UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form S-3

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

ELUTIA INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

47-4790334

(I.R.S. Employer Identification No.)

12510 Prosperity Drive, Suite 370 Silver Spring, MD 20904 (240) 247-1170

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

C. Randal Mills, Ph.D.
President and Chief Executive Officer
Elutia Inc.
12510 Prosperity Drive, Suite 370
Silver Spring, MD 20904
(240) 247-1170

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

Copies to:

David Eaton, Esq. Michael Cochran, Esq. Kilpatrick Townsend & Stockton LLP 1100 Peachtree St. NE, 2800 Atlanta, GA 30309 (404) 815-6500

APPROXIMATE DATE OF COMMENCEMENT OF PROPOSED SALE TO THE PUBLIC: From time to time after the effective date of this registration statement. If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following 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, 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 on filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box. $\ \square$ 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. \Box Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act. Large accelerated filer Accelerated filer Non-accelerated filer X X Smaller reporting company Emerging growth company X If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for comply with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of Securities Act. \Box

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 which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the registration statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

PROSPECTUS



ELUTIA INC.

18,577,644 Shares Class A Common Stock Offered by the Selling Securityholders

The selling securityholders may offer and sell up to 18,577,644 shares (the "Shares") in the aggregate of Class A common stock identified above, of which (i) 6,852,811 shares are presently issued and outstanding, (ii) 503,058 shares are issuable upon the exercise of certain pre-funded warrants to purchase shares of Class A common stock held by the selling securityholders named herein, and (iii) 11,221,775 are issuable upon the exercise of certain common warrants to purchase shares of Class A common stock held by the selling securityholders named herein. This prospectus provides you with a general description of the securities. We will not receive any proceeds from the sale of our Class A common stock by the selling securityholders.

Each time any of the selling securityholders offers and sells securities, such selling securityholders will provide a supplement to this prospectus that contains specific information about the offering and the amounts, prices and terms of the securities. The supplement may also add, update or change information contained in this prospectus with respect to that offering. You should carefully read this prospectus and the applicable prospectus supplement before you invest in any of our securities.

The selling securityholders may offer and sell the securities described in this prospectus and any prospectus supplement to or through one or more underwriters, dealers and agents, or directly to purchasers, or through a combination of these methods. If any underwriters, dealers or agents are involved in the sale of any of the securities, their names and any applicable purchase price, fee, commission or discount arrangement between or among them will be set forth, or will be calculable from the information set forth, in the applicable prospectus supplement. See the sections of this prospectus entitled "About this Prospectus" and "Plan of Distribution" for more information. No securities may be sold without delivery of this prospectus and the applicable prospectus supplement describing the method and terms of the offering of such securities.

INVESTING IN OUR SECURITIES INVOLVES RISKS. SEE THE "RISK FACTORS" ON PAGE 9 OF THIS PROSPECTUS AND ANY SIMILAR SECTION CONTAINED IN THE APPLICABLE PROSPECTUS SUPPLEMENT CONCERNING FACTORS YOU SHOULD CONSIDER BEFORE INVESTING IN OUR SECURITIES.

Our Class A common stock is listed on the Nasdaq Capital Market under the symbol "ELUT." On November 16, 2023, the last reported sale price of our Class A common stock on the Nasdaq Capital Market was \$1.61 per share.

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

The date of this	prospectus is	

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the U.S. Securities and Exchange Commission, or the SEC, using a "shelf" registration process. By using a shelf registration statement, the selling securityholders may, from time to time, sell up to 18,577,644 shares of Class A common stock in one or more offerings as described in this prospectus. In connection with the offer and sale of securities by the selling securityholders, the selling securityholders may provide a prospectus supplement to this prospectus that contains specific information about the securities being offered and sold and the specific terms of that offering. We may also authorize one or more free writing prospectuses to be provided to you that may contain material information relating to these offerings. The prospectus supplement or free writing prospectus may also add, update or change information contained in this prospectus with respect to that offering. If there is any inconsistency between the information in this prospectus and the applicable prospectus supplement or free writing prospectus, you should rely on the prospectus supplement or free writing prospectus, as applicable. Before purchasing any securities, you should carefully read both this prospectus and any applicable prospectus supplement or free writing prospectuses, together with the additional information described under the heading "Where You Can Find More Information; Incorporation by Reference."

Neither we, nor the selling securityholders, have authorized anyone to provide you with any information or to make any representations other than those contained in this prospectus, any applicable prospectus supplement or any free writing prospectuses prepared by or on behalf of us or to which we have referred you. We and the selling securityholders take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. The selling securityholders will not make an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information appearing in this prospectus and any applicable prospectus supplement to this prospectus is accurate only as of the date on its respective cover, that the information appearing in any applicable free writing prospectus is accurate only as of the date of that free writing prospectus, and that any information incorporated by reference is accurate only as of the date of the document incorporated by reference, unless we indicate otherwise. Our business, financial condition, results of operations and prospects may have changed since those dates. This prospectus incorporates by reference, and any prospectus supplement or free writing prospectus may contain and incorporate by reference, market data and industry statistics and forecasts that are based on independent industry publications and other publicly available information. Although we believe these sources are reliable, we do not guarantee the accuracy or completeness of this information and we have not independently verified this information. In addition, the market and industry data and forecasts that may be included or incorporated by reference in this prospectus, any prospectus supplement or any applicable free writing prospectus may involve estimates, assumptions and other risks and uncertainties and are subject to change based on various factors, including those discussed under the heading "Risk Factors" contained in this prospectus, the applicable prospectus supplement and any applicable free writing prospectus, and under similar headings in other documents that are incorporated by reference into this prospectus. Accordingly, investors should not place undue reliance on this information.

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

We use our trademarks and our logo, in this prospectus and the documents incorporated by reference. This prospectus and the documents incorporated by reference also include trademarks, tradenames and service marks that are the property of other organizations. Solely for convenience, trademarks and tradenames referred to in this prospectus appear without the ® and ™ symbols, but those references are not intended to indicate, in any way, that we will not assert, to the fullest extent under applicable law, our rights or that the applicable owner will not assert its rights, to these trademarks and tradenames.

SPECIAL NOTE ABOUT FORWARD-LOOKING STATEMENTS

This prospectus and the other documents we incorporate by reference in this prospectus, may include forward-looking statements regarding our prospective performance and strategies within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. We intend for such forward-looking statements to be covered by the safe harbor provisions for forward-looking statements contained in the Private Securities Litigation Reform Act of 1995, and are including this statement for purposes of said safe harbor provisions. Contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. We intend such forward-looking statements to be covered by the safe harbor provisions for forward-looking statements contained in 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 involve known and unknown risks, uncertainties and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements.

Without limiting the foregoing, the words "aim," "believe," "may," "will," "should," "expect," "exploring," "plan," "anticipate," "could," "intend," "target," "project," "contemplate," "believe," "estimate," "predict," "potential," "seeks," or "continue" or the negative of these terms or other similar expressions, are intended to identify forward-looking statements, although not all forward-looking statements contain these words. These forward-looking statements are not a guarantee of future results, performance, or achievements, and one should avoid placing undue reliance on such statements.

These forward-looking statements are based on our management's beliefs and assumptions and on information currently available to us. Such beliefs and assumptions may or may not prove to be correct. Additionally, such forward-looking statements are subject to a number of known and unknown risks, uncertainties and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied in the forward-looking statements, including, but not limited to the following:

- our ability to continue as a going concern;
- our ability to achieve or sustain profitability;
- our ability to obtain regulatory approval or other marketing authorizations from the U.S. Food and Drug Administration ("FDA") and comparable foreign authorities for our products and product candidates, including our FDA 510(k) submission with respect to our CanGarooRM antibioticeluting biologic envelope;
- our ability to enhance our products, expand our product indications and develop, acquire and commercialize additional product offerings;
- our dependence on our commercial partners and independent sales agents to generate a substantial portion of our net sales;
- our ability to successfully realize the anticipated benefits of the sale of our Orthobiologics Business;
- our ability to successfully execute or realize the anticipated benefits under our distribution arrangements with LeMaitre Vascular and Sientra;
- physician awareness of the distinctive characteristics, benefits, safety, clinical efficacy and costeffectiveness of our products;
- the continued and future acceptance of our products by the medical community;
- our dependence on a limited number of third-party suppliers;
- our ability to defend against the various lawsuits related to our recall of a single lot of Fiber Viable Bone Matrix ("FiberCel") and avoid a material adverse financial consequence;
- our ability to defend ourselves against lawsuits and other claims related to our recall of a single lot of
 a certain viable bone matrix product and the market withdrawal of all of our viable bone matrix
 products;

- with respect to earnout payments potentially payable in connection with the sale of our Orthobiologics business, the ability of the sold business to generate specified revenues; and
- our ability to regain compliance with the listing standards of the Nasdaq Capital Market ("Nasdaq") and maintain the listing of our Class A common stock on Nasdaq.

Further information about these and other important factors that could materially affect the Company, including our results of operations, financial condition and stock price, is contained under the heading "Risk Factors" starting on page 9 of this prospectus, in Part I, Item 1A, "Risk Factors" and Part II, Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our Annual Report on Form 10-K for the fiscal year ended December 31, 2022 (the "Annual Report") (as updated through our Current Report on Form 8-K filed with the SEC on November 20, 2023 solely to recast certain financial information and related disclosures included in the Company's Annual Report) and Part II, Item 1A, "Risk Factors" in our Quarterly Reports for the periods ended March 31, 2023, June 30, 2023 and September 30, 2023, and in our other filings with the Securities and Exchange Commission (the "SEC"), each of which filings are accessible on the SEC's website at www.sec.gov and the Investor Relations page of our website at https://investors.elutia.com/financials/sec-filings.

Moreover, we operate in an evolving environment. New risk factors and uncertainties may emerge from time to time, and it is not possible for management to predict all risk factors and uncertainties. In addition, the timing and occurrence or non-occurrence of events may be subject to circumstances beyond our control.

Furthermore, we routinely evaluate opportunities to expand through acquisitions and conduct due diligence activities in connection with such opportunities. As a result, acquisition discussions and, in some cases, negotiations, may take place at any time, and acquisitions involving cash or our debt or equity securities may occur.

You should not place undue reliance on the forward-looking statements contained in, or incorporated by reference into, this prospectus, which speak only as of the date of this prospectus. We do not assume any obligation to revise or update these forward-looking statements except as may be required by law.

WHERE YOU CAN FIND MORE INFORMATION; INCORPORATION BY REFERENCE

Available Information

We file reports, proxy statements and other information with the SEC. The SEC maintains a web site that contains reports, proxy and information statements and other information about issuers, such as us, who file electronically with the SEC. The address of that website is http://www.sec.gov.

Our web site address is *https://www.elutia.com*. The information on our web site, however, is not, and should not be deemed to be, a part of this prospectus.

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

Incorporation by Reference

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

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

- Our Annual Report on Form 10-K for the year ended December 31, 2022, filed with the SEC on March 23, 2023, as updated through our Current Report on Form 8-K filed with the SEC on November 20, 2023 solely to recast certain financial information and related disclosures included in the Company's Annual Report.
- Our Quarterly Reports on Form 10-Q for the quarters ended <u>March 31, 2023</u>, <u>June 30, 2023</u> and <u>September 30, 2023</u>, filed with the SEC on May 12, 2023, August 14, 2023 and November 14, 2023, respectively.
- Our Current Reports on Form 8-K filed with the SEC on April 21, 2023, May 10, 2023, June 9, 2023, September 7, 2023, September 19, 2023, September 21, 2023, November 7, 2023, November 15, 2023 and November 20, 2023 (other than those portions of the documents deemed to be furnished and not filed).
- Our annual Proxy Statement on Schedule 14A relating to our annual meeting of stockholders, filed on April 27, 2023.
- The description of our common stock contained in our Registration Statement on Form 8-A, filed
 with the SEC on <u>September 30, 2020</u>, as updated by Exhibit 4.4 to our Annual Report on <u>Form 10-K</u>
 <u>for the fiscal year ended December 31, 2020</u>, together with any subsequent amendment or report
 filed with the SEC for the purpose of updating the description.

All reports and other documents we subsequently file pursuant to Section 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, which we refer to as the "Exchange Act" in this prospectus, prior to the termination of this offering, including all such documents we may file with the SEC after the date of the initial registration statement and prior to the effectiveness of the registration statement, but

excluding any information furnished to, rather than filed with, the SEC, will also be incorporated by reference into this prospectus and deemed to be part of this prospectus from the date of the filing of such reports and documents.

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

Elutia Inc. 12510 Prosperity Drive, Suite 370 Silver Spring, MD 20904 (240) 247-1170

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

THE COMPANY

At Elutia, our mission is to humanize medicine so that patients can thrive without compromise. As a commercial-stage company, we leverage our unique understanding of biologics to improve the interaction between implanted medical devices and patients by reducing complications associated with these surgeries. These complications include device migration, erosion, non-union of implants as well as implant rejection. In addition, our products mitigate the formation of scar and fibrotic capsule formation that commonly occurs with device implants and is linked with additional risk factors including infection and capsular contracture.

We have leading products in our priority markets — Device Protection and Women's Health. In Device Protection, we sell CanGaroo, a "first-to-market" biological envelope, protected by a global patent portfolio, that is indicated for use with implantable electronic devices including cardiac and neurostimulator devices. CanGaroo creates a secure pocket to hold the device and mitigates complications such as device migration and erosion. It is a biomatrix made of extracellular matrix (ECM), which has been shown to support healthy wound healing. Because of this inherent ECM trait, CanGaroo may facilitate re-operative procedures by mitigating scar formation and fibrosis. In addition, we offer the only envelope designed for subcutaneous implantable cardiac defibrillators, a growing market.

In Women's Health, we have developed both patented and proprietary technologies designed to preserve and protect natural extracellular matrix structure and biologic factors needed to support tissue remodeling. This results in undamaged human acellular dermal matrices with superior handling, designed to promote faster healing and reduce inflammation. This technology is the basis for our product, SimpliDerm, which is used primarily in breast reconstruction surgeries.

CanGaroo is sold through both our internal sales force and independent sales agents and marketing partners, which include Boston Scientific and Biotronik. SimpliDerm is sold through both independent sales agents and our distributor, Sientra.

Our lead product in development is a version of CanGaroo known as CanGarooRM, a first-in-class biomatrix that combines the CanGaroo envelope with antibiotics. These antibiotics, rifampin and minocycline, have been shown to reduce the risk of infection following surgical implantation of an electronic device. We anticipate CanGarooRM will be the only drug-eluting biomatrix approved for use with implantable electronic devices, providing both acute and long-term benefits to the patient.

CanGarooRM will require FDA clearance of a 510(k) submission to be marketed in the United States. We submitted the required 510(k) in April 2022 and, in March 2023, received a Not Substantially Equivalent ("NSE") letter from FDA requiring us to address questions relating to drug testing — primarily a request by FDA to modify an in vitro drug release assay employed as a manufacturing control. We intend to address the questions raised in the NSE letter and continue to work with FDA for potential clearance via the 510(k) pathway. We anticipate being able to complete our responses to outstanding questions from FDA in the 2023 calendar year and gain clearance from the FDA for CanGarooRM in the first half of 2024..

We also sell legacy products into the Cardiovascular market. In particular, we sell our specialized porcine small intestine submucosa, which is also the tissue used to make CanGaroo, for use as an intracardiac and vascular patch as well as for pericardial reconstruction. In addition, our TYKE product is designed for use in the neonatal patient population. These cardiovascular products are sold in the United States through an exclusive agreement with LeMaitre Vascular and internationally through distributors.

We have incurred significant operating losses since our inception. We incurred a net loss of \$28.3 million for the nine months ended September 30, 2023. Our accumulated deficit as of September 30, 2023 was \$166.3 million. We expect our losses to continue for the foreseeable future and these losses will continue to have an adverse effect on our financial position. Because of the numerous risks and uncertainties associated with our commercialization and development efforts, including risks relating to our ability to obtain FDA clearance for CanGarooRM, and our ability to successfully commercialize this product, we are unable to predict when we will become profitable, and we may never become profitable. Our inability to achieve and then maintain profitability would negatively affect our business, financial condition, results of operations and cash flows.

Recent Developments

Sale of Orthobiologics Business

On September 17, 2023, we executed an Asset Purchase Agreement (the "Purchase Agreement") with Berkeley Biologics, LLC ("Berkeley"), a Delaware limited liability company and wholly-owned subsidiary of GNI Group, Ltd. (Tokyo Stock Exchange: 2160.T). On November 8, 2023, at the closing (the "Closing") of the transactions contemplated by the Purchase Agreement (the "Asset Purchase"), Berkeley purchased from us substantially all of our assets that are related to (i) our business of researching, developing, administering, insuring, operating, commercializing, manufacturing, selling and marketing our Orthobiologics products identified in the Purchase Agreement (the "Products"), and (ii) the business of contract manufacturing of particulate bone, precision milled bone, cellular bone matrix, acellular dermis, soft tissue and other products (but excluding the business of contract manufacturing of acellular dermis products for use in the field of breast reconstruction, other than as a supplier to Elutia). The assets sold represent the entirety of our Orthobiologics segment (the "Orthobiologics Business").

The Purchase Agreement provides for an aggregate purchase price, subject to certain adjustments pursuant to the terms of the Purchase Agreement, of up to \$35 million in cash, with approximately \$14.6 million, as adjusted, having been paid shortly after the Closing and up to \$20 million after the Closing potentially payable in the form of earn-out payments (each an "Earn-Out Payment"). For each of the five years following the Closing, Berkeley would be required to pay to us an Earn-Out Payment equal to 10% of the actual revenue earned by Berkeley in the applicable year that is derived from sales of those Products defined as "Earn-Out Products" under the Purchase Agreement, and from any improvements, modifications, derivatives and enhancements related to the Earn-Out Products, with the aggregate amount of Earn-Out Payments capped at \$20 million.

Berkeley did not assume any liabilities related to our voluntary recall of a single lot of FiberCel fiber viable bone matrix, our voluntary recall of a single lot of a certain viable bone matrix product and our market withdrawal of all of our viable bone matrix products, or any claims or lawsuits related thereto.

Nasdaq Delisting Notification and Company Appeal to Nasdaq

On May 4, 2023, the Company received a letter from the Listing Qualifications Department of the Nasdaq Stock Market ("Nasdaq") notifying the Company that it did not meet the Market Value of Listed Securities ("MVLS") requirement for continued listing on the Nasdaq Capital Market pursuant to Nasdaq Listing Rule 5550(b)(2) (the "Market Value Standard"), and noting that the Company did not meet the requirements under Nasdaq Listing Rules 5550(b)(1) (Equity Standard) and 5550(b)(3) (Net Income Standard). The Original Notice provided that, in accordance with Nasdaq Listing Rule 5810(c)(3)(C), the Company would have a period of 180 calendar days from the date of the Original Notice, or until October 31, 2023 (the "Compliance Date"), to regain compliance with the Market Value Standard by having the Company's MVLS close at or above \$35 million for a minimum of 10 consecutive business days prior to the Compliance Date. On November 1, 2023, the Company received a delisting determination letter (the "Letter") from the Staff advising the Company that the Staff had determined that the Company did not regain compliance with the Market Value Standard by the Compliance Date. As a result, if not for the Company's appeal of the Staff's determination, trading of our common stock on the Nasdaq Capital Market would have been suspended at the opening of business on November 10, 2023, and Form 25-NSE would have been filed with the Securities and Exchange Commission to remove the Company's securities from listing and registration on the Nasdaq Capital Market. The Company timely submitted a hearing request to Nasdaq's Hearings Panel (the "Panel"), which stayed the suspension of our common stock pending the panel's conclusion of the hearing process.

The Company's hearing has been scheduled for February 15, 2024. At the hearing, the Company intends to present a plan to regain compliance with the Market Value Standard, and in the interim, the Company's common stock will continue to trade on the Nasdaq Capital Market under the symbol "ELUT" at least pending the ultimate conclusion of the hearing.

There can be no assurance that the Company's plan will be accepted by the Panel or that, if it is, the Company will be able to regain compliance with the applicable Nasdaq listing requirements. If the Company

cannot regain compliance with the Market Value Standard or under Nasdaq's alternative continued listing requirements, and if the Company's common stock is delisted by Nasdaq, it could lead to a number of negative implications, including an adverse effect on the price of our common stock, increased volatility in our common stock, reduced liquidity in our common stock, the loss of federal preemption of state securities laws and greater difficulty in obtaining financing. In addition, delisting of our common stock could deter broker-dealers from making a market in or otherwise seeking or generating interest in our common stock, could result in a loss of current or future coverage by certain sell-side analysts and might deter certain institutions and persons from investing in our securities at all. Delisting could also cause a loss of confidence of our collaborators, vendors, suppliers and employees, which could harm the Company's business and future prospects.

Viable Bone Matrix Recall

In July 2023, we announced a voluntary recall of a single lot of one of our viable bone matrix ("VBM") products and the market withdrawal of all of our VBM products produced after a specified date. (the "VBM Matter"). Such VBM products are within our divested Orthobiologics Business. Notice of the voluntary recall was issued to centers after we learned of post-surgical Mycobacterium tuberculosis ("MTB") infections in two patients treated with product from a single donor lot of our VBM product. Prior to release, samples from this specific lot had tested negative for MTB by an independent laboratory using a nucleic acid test that is designed to specifically detect the MTB organism. A total of 36 patients were treated with product from the single donor lot. At present, one lawsuit and twelve claims have been asserted as a result of the VBM Matter. While unknown at this time, possible losses in connection with the VBM Matter could have a material effect on our financial position and results of operations. We have purchased insurance coverage that, subject to common contract exclusions, is expected to provide coverage for the VBM Matter as well as legal defense costs.

Corporate Information

We were incorporated under the laws of the State of Delaware on August 6, 2015 under the name Aziyo Biologics, Inc. On September 6, 2023, we changed our name to Elutia Inc. Our principal executive offices are located at 12510 Prosperity Drive, Suite 370, Silver Spring, MD 20904, and our telephone number is (240) 247-1170. We maintain a website at www.elutia.com. Information on the website is not incorporated by reference and is not a part of this prospectus.

RISK FACTORS

Investment in any securities offered pursuant to this prospectus and the applicable prospectus supplement involves risks. You should carefully consider the risk factors incorporated by reference to our most recent Annual Report on Form 10-K and any subsequent Quarterly Reports on Form 10-Q or Current Reports on Form 8-K, and all other information contained or incorporated by reference into this prospectus, as updated by our subsequent filings under the Exchange Act, and the risk factors and other information contained in any applicable prospectus supplement and any applicable free writing prospectus before acquiring any of such securities. The occurrence of any of these risks might cause you to lose all or part of your investment in the offered securities.

USE OF PROCEEDS

We will not receive any of the proceeds from the sale of Class A common stock being offered by any of the selling securityholders.

We may, however, receive cash proceeds equal to the exercise price of the warrants that the selling securityholders may exercise, to the extent any such warrants are exercised for cash. The warrants may be exercised, in whole or in part, for cash at any time. The pre-funded warrants may also be exercised by means of cashless exercise at any time. The common warrants issued in the private placement may be exercised by means of a cashless exercise on or after January 15, 2024 if, at the time of exercise, there is no effective registration statement registering, or no current available for, the resale of the shares obtainable upon exercise of the common warrants by the selling securityholder. If all of the private placement warrants are exercised for cash, then we will receive total gross proceeds of approximately \$26.2 million, subject to any adjustments. The SWK Warrant is exercisable, in whole or in part, at any time before expiration for cash or by means of a cashless exercise. If the SWK Warrant is exercised for cash, then we will receive total gross proceeds from the exercise of approximately \$1.3 million, subject to any adjustments. We intend to use the net proceeds from any warrant exercises for general corporate purposes, which may include product development and clinical research activities, hiring additional sales personnel to coincide with product launches, general capital expenditures, working capital, general and administrative expenses, interest on outstanding debt and payments related to our revenue interest obligation, settlement of claims related to the 2021 voluntary recall of a single lot of our FiberCel fiber viable bone matrix and the VBM Matter and potential acquisitions of or investments in businesses, products and technologies that complement our business, although we have no present commitments or agreements to make any such acquisitions or investments as of the date of this prospectus.

DESCRIPTION OF SECURITIES

Authorized Capital Stock

The following description of our restated certificate of incorporation (the "Certificate of Incorporation"), as amended from time to time, and our second amended and restated bylaws (the "Bylaws") are summaries and are qualified in their entirety by reference to the full text of our Certificate of Incorporation and our Bylaws, each of which have been publicly filed with the Securities and Exchange Commission (the "SEC"). We encourage you to read the full text of our Certificate of Incorporation and our Bylaws and the applicable provisions of the Delaware General Corporation Law (the "DGCL") for additional information.

Our authorized capital stock consists of 200,000,000 shares of Class A common stock, par value \$0.001 per share, 20,000,000 shares of Class B common stock, par value \$0.001 per share, and 10,000,000 shares of preferred stock, par value \$0.001 per share, all of which are undesignated.

Class A Common Stock and Class B Common Stock

Holders of our Class A common stock are entitled to one vote for each share held on all matters submitted to a vote of stockholders and do not have cumulative voting rights. An election of directors by our stockholders shall be determined by a plurality of the votes cast. Subject to the supermajority votes for some matters, all other elections and questions presented to the stockholders shall be decided by the affirmative vote of the holders of a majority in voting power of the votes cast affirmatively or negatively (excluding abstentions) at the meeting by the holders entitled to vote thereon. Our Certificate of Incorporation and Bylaws also provide that our board of directors or any individual director may be removed only for cause and only by the affirmative vote of the holders of at least two-thirds in voting power of the outstanding shares of capital stock entitled to vote thereon. In addition, the affirmative vote of the holders of at least two-thirds in voting power of the outstanding shares of capital stock entitled to vote thereon is required to amend or repeal, or to adopt any provision inconsistent with, several of the provisions of our Certificate of Incorporation. See below under "— Anti-Takeover Effects of Delaware Law and Our Certificate of Incorporation and Bylaws — Amendment of Charter Provisions."

Holders of our Class B common stock have identical rights to holders of our Class A common stock as set forth in the preceding paragraph, other than as follows: (i) except as otherwise expressly provided in our Certificate of Incorporation or as required by applicable law, on any matter that is submitted to a vote by our stockholders, while holders of our Class A common stock are entitled to one vote per share of Class A common stock, holders of our Class B common stock are not entitled to any votes per share of Class B common stock, including for the election of directors, and (ii) while holders of our Class A common stock have no conversion rights, holders of our Class B common stock shall have the right to convert each share of our Class B common stock into one share of Class A common stock at such holder's election, provided that as a result of such conversion, such holder and all other persons or entities whose beneficial ownership of Class A common stock would be aggregated with the shares of Class A common stock held by the holder for purposes of Section 13(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and the applicable rules and regulations thereunder, would not beneficially own in excess of 4.9% of any class of our securities registered under the Exchange Act. Accordingly, the holders of a majority of the outstanding shares of Class A common stock entitled to vote in any election of directors can elect all of the directors standing for election, if they so choose, other than any directors that holders of any preferred stock we may issue may be entitled to elect.

Holders of our common stock are entitled to receive proportionately any dividends as may be declared by our board of directors, subject to any preferential dividend rights of any series of preferred stock that we may designate and issue in the future, and to the requirements of law.

In the event of our liquidation or dissolution, the holders of our common stock are entitled to receive proportionately our net assets available for distribution to stockholders after the payment of all debts and other liabilities and subject to the prior rights of any outstanding preferred stock. Holders of our common stock have no preemptive, subscription, redemption or conversion rights. Our outstanding shares of common stock are validly issued, fully paid and nonassessable. The rights, preferences and privileges of holders of

Class A common stock are subject to and may be adversely affected by the rights of the holders of shares of any series of preferred stock that we may designate and issue in the future.

Preferred Stock

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

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

Registration Rights

Certain of our stockholders are entitled to certain rights with respect to the registration of such shares for public resale under the Securities Act, pursuant to an amended and restated investor rights agreement by and among us and certain of our stockholders, until the rights otherwise terminate pursuant to the terms of the investor rights agreement. The registration of shares of common stock as a result of the following rights being exercised would enable holders to trade these shares without restriction under the Securities Act when the applicable registration statement is declared effective.

Piggyback Registration Rights

If we propose to register any shares of our common stock under the Securities Act, subject to certain exceptions, the holders of registrable securities will be entitled to notice of the registration and to include their shares of registrable securities in the registration. If our proposed registration involves an underwriting, the managing underwriter of such offering will have the right to limit the number of shares to be underwritten for reasons related to the marketing of the shares.

Form S-3 Registration Rights

If, at any time after we become entitled under the Securities Act to register our shares on a registration statement on Form S-3, certain of our stockholders request that we effect a registration with respect to all or part of the registrable securities then outstanding and having an anticipated aggregate offering amount, net of expenses, of at least \$2,500,000, we will be required to effect such registration.

Termination of Registration Rights

The registration rights terminate upon the earlier of the date that is three years after the closing of our initial public offering, such time as Rule 144 or another similar exemption under the Securities Act is available for the sale of all of such holders' shares without limitation during a three-month period without registration and the consummation of a sale transaction, as defined in the investor rights agreement.

Private Placement Form S-3 Registration Rights

We have also agreed to prepare and file with the Securities Exchange Commission (the "Commission") a registration statement on Form S-3 promptly following September 21, 2023, but in no event later than November 20, 2023, covering the public resale pursuant to the Securities Act of certain shares of our Class A common stock issued, and we have further agreed to use commercially reasonable efforts to have such registration statement declared effective as soon as reasonably practicable after the filing thereof. This registration statement on Form S-3 is being filed with the Commission in accordance with the aforementioned obligations.

Expenses and Indemnification

Ordinarily, other than underwriting discounts and commissions, we will be required to pay all expenses incurred by us related to any registration effected pursuant to the exercise of these registration rights. These expenses may include all registration and filing fees, printing expenses, fees and disbursements of our counsel, reasonable fees and disbursements of a counsel for the selling securityholders and blue sky fees and expenses. Additionally, we have agreed to indemnify selling securityholders for damages, and any legal or other expenses reasonably incurred, arising from or based upon any untrue statement of a material fact contained in any registration statement, an omission or alleged omission to state a material fact in any registration statement or necessary to make the statements therein not misleading, or any violation or alleged violation by the indemnifying party of securities laws, subject to certain exceptions.

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

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

Undesignated Preferred Stock

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

Stockholder Meetings

Our Bylaws provide that a special meeting of stockholders may be called only by our board of directors, chairperson of the board, chief executive officer or president (in the absence of a chief executive officer).

Requirements for Advance Notification of Stockholder Nominations and Proposals

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

Elimination of Stockholder Action by Written Consent

Our Certificate of Incorporation eliminates the right of stockholders to act by written consent without a meeting.

Staggered Board

In accordance with our Certificate of Incorporation, and subject to the rights of holders of any series of preferred stock to elect directors, our board of directors is divided into three classes. Each class shall consist, as nearly as may be possible, of one-third of the total number of directors constituting the entire board of directors. The directors in each class will serve for a three-year term, with one class being elected each year by our stockholders. Our Certificate of Incorporation and Bylaws provide that the authorized number of directors may be changed only by resolution of the board of directors. This system of electing and removing directors may delay or prevent a change of management or a change in control of our company and tend to discourage a third party from making a tender offer or otherwise attempting to obtain control of us, because it generally makes it more difficult for stockholders to replace a majority of the directors.

Removal of Directors

Our Certificate of Incorporation provides that no member of our board of directors may be removed from office by our stockholders except for cause and, in addition to any other vote required by law, upon

the approval of the holders of at least two-thirds in voting power of the outstanding shares of stock entitled to vote in the election of directors.

Stockholders Not Entitled to Cumulative Voting

Our Certificate of Incorporation does not permit stockholders to cumulate their votes in the election of directors. Accordingly, a plurality of the votes cast by holders of shares of our Class A common stock shall be sufficient to elect all of the directors standing for election, if they choose, other than any directors that holders of our preferred stock may be entitled to elect.

Delaware Anti-Takeover Statute

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

Choice of Forum

Our Certificate of Incorporation provides that, unless we consent in writing to the selection of an alternative form, the Court of Chancery of the State of Delaware is the sole and exclusive forum for: (1) any derivative action or proceeding brought on our behalf; (2) any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers, employees or stockholders; (3) any action asserting a claim against us arising pursuant to any provision of the DGCL or as to which the DGCL confers jurisdiction on the Court of Chancery of the State of Delaware; or (4) any action asserting a claim governed by the internal affairs doctrine. Under our Certificate of Incorporation, this exclusive forum provision does not apply to suits brought to enforce any liability or duty created by the Securities Act of 1933, as amended (the "Securities Act"), or the Exchange Act, or any other claim for which the federal courts have exclusive jurisdiction. If and only if the Court of Chancery of the State of Delaware dismisses any such action for lack of subject matter jurisdiction, such action may be brought in another state or federal court sitting in the State of Delaware. Our Certificate of Incorporation further provides that, unless we consent in writing to the selection of an alternative forum, the federal district courts of the United States of America shall, to the fullest extent permitted by law, be the sole and exclusive forum for the resolution of any complaint asserting a cause of action arising under the Securities Act. Our Certificate of Incorporation also provides that any person or entity purchasing or otherwise acquiring or holding any interest in shares of our capital stock shall be deemed to have notice of and to have consented to this choice of forum provision. It is possible that a court of law could rule that the choice of forum provision contained in our Certificate of Incorporation is inapplicable or unenforceable if it is challenged in a proceeding or otherwise.

Amendment of Charter Provisions

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

The provisions of Delaware law, our Certificate of Incorporation and our Bylaws could have the effect of discouraging others from attempting hostile takeovers and, as a consequence, they may also inhibit temporary fluctuations in the market price of our common stock that often result from actual or rumored hostile takeover attempts. These provisions may also have the effect of preventing changes in the composition of our board and management. It is possible that these provisions could make it more difficult to accomplish transactions that stockholders may otherwise deem to be in their best interests.

Pre-Funded Warrants and Common Warrants

The material terms and provisions of the Pre-Funded Warrants and the Common Warrants to purchase shares of Class A common stock are summarized below. This summary is subject to and qualified in its entirety by the form of Pre-Funded Warrant and the form of Common Warrant, each filed with the SEC as an exhibit to the Company's Form 8-K on September 21, 2023.

Pre-Funded Warrants

The holder may exercise the Pre-Funded Warrants at any time, in whole or in part, at an exercise price of \$0.001 per share of Class A common stock, subject to adjustment pursuant to the Pre-Funded Warrant terms. There is no expiration date for the Pre-Funded Warrants. As further described under "Selling Securityholders," notwithstanding the foregoing, a holder (other than a holder affiliated with HighCape Partners) may not exercise a Pre-Funded Warrant or a portion of such warrant if the holder, together with its affiliates, would beneficially own more than 9.99% of the number of shares of Class A common stock outstanding immediately after giving effect to such exercise (the "Beneficial Ownership Limitation"). The holder may decrease or, upon 61 days' notice to us, increase the Beneficial Ownership Limitation, provided that the Beneficial Ownership Limitation in no event exceeds 9.99% of the number of shares of Class A common stock outstanding immediately after giving effect to the issuance of shares of Class A common stock related to the Pre-Funded Warrant. The Pre-Funded Warrants provide for certain anti-dilution measures, as well as adjustments to be made to such warrants in connection with stock dividends, stock splits, fundamental transactions and similar events.

Common Warrants

The holders may exercise the Common Warrants, in whole or in part, at any time until the earlier of (a) 30 trading days after the clearance by the U.S. Food & Drug Administration of the Company's CanGaroo®RM antibiotic-eluting biologic envelope or (b) September 21, 2028, at an exercise price per share of \$1.4275, subject to adjustment pursuant to the terms of the Common Warrant As further described under "Selling Securityholders," notwithstanding the foregoing, a holder (other than a holder affiliated with HighCape Partners) may not exercise a Common Warrant or a portion of such warrant if the holder, together with its affiliates, would hold shares of Class A common stock in excess of the Beneficial Ownership Limitation immediately following the exercise. The holder may decrease or, upon 61 days' notice to us, increase the Beneficial Ownership Limitation, provided that the Beneficial Ownership Limitation in no event exceeds 9.99% of the number of shares of Class A common stock outstanding immediately after giving effect to the issuance of shares of Class A common stock related to the Common Warrant. In addition, a holder may elect to receive a Pre-Funded Warrant upon exercise of the Common Warrant in lieu of a share of Class A common stock. The Common Warrants provide for certain anti-dilution measures, as well as adjustments to be made to such warrants in connection with stock dividends, stock splits, fundamental transactions and similar events.

Stock Exchange Listing

Our Class A common stock is listed on The Nasdaq Capital Market under the symbol "ELUT."

SELLING SECURITYHOLDERS

This prospectus relates to the possible resale by certain of the selling securityholders from time to time of up to an aggregate of 18,577,644 shares of Class A common stock sold in the transactions described below (the "Shares"), which consists of 6,852,811 shares of our Class A common stock issued and outstanding, 503,058 shares of our Class A common stock issuable upon the exercise of pre-funded warrants, and 11,221,775 shares of our Class A common stock issuable upon the exercise of common warrants. The term "selling securityholders" includes donees, pledgees, transferees or other successors in interest selling securities received after the date of this prospectus from a selling securityholder as a gift, pledge, partnership distribution or other transfer.

On September 18, 2023, we entered into a Securities Purchase Agreement, or the Purchase Agreement, with certain of the selling securityholders. Pursuant to the Purchase Agreement, on September 21, 2023, the Company sold, in a private placement exempt from the registration requirements of the Securities Act of 1933, as amended, an aggregate of (i) 6,852,811 units (the "Common Units") to certain of the selling securityholders, each comprised of (a) one share of the Company's Class A common stock and (b) a common warrant to purchase one and one half shares of Class A common stock, and (ii) 503,058 units (the "Prefunded Units") to certain of the selling securityholders, each comprised of (a) a pre-funded warrant to purchase one share of Class A common stock, and (b) a common warrant to purchase one and one half shares of Class A common stock. The Common Units were sold at a purchase price of \$1.4275 per unit, and the Prefunded Units were sold at a purchase price of \$1.4265 per unit, for aggregate gross proceeds of approximately \$10.5 million, before deducting offering expenses.

On August 10, 2022 (the "SWK Closing Date"), we entered into a senior secured term loan facility with SWK Funding LLC, as agent, and other lenders party thereto (as amended and modified subsequent to the SWK Closing Date, the "SWK Loan Facility") for an aggregate principal amount of \$25 million. On the SWK Closing Date, the Company issued to SWK Funding LLC a common warrant (the "SWK Warrant") to purchase, in the aggregate, up to 187,969 shares of Class A common stock of the Company at an exercise price of \$6.65 per share. The SWK Warrant is immediately exercisable from time to time on or after the SWK Closing Date, and the exercise price and number of shares of Class A common stock issuable upon exercise of the SWK Warrant are subject to adjustment in the event of stock dividends, stock splits and certain other events affecting the Class A common stock. Upon issuance, the Company valued the SWK Warrant at approximately \$0.6 million using the Black-Scholes model. The recognition of the SWK Warrant as well as deferred financing costs of approximately \$0.5 million incurred in securing the SWK Loan Facility served to reduce the recorded value of the associated debt.

The following table sets forth information concerning the shares of Class A common stock that may be offered from time to time by each selling securityholder. The number of shares beneficially owned by each selling securityholder is determined under rules issued by the SEC. Under these rules, beneficial ownership includes any shares as to which the selling securityholder has sole or shared voting power or investment power. Percentage ownership is based on 18,884,146 shares of Class A common stock outstanding as of November 9, 2023. In computing the number of shares beneficially owned by a selling securityholder and their percentage ownership, shares of Class A common stock subject to options, warrants or other rights held by such selling securityholder that are currently exercisable or will become exercisable within 60 days of November 9, 2023 are considered outstanding, although these shares are not considered outstanding for purposes of computing the percentage ownership of any other selling securityholder. For purposes of this table, we have assumed that the selling securityholders will have sold all of the securities covered by this prospectus upon the completion of the offering (including all shares of Class A common stock issuable upon exercise of the Pre-Funded Warrants and the Common Warrants). Each of the selling securityholders listed has sole voting and investment power with respect to the shares beneficially owned by the selling securityholder unless noted otherwise.

The information in the following table has been provided to us by or on behalf of the selling securityholders and the selling securityholders may have sold, transferred or otherwise disposed of all or a portion of their securities after the date on which they provided us with information regarding their securities. A selling securityholder may sell all, some or none of its securities in this offering. See "Plan of Distribution."

	Class A Com Beneficially Before this	y Owned	Number of Shares of Class A Common Stock to be Sold Pursuant to this Prospectus	Class A Common Stock Beneficially Owned Upon Completion of this Offering	
Selling Securityholder	Number	Percentage	Number	Number	Percentage
Entities affiliated with HighCape (1)	12,781,232	67.68%	7,092,821	5,688,411	30.12%
Entities affiliated with Nantahala Capital Management ⁽²⁾	1,860,135	9.99	4,728,971	_	*
Entities affiliated with AIGH Capital					
Management LLC ⁽³⁾	1,860,135	9.99	4,903,675	64,000	*
Alyeska Master Fund, L.P. ⁽⁴⁾	1,489,075	7.89	1,489,075	_	*
Matthew Ferguson ⁽⁵⁾	225,599	1.19	175,133	50,466	*
SWK Funding LLC ⁽⁶⁾	187,969	1.00	187,969	_	*

Less than 1%.

(2) Includes (a) 1,650,000 shares of Class A common stock issued and outstanding, comprised of (i) 286,446 shares of Class A common stock held by Nantahala Capital Partners Limited Partnership, (ii) 327,434 shares of Class A common stock held by NCP RFM LP, and (iii) 1,036,120 shares of Class A common

⁽¹⁾ Includes: (i) 53,818 shares of Class A common stock held of record by HighCape Partners, L.P.; (ii) 4,001,428 shares of Class A common stock held of record by HighCape Partners QP, L.P.; (iii) 499,145 shares of Class A common stock held of record by HighCape Co-Investment Vehicle I, LLC; (iv) 259,282 shares of Class A common stock held of record by HighCape Co-Investment Vehicle II, LLC; (v) 48,931 shares of Class A common stock held of record by HighCape Capital, L.P.; (vi) 43,659 shares of Class A common stock held of record by HighCape Partners II, L.P. (of which 28,636 are part of the maximum number of shares to be sold under this prospectus (the "Offering Maximum"); (vii) 2,092,392 shares of Class A common stock held of record by HighCape Partners QP II, L.P. (of which 1,372,415 are part of the Offering Maximum); and (viii) 1,436,077 shares of Class A common stock held of record by Elutia PIPE Investment, LP. (all of which are part of the Offering Maximum). The amount beneficially owned by Kevin Rakin also includes 90,807 shares of Class A common stock held of record by the Kevin L. Rakin Irrevocable Trust. Also includes: (i) 2,154,116 shares of Class A common stock issuable upon the exercise of Common Warrants held of record by Elutia PIPE Investment, LP; (ii) 2,058,623 shares of Class A common stock issuable upon the exercise of Common Warrants held of record by HighCape Partners QP II, L.P., and 42,954 shares of Class A common stock issuable upon the exercise of Common Warrants held of record by HighCape Partners II, L.P., all of which are part of the Offering Maximum. Mr. Rakin and W. Matthew Zuga are the managing members of HighCape Partners GP, LLC, which in turn is the general partner of HighCape Partners GP, L.P., which in turn is the general partner of each of HighCape Partners, L.P. and HighCape Partners QP, L.P. and manages each of HighCape Co-Investment Vehicle I, LLC and HighCape Co-Investment Vehicle II, LLC. Mr. Rakin and Mr. Zuga are the managing members of HighCape Capital, LLC, which in turn is the general partner of HighCape Capital, L.P. Mr. Rakin and Mr. Zuga are the managing members of HighCape Partners GP II, LLC, which is the general partner of HighCape Partners GP II, L.P., which is the general partner of each of HighCape Partners II, L.P., HighCape Partners QP II, L.P. and Elutia PIPE Investment, LP. Each of Mr. Rakin, Mr. Zuga, HighCape Partners GP, LLC and HighCape Partners GP, L.P. may be deemed to beneficially own the securities held of record by HighCape Partners, L.P., HighCape Partners QP, L.P., HighCape Co-Investment Vehicle I, LLC and HighCape Co-Investment Vehicle II, LLC. Mr. Rakin, Mr. Zuga and HighCape Capital, LLC may be deemed to beneficially own the securities held of record by HighCape Capital, L.P. In addition, each of Mr. Rakin, Mr. Zuga, HighCape Partners GP II, LLC and HighCape Partners GP II, L.P. may be deemed to beneficially own the securities held by HighCape Partners II, L.P., HighCape Partners QP II, L.P. and Elutia PIPE Investment, LP. Mr. Rakin may be deemed to beneficially own the securities held of record by the Kevin L. Rakin Irrevocable Trust. Each of the Reporting Persons disclaims beneficial ownership of the securities held by the other Reporting Persons. The address for HighCape is 36 Church Lane, Westport, CT 06880.

stock held by Blackwell Partners LLC — Series A, and (b) 236,526 shares of Class A common stock issuable in the aggregate by the aforementioned entities upon the exercise of either Pre-Funded Warrants or Common Warrants. Excludes approximately 2,842,445 shares of Class A common stock issuable in the aggregate upon the exercise of remaining Pre-Funded Warrants and Common Warrants held in aggregate by Nantahala Capital Partners Limited Partnership, NCP RFM LP and Blackwell Partners LLC — Series A (which shares are registered for sale in this Registration Statement), because such shares may not be acquired by the selling securityholders within 60 days due to the 9.99% Beneficial Ownership Limitation cap. Nantahala Capital Management, LLC ("Nantahala") is a registered investment adviser and has been delegated the legal power to vote and/or direct the disposition of such securities on behalf of the selling securityholders as a General Partner, Investment Manager, or Sub-Advisor and would be considered the beneficial owner of such securities. The above shall not be deemed to be an admission by the record owners or the selling securityholder that they are themselves beneficial owners of these securities for purposes of Section 13(d) of the Securities Exchange Act of 1934, as amended, or the Exchange Act, or any other purpose. Wilmot Harkey and Daniel Mack are managing members of Nantahala Capital Management, LLC and may be deemed to have voting and dispositive power over the shares held by the selling securityholder. The address for Nantahala is 130 Main Street 2nd Floor, New Canaan, CT 06840.

- (3) Includes (a) 1,764,000 shares of Class A common stock issued and outstanding, comprised of (i) 1,270,030 shares of Class A common stock held by AIGH Investment Partners, L.P.; (ii) 388,222 shares of Class A common stock held by WVP Emerging Manager Onshore Fund, LLC — AIGH Series; and (iii) 105,748 shares of Class A common stock held by WVP Emerging Manager Onshore Fund, LLC — Optimized Equity Series, and (b) 122,526 shares of Class A common stock issuable in the aggregate by the aforementioned entities upon the exercise of either Pre-Funded Warrants or Common Warrants. Excludes approximately 3,081,149 shares of Class A common stock issuable in the aggregate upon the exercise of remaining Pre-Funded Warrants and Common Warrants held in aggregate by AIGH Investment Partners, LP, WVP Emerging Manager Onshore Fund, LLC — AIGH Series, and WVP Emerging Manager Onshore Fund, LLC — Optimized Equity Series (which shares are registered for sale in this Registration Statement), because such shares may not be acquired by the selling securityholders within 60 days due to the 9.99% Beneficial Ownership Limitation cap. Mr. Orin Hirschman is the managing member of AIGH Capital Management, LLC, a Maryland limited liability company ("AIGH CM"), who is an advisor with respect to the securities held by AIGH Investment Partners, L.P. ("AIGH LP"). AIGH CM is also a sub-advisor with respect to the securities held by WVP Emerging Manager Onshore Fund, LLC — AIGH Series and a sub-advisor with respect to the securities held by WVP Emerging Manager Onshore Fund, LLC — Optimized Equity Series. Mr. Hirschman has voting and investment control over the securities indirectly held by AIGH CM, directly held by AIGH LP and directly held by Mr. Hirschman and his family. The address for AIGH CM, AIGH LP and Mr. Hirschman is 6006 Berkeley Avenue, Baltimore, Maryland 21209.
- (4) Includes (a) 595,630 shares of Class A common stock issued and outstanding and (b) 893,445 shares of Class A common stock issuable upon the 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. The general partner of the Selling Securityholder is Alyeska Fund GP, LLC. 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) Includes (a) 120,519 shares of Class A common stock issued and outstanding and (b) 105,080 shares of Class A common stock issuable upon the exercise of Common Warrants. Mr. Ferguson is Chief Financial Officer of the Company. The address for Mr. Ferguson is 393 La Cuesta Drive, Portola Valley, CA 94028.
- (6) Represents 187,969 shares of Class A common stock issuable upon the exercise of the SWK Common Warrant. SWK Funding LLC is managed by its sole member, SWK Holdings Corporation. Joe D. Staggs, chief executive officer of SWK Holdings Corporation, holds voting and investment control over such shares. The address of the selling securityholder is 5956 Sherry Lane, Suite 650, Dallas, TX 75225.

PLAN OF DISTRIBUTION

The selling securityholders and any of their pledgees, donees, transferees, assignees or other successors-in-interest may, from time to time, sell, transfer or otherwise dispose of any or all of their shares of common stock or interests in shares of common stock on any stock exchange, market or trading facility on which the shares are traded or in private transactions. These dispositions may be at fixed prices, at prevailing market prices at the time of sale, at prices related to the prevailing market price, at varying prices determined at the time of sale, or at negotiated prices. The selling securityholders may use one or more of the following methods when disposing of the shares or interests therein:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- through brokers, dealers or underwriters that may act solely as agents;
- 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;
- distributions to members, limited partners or stockholders of selling securityholders;
- privately negotiated transactions, including between a selling securityholder and its affiliate or between selling securityholders;
- through the writing or settlement of options or other hedging transactions entered into after the
 effective date of the registration statement of which this prospectus is a part, whether through an
 options exchange or otherwise;
- broker-dealers may agree with the selling securityholders to sell a specified number of such shares at a stipulated price per share;
- a combination of any such methods of disposition; and
- any other method permitted pursuant to applicable law.

The selling securityholders may also sell shares under Rule 144 or Rule 904 under the Securities Act of 1933, as amended, or Securities Act, if available, or Section 4(a)(1) under the Securities Act, rather than under this prospectus.

Broker-dealers engaged by the selling securityholders may arrange for other broker-dealers to participate in sales. Broker-dealers may receive commissions or discounts from the selling securityholders (or, if any broker-dealer acts as agent for the purchaser of shares, from the purchaser) in amounts to be negotiated. The selling securityholders do not expect these commissions and discounts to exceed what is customary in the types of transactions involved.

The selling securityholders may, from time to time, pledge or grant a security interest in some or all of the shares of common stock owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell shares of common stock from time to time under this prospectus, or under a supplement or amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act amending the list of selling securityholders to include the pledgee, transferee or other successors in interest as selling securityholders under this prospectus.

Upon being notified in writing by a selling securityholder that any material arrangement has been entered into with a broker-dealer for the sale of common stock through a block trade, special offering, exchange distribution or secondary distribution or a purchase by a broker or dealer, we will file a supplement to this prospectus, if required, pursuant to Rule 424(b) under the Securities Act, disclosing (i) the name of each such selling securityholder and of the participating broker-dealer(s), (ii) the number of shares involved, (iii) the price at which such shares of common stock were sold, (iv) the commissions paid or discounts or concessions allowed to such broker-dealer(s), where applicable, (v) that such broker-dealer(s) did not conduct any investigation to verify the information set out or incorporated by reference in this prospectus, and (vi) other facts material to the transaction. In addition, upon being notified in writing by a selling

securityholder that a donee or pledgee intends to sell more than 500 shares of common stock, we will file a supplement to this prospectus if then required in accordance with applicable securities law. Furthermore, if a selling securityholder that is an entity makes an in-kind distribution of their shares of common stock or warrants to acquire shares of common stock to its members, partners, stockholders or other owners, then, to the extent that such owners do not thereby receive freely tradable shares, upon request of such owners and the receipt of completed customary questionnaires, we will file a supplement to this prospectus if then required in accordance with applicable securities law to identify such owners as selling securityholders.

The selling securityholders also may transfer the shares of common stock in other circumstances, in which case the transferees, pledgees or other successors in interest will be the selling beneficial owners for purposes of this prospectus.

In connection with the sale of the shares of common stock or interests in shares of common stock, the selling securityholders may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the common stock in the course of hedging the positions they assume. The selling securityholders may also sell shares of common stock short and deliver these securities to close out their short positions, or loan or pledge the common stock to broker-dealers that in turn may sell these securities. The selling securityholders may also enter into option or other transactions with broker-dealers or other financial institutions or the creation of one or more derivative securities which require the delivery to such broker-dealer or other financial institution of shares 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).

The selling securityholders and any broker-dealers or agents that are involved in selling the shares may be deemed to be "underwriters" within the meaning of the Securities Act in connection with such sales. In such event, any profits realized by such selling securityholders or compensation received by such broker-dealers or agents may be deemed to be underwriting commissions or discounts under the Securities Act. The maximum commission or discount to be received by any member of the Financial Industry Regulatory Authority (FINRA) or independent broker-dealer will not be greater than 8% of the initial gross proceeds from the sale of any security being sold.

We have advised the selling securityholders that they are required to comply with Regulation M promulgated under the Securities Exchange Act of 1934, as amended, during such time as they may be engaged in a distribution of the shares. The foregoing may affect the marketability of the common stock.

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

We are required to pay all fees and expenses incident to the registration of the shares. We have agreed to indemnify the selling securityholders against certain losses, claims, damages and liabilities, including liabilities under the Securities Act or otherwise.

We have agreed with the selling securityholders to keep the registration statement of which this prospectus constitutes a part effective until the earlier of (a) such time as all of the shares covered by this prospectus have been disposed of pursuant to and in accordance with the registration statement and (b) such time as none of the shares covered by this prospectus constitute "registrable securities", as such term is defined in the registration rights agreement by and among us and the selling securityholders.

LEGAL MATTERS

The validity of the Class A common stock being offered by this prospectus has been passed upon for us by Kilpatrick Townsend & Stockton LLP, Atlanta, Georgia.

EXPERTS

The financial statements incorporated in this prospectus by reference to Elutia Inc.'s Current Report on Form 8-K dated November 20, 2023 have been so incorporated in reliance on the report (which contains an explanatory paragraph relating to the Company's ability to continue as a going concern as described in Note 2 to the financial statements) of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

PART II INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution

The following is an estimate of the expenses (all of which are to be paid by the registrant) that we may incur in connection with the securities being registered hereby.

SEC registration fee	\$ 4,414
Printing expenses	25,000
Legal fees and expenses	85,000
Accounting fees and expenses	350,000
Miscellaneous	10,000
Total	\$474,414

Item 15. Indemnification of Directors and Officers

Subsection (a) of Section 145 of the General Corporation Law of the State of Delaware, or the DGCL, empowers a corporation to indemnify any person who was or is a party or who is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation) by reason of the fact that the person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with such action, suit or proceeding if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe the person's conduct was unlawful.

Subsection (b) of Section 145 empowers a corporation to indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to procure a judgment in its favor by reason of the fact that the person acted in any of the capacities set forth above, against expenses (including attorneys' fees) actually and reasonably incurred by the person in connection with the defense or settlement of such action or suit if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the corporation, except that no indemnification shall be made in respect of any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or the court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

Section 145 further provides that to the extent a director or officer of a corporation has been successful on the merits or otherwise in the defense of any action, suit or proceeding referred to in subsections (a) and (b) of Section 145, or in defense of any claim, issue or matter therein, such person shall be indemnified against expenses (including attorneys' fees) actually and reasonably incurred by such person in connection therewith; that indemnification provided for by Section 145 shall not be deemed exclusive of any other rights to which the indemnified party may be entitled; and the indemnification provided for by Section 145 shall, unless otherwise provided when authorized or ratified, continue as to a person who has ceased to be a director, officer, employee or agent and shall inure to the benefit of such person's heirs, executors and administrators. Section 145 also empowers the corporation to purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against such person and incurred by such person in any

such capacity, or arising out of his status as such, whether or not the corporation would have the power to indemnify such person against such liabilities under Section 145.

Section 102(b)(7) of the DGCL provides that a corporation's certificate of incorporation may contain a provision eliminating or limiting the personal liability of a director to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, provided that such provision shall not eliminate or limit the liability of a director (i) for any breach of the director's duty of loyalty to the corporation or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) under Section 174 of the DGCL, or (iv) for any transaction from which the director derived an improper personal benefit.

Any underwriting agreement or distribution agreement that the registrant enters into with any underwriters or agents involved in the offering or sale of any securities registered hereby may require such underwriters or dealers to indemnify the registrant, some or all of its directors and officers and its controlling persons, if any, for specified liabilities, which may include liabilities under the Securities Act of 1933, as amended.

Our bylaws provide that we will indemnify each person who was or is a party or threatened to be made a party to any threatened, pending or completed action, suit or proceeding (other than an action by or in the right of us) by reason of the fact that he or she is or was, or has agreed to become, a director or officer, or is or was serving, or has agreed to serve, at our request as a director, officer, partner, employee or trustee of, or in a similar capacity with, another corporation, partnership, joint venture, trust or other enterprise (all such persons being referred to as an "indemnitee"), or by reason of any action alleged to have been taken or omitted in such capacity, against all expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred in connection with such action, suit or proceeding and any appeal therefrom, if such indemnitee acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, our best interests, and, with respect to any criminal action or proceeding, he or she had no reasonable cause to believe his or her conduct was unlawful. Our bylaws provide that we will indemnify any indemnitee who was or is a party to an action or suit by or in the right of us to procure a judgment in our favour by reason of the fact that the Indemnitee is or was, or has agreed to become, a director or officer, or is or was serving, or has agreed to serve, at our request as a director, officer, partner, employee or trustee of, or in a similar capacity with, another corporation, partnership, joint venture, trust or other enterprise, or by reason of any action alleged to have been taken or omitted in such capacity, against all expenses (including attorneys' fees) and, to the extent permitted by law, amounts paid in settlement actually and reasonably incurred in connection with such action, suit or proceeding, and any appeal therefrom, if the indemnitee acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, our best interests, except that no indemnification shall be made with respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to us, unless a court determines that, despite such adjudication but in view of all of the circumstances, he or she is entitled to indemnification of such expenses. Notwithstanding the foregoing, to the extent that any indemnitee has been successful, on the merits or otherwise, he or she will be indemnified by us against all expenses (including attorneys' fees) actually and reasonably incurred in connection therewith. Expenses must be advanced to an Indemnitee under certain circumstances.

We have entered into indemnification agreements with each of our directors and officers. These indemnification agreements may require us, among other things, to indemnify our directors and officers for some expenses, including attorneys' fees, judgments, fines and settlement amounts incurred by a director or officer in any action or proceeding arising out of his or her service as one of our directors or officers, or any of our subsidiaries or any other company or enterprise to which the person provides services at our request.

We maintain a general liability insurance policy that covers certain liabilities of directors and officers of our corporation arising out of claims based on acts or omissions in their capacities as directors or officers.

Item 16. Exhibits

Exhibit Number	Description
3.1	Restated Certificate of Incorporation (incorporated by reference to Exhibit 3.1 of the Company's Current Report on Form 8-K filed with the SEC on October 13, 2020).
3.2	Amendment to the Restated Certificate of Incorporation (incorporated by reference to Exhibit 3.1 of the Company's Current Report on Form 8-K filed with the SEC on September 6, 2023).
3.3	<u>Second Amended and Restated Bylaws (incorporated by reference to Exhibit 3.2 of the Company's Current Report on Form 8-K filed with the SEC on September 6, 2023).</u>
4.1	<u>Specimen Stock Certificate Evidencing the Shares of Class A common stock (incorporated by reference to the Amendment to the Company's Registration Statement on Form S-1, filed with the SEC on September 30, 2020).</u>
4.2	Form of Common Warrant (incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K, filed with the SEC on September 21, 2023).
4.3	Form of Prefunded Warrant (incorporated by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K, filed with the SEC on September 21, 2023).
5.1	Opinion of Kilpatrick Townsend & Stockton LLP re: Legality of Shares*
23.1	Consent of Kilpatrick Townsend & Stockton LLP (included in Exhibit 5.0)*
23.2	Consent of PricewaterhouseCoopers LLP*
24.1	Powers of Attorney (incorporated by reference to the signature page hereto).*
99.1	<u>Securities Purchase Agreement, dated September 18, 2023, by and among Elutia Inc. and the Investors named therein (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K, filed with the SEC on September 21, 2023).</u>
107.0	Filing Fee Table*

^{*} Filed herewith.

Item 17. Undertakings

- (a) The undersigned registrant hereby undertakes:
- (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
 - (i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;
 - (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and
 - (iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

provided, however, that paragraphs (a)(1)(i), (a)(1)(ii), and (a)(1)(iii) above 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 section 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 a 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.
- (5) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:
 - (A) 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
 - (B) 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.
- (6) That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities:

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

- (i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;
- (ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
- (iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
- (iv) Any other communications that is an offer in the offering made by the undersigned registrant to the purchaser.
- (b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or

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.

(h) 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 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 Silver Spring, Maryland on November 20, 2023.

ELUTIA INC.

By: /s/ C. Randal Mills, Ph.D.

C. Randal Mills, Ph.D.

President and Chief Executive Officer

POWER OF ATTORNEY

Each of the undersigned officers and directors of the registrant hereby severally constitutes and appoints C. Randal Mills, Ph.D. and Matthew Ferguson, or either of them, as his or her true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, and in any and all capacities, to file and sign any and all amendments, including post-effective amendments, to this registration statement and any other registration statement for the same offering that is to be effective under Rule 462(b) of the Securities Act of 1933, and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith and about the premises as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or their substitute or substitutes, may lawfully do or cause to be done by virtue hereof. This power of attorney shall be governed by and construed with the laws of the State of Delaware and applicable federal securities laws.

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

Name	Title	Date		
/s/ C. Randal Mills, Ph.D. C. Randal Mills, PhD.	President, Chief Executive Officer and Director (principal executive officer)	November 20, 2023		
/s/ Matthew Ferguson	Chief Financial Officer	November 20, 2023		
Matthew Ferguson	(principal financial officer and (principal accounting officer)			
/s/ Kevin Rakin	Chairman of the Board of Directors	November 20, 2023		
Kevin Rakin				
/s/ W. Matthew Zuga	Director	November 20, 2023		
W. Matthew Zuga				
/s/ Maybelle Jordan	Director	November 20, 2023		
Maybelle Jordan				
/s/ Brigid A. Makes	Director	November 20, 2023		
Brigid A. Makes				
/s/ David Colpman	Director	November 20, 2023		
David Colpman				



1100 Peachtree Street NE, Suite 2800 Atlanta, GA 30309-4528



November 20, 2023

Elutia Inc. 12510 Prosperity Drive, Suite 370 Silver Spring, MD 20904

Ladies and Gentlemen:

We have acted as counsel to Elutia Inc., a Delaware corporation (the "Company"), in connection with the registration under the Securities Act of 1933, as amended (the "Act"), pursuant to the Registration Statement on Form S-3 (the "Registration Statement") filed with the Securities and Exchange Commission on November 20, 2023, of up to 18,577,644 shares of the Company's Class A common stock, par value \$0.001 per share (the "Common Stock"), to be sold by the selling securityholders listed in the Registration Statement under the heading "Selling Securityholders" (the "Selling Securityholders"), consisting of (a) 6,852,811 issued and outstanding shares of Common Stock (the "Pre-funded Warrant Shares") issuable upon the exercise of pre-funded warrants (the "Pre-funded Warrants") held by certain of the Selling Securityholders, and (c) 11,221,775 shares of Common Stock (the "Common Warrant Shares") issuable upon the exercise of common warrants (the "Common Warrants") held by certain of the Selling Securityholders. The Pre-funded Warrant Shares and Common Warrant Shares are collectively referred to herein as the "Warrant Shares," and the Pre-funded Warrants and the Common Warrants are collectively referred to as the "Warrants."

We have reviewed such documents, made such examination of law, examined originals or copies of such documents, corporate records, certificates of public officials and other instruments, and have conducted such other investigations of law and fact as we have deemed appropriate, necessary or advisable to give this opinion. In our examination, we have assumed, without verification, the legal capacity of natural persons, the genuineness of all signatures, the authenticity of all documents and instruments submitted to us as duplicates or conformed copies. In addition, we have relied, without independent verification, on certificates of public officials and, as to matters of fact material to the opinions set forth below, on certificates of officers of the Company.

This opinion is limited in all respects to the Delaware General Corporation Law (the "<u>DGCL</u>"), and no opinion is expressed with respect to the laws of any other jurisdiction.

ANCHORAGE ATLANTA AUGUSTA BEIJING CHARLOTTE CHICAGO DALLAS DENVER HOUSTON LOS ANGELES NEW YORK PHOENIX RALEIGH SAN DIEGO SAN FRANCISCO SEATTLE SHANGHAI SILICON VALLEY STOCKHOLM TOKYO WALNUT CREEK WASHINGTON WINSTON-SALEM Elutia Inc. November 20, 2023 Page 2

For purposes of this opinion, we have assumed that: (i) the Company will comply with all applicable notice requirements regarding uncertificated shares provided in the DGCL; (ii) the Warrants have each been duly executed and delivered by the Company and, under the internal laws of the State of New York, constitute valid and legally binding obligations of the Company; and (iii) before the Warrant Shares are issued the Company does not issue shares of Common Stock or reduce the total number of shares of Common Stock the Company is authorized to issue under its Restated Certificate of Incorporation, as amended from time to time, such that the number of unissued shares of Common Stock authorized under the Company's Restated Certificate of Incorporation is less than the number of Warrant Shares.

Based upon and subject to the foregoing, we are of the opinion that: (i) the Selling Securityholder Shares have been duly authorized and validly issued and are fully paid and nonassessable; and (ii) the Warrant Shares, when delivered and paid for upon exercise of the Warrants in accordance with the terms of the Warrants, will have been duly authorized and validly issued and will be fully paid and nonassessable.

We hereby consent to the filing of this opinion as an exhibit to the Registration Statement and to references to us under the heading "Legal Matters" in any related prospectus or prospectus supplement. In giving this consent, we do not thereby admit that we are "experts" within the meaning of the Securities Act, or other rules and regulations of the Commission promulgated thereunder.

Very truly yours,

/s/ KILPATRICK TOWNSEND & STOCKTON LLP

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on Form S-3 of Elutia Inc. of our report dated March 23, 2023, except for the effects of discontinued operations discussed in Note 4 to the consolidated financial statements, as to which the date is November 20, 2023 relating to the financial statements, which appears in Elutia Inc.'s Current Report on Form 8-K dated November 20, 2023. We also consent to the reference to us under the heading "Experts" in such Registration Statement.

/s/ PricewaterhouseCoopers LLP Baltimore, Maryland November 20, 2023

Calculation of Filing Fee Tables

Form S-3 (Form Type)

Elutia Inc.

(Exact Name of Registrant as Specified in its Charter)

Table 1: Newly Registered and Carry Forward Securities

	Security Type	Security Class Title	Fee Calculation or Carry Forward Rule	Amount Registered ⁽¹⁾	Proposed Maximum Offering Price Per Unit ⁽²⁾	Maximum Aggregate Offering Price ⁽¹⁾	Fee Rate	Amount of Registration Fee	Carry Forward Form Type	File	Initial	Filing Fee Previously Paid In Connection with Unsold Securities to be Carried Forward
					Newly l	Registered So	curities					
Fees to Be Paid	Equity	Class A Common Stock par value \$0.001 per share		18,577,644	\$1.61	\$29,910,006	\$0.00014760	\$4,414.72				
Fees Previously Paid	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				
					Carry	Forward Sec	curities		Į	ļ	<u> </u>	
Carry Forward Securities	N/A	N/A	N/A	N/A		N/A			N/A	N/A	N/A	N/A
		Total O	ffering Amou	ints		\$29,910,006		\$4,414.72				
	Total Fee Previously Paid						N/A					
		Tota	l Fee Offsets					N/A				
		N	et Fee Due					\$4,414.72				

- (1) Consists of (i) 6,852,811 shares of the registrant's Class A common stock ("Class A stock"), (ii) 503,058 shares of Class A stock issuable upon the exercise of pre-funded warrants by the selling shareholders named in the accompanying prospectus, and (iii) 11,221,775 shares of Class A stock issuable upon the exercise of common warrants by the selling shareholders named in the accompanying prospectus. Pursuant to Rule 416 under the Securities Act of 1933, as amended, or the Securities Act, this registration statement also covers any additional securities that may be offered, issued or become issuable in connection with any stock split, stock dividend or similar transaction or pursuant to anti-dilution provisions of any of the securities.
- (2) Estimated solely for the purpose of calculation of the registration fee pursuant to Rule 457(c) under the Securities Act based on a per share price of \$1.61, the average of the high and low reported sales prices of the registrant's common stock on the Nasdaq Capital Market on November 16, 2023.