the high and low price per share of the Registrant's common stock as reported by the Nasdaq Capital Market on January 25, 2024.