As filed with the Securities and Exchange Commission on January 30, 2026

Registration No. 333-

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

FORM S-8
REGISTRATION STATEMENT
UNDER THE SECURITIES ACT OF 1933

Azitra, Inc.
(Exact name of registrant as specified in its charter)

Delaware	**46-4478536**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

21 Business Park Drive **Branford, CT**	**06405**
(Address of Principal Executive Offices)	(Zip Code)

2023 Stock Incentive Plan
(Full title of the plan)

Francisco D. Salva
21 Business Park Drive
Branford, CT 06405
(Name and address of agent for service)

(203) 646-6446
(Telephone number, including area code, of agent for service)

Copies to:

Faith L. Charles, Esq.
Thompson Hine LLP
300 Madison Avenue, 27th Floor
New York, New York 10017-6232
Tel: (212) 344-6101

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

Large accelerated filer ☐	Accelerated filer ☐
Non-accelerated filer ☒	Smaller reporting company ☒
	Emerging growth company ☒

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

EXPLANATORY NOTE

At the 2024 Annual Meeting of Stockholders of Azitra, Inc. (the "Company") held on November 20, 2024, the stockholders approved an amendment to the 2023 Stock Incentive Plan (as may be amended from time to time, the "2023 Plan") for the adoption of an evergreen provision to the 2023 Plan (the "Evergreen Provision"). The Evergreen Provision provides for an automatic annual increase in the number of shares of common stock available for issuance under the 2023 Plan (the "Share Reserve") beginning on January 1st of each year for a period of 10 years commencing on January 1, 2026 and ending on (and including) January 1, 2035, in an amount equal to 5% of the total number of shares outstanding on December 31st of the preceding calendar year, unless the Company's board of directors acts prior to the first day of any calendar year to provide (i) that there shall be no increase in the Share Reserve for such calendar year, or (ii) that the increase in the Share Reserve for such calendar year shall be a lesser number of shares of common stock than would otherwise occur pursuant to the Evergreen Provision.

This registration statement (the "Registration Statement") on Form S-8 registers an additional 537,034 shares of the Company's common stock, par value $0.0001, that may be issuable under the Company's 2023 Plan pursuant to the Evergreen Provision based on 10,740,697 shares of common stock outstanding as of December 31, 2025. On August 20, 2025, the Company effected a 1-for-6.66 reverse stock split of its issued and outstanding common stock (the "Reverse Stock Split"). Unless otherwise indicated, all share numbers herein, including common stock registered hereunder and registered under prior registration statements, give effect to the Reverse Stock Split.

The Company previously registered (i) 223,814 shares of common stock available for issuance under the 2016 Stock Incentive Plan and 300,001 shares of common stock available for issuance under the 2023 Plan on a registration statement on Form S-8, filed by the Company on December 4, 2023, File No. 333-275876, and (ii) 171,832 shares of common stock available for issuance under the 2023 Plan on a registration statement on Form S-8, filed by the Company on December 1, 2025, File No. 333-291870, (the "Prior Registration Statements"). This Registration Statement on Form S-8 is filed with the Securities and Exchange Commission (the "SEC" or the "Commission") for the purposes of registering an additional 537,034 shares of the Company's common stock issuable under the 2023 Plan.

In accordance with General Instruction E of Form S-8, the contents of the Prior Registration Statements are hereby incorporated by reference in this Registration Statement. Only those items of Form S-8 containing new information not contained in the Prior Registration Statements are presented herein.

PART I

INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

The document(s) containing the information specified in Part I of Form S-8 will be sent or given to participants in the 2023 Plan as specified by Rule 428(b)(1) under the Securities Act of 1933, as amended (the “Securities Act”). Such documents are not being filed with the Commission, but constitute, along with the documents incorporated by reference into this Registration Statement, a prospectus that meets the requirements of Section 10(a) of the Securities Act.

PART II

INFORMATION REQUIRED
IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Certain Documents by Reference

The following documents filed by the Company with the Commission are incorporated by reference into this Registration Statement:

(a) The Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2024, filed with the SEC on February 24, 2025;

(b) The Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2025, which was filed on May 13, 2025;

(c) The Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2025, which was filed on August 11, 2025;

(d) The Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2025, which was filed on November 12, 2025;

(e) The Company's Current Reports on Form 8-K filed with the SEC on January 16, 2025, February 6, 2025, February 6, 2025 (both filed on that date), February 20, 2025, April 24, 2025, May 2, 2025, June 18, 2025, June 23, 2025, July 3, 2025, August 20, 2025, August 29, 2025, October 3, 2025, November 25, 2025 and December 17, 2025 (other than any information under Item 2.02 or Item 7.01 of each incorporated Form 8-K);

(f) The Company's definitive proxy statements filed on January 14, 2025, May 29, 2025 (including the proxy statement supplement dated June 18, 2025), and January 2, 2026;

(g) The description of the Company's common stock in its Form 8-A12B, which was filed on May 16, 2023, and any amendments or reports filed for the purpose of updating this description; and

(h) All reports and other documents subsequently filed by the Company pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), (other than Current Reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits furnished on such form that relate to such items) on or after the date of this Registration Statement and prior to the filing of a post-effective amendment which indicates that all securities offered have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference herein and to be a part of this Registration Statement from the date of the filing of such reports and documents.

Any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement contained herein or in any subsequently filed document that also is deemed to be incorporated by reference herein modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement.

Item 4. Description of Securities

Not applicable.

Item 5. Interests of Named Experts and Counsel

Not applicable.

Item 6. Indemnification of Directors and Officers

The following summary is qualified in its entirety by reference to the complete text of any statutes referred to below and the Second Amended and Restated Certificate of Incorporation of Azitra, Inc. (as amended to date, the "Certificate of Incorporation"), a Delaware corporation.

Section 145 of the General Corporation Law of the State of Delaware (the "DGCL") permits a Delaware 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, 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.

In the case of an action by or in the right of the corporation, Section 145 of the DGCL permits a Delaware 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 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) 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 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 that the Court of Chancery or such other court shall deem proper.

Section 145 of the DGCL also permits a Delaware 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 such person's status as such, whether or not the corporation would have the power to indemnify such person against such liability under Section 145 of the DGCL.

Our Certificate of Incorporation states that to the fullest extent permitted by the DGCL our directors shall not be personally liable to us or to our stockholders for monetary damages for breach of fiduciary duty as a director. If the DGCL is amended after the date hereof to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of our directors shall be eliminated or limited to the fullest extent permitted by the DGCL, as so amended.

Our Certificate of Incorporation requires us, to the fullest extent permitted by applicable law, to provide indemnification of (and advancement of expenses to) our directors and officers, and authorizes us, to the fullest extent permitted by applicable law, to provide indemnification of (and advancement of expenses to) other employees and agents (and any other persons to which the DGCL permits us to provide indemnification) through bylaw provisions, agreements with such directors, officers, employees, agents or other persons, vote of stockholders or disinterested directors or otherwise, subject only to limits created by the DGCL with respect to actions for breach of duty to our corporation, our stockholders and others.

Our Certificate of Incorporation provides that we shall, to the maximum extent and in the manner permitted by the DGCL, indemnify each of our directors, officers and all other persons we have the power to indemnify under Section 145 of the DGCL against expenses (including attorneys' fees), judgments, fines, settlements and other amounts actually and reasonably incurred in connection with any proceeding, arising by reason of the fact that such person is or was a director of the Company. We may maintain insurance, at our expense, to protect the Company and any of our directors, officers, employees or agents against any such expense, liability or loss, whether or not we have the power to indemnify such person.

We have entered into indemnification agreements with each of our directors and executive officers that are broader than the specific indemnification provisions contained in the DGCL. These indemnification agreements require us, among other things, to indemnify our directors and executive officers against liabilities that may arise by reason of their status or service. These indemnification agreements also require us to advance all expenses incurred by the directors and executive officers in investigating or defending any such action, suit, or proceeding. We believe that these agreements are necessary to attract and retain qualified individuals to serve as directors and executive officers.

We maintain insurance, at our expense, to protect the Company and any of our directors, officers, employees or agents against any such expense, liability or loss, whether or not we have the power to indemnify such person.

Insofar as indemnification for liabilities arising under the Securities Act, may be permitted to our directors, officers or persons controlling our Company pursuant to the provisions contained in our Certificate of Incorporation, Bylaws, the DGCL or otherwise, we have been informed that, in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

Item 7. Exemption from Registration Claimed

Not applicable.

Item 8. Exhibits.

Exhibit No.	Description	Method of Filing
4.1	Azitra, Inc. 2023 Stock Incentive Plan	Incorporated by reference from the Company's Registration Statement on Form S-1/A filed on March 20, 2023.
4.2	Amendment No. 1 to Azitra, Inc. 2023 Stock Incentive Plan	Incorporated herein by reference to Exhibit 4.2 to the Company's Registration Statement on Form S-8 filed on December 1, 2025 (File No. 333-291870).
4.3	Form of Stock Option Agreement under the Azitra, Inc. 2023 Stock Incentive Plan	Incorporated herein by reference to Exhibit 4.3 to the Company's Registration Statement on Form S-8 filed on December 1, 2025 (File No. 333-291870).
5.1	Opinion and Consent of Thompson Hine LLP	Filed electronically herewith.
23.1	Consent of Grassi & Co., CPAs, P.C.	Filed electronically herewith.
23.2	Consent of Thompson Hine LLP	Included in Exhibit 5.1.
24.1	Power of Attorney	Included on the signature page to this Registration Statement.
107	Filing Fee Table	Filed electronically herewith.

Item 9. 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, as amended (the "Securities Act").

(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) under the Securities Act if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement.

(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) and (a)(1)(ii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or section 15(d) of the Exchange Act that are incorporated by reference in the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act, 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.

(b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act") (and where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) 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.

(c) Insofar as indemnification for liabilities arising under the Securities Act 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 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 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, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements of filing on Form S-8 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the city of Branford, State of Connecticut on January 30, 2026.

AZITRA, INC.

By: */s/ Francisco D. Salva*
Francisco D. Salva,
Chief Executive Officer

POWER OF ATTORNEY

Each person whose signature appears below hereby constitutes and appoints Francisco D. Salva and Norman Staskey, and each of them, as such person's true and lawful attorney-in-fact and agent, each with full powers of substitution and re-substitution, for such person and in such person's name, place and stead, in any and all capacities, to sign any or all amendments (including post effective amendments) to this Registration Statement, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agent full power and authority to do and perform each and every act and thing requisite or necessary to be done in and about the premises, as fully to all intents and purposes as such person might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent or his or her substitute or substitutes, may lawfully do or cause to be done by virtue thereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed on January 30, 2026 by the following persons in the capacities indicated.

Signature	Title
/s/ Francisco D. Salva Francisco D. Salva	President, Chief Executive Officer and Director (Principal Executive Officer)
/s/ Norman Staskey Norman Staskey	Chief Financial Officer (Principal Financial and Accounting Officer)
/s/ Travis Whitfill Travis Whitfill	Chief Operating Officer and Director
/s/ Barbara Ryan Barbara Ryan	Director
/s/ John Schroer John Schroer	Director

THOMPSON HINE

ATLANTA CINCINNATI COLUMBUS LOS ANGELES NEW YORK
CHICAGO CLEVELAND DAYTON MINNEAPOLIS WASHINGTON, D.C.

January 30, 2026

Azitra, Inc.
21 Business Park Drive
Brandford, Connecticut 06405

Re: Registration Statement on Form S-8 – Azitra, Inc. 2023 Stock Incentive Plan

Ladies and Gentlemen:

Azitra, Inc., a Delaware corporation (the "***Company***"), is filing with the U.S. Securities and Exchange Commission (the "***Commission***") a Registration Statement on Form S-8 (the "***Registration Statement***") for the registration, under the Securities Act of 1933, as amended (the "***Securities Act***"), of an additional 537,034 shares of common stock, par value $0.0001 per share, of the Company (the "***Common Stock***"), that are issuable at any time or from time to time under the Azitra, Inc. 2023 Stock Incentive Plan (as may be amended from time to time, the "***2023 Plan***").

Item 601 of Regulation S-K and the instructions to Form S-8 require that an opinion of counsel concerning the legality of the securities to be registered be filed as an exhibit to a Form S-8 registration statement if the securities are original issue shares. This opinion letter is provided in satisfaction of that requirement as it relates to the Registration Statement.

In rendering this opinion, we have examined the 2023 Plan, the Registration Statement, the certificate of incorporation of the Company, and the bylaws of the Company (each as amended and/or restated as of the date hereof) and such other records, instruments, and documents as we have deemed advisable in order to render this opinion letter. In such examination, we have assumed: (a) the genuineness of all signatures, (b) the legal capacity of all natural persons, (c) the authenticity of all documents, certificates, and instruments submitted to us as originals, (d) the conformity to original documents of all documents, certificates, and instruments submitted to us as certified, conformed, or photostatic copies, and (e) the authenticity of the originals of such latter documents. Our opinion set forth below is based on the text of the 2023 Plan and the amendment thereto as referenced in the Exhibits Index to the Registration Statement and is limited to the General Corporation Law of the State of Delaware (the "***DGCL***") as currently in effect, and we express no opinion as to the effect on the matters covered by this letter of the laws of any other jurisdiction.

As a result of the foregoing, and subject to the further limitations, qualifications, and assumptions set forth herein, we are of the opinion that, when issued pursuant to and in accordance with the terms of the 2023 Plan, the Common Stock that is the subject of the Registration Statement will be validly issued, fully paid, and non-assessable.

In rendering the opinion above, we have assumed that: (a) the Company will have sufficient authorized and unissued shares of Common Stock at the time of each issuance of any of the shares of Common Stock under the 2023 Plan, (b) the shares of Common Stock issued pursuant to the 2023 Plan will be evidenced by appropriate certificates, duly executed and delivered, or the Company's Board of Directors has adopted or will adopt a resolution providing that all of the shares of Common Stock shall be uncertificated in accordance with Section 158 of the DGCL prior to their issuance, (c) the issuance of each share of Common Stock issued pursuant to the 2023 Plan will be duly noted in the Company's stock ledger upon its issuance, (d) the Company will receive consideration for each share of Common Stock issued pursuant to the 2023 Plan at least equal to the par value of such share of Common Stock, and in the amount required by the 2023 Plan (or the award agreement issued thereunder) and the Authorizing Resolutions (as defined below), (e) the resolutions authorizing the Company to issue the Common Stock pursuant to the 2023 Plan (the "***Authorizing Resolutions***") will be in full force and effect at all times at which the Common Stock is issued by the Company, and that the Company will take no action inconsistent with such Authorizing Resolutions, and (f) each award under the 2023 Plan will be approved by the Board of Directors of the Company or an authorized committee of the Board of Directors.

This opinion letter speaks only as of the date hereof. We expressly disclaim any responsibility to advise you of any development or circumstance of any kind, including any change of law or fact that may occur after the date of this opinion letter that might affect the opinion expressed herein.

We hereby consent to the filing of this opinion letter as an exhibit to the Registration Statement. In giving such consent, we do not thereby admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission.

Very truly yours,

/s/ Thompson Hine LLP
Thompson Hine LLP

Exhibit 23.1

GRASSI
ADVISORS & ACCOUNTANTS

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in this Registration Statement on Form S-8 of our report dated February 24, 2025, which includes an explanatory paragraph as to the Company's ability to continue as a going concern, relating to of the financial statements of Azitra, Inc. as of and for the years ended December 31, 2024 and 2023, which report is included in this Annual Report on Form 10-K of Azitra, Inc.

Grassi & Co., CPAs, P.C.

Grassi & Co., CPAs, P.C.

Jericho, New York
January 30, 2026

Exhibit 107

Calculation of Filing Fee Tables

Form S-8
(Form Type)

Azitra, 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 Rule**	**Amount Registered**	**Proposed Maximum Offering Price Per Unit**	**Maximum Aggregate Offering Price**	**Fee Rate**	**Amount of Registration Fee**
Equity	Common Stock, par value $0.0001 per share	Other(1)	537,034(2)	$ 0.27385(1)	$ 147,066.76	0.00013810	$ 20.31
	Total Offering Amounts				$ 147,066.76		$ 20.31
	Total Fee Offsets						$ -
	Net Fee Due						$ 20.31

(1) Calculated solely for purposes of this offering under Rules 457(c) and 457(h) of the Securities Act of 1933, as amended (the "Securities Act"), on the basis of the average of the high and low prices per share of Azitra, Inc.'s (the "Registrant") common stock on January 26, 2026 as reported by NYSE American.

(2) Represents an additional 537,034 shares, not previously registered, of the Registrant's common stock that may be issued under the Azitra, Inc. 2023 Stock Incentive Plan (the "2023 Plan"), which was recommended by the Registrant's Board of Directors and approved by the Registrant's stockholders on November 20, 2024. The amount registered represents shares of common stock that were added to the shares reserved for future issuance under the 2023 Plan on January 1, 2026, pursuant to an evergreen provision contained in the 2023 Plan. Pursuant to such provision, the number of shares reserved for issuance under the 2023 Plan will automatically increase on January 1st of each year for a period of 10 years commencing on January 1, 2026 and ending on (and including) January 1, 2035, in an amount equal to 5% of the total number of shares of the Registrant's common stock outstanding on December 31st of the preceding calendar year, except that, before the first day of any calendar year, the Registrant's board of directors may determine that there shall be no increase in the share reserve for such calendar year or that the increase in the share reserve for such calendar year shall be a lesser number of shares of common stock. Pursuant to Rule 416(a) promulgated under the Securities Act, this registration statement shall also cover any additional shares of Registrant's common stock that become issuable under the 2023 Plan by reason of any stock dividend, stock split, recapitalization, or other similar transaction effected without receipt of consideration that increases the number of outstanding shares of Registrant's common stock, as applicable.