REPLY EXHIBIT 2

Reply Exhibit 2 – Theriva Biologics, Inc. Form 8-K filed November 2, 2026, with Exhibit 99.1 and Exhibit 10.1 (first pages)

Nejmeh v. Theriva Biologics, Inc., No. 3:26-cv-00705-ART-CSD (D. Nev.)

Source: SEC EDGAR, Accession No. 0001104659-26-121318.

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

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d)
of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): October 30, 2026

THERIVA BIOLOGICS, INC.

(Exact name of registrant as specified in its charter)

Nevada	**001-12584**	**13-3808303**
(State or other jurisdiction of incorporation)	(Commission File No.)	(IRS Employer Identification No.)

9605 Medical Center Drive, Suite 270
Rockville, Maryland 20850
(Address of principal executive offices and zip code)

(301) 417-4364
Registrant's telephone number, including area code

N/A
(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

☐ Soliciting material pursuant to Rule 14a-12(b) under the Exchange Act (17 CFR 240.14a-12)

☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common stock, par value $0.001 per share	TOVX	NYSE American

Indicate by check mark whether the registrant is an emerging growth company as defined in in Rule 405 of the Securities Act of 1933 (17 CFR §230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (17 CFR §240.12b-2 of this chapter).

Emerging growth company ☐

If an emerging growth company, indicate by checkmark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Item 1.01. Entry into a Material Definitive Agreement.

On October 30, 2026 (the "Effective Date"), Theriva Biologics, Inc. (the "Company") entered into an Asset Purchase and Sale Agreement (the "Purchase Agreement") with Biossil Labs Inc., a corporation organized under the laws of Canada (the "Biossil"), pursuant to which the Company sold to Biossil, and Biossil purchased from the Company, the Company's assets exclusively relating to SYN-004 (ribaxamase), the Company's oral β-lactamase product candidate, including its improvements, modifications and reformulations, including SYN-007 (collectively, "Ribaxamase"), as well as certain assets exclusively related to SYN-006, the Company's carbapenemase product candidate (collectively, the "Purchased Assets"). The closing of the transaction (the "Closing") occurred concurrently with the execution of the Purchase Agreement on the Effective Date.

The Purchased Assets include, among other things, the patents and other intellectual property relating exclusively to Ribaxamase, specified contracts, regulatory filings and approvals (including an investigational new drug application), existing inventory and materials, books, records and data, related claims and rights of recovery, and the specified SYN-006 assets. Biossil assumed only specified liabilities, consisting generally of liabilities arising after the Closing from Biossil's ownership or exploitation of the Purchased Assets and post-Closing obligations under the assumed contracts. The Company retained all other liabilities, including liabilities arising from its ownership or exploitation of the Purchased Assets prior to the Closing. All cash, contracts not assumed by Biossil, intellectual property other than the purchased intellectual property, and certain other assets were excluded from the sale. At the Closing, the Company also granted Biossil a non-exclusive, perpetual, irrevocable, worldwide, fully paid-up, royalty-free license under certain Company intellectual property not included in the Purchased Assets, solely to the extent necessary to exploit the products.

In consideration for the Purchased Assets, Biossil paid the Company an upfront payment of $350,000 at the Closing, which is non-refundable and non-creditable against other amounts payable under the Purchase Agreement. In addition, the Company is eligible to receive:

- regulatory milestone payments in the aggregate amount of up to $3 million upon the first regulatory approval of any product from the US Food and Drug Administration and the first marketing authorization of any product from the European Medicines Agency;

- sales milestone in the aggregate amount of up to $88 million upon the achievement of specified cumulative worldwide net sales thresholds;

- a running royalty at a low-single-digit percentage of worldwide net sales of Ribaxamase, the carbapenemase product known as SYN-006, and certain other products derived from or based on the purchased assets by Biossil, its affiliates, licensees and other selling parties, to the Company, subject to a cap of $250 million; and

- a low-double-digit percentage of certain license consideration received by Biossil or any other selling party for the grant of a license under any Purchased Asset, which payments are not subject to the royalty cap.

Each milestone payment is payable only once, regardless of the number of products, indications, or selling parties. There can be no assurance that any milestone will be achieved, that any product will be approved or commercialized, or that the Company will receive any payments beyond the upfront payment.

Biossil has sole control over the development and commercialization of the products and has agreed to use commercially reasonable efforts to develop and obtain regulatory approval for at least one product. Biossil is required to provide the Company with periodic summary reports of material product development and regulatory activities, and the Company has customary audit rights following the first commercial sale of a product.

The Purchase Agreement contains customary representations, warranties and covenants of the parties, including transition assistance by the Company for 120 days following the Closing, regulatory transfer obligations, and confidentiality obligations. Each party has agreed to indemnify the other for, among other things, breaches of its representations, warranties and covenants, subject to a deductible, caps and other customary limitations. Biossil may offset certain finally determined indemnification amounts against amounts payable to the Company, other than the upfront payment. Biossil may not assign the Purchased Assets unless the assignee assumes Biossil's payment obligations to the Company. The Purchase Agreement is governed by New York law, and disputes are to be resolved by confidential arbitration in New York, New York.

The Purchase Agreement does not contain customary pre-closing termination rights because the Closing occurred concurrently with the execution of the Purchase Agreement. Following the Closing, the Purchase Agreement does not provide for a termination of the

transaction or reversion of the Purchased Assets to Theriva upon a breach by Biossil; rather, the parties' remedies are principally addressed through the indemnification, specific performance and dispute resolution provisions of the Purchase Agreement.

In connection with the Purchase Agreement, on October 30, 2026, the Company also entered into an amendment (the "PREV Amendment") to the Asset Purchase Agreement, dated November 7, 2012, between the Company (formerly known as Synthetic Biologics, Inc.) and PREV ABR LLC ("PREV"). The PREV Amendment modifies the amounts payable by the Company to PREV with respect to the Purchased Assets being transferred to Biossil, while preserving the existing milestone payment provisions with respect to products retained by the Company.

Pursuant to the PREV Amendment, upon Closing, the Company paid PREV $140,000. Thereafter, the Company will be required to pay PREV (i) fifty percent (50%) of regulatory milestone payments and sales milestone payments received by the Company or its affiliates pursuant to the Purchase Agreement, (ii) thirty-three and one-third percent (33⅓%) of royalty payments received by the Company or its affiliates thereunder and (iii) fifty percent (50%) of other consideration received by the Company or its affiliates in connection with the Purchased Assets, including license consideration payments, in each case subject to the terms and conditions of the PREV Amendment. The Company's payment obligations under these provisions are subject to an aggregate cap of $13.0 million, which includes the $140,000 closing payment and applicable payments made under the amended payment provisions and certain payments made under the existing agreement following the date of the PREV Amendment. Amounts paid under the existing agreement prior to the date of the PREV Amendment do not count toward the $13.0 million cap. The PREV Amendment also provides that, if the Company or an affiliate transfers its right to receive consideration under the Purchase Agreement in specified circumstances, the Company will generally pay PREV fifty percent (50%) of the proceeds actually received from such transfer, subject to the $13.0 million cap. Except for certain provisions that become effective upon execution, the PREV Amendment became effective upon PREV's receipt of the $140,000 closing payment at the Closing of the Biossil transaction.

The foregoing descriptions of the Purchase Agreement and the PREV Amendment do not purport to be complete and are qualified in their entirety by reference to the full texts thereof, copies of which are filed as Exhibits 10.1 and 10.2, respectively, to this Current Report on Form 8-K and are incorporated herein by reference.

The representations, warranties and covenants contained in the Purchase Agreement were made solely for purposes of the Purchase Agreement and as of specific dates, were solely for the benefit of the parties thereto, may be subject to limitations agreed upon by the parties, including qualification by confidential disclosure schedules, and may be subject to standards of materiality that differ from those applicable to investors. Investors are not third-party beneficiaries under the Purchase Agreement and should not rely on the representations, warranties and covenants or any descriptions thereof as characterizations of the actual state of facts or condition of the Company or Biossil.

Item 2.01. Completion of Acquisition or Disposition of Assets.

The information set forth in Item 1.01 of this Current Report on Form 8-K is incorporated by reference into this Item 2.01. The Closing occurred on October 30, 2026.

Item 7.01. Regulation FD Disclosure.

On November 2, 2026, the Company issued a press release announcing the Agreement, a copy of which is furnished as Exhibit 99.1 to this Current Report on Form 8-K.

The information in this Item 7.01 and in the press release attached as Exhibit 99.1 to this Current Report on Form 8-K shall not be deemed to be "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liabilities of that section or Sections 11 and 12(a)(2) of the Securities Act of 1933, as amended. The information contained in this Item 7.01 and in the press release furnished as Exhibit 99.1 to this Current Report on Form 8-K shall not be incorporated by reference into any filing with the U.S. Securities and Exchange Commission made by the Company, whether made before or after the date hereof, regardless of any general incorporation language in such filing.

The press release furnished as Exhibit 99.1 to this Current Report on Form 8-K includes "safe harbor" language pursuant to the Private Securities Litigation Reform Act of 1995, as amended, indicating that certain statements contained therein are "forward-looking" rather than historical.

The Company undertakes no duty or obligation to update or revise the information contained in this Current Report on Form 8-K, although it may do so from time to time if its management believes it is appropriate. Any such updating may be made through the filing of other reports or documents with the Securities and Exchange Commission, through press releases or through other public disclosures.

Forward-Looking Statements

This Current Report on Form 8-K contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, including statements regarding the potential receipt of milestone, royalty and license consideration payments under the Purchase Agreement and the development, regulatory approval and commercialization of the products. These statements are based on current expectations and are subject to risks and uncertainties, including that Biossil may not successfully develop, obtain regulatory approval for, or commercialize any product, that the milestones may not be achieved, and the other risks described in the Company's filings with the SEC, including its most recent Annual Report on Form 10-K and subsequent Quarterly Reports on Form 10-Q. Actual results may differ materially. The Company undertakes no obligation to update any forward-looking statement except as required by law.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits.

The following exhibits are furnished with this Current Report on Form 8-K.

Exhibit Number	Description
10.1*#	Asset Purchase and Sale Agreement, dated as of October 30, 2026, by and between Theriva Biologics, Inc. and Biossil Labs Inc.
10.2#	Amendment to Asset Purchase Agreement, dated as of October 30, 2026, by and between Theriva Biologics, Inc. and PREV ABR LLC
99.1	Press Release dated November 2, 2026

104	Cover Page Interactive Data File (embedded within the XBRL document)

* Certain portions of this exhibit (indicated by "[***]") have been omitted pursuant to Item 601(b)(10)(iv) of Regulation S-K because they are both not material and of the type that the Company treats as private or confidential.

Schedules and exhibits have been omitted pursuant to Item 601(a)(5) of Regulation S-K. The Company agrees to furnish supplementally a copy of any omitted schedule or exhibit to the SEC upon request.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Dated: November 2, 2026

THERIVA BIOLOGICS, INC.

By: /s/ Steven A. Shallcross
Name: Steven A. Shallcross
Title: Chief Executive Officer and Chief Financial Officer

Exhibit 99.1

Theriva™ Biologics Announces Sale of SYN-004 (ribaxamase) and Related Antibiotic-Degrading Enzyme Portfolio to Biossil Labs Inc.

- Theriva received a $350,000 upfront payment at closing and is eligible for up to $91 million in regulatory and sales milestones, along with low single-digit royalties on net product sales -

- Biossil to assume all responsibility and costs for future development and commercialization of the antibiotic-degrading enzyme portfolio -

ROCKVILLE, MD, November 2, 2026 (GLOBE NEWSWIRE) — Theriva™ Biologics, Inc. (NYSE American: TOVX), a diversified clinical-stage company developing therapeutics designed to treat cancer and related diseases in areas of high unmet need, today announced the sale of the Company's portfolio of antibiotic-degrading enzymes — including SYN-004 (ribaxamase), SYN-007 (reformulated ribaxamase), and SYN-006 (carbapenemase) — to Biossil Labs Inc. (Biossil), a privately held, Toronto-based, artificial intelligence (AI)-native biopharmaceutical company advancing a diverse portfolio of late-stage programs in life-threatening indications with urgent unmet needs.

Under the terms of the agreement, Biossil acquired all of Theriva's rights, title and interest in SYN-004 (ribaxamase), and its improvements, modifications, and reformulations, including SYN-007 (reformulated ribaxamase), as well as certain assets exclusively related to SYN-006 (carbapenemase). Theriva received a $350,000 upfront payment at closing and is eligible to receive up to $3 million upon the achievement of regulatory milestones, low single-digit royalties on net product sales, subject to a cap of $250 million, and up to $88 million in potential milestones payable upon achievement of certain cumulative worldwide net sales thresholds. Biossil assumed all responsibility and costs for future development and commercialization of the acquired product portfolio pursuant to the agreement.

"We are extremely pleased to complete the sale of our antibiotic-degrading enzyme portfolio to Biossil to continue the clinical development of these gastrointestinal microbiome-protecting assets, including advancement of the Phase 1b/2a clinical trial at Washington University investigating prevention of acute graft-versus-host disease (aGVHD) and opportunistic infections in antibiotic-treated allogeneic hematopoietic cell transplant (HCT) recipients," said Steven A. Shallcross, Chief Executive Officer of Theriva Biologics. "We have made a significant investment in SYN-004 (ribaxamase) clinical development and strongly believe that the product candidates in our antibiotic-degrading enzyme portfolio can provide clinical benefit for patients and hospital systems by reducing the incidence of infections by *Clostridioides difficile*, vancomycin-resistant enterococci (VRE), and carbapenem-resistant Enterobacterales (CRE), as well as the incidence and/or severity of aGVHD."

"Gut dysbiosis, antibiotic resistant colonization, and opportunistic infections in vulnerable patients represent important unmet needs that recommend we advance this portfolio of antibiotic-degrading enzymes with rigor and equipoise," said Alexander I. Mosa, MD, PhD, Chief Scientific Officer and Chair of Biossil.

About the SYN-004 (ribaxamase) Portfolio

SYN-004 (ribaxamase) is an orally administered prophylactic therapy designed to degrade certain intravenous (IV) beta-lactam antibiotics excreted into the gastrointestinal tract and maintain the natural balance of the gut microbiome for the prevention of *Clostridioides difficile* infection (CDI), overgrowth of pathogenic organisms, and the emergence of antimicrobial resistance (AMR). SYN-004 (ribaxamase) is also being evaluated for its potential to reduce the incidence and/or severity of acute graft-versus-host disease (aGVHD) in allogeneic hematopoietic cell transplant (HCT) recipients. A previously completed, randomized, placebo-controlled Phase 2b clinical trial in 412 patients receiving IV ceftriaxone to treat a lower respiratory tract infection demonstrated that coadministered oral SYN-004 (ribaxamase) protected the gut microbiome from antibiotic-mediated dysbiosis. The SYN-004 (ribaxamase) treatment group demonstrated significantly better maintenance and recovery of the gut microbiome; a lower incidence of CDI; and reduced colonization by opportunistic and potentially pathogenic microorganisms such as vancomycin-resistant enterococci (VRE)[1].

SYN-007 is a reformulation of ribaxamase intended for oral coadministration with orally administered beta-lactam antibiotics. Preclinical proof-of-concept for gut microbiome protection by SYN-007 coadministered with oral amoxicillin has been demonstrated in dogs[2,3]. SYN-006 (carbapenemase) is an oral formulation of a metallo-beta-lactamase enzyme able to degrade carbapenem antibiotics in addition to beta-lactams. Preclinical proof-of-concept for gut microbiome protection by oral SYN-006 (carbapenemase) coadministered with the IV carbapenem antibiotic ertapenem has been demonstrated in a pig model[4,5].

[1]Kokai-Kun JF, et al. (2019). *Lancet Infect Dis* 19(5):487-496. [2]Connelly S et al. (2019) *Microorganisms* 7(5):150. [3]Connelly S et al. (2020) *Microorganisms* 8(2):152. [4]Connelly S et al. (2019). *Front Microbiol* 10:101. [5]Connelly S et al. (2019) *Microorganisms* 16;7(1):22.

About the Phase 1b/2a Clinical Trial at Washington University

Allogeneic hematopoietic cell transplant (HCT) recipients routinely receive long courses of IV beta-lactam antibiotics to treat infection following conditioning therapy. Antibiotic-mediated damage to the gut microbiome in allogeneic HCT recipients may lead to adverse outcomes including CDI, VRE colonization and potentially fatal bacteremia, and aGVHD. A randomized, double-blind, placebo-controlled Phase 1b/2a clinical trial has been conducted at Washington University School of Medicine in St. Louis, but enrollment is currently paused after completing 2 of 3 cohorts, to evaluate the safety, tolerability, and potential absorption of oral SYN-004 (ribaxamase) into the systemic circulation of allogeneic HCT recipients who receive one of three prespecified IV antibiotics to treat fever. The trial is also designed to evaluate potential protective effects of SYN-004 (ribaxamase) on the gut microbiome as well as generate preliminary information on potential therapeutic benefits and patient outcomes of SYN-004 in allogeneic HCT recipients.

Erik R. Dubberke, MD, MSPH, Professor of Medicine at Washington University School of Medicine in St. Louis, said: “Allogeneic HCT recipients are at very high risk for both CDI and bloodstream infections due to VRE and other resistant bacteria that can colonize the gut because of frequent exposures to beta-lactam antibiotics. Ribaxamase, by protecting the gut microbiota during antibiotic exposures, has the potential to significantly improve outcomes after allogeneic HCT by preventing these infections. Also, it would really be a game-changer if ribaxamase is able to help prevent aGVHD.”

The trial intends to enroll up to 36 evaluable participants into three sequential cohorts, each evaluating a different study-assigned IV beta-lactam antibiotic. Two of the three antibiotic cohorts have been completed to date. To mitigate risk, patients in cohort 1 received IV meropenem (which is not metabolized by SYN-004) as the study-assigned antibiotic. Patients in cohort 2 were administered IV piperacillin/tazobactam as the study-assigned antibiotic. Piperacillin is metabolized by SYN-004 (ribaxamase) but is protected by the beta-lactamase inhibitor tazobactam. Safety and pharmacokinetic data for the first two cohorts were reviewed by an independent Data and Safety Monitoring Committee that recommended proceeding to cohort 3, in which patients will receive IV cefepime, which is a substrate for SYN-004 (ribaxamase). More information on the trial is available here [NCT04692181].

About Theriva™ Biologics, Inc.

Theriva™ Biologics (NYSE American: TOVX) is a diversified clinical-stage company developing therapeutics designed to treat cancer and related diseases in areas of high unmet need. The Company is advancing a new oncolytic adenovirus platform designed for intravenous (IV), intravitreal and antitumoral delivery to trigger tumor cell death, improve access of co-administered cancer therapies to the tumor, and promote a robust and sustained anti-tumor response by the patient's immune system. With the sale of the SYN-004 (ribaxamase) antibiotic-degrading portfolio, the Company's lead product candidate is VCN-01, an oncolytic adenovirus designed to replicate selectively and aggressively within tumor cells, and to degrade the tumor stroma barrier that serves as a significant physical and immunosuppressive barrier to cancer treatment. VCN-01 has completed a successful Phase 2b clinical trial in first-line metastatic pancreatic cancer patients treated with gemcitabine-nab-paclitaxel standard-of-care chemotherapy (published in Nature Medicine) and the Company is in discussions with regulatory agencies regarding a potential Phase 2/3 clinical trial in the treatment of retinoblastoma. For more information, please visit the Theriva Biologics website.

About Biossil

Biossil is an AI-native drug development company advancing a pipeline of late-stage, first-in-class candidates for heterogeneous and life-threatening diseases. With teams in Toronto and Boston, and partnerships with leading academic medical centers and research hospitals, Biossil integrates proprietary AI with deep clinical and translational expertise to advance promising clinical-stage assets.

Forward-Looking Statement

This release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. In some cases forward-looking statements can be identified by terminology such as "may," "should," "potential," "continue," "expects," "anticipates," "intends," "plans," "believes," "estimates," and similar expressions, and include statements regarding the sale to Biossil enabling continued clinical development of the SYN-004 (ribaxamase), SYN-007 (reformulated ribaxamase) and SYN-006 (carbapenemase) antibiotic-degrading enzyme portfolio; strongly believing that the product candidates in the antibiotic-degrading enzyme portfolio can provide clinical benefit for patients and hospital systems by reducing the incidence of infections by C. difficile, vancomycin-resistant enterococci (VRE), and carbapenem-resistant Enterobacterales (CRE), as well as the incidence and/or severity of aGVHD; *and Theriva receiving up to $3 million upon the achievement of regulatory milestones, low single-digit royalties on net product sales, subject to a cap of $250 million, and up to $88 million in potential milestones payable upon achievement of certain cumulative worldwide net sales thresholds; Biossil continuing the clinical development of the gastrointestinal microbiome-protecting assets, including advancement of the Phase 1b/2a clinical trial at Washington University; the belief that the product candidates in the antibiotic-degrading enzyme portfolio can provide clinical benefit for patients and hospital systems by reducing the incidence of infections by Clostridioides difficile, vancomycin-resistant enterococci (VRE), and carbapenem-resistant Enterobacterales (CRE), as well as the incidence and/or severity of aGVHD. Important factors that could cause actual results to differ materially from current expectations include, among others, Biossil's ability to complete clinical trials and generate clinical data establishing that the product candidates in the antibiotic-degrading enzyme portfolio may deliver benefits for patients and have therapeutic potential; Biossil's ability to achieve regulatory milestones and generate net product sales that result in sales milestone and royalty payments to Theriva; the product candidates in the antibiotic-degrading enzyme portfolio demonstrating safety and effectiveness, as well as results that are consistent with prior results; Biossil's ability to achieve regulatory milestones and obtain regulatory approval for commercialization of product candidates or to comply with ongoing regulatory requirements; regulatory limitations relating to Biossil's ability to promote or commercialize the product candidates for the specific indications; acceptance of product candidates in the antibiotic-degrading enzyme portfolio in the marketplace and their successful development, marketing or sale; developments by competitors that render such products obsolete or non-competitive; the ability to remain well financed; and other factors described in the Company's Annual Report on Form 10-K for the year ended December 31, 2025 and its other filings with the SEC, including subsequent periodic reports on Forms 10-Q and current reports on Form 8-K. The information in this release is provided only as of the date of this release, and Theriva Biologics undertakes no obligation to update any forward-looking statements contained in this release on account of new information, future events, or otherwise, except as required by law.*

For further information, please contact:

Investor Relations:
Kevin Gardner
LifeSci Advisors, LLC
kgardner@lifesciadvisors.com

Source: Theriva Biologics, Inc.

EXHIBIT 10.1

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS EXHIBIT MARKED BY [***] HAS BEEN OMITTED BECAUSE IT IS BOTH NOT MATERIAL AND IS THE TYPE OF INFORMATION THAT THE REGISTRANT TREATS AS PRIVATE OR CONFIDENTIAL

ASSET PURCHASE AND SALE AGREEMENT

by and between

THERIVA BIOLOGICS, INC.

as Seller

and

BIOSSIL LABS INC.

as Buyer

SYN-004 (ribaxamase) and related Purchased Assets

Dated as of October 30, 2026

ASSET PURCHASE AND SALE AGREEMENT

This ASSET PURCHASE AND SALE AGREEMENT (this "**Agreement**"), dated as of October 30, 2026 (the "**Effective Date**") is by and between Theriva Biologics, Inc., a Nevada corporation ("**Seller**"), and Biossil Labs Inc., a corporation organized under the laws of Canada ("**Buyer"**). Seller and Buyer are each a "**Party**" and together the "**Parties**." Capitalized terms are defined in Section 6.1 or where first used.

RECITALS

Seller owns or controls assets relating to the oral β-lactamase product known as SYN-004 (ribaxamase) and its improvements and modifications, the reformulation known as including SYN-007 (collectively, "**Ribaxamase**"). Seller wishes to sell, and Buyer wishes to purchase, the Purchased Assets and assume only the Assumed Liabilities. The Parties intend an outright sale, with no retained Seller ownership, license-back, reversion or control rights except as expressly stated in this Agreement.

In consideration of the mutual promises below, the Parties agree as follows:

ARTICLE I. TRANSFER OF PROPERTIES AND ASSETS OF SELLER

1.1 Sale and Transfer of Properties and Assets

Subject to the terms and conditions set forth herein, at the Closing, Seller hereby sells, assigns, and transfers to Buyer and Buyer hereby purchases from Seller, free and clear of all Liens other than Existing Third-Party Rights, all right, title and interest in and to the following assets owned by Seller at Closing (the "**Purchased Assets**," also called the "**Transferred Assets**"):

(a) **Intellectual property.** All Purchased IP, including the Transferred Patents, identified on Schedule 1.1(a), inventions claimed or disclosed in them, and related priority, prosecution, maintenance, enforcement and recovery rights.

(b) **Contracts.** All rights and benefits under the Contracts expressly identified as assumed on Schedule 1.1(b) (the "**Assumed Contracts**"), but excluding all contract rights under any Assumed Contracts requiring a consent that is not obtained on or before Closing ("**Non-Assigned Contracts**"); provided, that once such consent is obtained, the contract rights under any such Non-Assigned Contract shall be deemed, automatically and without further action by the Parties, to be included in the Purchased Assets as of the date such consent is delivered to Buyer.

(c) **Regulatory Filings and Approvals.** All Regulatory Filings and Approvals identified on Schedule 1.1(c), to the extent transferable under Applicable Law.

(d) **Inventory and materials, if any.** All existing inventory of drug substance, intermediates, drug product, work in process, active pharmaceutical ingredients, biological and chemical materials, reference standards, controls, retained samples, cell banks, seed stocks and other materials, wherever held that are set forth on Schedule 1.1(d) (the "**Purchased Inventory**").

(e) **Books, records and data.** All books, records, files and data in any medium, including preclinical, clinical, safety, efficacy, toxicology, pharmacology, pharmacokinetic, bioanalytical and CMC data; databases, source records, protocols, statistical programs and study reports; investigator brochures and trial master files; laboratory notebooks; manufacturing, testing, quality and stability records; regulatory correspondence; regulatory meeting materials, safety and annual reports and related records in any jurisdiction, patent prosecution files and inventor assignments; and related business and technical information that are either (i) included in the Regulatory Filings and Approvals listed on Schedule 1.1(c), or (ii) in the Data Room at Closing or will be added to the Data Room by Seller within the sixty (60) day period following Closing in accordance with Section 4.5(d) hereof (the "**Assigned Books and Records**").