

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

FORM S-1
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

HCW BIOLOGICS INC.
(Exact name of Registrant as specified in its charter)

Delaware
(State or Other Jurisdiction of
Incorporation or Organization)

2834
Primary Standard Industrial
Classification Code Number

82-5024477
(I.R.S. Employer
Identification Number)

2929 N Commerce Parkway
Miramar, FL 33025
(954) 842-2024

Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices

Hing C. Wong, Ph.D.
Chief Executive Officer
HCW Biologics Inc.
2929 N Commerce Parkway
Miramar, FL 33025
(954) 842-2024

Name, Address Including Zip Code, and Telephone Number, Including Area Code, of Agent for Service

With a copy to:

James Groth
Clark Hill PLC
130 E. Randolph St., Ste. 3900
Chicago, IL 60601
(312) 985-5900

Yevgeniya (Jeny) Zarmon
Clark Hill PLC
210 Carnegie Center, Suite 102
Princeton, NJ 08540
(609) 785-2918

Approximate Date of Commencement of Proposed Sale to the Public: From time to time after the effective date of this registration statement, as determined by market conditions.

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, 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 post-effective amendment filed pursuant to Rule 462(d) 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. ☐

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 ☐
Non-accelerated filer ☒

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 accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act. ☐

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

The information contained in this prospectus is not complete and may be changed. The selling stockholder may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

PRELIMINARY PROSPECTUS

SUBJECT TO COMPLETION, DATED OCTOBER 2, 2026



Resale of

up to 1,807,228 Shares of Common Stock

This prospectus relates to the proposed resale by the selling stockholder identified below of up to an aggregate of 1,807,228 shares of our common stock, par value \$0.0001 per share (our “Common Stock”), consisting of:

- (1) up to 903,614 shares of our Common Stock issuable upon the exercise of pre-funded warrants issued on September 24, 2026 (the “Closing Date”) pursuant to that certain Securities Purchase Agreement, dated as of September 23, 2026 (the “Purchase Agreement”), by and between us and an existing institutional investor (the “Investor”) (the “Pre-Funded Warrants” and such shares, the “Pre-Funded Warrant Shares”); and
- (2) up to 903,614 shares of our Common Stock issuable upon the exercise of common stock purchase warrants to be issued following stockholder approval as required under Nasdaq Listing Rule 5635(d) (the “September 2026 Common Warrants” and such shares, the “September 2026 Warrant Shares”, together with the Pre-Funded Warrant Shares, the “Warrant Shares”)

On September 23, 2026, we entered into a Securities Purchase Agreement (the “Purchase Agreement”) with an existing institutional investor (the “Investor”), pursuant to which we agreed to issue and sell an aggregate of 903,614 units, with each unit consisting of (i) one pre-funded warrant (the “Pre-Funded Warrants”) to purchase one share of our common stock, par value \$0.0001 per share (the “Common Stock”), and (ii) the right to receive one common stock purchase warrant (the “September 2026 Common Warrants”) to purchase one share of Common Stock for \$1.66 per share upon, and subject to, stockholder approval of the issuance of the September 2026 Common Warrants as required under Nasdaq Listing Rule 5635(d) (the “September 2026 PIPE Transaction”). The units were sold at a purchase price of \$1.6599 per unit. In connection with the closing of the September 2026 PIPE Transaction, we issued 903,614 Pre-Funded Warrants and, following receipt of the required stockholder approval, will issue September 2026 Common Warrants exercisable for up to an aggregate of 903,614 shares of Common Stock, for aggregate gross proceeds of approximately \$1.5 million before deducting offering expenses payable by us.

The Pre-Funded Warrants are exercisable immediately at an exercise price of \$0.0001 per share and will remain exercisable until exercised in full. The Pre-Funded Warrants may not be exercised to the extent that, after giving effect to such exercise, the holder would beneficially own more than 9.99% of the outstanding shares of Common Stock immediately after giving effect to such exercise.

The September 2026 Common Warrants will be issued only following receipt of stockholder approval required under Nasdaq Listing Rule 5635(d), will be exercisable immediately upon issuance at an exercise price of \$1.66 per share and will expire five and one-half years from the date of issuance. The September 2026 Common Warrants contain a beneficial ownership limitation of 4.99%, subject to adjustment by the holder in accordance with their terms.

We are registering the resale of the Warrant Shares pursuant to the registration rights granted to the Investor in that certain Registration Rights Agreement, dated September 23, 2026, by us and the Investor.

The selling stockholder may offer, sell, or distribute all or a portion of the securities hereby registered publicly or through private transactions at prevailing market prices or at negotiated prices. We will not receive any proceeds from the sale of shares of our Common Stock by the selling stockholder and proceeds from the exercise of Pre-Funded Warrants will be nominal. However, once approved by stockholders and issued by the Company, we may receive proceeds from the exercise of the September 2026 Common Warrants, if exercised for cash.

We will bear all costs, expenses and fees in connection with the registration of these securities, including with regard to compliance with state securities or “blue sky” laws. The selling stockholder will bear all commissions and discounts, if any, attributable to their sales of shares of our Common Stock. See the section entitled “Plan of Distribution” of this prospectus for additional information.

Our Common Stock is listed on The Nasdaq Stock Market LLC (“Nasdaq”) under the symbol “HCWB”. On September 28, 2026, the last quoted sale price for our Common Stock as reported on Nasdaq was \$1.82 per share, reflecting a one-for-six reverse stock split that was effective on June 30, 2026.

We are an “emerging growth company,” as defined under the federal securities laws, and, as such, may elect to comply with certain reduced public company reporting requirements for future filings.

Investing in our securities is speculative and involves a high degree of risk. You should review carefully the risks and uncertainties described under the heading “[Risk Factors](#)” beginning on page 8 of this prospectus before investing in our securities.

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

On June 30, 2026, we effected a one-for-six reverse stock split of our Common Stock pursuant to which stockholders received one share of our Common Stock for every six shares of our Common Stock previously held by them. Unless the context otherwise requires, all share and per share amounts presented herein have been adjusted to reflect the reverse stock split.

The date of this prospectus is October , 2026

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The registration statement containing this prospectus, including the exhibits to the registration statement, provides additional information about us and the securities offered under this prospectus. The registration statement, including the exhibits, can be read on our website and the website of the Securities and Exchange Commission. See “Where You Can Find More Information.”

Information contained in, and that can be accessed through our web site, www.hcwbiologics.com shall not be deemed to be part of this prospectus or incorporated herein by reference and should not be relied upon by any prospective investors for the purposes of determining whether to purchase the shares offered hereunder.

Unless the context otherwise requires, the terms “we,” “us,” “our,” the “Company,” “HCW Biologics,” “HCWB,” and “our business” refer to HCW Biologics Inc. and “this offering” refers to the offering contemplated in this prospectus.

All third-party trademarks, service marks, logos, and trade names referenced in this filing are the property of their respective owners. Our use of these names, trademarks, and brands does not imply endorsement.

Neither we nor the selling stockholder have authorized anyone to provide any information or to make any representations other than those contained in this prospectus or in any free writing prospectus prepared by or on behalf of us or to which we have referred you. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. This prospectus is an offer to sell only the securities offered hereby, but only under the circumstances and in jurisdictions where it is lawful to do so. The information contained in this prospectus or in any applicable free writing prospectus is current only as of its date, regardless of its time of delivery or any sale of securities hereunder. Our business, financial condition, results of operations and prospects may have changed since that date. We are not, and the selling stockholder is not, making an offer of these securities in any jurisdiction where such offer is not permitted.

ABOUT THIS PROSPECTUS

This prospectus describes the general manner in which the selling stockholder identified in this prospectus may offer, from time to time, (1) shares of our Common Stock issuable upon the exercise of Pre-Funded Warrants issued in the private placement transaction consummated on September 24, 2026 (“September 2026 PIPE Transaction”), and (2) shares of our Common Stock issuable upon the exercise of the September 2026 Common Warrants to be issued following stockholder approval pursuant to the terms of the September 2026 PIPE Transaction, in each case as described below. We are not selling any securities under this prospectus and will not receive any proceeds from the sale of shares of our Common Stock by the selling stockholder.

This prospectus is part of a registration statement that we filed with the SEC. This prospectus provides you with general information regarding the securities being offered by the selling stockholder. You should read this prospectus as well as the additional information described under the headings “Information Incorporated by Reference” and “Where You Can Find More Information” before making an investment decision.

No person has been authorized to give any information or to make any representations other than those contained in this prospectus in connection with the offering made hereby, and if given or made, such information or representations must not be relied upon as having been authorized by us, the selling stockholder or by any other person. Neither the delivery of this prospectus nor any sale made hereunder shall, under any circumstances, create any implication that information herein is correct as of any time subsequent to the date hereof. This prospectus does not constitute an offer to sell or a solicitation of an offer to buy any security other than the securities covered by this prospectus, nor does it constitute an offer to or solicitation of any person in any jurisdiction in which such offer or solicitation may not lawfully be made.

This document may only be used where it is legal to sell these securities. The information contained in this prospectus (and in any supplement or amendment to this prospectus) is accurate only as of the date on the front of the document, and any information we have incorporated by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus or any sale of our securities. Our business, financial condition, results of operations and prospects may have changed since those dates.

References to “selling stockholder” refers to the security holder identified herein in the section titled “Selling Stockholder” beginning on page 17 of this prospectus, who may sell securities from time to time as described in this prospectus.

Unless otherwise indicated, information contained in or incorporated by reference into this prospectus concerning our business and the industry and markets in which we operate, including with respect to our business prospects, our market position and opportunity, and the competitive landscape, is based on information from our management’s estimates, as well as from industry publications, surveys, and studies conducted by third parties. Our management’s estimates are derived from publicly available information, their knowledge of our business and industry, and assumptions based on such information and knowledge, which they believe to be reasonable. In addition, while we believe that information contained in industry publications, surveys, and studies has been obtained from reliable sources, we have not independently verified any of the data contained in these third-party sources, and the accuracy and completeness of the information contained in these sources is not guaranteed.

Although we are not aware of any misstatements regarding the market and industry data presented in this prospectus and the documents incorporated herein by reference, these estimates involve risks and uncertainties and are subject to change based on various factors, including those discussed under the heading “Risk Factors” in this prospectus and any related free writing prospectus, and under similar headings in the other documents that are incorporated by reference into this prospectus, including in our Annual Report on Form 10-K for the year ended December 31, 2025, filed with the Securities and Exchange Commission (the “SEC”) on March 31, 2026, and our Restated Quarterly Report on Form 10-Q/A for the three months ended March 31, 2026, filed with the SEC on August 14, 2026, and the Quarterly Report for the three- and six- month periods ended June 30, 2026, filed with the SEC on August 14, 2026.

PROSPECTUS SUMMARY

The SEC allows us to “incorporate by reference” certain information that we file with the SEC, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus, and information that we file later with the SEC will update automatically, supplement and/or supersede the information disclosed in this prospectus. Any statement contained in a document incorporated or deemed to be incorporated by reference in this prospectus shall be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus or in any other document that also is or is deemed to be incorporated by reference in this prospectus 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 prospectus. You should read the following summary together with the more detailed information regarding our company, our securities and our financial statements and notes to those statements included in this prospectus. This summary highlights selected information contained elsewhere or incorporated by reference in this prospectus. This summary may not contain all the information that you should consider before determining whether to invest in our securities. You should read the entire prospectus carefully, including the information included in the “Risk Factors” section, as well as our financial statements, notes to the financial statements and the other information included or incorporated by reference in this prospectus, before making an investment decision.

Our Company

HCW Biologics Inc. (“HCW Biologics” or the “Company”) is a clinical-stage biopharmaceutical company developing transformative fusion immunotherapeutics to treat diseases promoted by chronic inflammation. We have created novel compounds that represent a new class of drugs that we believe have the potential to fundamentally change the treatment of autoimmune disorders and other proinflammatory diseases, cancer and senescence-associated dysplasia. In addition, we have begun commercialization of certain commercial-ready proprietary compounds for use as reagents to support the production of immunotherapeutics for the treatment of infectious diseases and cancer. We want our products to improve patients’ healthspan as well as their quality of life, and possibly extend longevity.

Chronic inflammation is believed to be a significant contributing factor to the cause for many diseases and conditions that diminish health span and quality of life. The induction and retention of low-grade inflammation in the human body is mainly the result of persistent activation of immune cells and the accumulation of non-proliferative but metabolically active senescent cells.

HCW Biologics has an experienced team led by Dr. Hing C. Wong, our Founder and CEO, who discovered and developed the immunotherapeutic Anktiva® (also known as ALT-803, an IL-15 receptor agonist) through pivotal trials. This blockbuster immunotherapeutic treatment for cancer was sold to ImmunityBio, Inc. in 2017 in a \$1.0 billion acquisition. In April 2024, Anktiva® was approved by the U.S. Food and Drug Administration for its first indication, the treatment of BCG-Unresponsive Non-Muscle Invasive Bladder Cancer in combination with BCG.

Lead Product Candidates in Clinical Development

- HCW9302 is a clinical-stage compound that is an injectable, first-in-kind interleukin 2 (“IL-2”) fusion protein complex constructed using the Company’s proprietary TOBI platform technology. Its mechanism of action involves binding to IL-2 $\alpha\beta\gamma$ receptors predominantly expressed on regulatory T (“T_{reg}”) cells, thereby activating and expanding T_{reg} cells that can suppress unwanted immune and inflammatory responses. HCW9302 is currently being evaluated in patients with alopecia areata (NCT07049328). On June 16, 2026, we announced a preliminary data readout from the first two dose cohorts of this Phase 1 clinical trial. According to the preliminary data, HCW9302 was generally well tolerated, with no dose-limiting toxicities reported, and patients in the second dose cohort demonstrated preliminary signs of clinical activity. Enrollment and dose escalation in the trial are ongoing. The Company has not reported any dose-limiting toxicities. A full Phase 1 readout is expected to be made in the fourth quarter of 2026.

- HCW11-018b is an investigational tetravalent T-cell engager administered by subcutaneous injection, developed by HCW Biologics to treat solid tumors. After a Type B pre-IND meeting with the U.S. Food and Drug Administration in July 2026, the Company received clear direction for the preparation for the planned initiation of a Phase 1 clinical trial in solid tumors, which remains on track to be filed in the first half of 2027.
- HCW11-040 is an investigational molecule that is a unique combination of cytokines and pembrolizumab, a generic form of Keytruda®, in a multi-functional fusion molecule that is administered by subcutaneous injection. This lead product candidate exhibits the ability to expand Tpex cells without a cytokine storm in preclinical studies. In addition, it exhibits superior immune-cell activation, expansion, and cytotoxicity against cancer cells and tumors when compared to pembrolizumab in in-vitro and in-vivo studies. The Company plans to initiate a Phase 1 clinical study in a senescence-associated dysplasia indication in the second half of 2027.

Commercial-Ready Reagents for Production of Immunotherapeutic Treatments

On September 4, 2026, the Company entered into an exclusive distribution agreement (the “Distribution Agreement”) with Akron Biotech (“Akron”), a leading manufacturer of ancillary materials and a contract development and manufacturing organization, pursuant to which Akron was granted the right to distribute the Company’s commercial-ready molecule, HCW11-006, for use as a reagent in cell therapy manufacturing and other ex vivo applications, but not for use in injectable therapies (the “Product”), throughout the world, excluding the People’s Republic of China. The Distribution Agreement has a term of five years from the closing date, unless terminated earlier for cause or by the Company’s pursuant to its right to terminate for convenience. If the Distribution Agreement is terminated by the Company for convenience, the Company is required to continue supplying the Product to support Akron’s existing customers and satisfy certain other transition obligations intended to ensure a seamless transition for such customers.

In connection with the Distribution Agreement, the parties will enter into a Material Transfer Agreement to permit Akron to perform further due diligence and evaluate the Product. The closing of the transactions contemplated by the Distribution Agreement is subject to the satisfactory completion of due diligence and product testing and is required to occur no later than November 30, 2026. Under the Distribution Agreement, the parties have also agreed to negotiate in good faith to finalize and execute a Supply Agreement within 60 days of the closing date, under which the Company will, upon the closing, receive advance payments of \$200,000 at closing, \$100,000 within 30 days of execution of the Supply Agreement, and \$100,000 on each of the first and second anniversaries of the closing date. In addition, Akron has agreed to make quarterly payments for technical support services provided by the Company, as needed, pursuant to the terms of the Distribution Agreement.

Emerging Growth Company

From the time the Company effected its initial public offering, in July 2021, we have qualified as an “emerging growth company,” as defined in Section 2(a) of the Securities Act of 1933, as amended (the “Securities Act”), as modified by the Jumpstart Our Business Startups Act of 2012 (the “JOBS Act”). As such, we are eligible to take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not “emerging growth companies” including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002 (the “Sarbanes-Oxley Act”), reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, and exemptions from the requirements of holding a non-binding advisory vote on executive compensation and shareholder approval of any golden parachute payments not previously approved. If some investors find our securities less attractive as a result, there may be a less active trading market for our securities and the prices of our securities may be more volatile.

We expect to remain an emerging growth company until December 31, 2026 (the last day of the fiscal year following the fifth anniversary of the consummation of our initial public offering). References herein to “emerging growth company” shall have the meaning associated with that term in the JOBS Act.

Smaller Reporting Company

Additionally, we are a “smaller reporting company” as defined in Item 10(f)(1) of Regulation S-K. Smaller reporting companies may take advantage of certain reduced disclosure obligations, including, among other things, providing only two years of audited financial statements. We will remain a smaller reporting company until the last day of the fiscal year in which (i) the market value of our Common Stock held by non-affiliates exceeds \$250 million as of the prior June 30, or (ii) our annual revenues exceeded \$100 million during such completed fiscal year and the market value of our Common Stock held by non-affiliates exceeds \$700 million as of the prior June 30.

Corporate Information

Our principal executive office is located at 2929 N Commerce Parkway, Miramar, FL 33025, and our telephone number is (954) 842-2024. Our website address is www.hcwbiologics.com. Information on or accessed through our website is not incorporated into and not part of this prospectus.

OFFERING SUMMARY

This prospectus relates to the resale, from time to time, by the selling stockholder identified herein of up to 1,807,228 shares of our Common Stock, which consist of shares of our Common Stock issuable upon exercise of the Pre-Funded Warrants and the September 2026 Common Warrants that may be issued pursuant to the September 2026 PIPE Transaction following stockholder approval.

Issuer: HCW Biologics Inc.

Shares of Common Stock to be Issued by Us: Up to 1,807,228 shares of our Common Stock, consisting of (i) 903,614 shares issuable upon exercise of the Pre-Funded Warrants and (ii) 903,614 shares issuable upon exercise of the September 2026 Common Warrants, which warrants are issuable only upon, and subject to, stockholder approval pursuant to the terms of the September 2026 PIPE Transaction. The shares covered by this prospectus have not been issued and will be issued only upon exercise of the Pre-Funded Warrants and September 2026 Common Warrants, as applicable. No shares are being issued by the Company in connection with this registration statement.

Shares of Common Stock outstanding as of the date of this prospectus⁽¹⁾: 4,043,552 shares of Common Stock (including 2,236,324 shares of Common Stock outstanding on September 28, 2026, up to 903,614 Shares issuable upon exercise of Pre-Funded Warrants and up to 903,614 Shares issuable upon exercise of September 2026 Common Warrants).

Resale of Common Stock:

Shares of Common Stock Offered by the Selling Stockholders⁽¹⁾: The selling stockholder is offering up to an aggregate of 1,807,228 shares of our Common Stock, consisting of:

- up to 903,614 shares of our Common Stock issuable upon exercise of the Pre-Funded Warrants; and
- up to 903,614 shares of our Common Stock issuable upon exercise of the September 2026 Common Warrants that may be issued following stockholder approval pursuant to the September 2026 PIPE Transaction.

Terms of the Offering: The selling stockholder may sell the shares from time to time at prevailing market prices or at negotiated prices. See “Plan of Distribution.”

Use of Proceeds: We will not receive any proceeds from any sale of shares of our Common Stock by the selling stockholder. However, we may receive gross proceeds of up to approximately \$1.5 million from the cash exercise of the September 2026 Common Warrants (based on an exercise price of \$1.66 per share), assuming the requisite stockholder approval is obtained, the September 2026 Common Warrants are issued and the September 2026 Common Warrants are exercised in full for cash. We do not expect to receive material proceeds from the exercise of the Pre-Funded Warrants, which have a nominal exercise price. We intend to use any proceeds from the exercise of the September 2026 Common Warrants for general corporate purposes, which may include funding our clinical and preclinical development programs, research and development expenses, working capital and other general corporate purposes.

Risk Factors:	Investing in our securities involves a high degree of risk. You should review carefully the risks and uncertainties described under the heading “Risk Factors” beginning on page 8 of this prospectus.
Transfer Agent:	The transfer agent and registrar for our Common Stock is Equiniti Trust Company, LLC.
Nasdaq Symbol:	Our Common Stock is listed on Nasdaq under the symbol “HCWB”. There is no established trading market for the Pre-Funded Warrants, and we do not expect a trading market to develop. We do not intend to list the Pre-Funded Warrants on any securities exchange or other trading market. Without a trading market, the liquidity of the Pre-Funded Warrants will be extremely limited.
Adjustment to Outstanding Warrants:	Pursuant to the Securities Purchase Agreement entered into in connection with the September 2026 PIPE Transaction, the Investors are entitled to receive September 2026 Common Warrants exercisable for up to 903,614 shares of our Common Stock. The issuance of the September 2026 Common Warrants is subject to stockholder approval required under Nasdaq Listing Rule 5635(d), which approval we are obligated to seek pursuant to the terms of the Securities Purchase Agreement. There can be no assurance that stockholder approval will be obtained or, if obtained, when such approval will occur. If stockholder approval is not obtained, the September 2026 Common Warrants will not be issued and the 903,614 shares of Common Stock underlying the September 2026 Common Warrants will not become issuable.

(1) The number of shares of Common Stock outstanding is based on 2,236,324 shares outstanding as of September 28, 2026. The number excludes the following:

- 903,614 shares of Common Stock which may be issued upon the exercise of Pre-Funded Warrants issued in connection with the September 2026 PIPE Transaction for \$0.0001 per share;
- 903,614 shares of Common Stock upon the exercise of September 2026 Common Warrants which are issuable in connection with the September 2026 PIPE Transaction, subject to stockholder approval pursuant to Nasdaq Listing Rule 5635(d), for \$1.66 per share;
- 474,496 shares of Common Stock which may be issued upon the exercise of the May 2026 Common Warrants issued in connection with our May 2026 private placement transaction (the “May 2026 PIPE Transaction”) for \$7.68 per share;
- 21,099 shares issuable upon the exercise of outstanding warrants exercisable at \$156.00 per share;
- 916,284 shares issuable upon the exercise of outstanding warrants for \$3.633 per share, including warrants to exercise up to 412,882 shares of Common Stock issued on February 19, 2026 and warrants to exercise up to 503,402 shares of Common Stock issued on November 20, 2025;
- 618,682 shares of Common Stock upon the exercise of 2026 July Common Warrants which are issuable in connection with our July 2026 private placement transaction (the “July 2026 PIPE Transaction”), subject to stockholder approval pursuant to Nasdaq Listing Rule 5635(d), for \$2.585 per share;
- 7,160 shares issuable upon the exercise stock options of vested employee equity awards under the 2019 Equity Incentive Plan (“2019 Plan”) and the 2021 Equity Incentive Plan (“2021 Plan”);
- 196 shares for stock options underlying unvested employee equity awards under the 2019 Plan and 2021 Plan;
- 15,550 shares reserved for issuance under our 2021 Plan; and
- Shares valued up to \$17.0 million, which may be issued through additional draws on our Standby Equity Purchase Agreement. Up to \$20.0 million worth of the Company’s shares of Common Stock was issuable under the Standby Equity Purchase Agreement at the time the Company entered into the agreement with Square Gate on February 20, 2025.

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the information incorporated herein by reference contain forward-looking statements. Forward-looking statements are neither historical facts nor assurances of future performance. Instead, they are based only on our current beliefs, expectations, and assumptions regarding the future of our business, future plans and strategies, projections, anticipated events and trends, the economy, and other future conditions. This includes, without limitation, statements regarding the financial position and the plans and objectives of management for our future operations. Such statements can be identified by the fact that they do not relate strictly to historical or current facts. When used in this prospectus, words such as “anticipate,” “believe,” “continue,” “could,” “estimate,” “expect,” “intend,” “may,” “might,” “plan,” “possible,” “potential,” “predict,” “project,” “should,” “strive,” “would” and similar expressions may identify forward-looking statements, but the absence of these words does not mean that a statement is not forward-looking. Forward-looking statements in this prospectus and in any document incorporated by reference in this prospectus, including our Annual Report for the year ended December 31, 2025, filed on Form 10-K on March 31, 2026 (the “Annual Report”), and our Restated Quarterly Report for the three month period ended March 31, 2026, filed on Form 10-Q/A on August 14, 2026 and the Quarterly Report for the three and six month periods ended June 30, 2026, filed on Form 10-Q on August 14, 2026 (collectively, the “Quarterly Reports”), may include, for example, statements about:

- management’s going concern assessment;
- the occurrence of any event, change or other circumstances, including the outcome of any legal proceedings that may be instituted against us;
- financial performance and the ability to remain compliant with the continued listing requirements of Nasdaq, maintain the listing of our securities on Nasdaq, and the potential liquidity and trading of our securities;
- the sufficiency of our existing cash and cash equivalents to fund our future operating expenses and capital expenditure requirements and the risk of disruption to our current plans and operations;
- our ability to obtain funding for our operations, including funding necessary to develop and commercialize our drug candidates;
- timing, costs and outcome of regulatory review, and impact on our ability to receive FDA clearance for clinical trials;
- the ability to secure clinical sites, enroll patients, and initiate clinical trials;
- number of trials needed to obtain clinical approval;
- the ability of our clinical trials to demonstrate safety and efficacy of our drug candidates, and other positive results;
- the success, cost and timing of our development activities, preclinical studies and clinical trials;
- the timing and focus of our future clinical trials, and the reporting of data from those trials;
- our plans relating to commercializing our drug candidates, if approved;
- our plans and ability to establish sales, marketing and distribution infrastructure to commercialize any drug candidates for which we obtain approval;
- our ability to attract and retain key scientific and clinical personnel;
- our ability to contract with third-party suppliers and manufacturers and their ability to perform adequately;

- our reliance on third parties to conduct clinical trials of our drug candidates, and for the manufacture of our drug candidates for preclinical studies and clinical trials;
- our ability to expand our drug candidates into additional indications and patient populations;
- the success of competing therapies that are or may become available;
- the beneficial characteristics, safety and efficacy of our drug candidates;
- political and regulatory developments in the United States and other jurisdictions;
- our ability to obtain and maintain regulatory approval of our drug candidates, and any related restrictions, limitations and/or warnings in the label of any approved drug candidate;
- cost of maintaining, expanding, and enforcing our intellectual property rights;
- our plans and ability to obtain or protect intellectual property rights;
- the scope of protection we are able to establish and maintain for intellectual property rights covering our drug candidates and technology;
- potential claims relating to our intellectual property;
- impact of litigation, regulatory inquiries, or investigations, as well as cost to indemnify our officers and directors against third-party claims related to our patents and other intellectual property;
- our ability to enter out-license agreements for the development and commercialization of the Company's non-core assets;
- cost and timing of future commercialization activities, including product manufacturing, marketing, sales and distribution, for any of our product candidates for which we receive regulatory approval; and
- other factors disclosed under the section entitled "Risk Factors" in this prospectus.

Forward-looking statements are based on management's current expectations, estimates, forecasts and projections about our business and the industry in which we operate, and management's beliefs and assumptions are not guarantees of future performance or development and involve known and unknown risks, uncertainties and other factors that are in some cases beyond our control, including those described in the section titled "Risk Factors" and elsewhere in this prospectus and the documents incorporated by reference into this prospectus.

Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee that the future results, levels of activity, performance or events and circumstances reflected in the forward-looking statements will be achieved or occur. Accordingly, you should not place undue reliance on forward-looking statements as predictions of future events. We undertake no obligation to update publicly any forward-looking statements for any reason after the date of this prospectus to conform these statements to actual results or to changes in our expectations, except as required by law.

You should read this prospectus, the documents incorporated by reference into this prospectus, any free writing prospectus and the documents that we reference in this prospectus and have filed with the SEC, as exhibits to the registration statement of which this prospectus is a part with the understanding that our actual future results, levels of activity, performance and events and circumstances may be materially different from what we expect.

RISK FACTORS

Investing in our securities involves a high degree of risk. Before making an investment decision with respect to our securities, we urge you to carefully consider the risks described below and in the “Risk Factors” sections of our most recent Annual Report on Form 10-K for the fiscal year ended December 31, 2025, which is incorporated by reference in this prospectus, together with the information included in this prospectus and documents incorporated by reference herein, and in any free writing prospectus that we have authorized for use in connection with this offering. The risks and uncertainties incorporated by reference into this prospectus or described below are not the only ones we face. Additional risks and uncertainties not presently known or which we consider immaterial as of the date hereof may also materially harm our business and could result in a complete loss of your investment. If any of the matters discussed in the following risk factors were to occur, our business, financial condition, results of operations, cash flows, or prospects could be materially and adversely affected, the market price of our common stock could decline, as well as the value of the pre-funded warrants, and you could lose all or part of your investment in our securities.

Risks Related to this Offering

Our stock price may be volatile or may decline regardless of our operating performance, resulting in substantial losses for investors.

The market price of our Common Stock may be highly volatile and may fluctuate substantially as a result of a variety of factors, some of which are related in complex ways. The market price of our Common Stock may fluctuate significantly in response to numerous factors, many of which are beyond our control, including the factors described in this “Risk Factors” section and elsewhere in this Annual Report.

In addition, the stock market in general, and Nasdaq, and biopharmaceutical companies in particular, have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of these companies. Additionally, the trading prices for pharmaceutical, biopharmaceutical and biotechnology companies have been highly volatile. Also, broad market and industry factors may negatively affect the market price of our Common Stock, regardless of our actual operating performance.

We cannot assure you that the steps we have taken to regain and maintain compliance with the Nasdaq continued listing rules will be adequate to remain listed on the Nasdaq Capital Market tier.

On June 26, 2025, we received formal notice from Nasdaq that we were in compliance with the Equity Rule for continued listing of our securities on the Nasdaq Capital Market tier. We were also notified that we will remain subject to a “Panel Monitor,” as that term is defined in Nasdaq Listing Rule 5815(d)(4)(B), for a period of one year from the date of the Nasdaq notice, through June 23, 2026. If, during the term of the Panel Monitor, we do not continue to remain in compliance with the Equity Rule, we will not be provided with the opportunity to submit a compliance plan for review by the Staff and must instead request a hearing before Nasdaq to address the deficiency, with such request staying any further action with respect to the listing of our securities on Nasdaq pending completion of the hearing process.

On August 19, 2025, we received written notice from the Staff that as of June 30, 2025, we were non-compliant with the Equity Rule, so our securities would be suspended from trading on Nasdaq on August 28, 2025 unless we request a hearing by August 26, 2025. On August 26, 2025, we timely requested a hearing before the Panel, which stayed the suspension of trading of our securities on Nasdaq pending completion of the hearing process, which included a hearing held before the Panel on September 25, 2025 at which the Company presented a detailed compliance plan, including the filing of the registration statement that includes this prospectus and the offering contemplated herein.

On October 13, 2025, the Panel granted the Company an extension of time in which to regain compliance with all continued listing rules of the Exchange. The Panel's determination followed the Company's hearing on September 25, 2025, at which the Company presented, and the Panel considered, the Company's plan to regain compliance with the Equity Rule. The Panel granted the Company's request for continued listing on the Nasdaq, subject to, among other things, the Company demonstrating compliance with the Equity Rule by December 31, 2025, and with all other Nasdaq continued listing rules by February 16, 2026. The Company was advised that February 16, 2026, represents the full extent of the Panel's discretion to grant continued listing while the Company is non-compliant with the Nasdaq Listing Rules.

The Panel also required that the Company provide prompt notification of any significant events that occur during the exception period that may affect the Company's compliance with Nasdaq requirements. In addition, the Company was required to timely file Form 10-Q for the third quarter (which it did), and to provide notice of the status of certain elements of the Company's compliance plan. Any compliance documentation submitted by the Company will be subject to review by the Panel, which may, in its discretion, request additional information before determining that the Company has complied with the terms of the exception. The Panel has discretion to review its decision to grant an exception period within 45 calendar days after issuance of the written decision.

On January 7, 2026, the Company received written notice from the Staff that as of December 31, 2025, the Company was compliant with the Equity Rule. The Company remains subject to the Panel's decision letter to maintain compliance with all listing rules for continued listing through February 16, 2026. On February 26, 2026, the Nasdaq Hearings Panel found that the Company regained compliance with all continued listing rules of The Nasdaq Capital Market. Pursuant to Listing Rule 5815(d)(4)(B), the Company will be subject to a Mandatory Panel Monitor per the January 7, 2026 letter. Pursuant to Listing Rule 5815(d)(4)(B), the Company will be subject to a Mandatory Panel Monitor for a period of one year from the date of this letter. If, within that one-year monitoring period, Staff finds the Company again out of compliance with the Equity Rule that was the subject of the exception, notwithstanding Rule 5810(c)(2), the Staff will issue a Delist Determination Letter and the Company will have an opportunity to request a new hearing with the initial Panel or a newly convened Hearings Panel if the initial Panel is unavailable.

On March 26, 2026, the Company received a written notice from the Staff which notified the Company that, for the 30 consecutive business days, the Company's security did not maintain a minimum bid price of \$1 per share, in accordance with Nasdaq Listing Rule 5810(c)(3)(A) ("Bid Price Rule"). Due to the fact that the Company effected a 1-for-40 reverse stock split on April 11, 2025, the Company was not afforded a 180-calendar day period to demonstrate compliance. The Company had the opportunity to appeal this determination at a hearing held by the Nasdaq Hearings Panel (the "Panel") on May 5, 2026.

Following the May 5, 2026 hearing at which the Company presented, and the Panel considered, the Company's plan to regain compliance with the Bid Price Rule, on May 29, 2026, the Panel granted the Company an extension to regain compliance with the Nasdaq continued listing rules. In particular, the Panel granted the Company's request for continued listing on Nasdaq, subject to, among other things, the requirement that on or before July 29, 2026, the Company demonstrate compliance with the Bid Price Rule by exhibiting a bid price at or above \$1 for twenty consecutive trading days.

On June 29, 2026, the Company received written notice from the Staff that the Panel found that the Company had regained compliance with the Bid Price Rule in accordance with the terms set forth in the Panel's decision letter dated May 29, 2026, as amended.

As indicated in the Panel's decision letter, as amended, if the Company satisfies the remaining terms of the decision through September 22, 2026, the Panel intends to impose a Discretionary Panel Monitor on the Company pursuant to Listing Rule 5815(d)(4)(A) for a one-year period from that date. As of September 22, 2026, the Company maintained its stock price over the minimum Bid Price, as required.

Pursuant to Listing Rule 5815(d)(4)(B), the Company will be subject to a Mandatory Panel Monitor until June 17, 2027. If, within that one-year monitoring period, the Staff finds that the Company is again out of compliance with the Bid Price Rule, which was the subject of the exception, then notwithstanding Rule 5810(c)(2) the Company will not be permitted to provide the Staff with a plan of compliance with respect to that deficiency, and the Staff will not be permitted to grant additional time for the Company to regain compliance with respect to that deficiency, nor will the Company be afforded any cure or compliance period pursuant to Rule 5810(c)(3). Instead, the Staff will issue a Delist Determination Letter and the Company will have an opportunity to request a new hearing with the initial Panel or a newly convened Hearings Panel if the initial Panel is unavailable. The Company will have the opportunity to appear before and present its position to the Hearings Panel as provided by Listing Rule 5815(d)(4)(C). The Company's securities could then be delisted from Nasdaq.

On July 29, 2026, the SEC temporarily stayed the effectiveness of its July 22, 2026 order approving the Nasdaq's proposed adoption of a new continued listing standard requiring listed securities to maintain a \$5.0 million market value of listed securities.

Moreover, because we are currently subject to a Mandatory Panel Monitor until June 17, 2027, any future Nasdaq compliance issue could subject us to heightened scrutiny by Nasdaq and could limit the procedural remedies and compliance opportunities otherwise available to listed companies.

If our Common Stock is delisted from Nasdaq and begins trading on an OTC market, the liquidity and market price of our Common Stock could be adversely affected. OTC markets generally have fewer market participants, lower trading volumes and less analyst coverage than national securities exchanges, which could result in increased volatility and a decline in the market price of our Common Stock.

Our limited operating history may make it difficult for you to evaluate the success of our business to date and to assess our future viability.

Since our inception in 2018, we have devoted a significant portion of our resources to identifying and developing our product candidates emerging from our internally-developed immunotherapy platform technology, our other research and development efforts, building our intellectual property portfolio, raising capital, and providing general and administrative support for these operations. We have not yet demonstrated our ability to successfully complete clinical trials, obtain regulatory approvals, manufacture a commercial scale product or arrange for a third party to do so on our behalf, or conduct sales and marketing activities necessary for successful product commercialization. Additionally, we expect our financial condition and operating results to continue to fluctuate significantly from period to period due to a variety of factors, many of which are beyond our control. Consequently, any predictions you may make about our future success or viability may not be as accurate as they could be if we had a longer operating history.

We are negotiating with creditors for forbearance of payment of debt.

On December 30, 2025, the Company entered a settlement agreement with the legal firm, Cooley LLP (“Cooley”), related to legal fees incurred in connection an arbitration by and between Dr. Wong, the Company, ImmunityBio, Inc. and its affiliates, which settled on July 13, 2024. As a result of that agreement, the Company, Dr. Wong and Cooley agreed to settle a \$7.5 million obligation to Cooley for \$2.0 million in cash and contingent payments up to \$5.5 million upon achievement of certain triggering events, all of which were deemed to be remote as June 30, 2026. In accordance with the terms of the settlement agreement, \$500,000 was paid on December 31, 2025. Based on amendments to the settlement agreement, the Company paid \$750,000 on March 20, 2026, and was required to pay the remaining \$750,000 upon the earlier of the completion of a financing for at least \$4.0 million in gross proceeds or August 31, 2026. On August 31, 2026, the Company paid Cooley \$10,000 toward the amount due. The parties are currently negotiating an amendment to the terms of the repayment of the remaining \$740,000, as well as the payment terms of the contingent payments.

If the Company is unable to obtain forbearance or other resolve this obligation, Cooley could pursue available remedies, which could materially and adversely affect the Company’s liquidity and ability to continue operations.

We cannot assure you that the measures we have taken to date to strengthen internal controls over financial reporting, or any measures we may take in the future, will be sufficient to avoid potential future material weaknesses.

As of December 31, 2025, management identified a material weakness related to management’s assessment of long-lived assets for impairment. As a result the Company was at risk of a material misstatement in its financial statements by failing to recognize an impairment of \$1.5 million for an impairment of the Company’s building, which could have resulted in overstating the value of long-lived assets by \$1.5 million.

As of March 31, 2026, management identified a material weakness in the Company’s internal control over financial reporting related to a lack of precision of review to identify the improper application of the accounting guidance for warrant modifications under ASC 815-40 for the modification of warrants issued in November 2025 (the “Warrants”). In connection with a financing completed on February 17, 2026, the Company agreed, subject to stockholder approval which was obtained on June 15, 2026, to reprice the Warrants from an exercise price of \$14.46 per share to \$3.633 per share. The Company originally concluded the modification did not result in a change in the instrument’s classification. As a result of the material weakness, the Company determined that the Warrants should have been reclassified from equity to a liability and accordingly recognized a warrant liability of approximately \$1.6 million on February 17, 2026. The warrant liability is required to be remeasured at fair value at each subsequent reporting date, with changes in fair value recognized in earnings. On June 15, 2026, the Company’s stockholders approved the pricing of these Warrants at \$3.633 per share, and thus these warrants will be reclassified as equity as of June 30, 2026.

Management identified a material weakness in the Company’s internal control over financial reporting related to a lack of precision in the review process used to determine the appropriate accounting treatment of participating warrants and the application of the two-class method for calculating earnings per share (“EPS”). Specifically, the Company did not appropriately allocate undistributed earnings between Common Stock and participating securities with non-forfeitable dividend rights. Management determined that these errors constituted a material misstatement of EPS. After giving effect to the Company’s reverse stock split effective on June 30, 2026, the Company had 904,312 weighted-average shares of Common Stock outstanding and had outstanding participating warrants which may be exercised for 524,501 shares of Common Stock as of March 31, 2026. On a post-split basis, as a result of the misapplication of the two-class method, the Company originally reported basic and diluted EPS of \$2.19 per share, an overstatement of \$0.80 per share, caused by applying a 100% allocation of undistributed earnings to the weighted average shares outstanding; however, the Company should have allocated approximately 63.3% of the applicable undistributed earnings to Common Stock and approximately 36.7% to the participating securities. The error affected EPS as presented on the face of the statement of operations and in the related EPS disclosures. This correction did not impact any other reporting periods.

The Company has not yet remediated the material weakness identified as of December 31, 2025 related to the assessment of long-lived assets for impairment. In addition, management identified a material weakness in the Company’s internal control over financial reporting related to a lack of precision in the review control over the application of technical accounting guidance for complex warrant instruments and financing transactions which has not been remediated as of June 30, 2026.

Material weaknesses in the Company’s internal controls over financial reporting were identified in previous reporting periods not presented in the Annual Report. Upon detecting material weaknesses, the Board of Directors and management implemented a remediation plan to strengthen internal controls. As we continue to evaluate and work to improve our internal control over financial reporting, we may take additional measures to address control deficiencies or determine to modify remediation measures. We cannot assure you that the measures we have taken to date, and may take in the future, will be sufficient to remediate the control deficiencies that led to the material weaknesses in internal control over financial reporting or that we will prevent or avoid potential future material weaknesses. Effective internal controls are necessary for us to provide reliable financial reports. These remediation measures may be time consuming and costly and there is no assurance that these initiatives will ultimately have the intended effects.

The resale of shares by the selling stockholder and the issuance of shares upon exercise of the Pre-Funded Warrants and, if issued, the Common Warrants could cause substantial dilution to our existing stockholders and could cause the price of our Common Stock to decline.

We are registering for resale (i) up to 903,614 shares of our Common Stock issuable upon exercise of pre-funded warrants issued in the September 2026 PIPE Transaction (the “Pre-Funded Warrants”), and (ii) up to 903,614 shares of our Common Stock issuable upon exercise of September 2026 Common Warrants to be issued in connection with the September 2026 PIPE Transaction, subject to stockholder approval required under Nasdaq Listing Rule 5635(d).

The shares issuable upon exercise of the Pre-Funded Warrants and the September 2026 Common Warrants may be sold into the public market at any time after the date of this prospectus following their issuance. The number of shares ultimately sold by the selling stockholder under this prospectus is dependent upon the number of shares the selling stockholder elects to sell and the market conditions during the resale period. Depending on a variety of factors, including market liquidity of our Common Stock, the resale of a substantial number of shares of our Common Stock issued in the September 2026 PIPE Transaction or issuable upon exercise of the Pre-Funded Warrants and the September 2026 Common Warrants may cause the trading price of our Common Stock to decline.

We may ultimately issue all, some, or none of the shares of Common Stock underlying the Pre-Funded Warrants and the September 2026 Common Warrants. In particular, issuance of the September 2026 Common Warrants is contingent upon receipt of stockholder approval required under Nasdaq Listing Rule 5635(d), and there can be no assurance that such stockholder approval will be obtained. The selling stockholder may sell all, some, or none of the shares of our Common Stock covered by this prospectus. Any issuance of shares upon exercise of the Pre-Funded Warrants or the September 2026 Common Warrants will result in dilution to the interests of our existing stockholders. The sale of a substantial number of shares of our Common Stock by the selling stockholder in this offering, or anticipation of such sales, could cause the trading price of our Common Stock to decline or make it more difficult for us to raise additional capital in the future at a time and at a price that we might otherwise desire.

The sale of a substantial number of shares of our Common Stock in the public market could adversely affect the prevailing market price of our shares.

We are registering for resale an aggregate of 1,807,228 shares of our Common Stock, consisting of up to 903,614 shares issuable upon exercise of the Pre-Funded Warrants and 903,614 shares issuable upon the exercise of the September 2026 Common Warrants, if approved by stockholders and issued. Sales of a substantial number of our shares in the public market, or the perception that such sales might occur, could adversely affect the market price of our shares. We cannot predict if and when the selling stockholder may sell such shares in the public markets. Furthermore, in the future, we may issue additional shares or other equity or debt securities convertible into shares. Any such issuance could result in substantial dilution to our existing stockholders and could cause our share price to decline.

Exercises of the Pre-Funded Warrants or the September 2026 Common Warrants, if issued, may occur at times when our stock price is declining or volatile, which could further negatively impact the market price of our Common Stock. It is not possible to predict the actual number of shares that will be issued upon exercise of the Pre-Funded Warrants or the September 2026 Common Warrants or the timing of such issuances, and investors who purchase shares from the selling stockholder at different times may pay different prices.

The September 2026 Common Warrants to purchase up to 903,614 shares of Common Stock will be issued only if the requisite stockholder approval is obtained pursuant to Nasdaq Listing Rule 5635(d). If issued, the September 2026 Common Warrants will have a fixed exercise price of \$1.66 per share and may be exercised at any time prior to their expiration. If exercises occur when the market price of our Common Stock is below or near the exercise price, sales of the resulting shares by the selling stockholder could place downward pressure on our stock price. The Pre-Funded Warrants have a nominal exercise price and are exercisable at any time, which may result in immediate or near-term issuances of shares and additional downward pressure on our stock price.

The timing and number of shares issued upon exercise of the Pre-Funded Warrants and the September 2026 Common Warrants, if issued, will depend on when and to what extent the selling stockholder elects to exercise such warrants. In addition, issuance of the September 2026 Common Warrants is contingent upon receipt of stockholder approval, and there can be no assurance that such approval will be obtained. Because exercises may occur at any time during the term of the Pre-Funded Warrants and the September 2026 Common Warrants, it is not currently possible to predict the number of shares that will be issued or the gross proceeds, if any, that we may receive.

Further, because the selling stockholder may resell shares underlying the Pre-Funded Warrants and the September 2026 Common Warrants at varying prices and at different times, investors who purchase those shares may experience different levels of dilution and different investment outcomes. In addition, the expected or actual resale of a substantial number of shares by the selling stockholder may make it more difficult for us to raise additional capital in the future at a time and at a price we might otherwise desire.

Our securities may experience extreme price and volume fluctuations, which could lead to costly litigation for us and make an investment in us less appealing.

The market price of our Common Stock may fluctuate substantially due to a variety of factors, including:

- the status and results of our clinical trials for our product candidates;
- our ability to fund and complete our clinical trials and, if such trials provide data supporting an FDA submission, our ability to apply for and obtain clearance from the FDA;
- our ability to remain a going concern;
- our ability to maintain our Nasdaq listing;
- our business strategy and plans;
- the potential market for our product candidates, if approved for sale in the U.S.;
- new regulatory pronouncements and changes in regulatory guidelines and timing of regulatory approvals;
- general and industry-specific economic conditions;
- variations in our quarterly financial and operating results, including the rate at which we incur negative cash flow in future periods;
- additions to or departures of our key personnel;
- changes in market valuations of other companies that operate in our business segments or in our industry;
- lack of trading liquidity;
- if our products are approved and become available for us to sell in the U.S., whether we ultimately achieve profitability or not;
- changes in accounting principles; and
- general market conditions, economic and other external factors.

The market prices of the securities of early-stage companies, particularly companies like ours that are seeking to obtain regulatory approval of their product candidates and do not yet generate operating revenue, have been highly volatile and are likely to remain highly volatile in the future. This volatility has often been unrelated to the operating performance of particular companies. In the past, companies that experience volatility in the market price of their securities have often faced securities class action litigation. Whether or not meritorious, litigation brought against us could result in substantial costs, divert our management's attention and resources and harm our financial condition and results of operations.

Sales of shares issued upon exercise of the Pre-Funded Warrants and the September 2026 Common Warrants could cause the market price of our Common Stock to decline.

Although the selling stockholder must pay the fixed exercise price when exercising the September 2026 Common Warrants (unless utilizing a cashless exercise if permitted), the selling stockholder may resell the underlying shares at any price and at any time. In addition, the Pre-Funded Warrants have a nominal exercise price and are exercisable at any time, which could result in immediate or near-term issuance and resale of a substantial number of shares. Such resales, or the expectation that such resales may occur, could cause the market price of our Common Stock to decline.

We will seek to raise additional funds, finance acquisitions or develop strategic relationships by issuing securities that would dilute your ownership. Depending on the terms available to us, if these activities result in significant dilution, it may negatively impact the trading price of our Common Stock.

Any additional financing that we secure may require the granting of rights, preferences or privileges senior to, or *pari passu* with, those of our Common Stock. Any issuances by us of equity securities may be at or below the prevailing market price of our Common Stock and in any event may have a dilutive impact on your ownership interest, which could cause the market price of our Common Stock to decline. We may also raise additional funds through the incurrence of debt or the issuance or sale of other securities or instruments senior to our shares of Common Stock, which may be highly dilutive. The holders of any securities or instruments we may issue may have rights superior to the rights of holders of our Common Stock. If we experience dilution from the issuance of additional securities and we grant superior rights to new securities over holders of our Common Stock, it may negatively impact the trading price of our common stock and you may lose all or part of your investment.

Trading of our Common Stock may be limited, making it difficult for our stockholders to sell their shares, and future sales of Common Stock could reduce our stock price.

Our Common Stock currently trades on Nasdaq under the ticker “HCWB.” The liquidity of our Common Stock may be limited, including in terms of the number of shares that can be bought and sold at a given price and reduction in security analysts’ and the media’s coverage of us, if any. These factors may result in different prices for our Common Stock than might otherwise be obtained in a more liquid market and could also result in a larger spread between the bid and asked prices for our Common Stock. In addition, in the absence of a large market capitalization, our Common Stock is less liquid than the stock of companies with broader public ownership, and, as a result, the trading prices of our Common Stock may be more volatile. In the absence of an active public trading market, an investor may be unable to liquidate his/her investment in our Common Stock. Trading of a relatively small volume of our common stock may have a greater impact on the trading price of our Common Stock. We cannot predict the prices at which our Common Stock will trade in the future, if at all.

We do not currently intend to pay dividends on our common stock in the foreseeable future and, consequently, your ability to achieve a return on your investment will depend on appreciation in the price of our common stock.

We do not anticipate paying any cash dividends to holders of our Common Stock for the foreseeable future. Consequently, investors must rely on sales of their Common Stock after price appreciation, which may never occur, as the only way to realize any future gains on their investments. There is no guarantee that shares of our common stock will appreciate in value or even maintain the price at which our stockholders have purchased their shares.

FINRA sales practice requirements may limit a stockholder’s ability to buy and sell our securities.

Effective June 30, 2020, the SEC implemented Regulation Best Interest requiring that “A broker, dealer, or a natural person who is an associated person of a broker or dealer, when making a recommendation of any securities transaction or investment strategy involving securities (including account recommendations) to a retail customer, shall act in the best interest of the retail customer at the time the recommendation is made, without placing the financial or other interest of the broker, dealer, or natural person who is an associated person of a broker or dealer making the recommendation ahead of the interest of the retail customer.” This is a significantly higher standard for broker-dealers to recommend securities to retail customers than before under FINRA “suitability rules.” FINRA suitability rules do still apply to institutional investors and require that in recommending an investment to a customer, a broker-dealer must have reasonable grounds for believing that the investment is suitable for that customer. Prior to recommending securities to their customers, broker-dealers must make reasonable efforts to obtain information about the customer’s financial status, tax status, investment objectives and other information, and for retail customers determine the investment is in the customer’s “best interest” and meet other SEC requirements. As a result, fewer broker-dealers may be willing to make a market in our common stock, reducing a stockholder’s ability to resell shares of our common stock.

THE SEPTEMBER 2026 PIPE TRANSACTION

On September 23, 2026, we entered into a Securities Purchase Agreement (the “Purchase Agreement”) with Armistice Capital Master Fund Ltd. (the “Investor”), pursuant to which we agreed to issue and sell, in the September 2026 PIPE Transaction, an aggregate of 903,614 units at a purchase price of \$1.6599 per unit, with each unit consisting of (i) one Pre-Funded Warrant and (ii) the right to receive one September 2026 Common Warrant, subject to stockholder approval. Each Pre-Funded Warrant is exercisable for one share of Common Stock, and each September 2026 Common Warrant, if and when issued, will be exercisable for one share of Common Stock. The Pre-Funded Warrants and the rights to receive September 2026 Common Warrants were immediately separable and were issued separately, with the Common Warrants to be issued only upon, and subject to, stockholder approval required under Nasdaq Listing Rule 5635(d).

Pursuant to the Purchase Agreement, the Investor is entitled to receive September 2026 Common Warrants exercisable for up to an aggregate of 903,614 shares of Common Stock. The issuance of the September 2026 Common Warrants is subject to stockholder approval required under Nasdaq Listing Rule 5635(d), which approval we are obligated to seek pursuant to the terms of the Purchase Agreement. Following receipt of such stockholder approval, we will issue the September 2026 Common Warrants to the Investor. The Company intends to hold a Special Meeting of Stockholders on or about January 26, 2027, at which the Company’s stockholders will be asked to approve the issuance of the September 2026 Common Warrants.

The September 2026 Common Warrants will be exercisable immediately upon issuance at an exercise price of \$1.66 per share and will expire on the five and one-half year anniversary of the date of issuance. The September 2026 Common Warrants will not be exercisable to the extent that, after giving effect to such exercise, the holder would beneficially own more than 4.99% of the number of shares of our Common Stock outstanding immediately after giving effect to such exercise, subject to adjustment by the holder in accordance with their terms. There can be no assurance that stockholder approval will be obtained. If stockholder approval is not obtained, the September 2026 Common Warrants will not be issued and the shares of Common Stock underlying the September 2026 Common Warrants will not become issuable.

The securities issued and to be issued in the September 2026 PIPE Transaction, including the Pre-Funded Warrants and the shares of Common Stock issuable upon exercise thereof, and the September 2026 Common Warrants and the shares of Common Stock issuable upon receipt of stockholder approval and exercise thereof, if issued (collectively, the “September 2026 Warrant Shares”), were offered and sold, or will be offered and sold, as applicable, in reliance on the exemption from registration provided by Section 4(a)(2) of the Securities Act and Rule 506(b) of Regulation D promulgated thereunder and have not been registered under the Securities Act or applicable state securities laws. Pursuant to the terms of the Registration Rights Agreement entered into in connection with the September 2026 PIPE Transaction, we agreed to file a registration statement to register the resale of the underlying shares of Common Stock that may be issued upon the exercise of the Pre-Funded Warrants issued in the September 2026 PIPE Transaction, and underlying shares of Common Stock that may be issued upon the exercise of the September 2026 Warrant Shares, subject to stockholder approval.

The September 2026 PIPE Transaction closed on September 24, 2026 and resulted in gross proceeds to the Company of approximately \$1.5 million before deducting offering expenses.

USE OF PROCEEDS

All of the securities offered by this prospectus are being registered for the account of the selling stockholder. We will not receive any proceeds from the sale of shares of Common Stock by the selling stockholder, and the proceeds from the exercise of Pre-Funded Warrants will be nominal. If the September 2026 Common Warrants are exercised, the Company may receive up to \$1.5 million from the exercise of these warrants by the selling stockholder. We have agreed to pay all costs, expenses, and fees relating to the registration of the securities covered by this prospectus. The selling stockholder will bear all commissions and discounts, if any, attributable to its sale of shares of our Common Stock. The prices at which the shares of Common Stock covered by this prospectus may actually be sold will be determined by the prevailing public market price for shares of our Common Stock, by negotiations between the selling stockholder and buyers of our Common Stock in private transactions or as otherwise described in "Plan of Distribution."

MARKET PRICE OF OUR COMMON STOCK AND DIVIDEND INFORMATION

Market Price of Our Common Stock

Our Common Stock is currently listed on Nasdaq, under the symbol "HCWB".

On September 28, 2026, the closing sale price of our Common Stock was \$1.82 per share.

As of September 28, 2026, there were approximately 4,500 holders of record of our Common Stock. Such numbers do not include beneficial owners holding our securities through nominee names.

Dividend Policy

HCWB does not anticipate paying any cash dividends in the foreseeable future. If HCWB incurs indebtedness in the future to fund its future growth, its ability to pay dividends may be further restricted by the terms of such indebtedness.

BENEFICIAL OWNERSHIP OF SECURITIES

The following table sets forth certain information with respect to the beneficial ownership of our Common Stock as of September 28, 2026, by:

- each stockholder, or group of affiliated persons, known by us to be the beneficial owner of more than 5% of our Common Stock;
- each of our directors;
- each of our named executive officers; and
- all of our directors and executive officers as a group.

Beneficial ownership is determined in accordance with the rules of the SEC and generally includes any shares over which a person exercises sole or shared voting or investment power. Unless otherwise indicated below, to our knowledge, the persons and entities named in the table have sole voting and sole investment power with respect to all shares beneficially owned by them, subject to community property laws where applicable. Shares of our Common Stock subject to stock options that are currently exercisable or exercisable within 60 days of September 28, 2026 are deemed to be outstanding and to be beneficially owned by the person holding the stock options for the purpose of computing the percentage ownership of that person, but are not treated as outstanding for the purpose of computing the percentage ownership of any other person.

Percentage ownership of our Common Stock is based on 2,236,324 shares of our Common Stock outstanding on September 28, 2026. Unless otherwise indicated, the address of each of the individuals and entities named below is c/o HCW Biologics Inc., 2929 N. Commerce Parkway, Miramar, Florida 33025.

Name of Beneficial Owner	Common Stock	Options Exercisable within 60 days	Aggregate Number of Shares Beneficially Owned	Percentage of Shares Beneficially Owned
<i>Directors and Executive Officers</i>				
Hing C. Wong, Ph.D.⁽¹⁾	125,845	3,334	129,179	5.8%
Peter Rhode, Ph.D.⁽²⁾	324	207	531	*
Rebecca Byam⁽³⁾	9,542	897	10,439	*
Scott T. Garrett⁽⁴⁾	41,644	369	42,013	1.9%
Rick S. Greene⁽⁵⁾	346	369	715	*
Lisa M. Giles⁽⁶⁾	150	436	586	*
All executive officers and directors as a group (7 persons)	186,542	5,821	192,363	8.6%

* Represents beneficial ownership of less than one percent of the outstanding shares of our Common Stock.

- (1) Consists of (a) 108,644 shares held directly by Dr. Hing C. Wong, including 23,210 shares purchased in connection with the July 2026 PIPE Transaction, and (b) 17,201 shares held by Dr. Hing C. Wong and Ms. Bee Yau Huang.
- (2) Consists of 324 shares held directly by Peter Rhode.
- (3) Consists of 9,542 shares held directly by Rebecca Byam.
- (4) Consists of (a) 38,509 shares held by Garrett Capital Partners, LLC, including 7,736 shares purchased in connection with the July 2026 PIPE Transaction. Mr. Garrett is deemed to beneficially own the shares held by Garrett Capital Partners, LLC and (b) 3,135 shares held directly by Mr. Garrett.
- (5) Consists of 346 shares held directly by Rick S. Greene.
- (6) Consists of 150 shares held by Lisa M. Giles Living Trust.

SELLING STOCKHOLDER

The securities offered under this prospectus may be offered from time to time by the selling stockholder named below or by any of its respective pledgees, donees, transferees or other successors-in-interest. As used in this prospectus, the term “selling stockholder” includes the selling stockholder identified below and any donees, pledgees, transferees or other successors-in-interest selling shares received after the date of this prospectus from the selling stockholder as a gift, pledge or other non-sale related transfer. The selling stockholder named below will acquire the shares of our Common Stock being offered under this prospectus directly from us. We will issue the securities to the selling stockholder in reliance on an exemption from the registration requirements of the Securities Act pursuant to Section 4(a)(2) of the Securities Act and Rule 506 promulgated thereunder.

The following table sets forth as of September 28, 2026: (1) the name of the selling stockholder for whom we are registering shares of our Common Stock under the registration statement of which this prospectus is a part, (2) the number of shares of our Common Stock beneficially owned by the selling stockholder prior to the offering, determined in accordance with Rule 13d-3 under the Exchange Act, (3) the number of shares of our Common Stock that may be offered by the selling stockholder under this prospectus and (4) the number of shares of our Common Stock to be owned by the selling stockholder after completion of this offering. We will not receive any of the proceeds from the sale of the shares of our Common Stock offered under this prospectus. The amounts and information set forth below are based upon information provided to us by the selling stockholder or its representatives, or on our records, as of September 28, 2026.

	Shares of Common Stock Beneficially Owned Prior to the Offering (1)		Number of Shares Being Offered	Shares of Common Stock Beneficially Owned After the Completion of the Offering (2)	
	Number	Percentage		Number	Percentage
Armistice Capital Master Fund, Ltd. (3)	1,083,614(3A)	34.5%(3B)	903,614	180,000(3C)	5.7%(3D)

- (1) Beneficial ownership prior to the offering assumes the selling stockholder holds all of the shares of Common Stock being registered for resale by this prospectus other than the 903,614 shares of Common Stock issuable upon exercise of the September 2026 Common Warrants, issuance of which is subject to receipt of stockholder approval required pursuant to Nasdaq Listing Rule 5635(d). The percentages shown are based on 2,236,324 shares of Common Stock outstanding as of September 28, 2026, plus 903,614 shares issuable upon exercise of the Pre-Funded Warrants.

Alternatively, assuming receipt of stockholder approval for issuance of the September 2026 Common Warrants and including all 903,614 shares of Common Stock issuable upon exercise of the September 2026 Common Warrants, 4,043,552 shares of Common Stock would be outstanding. The beneficial ownership by the selling stockholder prior to the offering and after completion of the offering, with 4,043,552 shares outstanding, would be as follows:

	Shares of Common Stock Beneficially Owned Prior to the Offering		Number of Shares Being Offered	Shares of Common Stock Beneficially Owned After the Completion of the Offering	
	Number	Percentage		Number	Percentage
Armistice Capital Master Fund, Ltd.	1,987,228	49.2%	1,807,228	180,000	4.5%

- (2) Beneficial ownership after the completion of the offering assumes the sale of all shares of Common Stock being registered for resale by this prospectus, including shares issuable upon exercise of the Pre-Funded Warrants, but excluding shares issuable upon exercise of the September 2026 Common Warrants, issuance of which is subject to receipt of the stockholder approval required pursuant to Nasdaq Listing Rule 5635(d). The selling stockholder may sell all, some, or none of the shares offered under this prospectus, subject to the ownership limitations described below. The percentages shown are based on 3,139,938 shares of Common Stock outstanding, which gives effect to the exercise of the Pre-Funded Warrants but does not give effect to the issuance or exercise of the September 2026 Common Warrants issuable in the September 2026 PIPE Transaction.
- (3) The securities are directly held by Armistice Capital Master Fund Ltd., a Cayman Islands exempted company (the “Master Fund”). Armistice Capital, LLC (“Armistice”), as the investment manager of the Master Fund, and Steven Boyd, as the Managing Member of Armistice, may be deemed to beneficially own the securities held by the Master Fund. The securities issuable upon exercise of the September 2026 Common Warrants are subject to a beneficial ownership limitation of 4.99%, and the securities issuable upon exercise of the Pre-Funded Warrants are subject to a beneficial ownership limitation of 9.99%, in each case such that the holder may not exercise such warrants to the extent that, after giving effect to such exercise, it would beneficially own more than the applicable percentage of the outstanding shares of Common Stock. The address of Armistice Capital Master Fund Ltd. is c/o Armistice Capital, LLC, 510 Madison Avenue, 7th Floor, New York, New York 10022.
- (3A) The number of shares and ownership percentages presented for Armistice in this table assumes, solely for illustrative purposes, the full exercise of the Pre-Funded Warrants (but not the September 2026 Common Warrants) without regard to the beneficial ownership limitations described above. The number of shares shown as beneficially owned after completion of the offering may differ from the actual number of shares the selling stockholder could own from time to time and are subject to an ownership blocker, as discussed below. Notwithstanding these amounts, Armistice is subject to a 4.99% or 9.99%, as applicable, beneficial ownership limitation that contractually prohibits Armistice from acquiring or holding shares of our Common Stock in excess of such limitation at any time. As a result, Armistice does not beneficially own more than 4.99% of our Common Stock prior to this offering and will not beneficially own more than 4.99% (or 9.99%, as applicable) after this offering, regardless of the number of shares registered for resale.
- (3B) The percentage beneficial ownership amounts shown for Armistice do not reflect the contractual beneficial ownership blocker and therefore overstate Armistice’s actual beneficial ownership. Armistice’s actual beneficial ownership before and after the offering will remain at or below 4.99% or 9.99%, as applicable, because Armistice may not exercise, convert or settle any securities to the extent such action would result in ownership above the applicable limitation. Thus, the number of shares shown as beneficially owned after completion of the offering may differ from the actual number of shares the selling stockholder may own from time to time.
- 3(C) The number of shares held and ownership percentages shown for Armistice after the offering assume that the selling stockholder has sold all shares registered in this registration statement. The number of shares shown as beneficially owned after completion of the offering may differ from the actual number of shares the selling stockholder could own from time to time and are subject to an ownership blocker, as discussed in note 3(D).
- 3(D) Because the Pre-Funded Warrants are subject to beneficial ownership limitations, the number of shares shown as beneficially owned after completion of the offering may differ from the actual number of shares Armistice may own from time to time.

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

In addition to the executive officer and director compensation arrangements discussed under “Executive Compensation” and “Director Compensation,” respectively, since October 1, 2022, the following are the only transactions or series of similar transactions to which we were or will be a party in which the amount involved exceeds the lesser of (i) \$120,000 or (ii) 1% of the Company’s average total assets at year-end for the last two completed fiscal years and in which any director, nominee for director, executive officer, beneficial holder of more than 5% of our capital stock or any member of their immediate family or any entity affiliated with any of the foregoing persons had or will have a direct or indirect material interest.

Senior Secured Promissory Note

On September 23, 2026, the Company issued a senior secured promissory note for \$250,000 to Hing C. Wong, the Company’s Founder and Chief Executive Officer. The senior secured promissory note accrued \$41,667 in interest on the date it was issued and will accrue an additional \$41,667 each quarter it remains outstanding. On the maturity date of June 23, 2027 (the “Maturity Date”), the Company will repay \$375,000. The senior secured promissory note and currently accrued interest may be prepaid by the Company in whole or in part without penalty prior to the Maturity Date. The proceeds of this senior secured promissory note were used for general corporate purposes.

July 2026 PIPE Transaction

On July 29, 2026, the Company completed a private placement of an aggregate of 618,682 units at a purchase price of \$2.585 per unit consisting of one share of Common Stock and the right to receive one Common Stock Purchase Warrant and \$2.5849 per unit consisting of one Pre-Funded Warrant and the right to receive one Common Stock Purchase Warrant. Each unit consisted of (i) one share of Common Stock (or, in lieu thereof, one Pre-Funded Warrant with an exercise price of \$0.0001 per share) and (ii) the right to receive one Common Stock Purchase Warrant to purchase one share of Common Stock, subject to stockholder approval pursuant to Nasdaq Listing Rule 5635(d). The shares of Common Stock (or Pre-Funded Warrants in lieu thereof) and the rights to receive the Common Stock Purchase Warrants comprising the units were issued separately in the private placement. The Company issued 218,682 shares of Common Stock and 400,000 Pre-Funded Warrants in the private placement for aggregate gross proceeds of approximately \$1.6 million before deducting offering expenses. Following receipt of the required stockholder approval, the Company will issue Common Stock Purchase Warrants exercisable for up to an aggregate of 618,682 shares of Common Stock at an exercise price of \$2.585 per share. In connection with the private placement, the Company entered into a Registration Rights Agreement pursuant to which it agreed to register for resale the shares of Common Stock issued in the offering and the shares issuable upon exercise of the Pre-Funded Warrants and Common Stock Purchase Warrants. On August 31, 2026, the SEC declared effective a resale registration statement on Form S-1 (File Number 333-298452) covering the resale of shares of Common Stock and warrants issued in the July 2026 PIPE Transaction. On September 1, 2026, the holder exercised all outstanding Pre-Funded Warrants issued in connection with this transaction, and the Company issued 400,000 shares of Common Stock upon such exercise at an exercise price of \$0.0001 per share.

In connection with this offering, certain of our directors and executive officers purchased an aggregate of approximately \$100,000 of the securities offered. Specifically, Scott Garrett, Chairman of our board of directors, purchased \$20,000 of securities, Hing C. Wong, Ph.D., our Founder and Chief Executive Officer, purchased \$60,000 of securities, and Lee Flowers, our Senior Vice President of Business Development, purchased approximately \$20,000 of securities. Such purchases were made on the same terms and conditions as those offered to the other investors in this offering.

May 2026 PIPE Transaction

On May 21, 2026, the Company completed a private placement of an aggregate of 474,496 units at a purchase price of \$8.43 per unit priced at-the-market under Nasdaq rules to a group of healthcare investors (the “Investors”). Each unit consisted of (i) one share of common stock at a purchase price of \$7.68 per share (or, in lieu thereof, one pre-funded warrant at a purchase price of \$7.6799 per pre-funded warrant with an exercise price of \$0.0001 per share) and (ii) one warrant at a purchase price of \$0.75 per warrant, each to purchase one share of common stock at an exercise price of \$7.68 per share. The shares of common stock (or pre-funded warrants in lieu thereof) and the warrants comprising the units were issued separately in the private placement. (The foregoing amounts have been adjusted to reflect the Reverse Stock Split.) On June 18, 2026, the SEC declared effective a resale registration statement on Form S-1 (File Number 333-296577) covering the resale of shares of Common Stock and warrants issued in the May 2026 PIPE Transaction. On June 22, 2026, the holder exercised all outstanding Pre-Funded Warrants issued in connection with this transaction, and the Company issued 403,322 shares of Common Stock upon such exercise at an exercise price of \$0.0001 per share.

In connection with this offering, certain of our directors and executive officers purchased an aggregate of \$430,000 of the securities offered. Specifically, Scott Garrett, Chairman of our board of directors, purchased \$250,000 of securities, Hing C. Wong, our Founder and Chief Executive Officer, purchased \$160,000 of securities, and Rebecca Byam, our Chief Financial Officer, purchased \$20,000 of securities. Such purchases were made on the same terms and conditions as those offered to other investors in this offering.

February 2024 Private Placement

On February 20, 2024, we entered into subscription agreements with certain of our officers and directors, pursuant to which we sold an aggregate of 7,441 shares of our Common Stock, as adjusted to reflect the Reverse Stock Split, \$0.0001 par value per share, at a purchase price of \$336.00 per share, for an aggregate purchase price of \$2.5 million. (The foregoing number of shares sold and purchase price are as adjusted for the Reverse Stock Split.)

The following table summarizes the Common Stock purchased by our directors, executive officers, and beneficial owners of more than 5% of Common Stock (after adjustment for the Reverse Stock Split).

Name and Title	Shares of Common Stock	Total Purchase Price
Rebecca Byam, Chief Financial Officer	3,170	\$ 1,064,999.60
Dr. Hing C. Wong, Chief Executive Officer*	3,081	\$ 1,035,003.20
Scott Garrett, Chairman of the Board	596	\$ 200,001.20

* Beneficial owner of more than 5% of the Common Stock

The shares will not be sold or transferred except as permitted under law and pursuant to registration or exemption therefrom. The Board of Directors and Audit Committee of the Board of Directors reviewed the transaction under the policy for Related Party Transactions and determined that the transaction was in compliance with such policy.

Secured Note Financing

As of October 31, 2024, we received approximately \$6.9 million from the issuance of senior secured notes to certain accredited investors (the “Secured Notes”). Of the total issuance of Secured Notes, the Company issued \$2.9 million to members of the Company’s board of directors and officers, including \$2.4 million purchased by Dr. Hing C. Wong, Founder and CEO, \$220,000 purchased by Rebecca Byam, Chief Financial Officer, \$140,000 purchased by Scott T. Garrett, Chairman of the board of directors, \$60,000 purchased by Gary M. Winer, a former member of the board of directors, \$25,000 purchased by Lee Flowers, Senior Vice President for Business Development, and \$25,000 purchased by Rick S. Greene, member of the board of directors.

The following table summarizes the aggregate principal amounts of Secured Notes purchased by our directors, executive officers, and beneficial owners of more than 5% of Common Stock at par.

Name and Title	Aggregate Principal Amount of Secured Notes
Dr. Hing C. Wong, Chief Executive Officer*	\$ 2,405,000
Rebecca Byam, Chief Financial Officer	\$ 220,000
Scott T. Garrett, Chairman of the board of directors	\$ 140,000
Gary M. Winer, Former Director	\$ 60,000
Lee Flowers, Senior Vice President for Business Development	\$ 25,000
Rick S. Greene, Director	\$ 25,000

* Beneficial owner of more than 5% of our Common Stock

The Senior Notes, as amended, bear interest at a rate of 9% per annum, payable quarterly in arrears, and mature on August 30, 2026 (the “Maturity Date”), on which date the principal balance and accrued but unpaid interest under the Secured Notes and a fixed bonus shall be due and payable. The Secured Notes may be prepaid in whole or in part at any time prior to the Maturity Date and are subject to a 5% prepayment penalty (“Premium Amount”). The Secured Notes are secured by the pledge of our equity ownership interest in AlloTera Therapeutics, Inc., formerly known as Wugen Inc., (the “Pledged Collateral”). Upon a qualifying event involving a transaction such as an acquisition, merger or initial public offering in which the Pledged Collateral can be sold or liquidated prior to the Maturity Date, subject to certain limitations (such as a threshold price per share in the case of an initial public offering), we have agreed to repay all indebtedness (including accrued interest) related to the Secured Notes plus a Premium Amount. Upon an Event of Default (as defined in the Note Purchase Agreement), we will have a thirty (30) day cure period (the “Cure Period”), and if the Event of Default is not so cured at the end of the Cure Period, we are required to distribute the Pledged Collateral to the Purchasers on a pro rata basis, in full satisfaction of the indebtedness evidenced by the Secured Notes.

The Pledged Collateral has not been registered and will not be sold or transferred except as permitted under law and pursuant to registration or exemption therefrom. The Board of Directors and Audit Committee of the Board of Directors reviewed the transaction under the policy for Related Party Transactions and determined that the transaction was in compliance with such policy.

The holders of \$6.6 million of the outstanding principal of the Secured Notes, including officers, directors and other significant stockholders, agreed to and effected the conversion of the Secured Notes held by them into shares of the Company's Common Stock at a conversion price of \$156.00 per share (adjusted for the Reverse Stock Split), warrants to purchase approximately \$3.3 million of the Company's Common Stock at an exercise price of \$156.00 per share, and the right to their pro rata share of 49.11% of the proceeds of the Company's shares of AlloTera Therapeutics common stock ("AlloTera Therapeutics Shares"), if and when such shares are ever sold (the "AlloTera Therapeutics Proceeds"). The conversion was approved at a Special Meeting of Stockholders held on March 31, 2025 and was effected pursuant to the terms of that certain Second Amendment to Amended and Restated Senior Secured Note Purchase Agreement and Related Agreements dated as of May 1, 2025 (the "Conversion Amendment"). On May 7, 2025, pursuant to the Conversion Amendment, the Secured Notes held by the participating noteholders were cancelled, and the Company issued a total of 42,181 unregistered shares of Common Stock (which are subject to a 180-day lock-up) and warrants to purchase an additional 21,099 shares of Common Stock at an exercise price of \$156.00 per share. On January 29, 2026, the SEC declared effective a resale registration statement on Form S-1 (File Number 333-292652) covering the resale of shares of Common Stock and warrants issued to such note holders.

On October 1, 2026, the Company assigned a pro-rata portion of the AlloTera Therapeutics proceeds as full satisfaction of the remaining outstanding balances due, including principal, accrued interest and bonus due on maturity, according to the terms of the amended agreement.

Convertible Bridge Notes

As of May 5, 2025, the Company issued a total of \$270,000 principal amount of unsecured convertible promissory notes that mature on May 5, 2026 with paid in kind interest accruing thereon, payable quarterly in arrears at 10% per annum (the "Convertible Bridge Notes"). In accordance with their terms, following the completion of a qualified offering, the Convertible Bridge Notes were converted into shares of our Common Stock at the final offering price in an offering that closed on May 15, 2025. In addition, holders of the Convertible Bridge Notes have the right to receive a portion of the proceeds of the Company's shares of Wugen common stock, if and when such shares are ever sold, determined by the number of the AlloTera Therapeutics shares equal to 0.25 multiplied by the original principal amount, in dollars, of the Convertible Bridge Notes. Investors included: \$60,000 invested by Hing C. Wong, the Company's Founder and CEO; \$100,000 invested by Scott T. Garrett, the Chairman of the Company's Board of Directors; and \$10,000 invested by Gary M. Winer, who was a member of the Company's Board of Directors at the time of his investment.

As of May 15, 2025, the outstanding principle of Convertible Bridge Notes were converted. The fair value of consideration transferred, including 6,041 shares of Common Stock and rights to proceeds of a portion of the Company's shares of AlloTera Therapeutics common stock, was \$401,134, with the difference of \$131,135 being recognized as a loss on conversion. Due to the related party nature of the converting noteholders, the loss was recorded as additional paid-in capital in the Company's audited financial statements, incorporated by reference herein.

Stock Option Grants to Executive Officers

We have granted stock options to our named executive officers as more fully described in the section entitled "Executive Compensation."

Indemnification Agreements

We have entered into indemnification agreements with each of our directors and officers. The indemnification agreements and our amended and restated certificate of incorporation and amended and restated bylaws require us to indemnify our directors and officers to the fullest extent permitted by Delaware law.

Review, Approval or Ratification of Transactions with Related Parties

Our written related party transactions policy states that our executive officers, directors, nominees for election as a director, beneficial owners of more than 5% of our Common Stock and any members of the immediate family of and any entity affiliated with any of the foregoing persons are not permitted to enter into a material related party transaction with us without the review and approval of our audit committee. The policy provides that any request for us to enter into a transaction with an executive officer, director, nominee for election as a director, beneficial owner of more than 5% of our Common Stock or with any of their immediate family members or affiliates in which the amount involved exceeds \$120,000 must be presented to our audit committee for review, consideration and approval. In approving or rejecting any such proposal, our audit committee considers the relevant facts and circumstances available and deemed relevant to the committee, including, but not limited to, whether the transaction is on terms no less favorable than terms generally available to an unaffiliated third party under the same or similar circumstances and the extent of the related party's interest in the transaction.

DESCRIPTION OF OUR SECURITIES

The following is a description of our securities of as set forth in certain provisions of our Second Amended and Restated Certificate of Incorporation (the “Charter”) and our Amended and Restated Bylaws (the “Bylaws”), and applicable forms of warrant, each previously filed with the SEC and incorporated by reference as an exhibit to this registration statement of which this prospectus forms a part. This summary does not purport to be complete and is qualified in its entirety by the full text of the Charter, Bylaws, applicable forms of warrant, and the applicable provisions of the Delaware General Corporation Law (the “DGCL”). We encourage you to read our Charter, Bylaws, applicable forms of warrant, and the applicable portions of the DGCL carefully.

Reverse Stock Splits

On March 31, 2025, at a Special Meeting of the Stockholders, the stockholders of the Company approved a reverse stock split of all outstanding shares of the Company’s Common Stock, and the Board approved a reverse stock split of the Common Stock at a final ratio of one-for-forty (1::40) (the “March 2025 Reverse Stock Split”). The March 2025 Reverse Stock Split was effective on April 11, 2025, and the Common Stock commenced trading on a reverse split-adjusted basis when the markets opened on April 11, 2025, under the existing trading symbol “HCWB.”

On June 15, 2026, at the Company’s Annual Meeting of Stockholders, the stockholders of the Company approved a reverse stock split of all outstanding shares of Common Stock, and on June 24, 2026, the Board approved a reverse stock split at a final ratio of one-for-six (1::6) (the “June 2026 Reverse Stock Split”, and, together with the March 2025 Reverse Stock Split, the “Reverse Stock Splits”), which was effective at 12:01 a.m. Eastern Time on Tuesday, June 30, 2026 (the “Effective Date”). The Common Stock commenced trading on a Reverse Stock Split-adjusted basis under the Company’s existing trading symbol, “HCWB,” at market open on Tuesday, June 30, 2026.

All issued and outstanding shares of Common Stock, stock option awards, and per share data included in this prospectus have been recast to give retrospective effect to the adjusted authorized shares and Reverse Stock Splits for all periods presented. The Reverse Stock Splits did not have any effect on authorized shares, the stated par value of the Company’s Common Stock or the rights and privileges of the holders of shares of Common Stock. Options, warrants and convertible securities outstanding immediately prior to the Reverse Stock Splits were appropriately adjusted to reflect the Reverse Stock Splits.

Authorized and Outstanding Stock

The Charter authorizes the issuance of an aggregate of 250 million shares of Common Stock, \$0.0001 par value per share and 10 million shares of preferred stock, \$0.0001 par value per share. Our purpose is to engage in any lawful act or activity for which corporations may be organized under the DGCL. Unless our board of directors determines otherwise, we will issue all shares of our capital stock in uncertificated form.

As of September 28, 2026, HCWB had 2,236,324 shares of its Common Stock issued and outstanding and 0 shares of preferred stock issued and outstanding.

Common Stock

Voting Rights

Each holder of Common Stock is entitled to one vote for each share on all matters submitted to a vote of the stockholders, including the election of directors. Our certificate of incorporation and bylaws do not provide for cumulative voting rights. Because of this, the holders of a plurality of the shares of Common Stock entitled to vote in any election of directors can elect all of the directors standing for election, if they should so choose. With respect to matters other than the election of directors, at any meeting of the stockholders at which a quorum is present or represented, the affirmative vote of a majority of the voting power of the shares present in person or represented by proxy at such meeting and entitled to vote on the subject matter shall be the act of the stockholders, except as otherwise required by law. The holders of a majority of the stock issued and outstanding and entitled to vote, present in person or represented by proxy, shall constitute a quorum for the transaction of business at all meetings of the stockholders.

Dividend Right

Subject to preferences that may be applicable to any then outstanding redeemable preferred stock, holders of Common Stock are entitled to receive dividends, if any, as may be declared from time to time by the board of directors out of legally available funds.

We have never declared or paid any cash dividends on our Common Stock or any other securities. We anticipate that we will retain all available funds and any future earnings, if any, for use in the operation of our business and do not anticipate paying cash dividends in the foreseeable future. In addition, future debt instruments may materially restrict our ability to pay dividends on our Common Stock. Payment of future cash dividends, if any, will be at the discretion of the Board after taking into account various factors, including our financial condition, operating results, current and anticipated cash needs, the requirements of current or then-existing debt instruments and other factors the Board deems relevant.

Rights upon Liquidation, Dissolution and Winding-Up

In the event of our liquidation, dissolution or winding up, holders of Common Stock will be entitled to share ratably in the net assets legally available for distribution to stockholders after the payment of all of our debts and other liabilities and the satisfaction of any liquidation preference granted to the holders of any then outstanding shares of redeemable preferred stock.

Preemptive or Other Rights

Holders of Common Stock have no preemptive, conversion, subscription or other rights, and there are no redemption or sinking fund provisions applicable to the Common Stock. The rights, preferences and privileges of the holders of Common Stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of redeemable preferred stock that we may designate in the future.

Warrants

On September 24, 2026, in connection with the September 2026 PIPE Transaction, we issued rights to receive common stock purchase warrants exercisable for an aggregate of up to 903,614 shares of our Common Stock (the “September 2026 Common Warrants”). The September 2026 Common Warrants were issued together with pre-funded warrants as part of units sold to an institutional investor in the September 2026 PIPE Transaction. The issuance of the September 2026 Common Warrants is subject to stockholder approval required under Nasdaq Listing Rule 5635(d). Following receipt of such stockholder approval, we will issue the September 2026 Common Warrants to the investor. The September 2026 Common Warrants will be exercisable immediately upon issuance at an exercise price of \$1.66 per share and will expire on the date that is five and one-half years from the date of issuance. The September 2026 Common Warrants may be exercised for cash or, subject to certain conditions set forth therein, on a cashless basis. The exercise of the September 2026 Common Warrants is subject to customary adjustments for stock splits, stock dividends, recapitalizations and similar events. The September 2026 Common Warrants are subject to beneficial ownership limitations that generally prohibit the holder from exercising the September 2026 Common Warrants to the extent that, after giving effect to such exercise, the holder would beneficially own more than 4.99% of the number of shares of our Common Stock outstanding immediately after giving effect to such exercise, which percentage may be increased or decreased by the holder in accordance with the terms of the September 2026 Common Warrants. We are obligated to seek the stockholder approval required for issuance of the September 2026 Common Warrants. There can be no assurance that such stockholder approval will be obtained. If stockholder approval is not obtained, the September 2026 Common Warrants will not be issued.

On July 29, 2026, in connection with the July 2026 PIPE Transaction, we issued rights to receive common stock purchase warrants exercisable for an aggregate of up to 618,682 shares of our Common Stock (the “July 2026 Common Warrants”). The July 2026 Common Warrants were issued together with shares of Common Stock or, in lieu thereof, pre-funded warrants, as part of units sold to investors in the July 2026 PIPE Transaction. The issuance of the July 2026 Common Warrants is subject to stockholder approval required under Nasdaq Listing Rule 5635(d). Following receipt of such stockholder approval, we will issue the July 2026 Common Warrants to the investors. The July 2026 Common Warrants will be exercisable immediately upon issuance at an exercise price of \$2.585 per share and will expire on the date that is five and one-half years from the date of issuance. The July 2026 Common Warrants may be exercised for cash or, subject to certain conditions set forth therein, on a cashless basis. The exercise of the July 2026 Common Warrants is subject to customary adjustments for stock splits, stock dividends, recapitalizations and similar events. The July 2026 Common Warrants are subject to beneficial ownership limitations that generally prohibit the holder from exercising the July 2026 Common Warrants to the extent that, after giving effect to such exercise, the holder would beneficially own more than 4.99% of the number of shares of our Common Stock outstanding immediately after giving effect to such exercise, which percentage may be increased or decreased by the holder in accordance with the terms of the July 2026 Common Warrants. We are obligated to seek the stockholder approval required for issuance of the July 2026 Common Warrants. There can be no assurance that such stockholder approval will be obtained. If stockholder approval is not obtained, the July 2026 Common Warrants will not be issued.

On May 22, 2026, in connection with a private placement transaction (the “May 2026 PIPE Transaction”), we issued common stock purchase warrants to purchase an aggregate of up to 474,496 shares of our Common Stock (the “May 2026 Common Warrants”). The May 2026 Common Warrants were issued together with shares of Common Stock or, in lieu thereof, pre-funded warrants, as part of units sold to investors in the May 2026 PIPE Transaction. The May 2026 Common Warrants are exercisable immediately upon issuance at an exercise price of \$7.68 per share and expire on the date that is five and one-half years from the date of issuance. The May 2026 Common Warrants may be exercised for cash or, subject to certain conditions set forth therein, on a cashless basis. The exercise of the May 2026 Common Warrants is subject to customary adjustments for stock splits, stock dividends, recapitalizations and similar events. The May 2026 Common Warrants are subject to beneficial ownership limitations that generally prohibit the holder from exercising the May 2026 Common Warrants to the extent that, after giving effect to such exercise, the holder would beneficially own more than 4.99% (or, at the holder’s election, up to 9.99%) of the number of shares of our Common Stock outstanding immediately after giving effect to such exercise, which limitation may be increased or decreased by the holder upon prior notice, subject to a 61-day effectiveness period for any increase.

On February 19, 2026, we sold 412,882 units at a purchase price of \$3.6329 per unit, each consisting of one pre-funded warrant that may be exercised for one share of Common Stock, and one accompanying warrant with an exercise price of \$3.633 per share (together, the “February 2026 Common Stock Warrants”) issuance of which was subject to stockholder approval. On March 16, 2026, the pre-funded warrants were exercised and the Company issued 412,882 shares of Common Stock. On June 15, 2026, at the Annual Meeting of Stockholders, the stockholders approved the issuance of the February 2026 Common Stock Warrants. The warrants may be exercised to purchase up to 412,882 shares of Common Stock for \$3.633 per share and expire on the five-year anniversary of such approval. In a private transaction on February 19, 2026, we agreed, subject to stockholder approval, to reduce the exercise price of existing warrants to purchase up to 503,402 shares of our Common Stock (the “Inducement Warrants”), which were issued in November 2025 in connection with a warrant inducement transaction with an existing investor, from \$14.46 per share to \$3.633 per share. On June 15, 2026, at the Annual Meeting of Stockholders, the stockholders approved the repricing of the November 2025 Common Stock Warrants.

On May 7, 2025, the Company issued warrants to purchase up to 21,099 shares of Common Stock to certain Noteholders who agreed to restructure and convert their Secured Notes to equity. These warrants are exercisable for five years from the date of issuance at \$156.00 per share.

Pre-Funded Warrants

On September 24, 2026, in connection with the September 2026 PIPE Transaction, we issued pre-funded warrants to purchase an aggregate of up to 903,614 shares of our Common Stock (the “Pre-Funded Warrants”).

Exercisability. The Pre-Funded Warrants are exercisable at any time after their original issuance date until the Pre-Funded Warrants are exercised in full. The Pre-Funded Warrants are exercisable, at the option of each holder, in whole or in part, by delivering to us a duly executed exercise notice accompanied by payment in full for the number of shares of common stock purchased upon such exercise (except in the case of a cashless exercise as discussed below).

Exercise Limitation. A holder (together with its affiliates) may not exercise any portion of the Pre-Funded Warrants to the extent that the holder would own more than 9.99% of the outstanding Common Stock immediately after exercise.

Exercise Price. The exercise price per whole share of our Common Stock purchasable upon the exercise of the Pre-Funded Warrants is \$0.0001 per share of Common Stock. The warrants are immediately exercisable and may be exercised at any time until the Pre-Funded Warrants are exercised in full. The exercise price and number of shares of Common Stock issuable upon exercise of the warrants may be adjusted in certain circumstances, including in the event of a stock dividend or recapitalization, reorganization, merger or consolidation.

Cashless Exercise. If, at any time after the issuance of the Pre-Funded Warrants, a holder of the warrants exercises the warrants and a registration statement registering the issuance of the shares of Common Stock underlying the warrants under the Securities Act is not then effective or available (or a prospectus is not available for the resale of shares of Common Stock underlying the warrants), then in lieu of making the cash payment otherwise contemplated to be made to us upon such exercise in payment of the aggregate exercise price, the holder shall instead receive upon such exercise (either in whole or in part) only the net number of shares of Common Stock determined according to a formula set forth in the Pre-Funded Warrants.

Fractional Shares. No fractional shares of Common Stock will be issued upon exercise of the warrants. If, upon exercise of a Pre-Funded Warrant, the holder would be entitled to receive a fractional interest in a share, we will, in our discretion and upon exercise, either pay a cash adjustment in respect of such final fraction in an amount equal to such fraction multiplied by the exercise price or round up to the next whole share.

Transferability. Subject to applicable laws, the Pre-Funded Warrants may be offered for sale, sold, transferred or assigned at the option of the holder without our consent.

Fundamental Transactions. In the event of a “fundamental transaction,” as described in the Pre-Funded Warrants and generally including any reorganization, recapitalization or reclassification of our Common Stock, the sale, transfer or other disposition of all or substantially all of our properties or assets, our consolidation or merger with or into another person, the acquisition of more than 50% of our outstanding shares of Common Stock, or any person or group becoming the beneficial owner of 50% of the voting power represented by our outstanding Common Stock, the holders of the warrants will be entitled to receive upon exercise of the warrants the kind and amount of securities, cash or other property that the holders would have received had they exercised the warrants immediately prior to such fundamental transaction.

Rights as a Stockholder. Except by virtue of such holder’s ownership of shares of our Common Stock, the holder of a Pre-Funded Warrant does not have the rights or privileges of a holder of our Common Stock, including any voting rights, until the holder exercises the warrant.

Our Transfer Agent

The transfer agent will continue to be Equiniti Trust Company, LLC.

Authorized but Unissued Capital Stock

Delaware law does not require stockholder approval for any issuance of shares that are authorized and available for issuance. However, the listing requirements of Nasdaq require stockholder approval of certain issuances equal to or exceeding 20% of the then-outstanding voting power or the then-outstanding number of shares of Common Stock. These additional shares may be used for a variety of corporate purposes, including future public offerings, to raise additional capital or to facilitate acquisitions. Additionally, the number of authorized shares of any series of Common Stock or preferred stock may be increased or decreased (but not below the number of shares thereof outstanding) by the affirmative vote of the holders of a majority in voting power, irrespective of the provisions of Section 242(b)(2) of the DGCL.

The HCWB Board may generally issue shares of one or more series of preferred stock on terms designed to discourage, delay or prevent a change of control of HCWB or the removal of our management. Moreover, our authorized but unissued shares of preferred stock will be available for future issuances in one or more series without stockholder approval and could be utilized for a variety of corporate purposes, including future offerings to raise additional capital, to facilitate acquisitions and employee benefit plans.

One of the effects of the existence of authorized and unissued and unreserved shares of Common Stock or preferred stock may be to enable HCWB’s board of directors to issue shares to persons friendly to current management, which issuance could render more difficult or discourage an attempt to obtain control of HCWB by means of a merger, tender offer, proxy contest or otherwise, and thereby protect the continuity of our management and possibly deprive our stockholders of opportunities to sell their shares of Common Stock at prices higher than prevailing market prices.

Vacancies and Newly Created Directorships

The Charter provides that, subject to the rights granted to one or more series of preferred stock then outstanding, any newly-created directorship on the board of directors that results from an increase in the number of directors and any vacancies on our board of directors will be filled solely only by the affirmative vote of a majority of the remaining directors, even if less than a quorum, by a sole remaining director or by the stockholders.

Special Stockholder Meetings

The Charter provides that special meetings of our stockholders may be called at any time only by the board of directors acting pursuant to a resolution approved by the affirmative vote of a majority of the directors then in office, subject to the rights of holders of any series of preferred stock then outstanding.

Stockholder Action by Written Consent

Pursuant to Section 228 of the DGCL, any action required to be taken at any annual or special meeting of the stockholders of a Delaware corporation may be taken without a meeting, without prior notice, and without a vote if a consent or consents in writing, setting forth the action so taken, is or are signed by the holders of outstanding stock having not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting at which all shares of our stock entitled to vote thereon were present and voted, unless our amended and restated certificate of incorporation provides otherwise. Subject to applicable law and the rights, if any, of the holders of any outstanding series of preferred stock or any other outstanding class or series of stock of HCWB, the Charter does not permit our holders of Common Stock to act by consent in writing.

Section 203 of the DGCL

HCWB will be subject to the provisions of Section 203 of the DGCL, which we refer to as “Section 203” regulating corporate takeovers. In general, Section 203 prohibits a publicly held Delaware corporation from engaging, under certain circumstances, in a business combination with an interested stockholder for a period of three years following the date the person became an interested stockholder unless:

- prior to the date of the transaction, HCWB’s board of directors approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder;
- upon completion of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the voting stock outstanding, but not the outstanding voting stock owned by the interested stockholder, (1) shares owned by persons who are directors and also officers and (2) shares owned by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- at or subsequent to the date of the transaction, the business combination is approved by HCWB’s board of directors and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least two-thirds of the outstanding voting stock that is not owned by the interested stockholder.

Generally, a business combination includes a merger, asset or stock sale, or other transaction resulting in a financial benefit to the interested stockholder. 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 outstanding voting stock.

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

Dissenters’ Rights of Appraisal and Payment

Under the DGCL, with certain exceptions, our stockholders will have appraisal rights in connection with a merger or consolidation in which we are a constituent entity. Pursuant to the DGCL, stockholders who properly demand and perfect appraisal rights in connection with such merger or consolidation will have the right to receive payment of the fair value of their shares as determined by the Court of Chancery of the State of Delaware, plus interest, if any, on the amount determined to be the fair value, from the effective time of the merger or consolidation through the date of payment of the judgment.

Stockholders’ Derivative Actions

Under the DGCL, any of our stockholders may bring an action in our name to procure a judgment in our favor, also known as a derivative action, provided that the stockholder bringing the action is a holder of our shares at the time of the transaction to which the action relates or such stockholder’s stock thereafter devolved by operation of law. To bring such an action, the stockholder must otherwise comply with Delaware law regarding derivative actions.

Exclusive Forum for Certain Lawsuits

Our Charter requires, unless we consent in writing to the selection of an alternative forum, that (i) any derivative action or proceeding brought on our behalf, (ii) any action asserting a claim of breach of a fiduciary duty owed by any director, officer or other employee to us or our stockholders, (iii) any action asserting a claim against us, our directors, officers or employees arising pursuant to any provision of the DGCL or our Charter or bylaws, or (iv) any action asserting a claim against us, our directors, officers or employees governed by the internal affairs doctrine may be brought only in the Court of Chancery in the State of Delaware, except any claim (A) as to which the Court of Chancery of the State of Delaware determines that there is an indispensable party not subject to the jurisdiction of the Court of Chancery (and the indispensable party does not consent to the personal jurisdiction of the Court of Chancery within ten days following such determination), (B) which is vested in the exclusive jurisdiction of a court or forum other than the Court of Chancery, or (C) for which the Court of Chancery does not have subject matter jurisdiction, as to which the Court of Chancery and the federal district court for the District of Delaware shall have concurrent jurisdiction. If an action is brought outside of Delaware, the stockholder bringing the suit will be deemed to have consented to service of process on such stockholder’s counsel. Although we believe this provision benefits us by providing increased consistency in the application of Delaware law in the types of lawsuits to which it applies, a court may determine that this provision is unenforceable, and to the extent it is enforceable, the provision may have the effect of discouraging lawsuits against HCWB’s directors and officers, although our stockholders will not be deemed to have waived our compliance with federal securities laws and the rules and regulations thereunder.

Notwithstanding the foregoing, our Charter provides that the exclusive forum provision will not apply to suits brought to enforce a duty or liability created by the Exchange Act or any other claim for which the federal courts have exclusive jurisdiction. Section 27 of the Exchange Act creates exclusive federal jurisdiction over all suits brought to enforce any duty or liability created by the Exchange Act or the rules and regulations thereunder. Additionally, unless we consent in writing to the selection of an alternative forum, the federal courts shall be the exclusive forum for the resolution of any complaint asserting a cause of action arising under the Securities Act against us or any of our directors, officers, other employees, or agents. Any person or entity purchasing or otherwise acquiring any interest in our securities shall be deemed to have notice of and consented to these provisions. We note, however, that there is uncertainty as to whether a court would enforce this provision and that investors cannot waive compliance with the federal securities laws and the rules and regulations thereunder. Section 22 of the Securities Act creates concurrent jurisdiction for state and federal courts over all suits brought to enforce any duty or liability created by the Securities Act or the rules and regulations thereunder.

Limitations on Liability and Indemnification of Officers and Directors

The DGCL authorizes corporations to limit or eliminate the personal liability of directors to corporations and their stockholders for monetary damages for breaches of directors’ fiduciary duties, subject to certain exceptions. The Charter includes a provision that eliminates the personal liability of directors for monetary damages to the corporation or its stockholders for any breach of fiduciary duty as a director, except to the extent such exemption from liability or limitation thereof is not permitted under the DGCL. The effect of these provisions is to eliminate the rights of us and our stockholders, through stockholders’ derivative suits on our behalf, to recover monetary damages from a director for breach of fiduciary duty as a director, including breaches resulting from grossly negligent behavior. However, exculpation does not apply to any director if the director has breached such director’s duty of loyalty, acted in bad faith, knowingly or intentionally violated the law, authorized illegal dividends, redemptions or repurchases or derived an improper benefit from his or her actions as a director.

The limitation of liability provision in the Charter may discourage stockholders from bringing a lawsuit against directors for breach of their fiduciary duty. These provisions also may have the effect of reducing the likelihood of derivative litigation against directors and officers, even though such an action, if successful, might otherwise benefit us and our stockholders. In addition, your investment may be adversely affected to the extent we pay the costs of settlement and damage awards against directors and officers pursuant to these indemnification provisions.

There is currently no pending material litigation or proceeding involving any of our directors, officers or employees for which indemnification is sought.

Listing

The Common Stock of HCWB is listed on Nasdaq under the symbol “HCWB”.

SECURITIES ACT RESTRICTIONS ON RESALE OF COMMON STOCK

Rule 144

Pursuant to Rule 144 under the Securities Act (“Rule 144”), a person who has beneficially owned restricted shares of Common Stock of HCWB for at least six months would be entitled to sell their securities provided that (i) such person is not deemed to have been an affiliate of HCWB at the time of, or at any time during the three months preceding, a sale and (ii) HCWB is subject to the Exchange Act periodic reporting requirements for at least three months before the sale and has filed all required reports under Section 13 or 15(d) of the Exchange Act during the 12 months (or such shorter period as it was required to file reports) preceding the sale.

Persons who have beneficially owned restricted shares of Common Stock of HCWB for at least six months but who are affiliates of HCWB at the time of, or at any time during the three months preceding, a sale would be subject to additional restrictions, by which such person would be entitled to sell within any three-month period only a number of securities that does not exceed the average weekly reported trading volume of Common Stock during the four calendar weeks preceding the filing of a notice on Form 144 with respect to the sale.

Sales by affiliates of HCWB under Rule 144 are also limited by manner of sale provisions and notice requirements and by the availability of current public information about HCWB.

PLAN OF DISTRIBUTION

The shares of Common Stock listed in the table appearing under “Selling Stockholder” are being registered to permit the resale of Common Stock issued or issuable upon the exercise of Pre-Funded Warrants or the September 2026 Common Stock Warrants by the selling stockholder from time to time after the date of this prospectus. There can be no assurance that the selling stockholder will sell any or all of the Common Stock offered hereby. We will not receive any of the proceeds from the sale of the Common Stock by the selling stockholder.

The selling stockholder may sell all or a portion of the Common Stock offered hereby from time to time directly to purchasers or through one or more underwriters, broker-dealers or agents, at either market prices prevailing at the time of sale or at privately negotiated prices (but not at a fixed price), by a variety of methods including the following:

- on any national securities exchange or over-the-counter market on which the Common Stock may be listed or quoted at the time of sale;
- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which a broker-dealer may attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer, as principal, and a subsequent resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- private negotiation transactions;
- in transactions otherwise than on such exchanges or in the over-the-counter market;
- through a combination of any such methods; or
- through any other method permitted under applicable law.

We will pay the reasonable expenses incident to the registration of the Common Stock offered hereby. We have agreed to indemnify the selling stockholder and certain other persons against certain liabilities in connection with the offering of shares offered hereby, including liabilities arising under the Securities Act or if such indemnity is unavailable, to contribute amounts required to be paid in respect of such liabilities.

The selling stockholder and any broker-dealers or agents that are involved in selling the securities registered hereunder may be deemed to be “underwriters” within the meaning of the Securities Act in connection with such sales. In such event, any commissions received by such broker-dealers or agents and any profit on the resale of the securities purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act. The selling stockholder has informed us that it does not have any written or oral agreement or understanding, directly or indirectly, with any person to distribute the securities.

We have advised the selling stockholder that it is required to comply with Regulation M promulgated under the Exchange Act. With certain exceptions, Regulation M precludes a selling stockholder, any affiliated purchasers, and any broker-dealer or other person who participates in the distribution from bidding for or purchasing, or attempting to induce any person to bid for or purchase, any security which is the subject of the distribution until the entire distribution is complete. Regulation M also prohibits any bids or purchases made in order to stabilize the price of a security in connection with the distribution of that security. All of the foregoing may affect the marketability of the shares offered hereby this prospectus.

LEGAL MATTERS

The validity of the securities offered hereby will be passed upon by Clark Hill PLC, Chicago, Illinois and Los Angeles, California.

EXPERTS

The financial statements incorporated in this Prospectus by reference to the Annual Report on Form 10-K for the year ended December 31, 2025, have been so incorporated in reliance on the report of Crowe LLP, independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND MORE INFORMATION

We are subject to the informational requirements of the Exchange Act. In accordance with the Exchange Act, we file periodic reports, proxy and information statements and other information with the SEC. Our filings with the SEC are available to the public over the Internet at the SEC’s website at www.sec.gov. You may also find documents we filed on our website at www.hcwbiologics.com. Information contained in or accessible through our website does not constitute a part of this prospectus and is not incorporated by reference herein.

This prospectus is part of a registration statement we filed with the SEC. This prospectus omits some information contained in the registration statement in accordance with SEC rules and regulations. You should review the information and exhibits in the registration statement for further information about us and the securities we are offering. Statements in this prospectus concerning any document we filed as an exhibit to the registration statement or that we otherwise filed with the SEC are not intended to be comprehensive and are qualified by reference to these filings. You should review the complete document to evaluate these statements.

INCORPORATION OF CERTAIN DOCUMENTS 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 those publicly available documents. The information that we incorporate by reference in this prospectus is considered to be part of this prospectus.

We incorporate by reference into this prospectus and the registration statement of which this prospectus is a part the information or documents listed below (except in each case the information contained in such document to the extent "furnished" and not "filed") that we have filed with the SEC:

- (i) our Annual Report on [Form 10-K](#) for the fiscal year ended December 31, 2025, as filed with the SEC on March 31, 2026, and our Restated Quarterly Report on [Form 10-Q/A](#) for the three months ended March 31, 2026, as filed with the SEC on August 14, 2026, and the Quarterly Report [Form 10-Q](#) for the three- and six-month periods ended June 30, 2026, as filed with the SEC on August 14, 2026;
- (ii) Current Reports on Form 8-K filed with the SEC on [February 13, 2026](#), [February 19, 2026](#), [March 2, 2026](#), [March 17, 2026](#), [March 31, 2026](#), [April 16, 2026](#), [April 30, 2026](#), [April 30, 2026](#), [May 14, 2026](#), [May 21, 2026](#), [May 27, 2026](#), [June 1, 2026](#), [June 15, 2026](#), [June 16, 2026](#), [June 26, 2026](#), [June 30, 2026](#), [July 1, 2026](#), [July 29, 2026](#), [August 14, 2026](#), [September 8, 2026](#), [September 10, 2026](#), and [September 24, 2026](#), excluding any information furnished in such reports under Item 2.02, Item 7.01 or Item 9.0;
- (iii) The description of the Company's Common Stock contained in the registration statement on [Form 8-A](#) filed with the SEC on July 9, 2021 pursuant to Section 12 of the Exchange Act, including any amendment or report filed for the purpose of updating that description.

In addition, all documents subsequently filed by us pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, prior to the termination of the offering (excluding any information furnished rather than filed), shall be deemed to be incorporated by reference into this prospectus.

Any statement contained in this prospectus or in a document incorporated or deemed to be incorporated by reference into this prospectus will be deemed to be modified or superseded for purposes hereof to the extent that a statement contained in this prospectus or any other subsequently filed document that is deemed to be incorporated by reference into this prospectus modifies or supersedes the statement. Any statement so modified or superseded will not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

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

HCW Biologics Inc.
2929 N Commerce Parkway
Miramar, FL 33025
(954) 842-2024

HCW BIOLOGICS INC.

Resale of
up to 1,807,228 Shares of Common Stock

PROSPECTUS

October, 2026

PART II

Item 13. Other Expenses of Issuance and Distribution

The following table sets forth the fees and expenses payable by the registrant in connection with the issuance and distribution of the securities being registered. All of the amounts shown are estimates, except for the SEC registration fee:

Legal fees and expenses	\$	30,000
Accounting fees and expenses		10,000
SEC registration fee		300
Miscellaneous fees and expenses		5,000
Total	\$	45,300

Item 14. Indemnification of Directors and Officers.

Section 145 of the DGCL concerning indemnification of officers, directors, employees and agents is set forth below.

Section 145. Indemnification of officers, directors, employees and agents; insurance.

- (a) A corporation shall have power 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. The termination of any action, suit or proceeding by judgment, order, settlement, conviction, or upon a plea of nolo contendere or its equivalent, shall not, of itself, create a presumption that the person did not act in good faith and in a manner which 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 reasonable cause to believe that the person's conduct was unlawful.
- (b) A corporation shall have power 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 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 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 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 which the Court of Chancery or such other court shall deem proper.
- (c) (1) To the extent that a present or former director or officer of a corporation has been successful on the merits or otherwise in defense of any action, suit or proceeding referred to in subsections (a) and (b) of this section, 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. For indemnification with respect to any act or omission occurring after December 31, 2020, references to "officer" for purposes of these paragraphs (c)(1) and (2) of this section shall mean only a person who at the time of such act or omission is deemed to have consented to service by the delivery of process to the registered agent of the corporation pursuant to § 3114(b) of Title 10 (for purposes of this sentence only, treating residents of this State as if they were nonresidents to apply § 3114(b) of Title 10 to this sentence).

- (2) The corporation may indemnify any other person who is not a present or former director or officer of the corporation against expenses (including attorneys' fees) actually and reasonably incurred by such person to the extent he or she has been successful on the merits or otherwise in defense of any action, suit or proceeding referred to in subsections (a) and (b) of this section, or in defense of any claim, issue or matter therein.
- (d) Any indemnification under subsections (a) and (b) of this section (unless ordered by a court) shall be made by the corporation only as authorized in the specific case upon a determination that indemnification of the present or former director, officer, employee or agent is proper in the circumstances because the person has met the applicable standard of conduct set forth in subsections (a) and (b) of this section. Such determination shall be made, with respect to a person who is a director or officer of the corporation at the time of such determination, (1) By a majority vote of the directors who are not parties to such action, suit or proceeding, even though less than a quorum, or (2) By a committee of such directors designated by majority vote of such directors, even though less than a quorum, or (3) If there are no such directors, or if such directors so direct, by independent legal counsel in a written opinion, or (4) By the stockholders.
- (e) Expenses (including attorneys' fees) incurred by an officer or director of the corporation in defending any civil, criminal, administrative or investigative action, suit or proceeding may be paid by the corporation in advance of the final disposition of such action, suit or proceeding upon receipt of an undertaking by or on behalf of such director or officer to repay such amount if it shall ultimately be determined that such person is not entitled to be indemnified by the corporation as authorized in this section. Such expenses (including attorneys' fees) incurred by former directors and officers or other employees and agents of the corporation or by persons serving at the request of the corporation as directors, officers, employees or agents of another corporation, partnership, joint venture, trust or other enterprise may be so paid upon such terms and conditions, if any, as the corporation deems appropriate.
- (f) The indemnification and advancement of expenses provided by, or granted pursuant to, the other subsections of this section shall not be deemed exclusive of any other rights to which those seeking indemnification or advancement of expenses may be entitled under any bylaw, agreement, vote of stockholders or disinterested directors or otherwise, both as to action in such person's official capacity and as to action in another capacity while holding such office. A right to indemnification or to advancement of expenses arising under a provision of the certificate of incorporation or a bylaw shall not be eliminated or impaired by an amendment to or repeal or elimination of the certificate of incorporation or the bylaws after the occurrence of the act or omission that is the subject of the civil, criminal, administrative or investigative action, suit or proceeding for which indemnification or advancement of expenses is sought, unless the provision in effect at the time of such act or omission explicitly authorizes such elimination or impairment after such action or omission has occurred.
- (g) A corporation shall have power 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 this section. For purposes of this subsection, insurance shall include any insurance provided directly or indirectly (including pursuant to any fronting or reinsurance arrangement) by or through a captive insurance company organized and licensed in compliance with the laws of any jurisdiction, including any captive insurance company licensed under Chapter 69 of Title 18, provided that the terms of any such captive insurance shall:
- (1) Exclude from coverage thereunder, and provide that the insurer shall not make any payment for, loss in connection with any claim made against any person arising out of, based upon or attributable to any
- (i) personal profit or other financial advantage to which such person was not legally entitled or

(ii) deliberate criminal or deliberate fraudulent act of such person, or a knowing violation of law by such person, if (in the case of the foregoing paragraph (g)(1)(i) or (ii) of this section) established by a final, nonappealable adjudication in the underlying proceeding in respect of such claim (which shall not include an action or proceeding initiated by the insurer or the insured to determine coverage under the policy), unless and only to the extent such person is entitled to be indemnified therefor under this section;

(2) Require that any determination to make a payment under such insurance in respect of a claim against a current director or officer (as defined in paragraph (c)(1) of this section) of the corporation shall be made by an independent claims administrator or in accordance with the provisions of paragraphs (d)(1) through (4) of this section; and

(3) Require that, prior to any payment under such insurance in connection with any dismissal or compromise of any action, suit or proceeding brought by or in the right of a corporation as to which notice is required to be given to stockholders, such corporation shall include in such notice that a payment is proposed to be made under such insurance in connection with such dismissal or compromise.

For purposes of paragraph (g)(1) of this section, the conduct of an insured person shall not be imputed to any other insured person. A corporation that establishes or maintains a captive insurance company that provides insurance pursuant to this section shall not, solely by virtue thereof, be subject to the provisions of Title 18.

- (h) For purposes of this section, references to “the corporation” shall include, in addition to the resulting corporation, any constituent corporation (including any constituent of a constituent) absorbed in a consolidation or merger which, if its separate existence had continued, would have had power and authority to indemnify its directors, officers, and employees or agents, so that any person who is or was a director, officer, employee or agent of such constituent corporation, or is or was serving at the request of such constituent corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, shall stand in the same position under this section with respect to the resulting or surviving corporation as such person would have with respect to such constituent corporation if its separate existence had continued.
- (i) For purposes of this section, references to “other enterprises” shall include employee benefit plans; references to “fines” shall include any excise taxes assessed on a person with respect to any employee benefit plan; and references to “serving at the request of the corporation” shall include any service as a director, officer, employee or agent of the corporation which imposes duties on, or involves services by, such director, officer, employee or agent with respect to an employee benefit plan, its participants or beneficiaries; and a person who acted in good faith and in a manner such person reasonably believed to be in the interest of the participants and beneficiaries of an employee benefit plan shall be deemed to have acted in a manner “not opposed to the best interests of the corporation” as referred to in this section.
- (j) The indemnification and advancement of expenses provided by, or granted pursuant to, this section 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 the heirs, executors and administrators of such a person.
- (k) The Court of Chancery is hereby vested with exclusive jurisdiction to hear and determine all actions for advancement of expenses or indemnification brought under this section or under any bylaw, agreement, vote of stockholders or disinterested directors, or otherwise. The Court of Chancery may summarily determine a corporation’s obligation to advance expenses (including attorneys’ fees).

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to our directors, officers, and controlling persons pursuant to the foregoing provisions, or otherwise, we have been advised that, in the opinion of the SEC, 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 of expenses incurred or paid by a director, officer or controlling person in a successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, we will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to the 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.

Article IV of the Company's By-laws provides:

Each person who was or is made a party to, or is threatened to be made a party to, or is involved in any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative, legislative or any other type whatsoever (a "Proceeding"), by reason of the fact that such person (or a person of whom such person is the legal representative), is or was a director or officer of the Corporation or, while serving as a director or officer of the Corporation, is or was serving at the request of the Corporation as a director, officer, employee, agent or trustee of another corporation, or of a partnership, joint venture, trust or other enterprise, including service with respect to employee benefit plans (for purposes of this Article VI, an "Indemnitee"), shall be indemnified and held harmless by the Corporation to the fullest extent permitted by the DGCL as the same exists or may hereafter be amended (but, in the case of any such amendment, only to the extent that such amendment permits the Corporation to provide broader indemnification rights than such law permitted the Corporation to provide prior to such amendment), against all expenses, liability and loss (including attorneys' fees, judgments, fines, ERISA excise taxes and penalties and amounts paid or to be paid in settlement) reasonably incurred or suffered by such Indemnitee in connection therewith, provided such Indemnitee acted in good faith and in a manner that the Indemnitee 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 Indemnitee's conduct was unlawful. Such indemnification shall continue as to an Indemnitee who has ceased to be a director or officer of the Corporation and shall inure to the benefit of such Indemnitees' heirs, executors and administrators. Notwithstanding the foregoing, subject to Section 6.5 of these Bylaws, the Corporation shall indemnify any such Indemnitee seeking indemnity in connection with a Proceeding (or part thereof) initiated by such Indemnitee only if such Proceeding (or part thereof) was authorized by the Board or such indemnification is authorized by an agreement approved by the Board.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers or persons controlling us pursuant to the foregoing provisions, 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 theretofore unenforceable.

Item 15. Recent Sales of Unregistered Securities.

During the past three years, we sold the following securities without registration under the Securities Act:

On February 20, 2024, the Company completed a private placement of 7,441 shares of Common Stock to certain officers and directors for aggregate gross proceeds of approximately \$2.5 million. The shares were sold at a purchase price of \$336.00 per share. The Board of Directors and the Audit Committee reviewed the transaction pursuant to the Company's Related Party Transactions Policy and determined that the transaction complied with the policy.

On November 18, 2024, the Company entered into a securities purchase agreement with Armistice Capital Master Fund Ltd. ("Armistice"). In a concurrent private placement completed on November 20, 2024, the Company issued unregistered warrants to purchase up to 27,988 shares of Common Stock (the "Armistice Warrants"). On April 16, 2025, the SEC declared effective a registration statement on Form S-1 (File No. 333-286409) covering the resale of the shares underlying the Armistice Warrants.

On March 12, 2025, in connection with an equity purchase agreement entered into with Square Gate Capital Master Fund, LLC – Series 4, the Company issued 9,616 shares of Common Stock as a commitment fee.

On May 7, 2025, pursuant to the terms of an amendment to certain outstanding Secured Notes approved by stockholders on March 31, 2025, the Company issued 42,181 shares of Common Stock and warrants to purchase an additional 21,099 shares of Common Stock in connection with the conversion of approximately \$6.6 million principal amount of Secured Notes and related amounts.

On November 19, 2025, the Company entered into a warrant inducement agreement with Armistice pursuant to which Armistice exercised existing warrants to purchase 251,702 shares of Common Stock at a reduced exercise price, resulting in gross proceeds to the Company of approximately \$4.0 million. In consideration for such exercise, the Company issued new unregistered warrants to purchase up to 503,402 shares of Common Stock at an exercise price of \$14.46 per share. On January 29, 2026, the SEC declared effective a registration statement on Form S-1 (File No. 333-292652) covering the resale of the shares underlying such warrants.

On May 21, 2026, the Company completed a private placement of an aggregate of 474,496 units to a group of existing investors, including certain directors, officers and significant stockholders, for aggregate gross proceeds of approximately \$4.0 million. Each unit consisted of one share of Common Stock (or a pre-funded warrant in lieu thereof) and one warrant to purchase one share of Common Stock. On June 18, 2026, the SEC declared effective a registration statement on Form S-1 (File No. 333-296577) covering the resale of the securities issued in the private placement. On June 22, 2026, the holder exercised all of its Pre-Funded Warrants issued in this transaction to purchase 403,322 shares of Common Stock for \$0.0001 per share.

On July 29, 2026, the Company completed a private placement with certain accredited investors in which the Company sold 618,682 units, each unit consisting of one share of Common Stock, or a Pre-Funded Warrant in lieu thereof, and (ii) the right to receive one Common Stock Warrant upon, and subject to, stockholder approval of the issuance of such Common Stock Warrants, which approval the Company is obligated to seek pursuant to the terms of the purchase agreement. Gross proceeds of the offering were approximately \$1.6 million before deducting offering expenses. The Company entered into a Registration Rights Agreement pursuant to which it agreed to file a registration statement covering the resale of the shares of Common Stock issued in the private placement, the shares issuable upon exercise of the Pre-Funded Warrants and the shares issuable upon exercise of the Common Stock Warrants. Hing C. Wong, Ph.D., our Founder and Chief Executive Officer, Scott Garrett, Chairman of our board of directors, and Lee Flowers, our Senior Vice President of Business Development, participated in the private placement on the same terms and conditions as the other investor. On August 31, 2026, the SEC declared effective a registration statement on Form S-1 (File No. 333-298452) covering the resale of the securities issued in the private placement. On September 1, 2026, the holder exercised all of its Pre-Funded Warrants issued in this transaction to purchase 400,000 shares of Common Stock for \$0.0001 per share.

On September 23, 2026, the Company entered into a Securities Purchase Agreement with Armistice Capital Master Fund Ltd., pursuant to which the Company agreed to issue and sell 903,614 units in a private placement. Each unit consisted of (i) one pre-funded warrant to purchase one share of the Company's common stock and (ii) the right to receive one common stock purchase warrant upon, and subject to, stockholder approval of the issuance of such common stock warrants, which approval the Company is obligated to seek pursuant to the terms of the Securities Purchase Agreement. The units were sold at a purchase price of \$1.6599 per unit, for aggregate gross proceeds of approximately \$1.5 million before deducting placement agent fees and other offering expenses. The Company entered into a Registration Rights Agreement with the investor pursuant to which it agreed to file a registration statement covering the resale of the shares issuable upon exercise of the pre-funded warrants and the shares issuable upon exercise of the common stock warrants.

The foregoing issuances were made in reliance upon exemptions from registration under Section 4(a)(2) of the Securities Act and/or Rule 506 of Regulation D promulgated thereunder, as applicable.

Item 16. Exhibits.

The exhibits to this registration statement are listed in the Exhibit Index to this registration statement, which immediately precedes the Signature Page, and which Exhibit Index is hereby incorporated by reference.

Item 17. Undertakings.

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

- (iii) to include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement; provided, however, that paragraphs (i), (ii) and (iii) do not apply if the registration statement is on Form S-1 and 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 part of 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.
- (4) that, for the purpose of determining liability under the Securities Act to any purchaser:
- (i) If the registrant is relying on Rule 430B:
- (A) Each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness.
- 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 first use, 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 date of first use; and
- (5) that, for the purpose of determining liability of the registrant under the Securities Act 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 an undersigned registrant; and
- (iv) any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

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

EXHIBIT INDEX

Exhibit No.	Exhibit title	Incorporated by reference				Filed or furnished herewith
		Form	File No.	Exhibit No.	Filing date	
3.1	Amended and Restated Certificate of Incorporation	8-K	001-40591	3.1	07/26/2021	
3.1a	Certificate of Amendment of Certificate of Incorporation, filed March 31, 2025	8-K	001-40591	3.1a	04/01/2025	
3.1b	Certificate of Correction of the Certificate of Amendment of Certificate of Incorporation, filed April 1, 2025	8-K	001-40591	3.1b	04/01/2025	
3.1c	Certificate of Amendment of Certificate of Incorporation, filed June 24, 2026	8-K	001-40591	3.1	06/26/2026	
3.2	Amended and Restated Bylaws	8-K	001-40591	3.2	07/26/2021	
4.1	Specimen Stock Certificate	S-1/A	333-256510	4.1	07/09/2021	
4.2	Description of Securities	10-K	001-40591	4.2	03/29/2022	
4.3	Form of New Warrant	8-K	001-40591	4.1	11/20/2025	
4.4	Form of Common Stock Purchase Warrant	8-K	001-40591	4.1	02/19/2026	
4.5	Form of Common Stock Warrant, dated May 7, 2025, by and between Company and Holder named therein	10-Q	001-40591	10.13	08/18/2025	
4.6	Form of Common Stock Purchase Warrant, dated May 21, 2026, by and between Company and Holder named therein	8-K	001-40591	4.2	05/21/2026	
4.7	Form of Pre-Funded Common Stock Purchase Warrant, dated July 29, 2026, by and between Company and Holder	8-K	001-40591	4.1	07/29/2026	
4.8	Form of Common Stock Purchase Warrant, dated July 29, 2026, by and between Company and Holders	8-K	001-40591	4.2	07/29/2026	
4.9	Form of Pre-Funded Common Stock Purchase Warrant, dated September 23, 2026, by and between Company and Holder	8-K	001-40591	4.1	09/23/2026	
4.10	Form of Common Stock Purchase Warrant, dated September 23, 2026, by and between Company and Holder	8-K	001-40591	4.2	09/23/2026	
5.1	Opinion of Clark Hill PLC					X
10.1	Securities Purchase Agreement, dated February 17, 2026, between Company and Purchaser	8-K	001-40591	10.2	02/19/2026	
10.2	Amendment to Existing Warrants Agreement, dated February 17, 2026, between the Company and Purchaser	8-K	001-40591	10.3	02/19/2026	
10.3	Form of Lock-up Agreement	S-1	333-393396	10.42	02/11/2026	
10.4	Placement Agency Agreement, dated February 17, 2026, between the Company and Maxim Group LLC	8-K	001-40591	10.1	02/19/2026	
10.5	Form of Securities Purchase Agreement dated May 21, 2026, by and between the Company and the Investors	8-K	001-40591	10.1	05/21/2026	
10.6	Form of Registration Rights Agreement dated May 21, 2026, by and between Company and Investors	8-K	001-40591	10.2	05/21/2026	
10.7	Form of Lock Up Agreement dated May 21, 2026, by and between Company and certain Investors, Officers and Directors	10-Q	011-40591	10.7	08/14/2026	
10.8	Form of Placement Agent Agreement, dated May 21, 2026, between the Company and E.F. Hutton & Co. LLC	8-K	001-40591	10.3	05/21/2026	
10.9	Form of Securities Purchase Agreement, between Company and Investors	8-K	001-40591	10.1	07/29/2026	
10.10	Form of Registration Rights Agreement, by and between Company and Investors	8-K	001-40591	10.2	07/29/2026	
10.11	Form of Lock Up Agreement dated July 29, 2026, by and between Company and certain Officers and Directors	10-Q	011-40591	10.11	08/14/2026	
10.12	Form of Indemnification Agreement between HCW Biologics Inc. and each of its officers and directors.	S-1/A	333-256510	10.1	07/09/2021	
10.13+	2019 Equity Incentive Plan, as amended, and forms of agreement thereunder.	S-1	333-256510	10.2	07/09/2021	
10.14+	First Amendment to 2019 Equity Incentive Plan.	S-1	333-256510	10.3	07/09/2021	
10.15+	2021 Equity Incentive Plan and forms of agreement thereunder	S-1	333-256510	10.4	07/09/2021	
10.16+	Employment Agreement, dated July 6, 2021, between Peter Rhode and HCW Biologics Inc.	S-1	333-256510	10.6	07/09/2021	
10.17+	Employment Agreement, dated October 9, 2019, between Rebecca Byam and HCW Biologics Inc.	S-1	333-256510	10.7	07/09/2021	

Exhibit No.	Exhibit title	Incorporated by reference				Filed or furnished herewith
		Form	File No.	Exhibit No.	Filing date	
10.18+	Non-Employee Director Compensation Policy.	S-1	333-256510	10.8	07/09/2021	
10.19+	Employment Agreement, dated June 18, 2021, between Dr. Hing C. Wong and HCW Biologics Inc.	S-1	333-256510	10.13	07/09/2021	
10.20+	Executive Incentive Bonus Plan	S-1	333-256510	10.11	07/09/2021	
10.21†	Exclusive License Agreement, dated December 24, 2020, between HCW Biologics Inc. and Wugen, Inc.	S-1	333-256510	10.10	07/09/2021	
10.22†#	Purchase and Sale Agreement, by and between HCW Biologics Inc. and Wai 3300 Corporate Way, LLC, dated May 27, 2022	10-Q	001-40591	10.1	08/12/2022	
10.23#	Loan Agreement by and between HCW Biologics Inc. and Cogent Bank, dated August 15, 2022	10-Q	001-40591	10.1	11/07/2022	
10.24#	Mortgage and Security Agreement by and between HCW Biologics Inc. and Cogent Bank, dated August 15, 2022	10-Q	001-40591	10.2	11/07/2022	
10.25	Form of Subscription Agreement, dated February 20, 2024, by and between the Company and the Subscribers party thereto	8-K	001-40591	10.1	02/22/2024	
10.26	Form of Amended and Restated Senior Secured Note Purchase Agreement, dated July 2, 2024, by and between the Company and the Purchase party thereto	10-Q	001-40591	10.1	08/14/2024	
10.27	Form of Amended and Restated Pledge Agreement, dated July 2, 2024, by and among the Company, Escrow Agent and Noteholder parties thereto	10-Q	001-40591	10.3	08/14/2024	
10.28	Form of Escrow Agreement, dated May 1, 2025, by and between the Company, Escrow Agent and Noteholder party thereto	10-Q	001-40591	10.4	08/14/2024	
10.29	Form of First Amendment to Amended and Restated Secured Note Purchase Agreement, dated September 30, 2024, by and between the Company and Purchaser party thereto	10-Q	001-40591	10.5	11/14/2024	
10.30	Form of Secured Promissory Note by and between the Company and the Holder party thereof	10-Q	001-40591	10.2	08/14/2024	
10.31	Second Amendment to Amended and Restated Senior Secured Note Purchase Agreement and Related Agreements, dated May 1, 2025, between Company and Holder	10-Q	001-40591	10.12	08/18/2025	
10.32	Equity Purchase Agreement, dated February 20, 2025, between the Company and Square Gate Master Fund - Series 4.	8-K	001-40591	10.1	2/21/2025	
10.33	Registration Rights Agreement, dated February 20, 2025, between the Company and Square Gate Master Fund - Series 4.	8-K	001-40591	10.2	2/21/2025	
10.34	First Amendment to the Equity Purchase Agreement, dated August 14, 2025, between the Company and Square Gate Master Fund - Series 4.	8-K	001-40591	10.1	08/15/2025	

Exhibit No.	Exhibit title	Incorporated by reference				Filed or furnished herewith
		Form	File No.	Exhibit No.	Filing date	
10.35	Amended and Restated Amended and Restated License, Research and Co-Development Agreement, dated November 17, 2025, between the Company and Beijing Trimmune Biotech Co., Ltd.	S-1	333-293396	10.40	02/11/2026	
10.36†#	Amendment 1 to Amended and Restated License, Research and Co-Development Agreement, dated January 27, 2026, between the Company and Beijing Trimmune Biotech Co., Ltd.	S-1	333-293396	10.43	02/11/2026	
10.37†#	Shareholder Purchase Agreement, dated October 10, 2025, between co-founders of Beijing Trimmune Biotech Co., Ltd., including the Company.	S-1	333-293396	10.44	02/11/2026	
10.38	Exclusive License Agreement 12-Month Suspension, dated May 29, 2025, between the Company and Wugen, Inc.	10-Q	001-40591	10.17	8/14/2025	
10.39	Settlement Agreement and Release, dated July 13, 2024, by and between the Company and Altor BioScience, LLC, NantCell, Inc., and ImmunityBio, Inc.	10-Q	001-40591	10.6	11/14/2024	
10.40	Form of Securities Purchase Agreement, between Company and Investors	8-K	001-40591	10.1	09/23/2026	
10.41	Form of Registration Rights Agreement, by and between Company and Investor	8-K	001-40591	10.2	09/23/2026	
10.42	Form of Lock Up Agreement dated September 23, 2026, by and between Company and certain Officers and Directors					X
23.1	Consent of Independent Registered Public Accounting Firm					X
23.2	Opinion of Clark Hill PLC (included in Exhibit 5.1)					
101.INS	Inline XBRL Instance Document					X
101.SCH	Inline XBRL Taxonomy Extension Schema Document					X
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document					X
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document					X
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document					X
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document					X
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)					X
107	Filing Fee Table					X

+ Indicates a management contract or compensatory plan or arrangement.

†† Certain information in this document has been excluded pursuant to Item 601(b)(10) of Regulation S-K. Such excluded information is not material and is the type of information the Registrant treats as private and confidential. The Registrant agrees to furnish supplementally such information to the SEC upon request.

Certain information in this document has been excluded pursuant to Item 601(a)(5) or (a)(6) of Regulation S-K. The Registrant agrees to furnish supplementally such information to the SEC upon request.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this registration statement on Form S-1 to be signed on its behalf by the undersigned, in the city of Miramar, State of Florida, on October 2, 2026.

HCW BIOLOGICS INC.

By: /s/ Hing C. Wong
Name: Hing C. Wong
Title: Founder & Chief Executive Officer

POWER OF ATTORNEY

Each person whose signature appears below constitutes and appoints Hing C. Wong, acting alone or together with another attorney-in-fact, as his or her true and lawful attorney-in-fact and agent, with full power of substitution and re-substitution, for such person and in his or her name, place and stead, in any and all capacities, to sign any or all further amendments (including post-effective amendments) to this registration statement (and any additional registration statement related hereto permitted by Rule 462(b) promulgated under the Securities Act (and all further amendments, including post-effective amendments, thereto)), and to file the same, with all exhibits thereto, and other documents in connection therewith, with the SEC, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in 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 attorney-in-fact and agent, or his or her substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this registration statement on Form S-1 to be signed on its behalf by the undersigned, thereunto duly authorized.

Signature	Title	Date
<u>/s/ Scott T. Garrett</u> Scott T. Garrett	Chairman of the Board of Directors	October 2, 2026
<u>/s/ Rebecca Byam</u> Rebecca Byam	Chief Financial Officer	October 2, 2026
<u>/s/ Hing C. Wong</u> Hing C. Wong	Chief Executive Officer	October 2, 2026
<u>/s/ Rick S. Greene</u> Rick S. Greene	Director	October 2, 2026
<u>/s/ Lisa M. Giles</u> Lisa M. Giles	Director	October 2, 2026
II-10		



Clark Hill
130 E. Randolph Street, Suite 3900
Chicago, Illinois 60601
T (312) 985-5900
F (312) 985-5999

October 2, 2026

HCW Biologics Inc.
2929 N Commerce Parkway
Miramar, Florida 33025

Re: HCW Biologics Inc.
Resale Registration Statement Under Form S-1 (File No. 333-

Ladies and Gentlemen:

We have acted as counsel to HCW Biologics Inc., a Delaware corporation (the “**Company**”), in connection with the filing of a Registration Statement on Form S-1 (as it may be amended or supplemented, the “**Registration Statement**”) with the U.S. Securities and Exchange Commission (the “**SEC**”) under the Securities Act of 1933, as amended (the “**Securities Act**”), relating to the resale by the selling stockholders identified in the Registration Statement (the “**Selling Stockholders**”) of shares of the Company’s common stock, \$0.0001 par value per share (the “**Common Stock**”).

The Registration Statement relates to the resale of: (i) up to 903,614 shares of Common Stock issuable upon the exercise of pre-funded warrants issued on July 29, 2026 (the “**Pre-Funded Warrants**”) and such shares, the “**Pre-Funded Warrant Shares**”) pursuant to that certain Securities Purchase Agreement, dated July 29, 2026, by and among the Company and certain accredited investors (the “**Purchase Agreement**”); and (ii) up to 903,614 shares of Common Stock issuable upon the exercise of common stock purchase warrants to be issued following stockholder approval pursuant to Nasdaq Listing Rule 5635(d) (the “**September 2026 Common Warrants**”) and such shares, the “**Common Warrant Shares**” and, together with the Pre-Funded Warrant Shares, the “**Warrant Shares**”).

In connection with this opinion, we have examined and relied upon: (i) the Registration Statement; (ii) the prospectus included therein (the “**Prospectus**”); (iii) the Company’s certificate of incorporation and bylaws, each as amended and in effect on the date hereof; (iv) certain resolutions of the Company’s board of directors authorizing the entry into the Purchase Agreement, the issuance of the Pre-Funded Warrants and the September 2026 Common Warrants, and the shares issuable upon exercise thereof, and the filing of the Registration Statement; and (v) the originals or copies, certified or otherwise, identified to our satisfaction, of such records of the Company, certificates of public officials regarding the Company, officers of the Company, and such matters of law and regulation and such other documents as we have deemed relevant and necessary for the basis of our opinions hereinafter expressed.

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In such examination, we have assumed the following: (i) the authenticity of documents submitted to us as originals and the conformity to authentic original documents, agreements and instruments of all documents, agreements and instruments submitted to us as facsimiles or PDFs, or as certified, conformed or reproduced copies, and the genuineness of all signatures; (ii) the legal capacity and competency of all signatories and the genuineness and validity of all signatures on all documents, (iii) the conformity to the originals of all documents submitted to us as copies and the authenticity of the originals of such copies; (iv) all documents filed as exhibits to the Registration Statement that have not been executed will conform to the forms thereof; and (v) the truth, accuracy and completeness of the information, factual matters, representations, warranties and covenants contained in the records, agreements (including the Transaction Agreements), documents, instruments and certificates we have reviewed. In making our examination of documents executed or to be executed, we have assumed that the parties thereto, other than the Company, had or will have the power, corporate or other, to enter into and perform all obligations thereunder and have also assumed the due authorization by all requisite action, corporate or other, and the execution and delivery by such parties of such documents and the validity and binding effect thereof on such parties. As to any facts material to the opinions expressed herein that we did not independently establish or verify, we have relied upon statements and representations of officers and other representatives of the Company and others and of public officials.

We have further assumed that at the time of issuance and to the extent any such issuance would exceed the maximum share capital of the Company currently authorized, the number of shares of Common Stock that the Company is authorized to issue shall have been increased in accordance with the bylaws such that a sufficient number of shares of Common Stock are authorized and available for issuance under the bylaws. We have further assumed that, prior to the issuance of any September 2026 Common Warrants, the requisite stockholder approval required pursuant to Nasdaq Listing Rule 5635(d) will have been obtained and the September 2026 Common Warrants will have been duly authorized, executed, issued and delivered in accordance with the terms of the Purchase Agreement and such warrants.

Based upon the foregoing, and subject to the assumptions, qualifications and limitations set forth herein, we are of the opinion that:

1. The Shares have been duly authorized and are validly issued, fully paid and nonassessable.
2. The Pre-Funded Warrant Shares have been duly authorized and, when issued upon proper exercise of the Pre-Funded Warrants in accordance with their terms (including payment of the applicable exercise price), will be validly issued, fully paid and nonassessable.
3. The Common Warrant Shares have been duly authorized and, when issued upon proper exercise of the September 2026 Common Warrants following the issuance thereof after receipt of the requisite stockholder approval pursuant to Nasdaq Listing Rule 5635(d) in accordance with their terms (including payment of the applicable exercise price), will be validly issued, fully paid and nonassessable.

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We hereby consent to the filing of this opinion as Exhibit 5.1 to the Registration Statement and to the reference to our firm under the heading “Legal Matters” in the Registration Statement. In giving such consent, we do not thereby admit that we are within the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the SEC promulgated thereunder.

Our opinion is limited to the General Corporation Law of the State of Delaware and the federal laws of the United States of America. We express no opinion as to the laws of any other jurisdiction. This opinion is rendered as of the date hereof, and we undertake no obligation to update or supplement this opinion to reflect any facts or circumstances that may arise after the date hereof or any changes in applicable law.

Very truly yours,

/s/ Clark Hill PLC

CLARK HILL PLC

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FORM OF LOCK-UP AGREEMENT

September 24, 2026

HCW Biologics Inc.
2929 N. Commerce Parkway
Miramar, FL 33025

Re: Securities Purchase Agreement, dated as of September 23, 2026 (the “Securities Purchase Agreement”), between HCW Biologics Inc. (the “Company”) and Purchasers (the “Purchasers”).

Ladies and Gentlemen:

Defined terms not otherwise defined in this letter agreement (the “Letter Agreement”) shall have the meanings set forth in the Securities Purchase Agreement. In satisfaction of a condition of the Company’s obligations under the Securities Purchase Agreement, the undersigned irrevocably agrees with the Company that, from the date hereof until one hundred eighty (180) days after the Closing Period (such period, the “**Restriction Period**”), the undersigned will not offer, sell, contract to sell, hypothecate, pledge or otherwise dispose of (or enter into any transaction which is designed to, or might reasonably be expected to, result in the disposition (whether by actual disposition or effective economic disposition due to cash settlement or otherwise) by the undersigned or any Affiliate of the undersigned to the extent such Affiliate transaction would be required to be reported by the undersigned during the Restriction Period with the Securities and Exchange Commission in accordance with Section 13 or Section 16 of the Exchange Act), directly or indirectly, or establish or increase a put equivalent position or liquidate or decrease a call equivalent position within the meaning of Section 16 of the Securities Exchange Act of 1934, as amended (the “**Exchange Act**”), with respect to, any shares of Common Stock of the Company or securities convertible, exchangeable or exercisable into, shares of Common Stock of the Company beneficially owned, held or hereafter acquired by the undersigned (the “**Securities**”), other than Securities acquired in the Offering, or make any demand for or exercise any right or cause to be filed a registration, including any amendments thereto, with respect to the registration of any shares of Common Stock or Common Stock Equivalents or publicly disclose the intention to do any of the foregoing. Beneficial ownership shall be calculated in accordance with Section 13(d) of the Exchange Act. The undersigned acknowledges that the Company shall provide written notice to the transfer agent of the Company to inform them of the Restriction Period, which written notice shall include notification by email. In order to enforce this covenant, the Company shall impose irrevocable stop-transfer instructions preventing the transfer agent of the Company from effecting any actions in violation of this Letter Agreement.

Notwithstanding the foregoing, and subject to the conditions below, the undersigned may transfer the Securities provided that (1) the Company receives a signed lock-up letter agreement (in the form of this Letter Agreement) for the balance of the Restriction Period from each donee, trustee, distributee, or transferee, as the case may be, prior to such transfer (2) any such transfer shall not involve a disposition for value, (3) such transfer is not required to be reported with the Securities and Exchange Commission in accordance with the Exchange Act and no report of such transfer shall be made voluntarily during the Restricted Period, and (4) neither the undersigned nor any donee, trustee, distributee or transferee, as the case may be, otherwise voluntarily effects any public filing or report regarding such transfers during the Restricted Period, with respect to transfer:

- (i) as a bona fide gift or gifts;
- (ii) to any immediate family member or to any trust for the direct or indirect benefit of the undersigned or the immediate family of the undersigned (for purposes of this Letter Agreement, "immediate family" shall mean any relationship by blood, marriage or adoption, not more remote than first cousin);
- (iii) to any corporation, partnership, limited liability company, or other business entity all of the equity holders of which consist of the undersigned and/or the immediate family of the undersigned;
- (iv) if the undersigned is a corporation, partnership, limited liability company, trust or other business entity (a) to another corporation, partnership, limited liability company, trust or other business entity that is an Affiliate of the undersigned or (b) in the form of a distribution to limited partners, limited liability company members or stockholders of the undersigned;
- (v) if the undersigned is a trust, to the beneficiary of such trust;
- (vi) by operation of law, such as pursuant to a qualified domestic order, divorce settlement, divorce decree, separation agreement or other court order;
- (vii) to a charity or educational institution;
- (viii) by will, other testamentary document or intestate succession to the legal representative, heir, beneficiary or a member of the immediate family of the undersigned; or
- (ix) sales of Common Stock made pursuant to and in accordance with a trading plan pursuant to Rule 10b5-1 under the Exchange Act existing on the date hereof.

In addition, notwithstanding the foregoing, this Letter Agreement shall not restrict (i) the delivery of shares of Common Stock to the undersigned upon exercise of any options or settlement of restricted stock units or other equity awards granted under any employee benefit plan of the Company, or the exercise of warrants; provided in each case that any shares of Common Stock or Securities acquired in connection with any such exercise or settlement will be subject to the restrictions set forth in this Letter Agreement, (ii) the withholding of shares of Common Stock to cover the payment of the exercise prices or the payment of taxes associated with the exercise or settlement of equity set forth in (i) above, or (iii) the issuance to the undersigned of awards by the Company under its equity incentive plans or the issuance of warrants.

Furthermore, the undersigned may enter into any new plan established in compliance with Rule 10b5-1 of the Exchange Act; provided that (i) such plan may only be established if no public announcement or filing with the Securities and Exchange Commission, or other applicable regulatory authority, is made in connection with the establishment of such plan during the Restriction Period and (ii) no sale of shares of Common Stock are made pursuant to such plan during the Restriction Period.

The undersigned acknowledges that the execution, delivery and performance of this Letter Agreement is a material inducement to the Purchasers to complete the transactions contemplated by the Securities Purchase Agreement and the Company shall be entitled to specific performance of the undersigned's obligations hereunder. The undersigned hereby represents that the undersigned has the power and authority to execute, deliver and perform this Letter Agreement, that the undersigned has received adequate consideration therefor and that the undersigned will indirectly benefit from the closing of the transactions contemplated by the Securities Purchase Agreement.

The undersigned understands that, if the Agreement does not become effective, or if the Agreement (other than the provisions thereof which survive termination) shall terminate or be terminated prior to payment for and delivery of the Common Stock to be sold thereunder, the undersigned shall be released from all obligations under this Letter Agreement.

This Letter Agreement may not be amended or otherwise modified in any respect without the written consent of each of the Company and the undersigned. This Letter Agreement shall be construed and enforced in accordance with the laws of the State of New York without regard to the principles of conflict of laws. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. The undersigned agrees and understands that this Letter Agreement does not intend to create any relationship between the undersigned and the Purchasers and that no issuance or sale of the Securities is created or intended by virtue of this Letter Agreement.

This Letter Agreement shall be binding on successors and assigns of the undersigned with respect to the Securities and any such successor or assign shall enter into a similar agreement for the benefit of the Purchasers.

***** SIGNATURE PAGE FOLLOWS*****

This Letter Agreement may be executed in two or more counterparts, all of which when taken together may be considered one and the same agreement.

Signature

Print Name

Position in Company

Address for Notice:

By signing below, the Company agrees to enforce the restrictions on transfer set forth in this Letter Agreement.

HCW Biologics Inc.

By: _____

Name: Hing C. Wong, Ph.D.

Title: Chief Executive Officer

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in this Registration Statement of HCW Biologics Inc. on Form S-1 of our report dated March 31, 2026 on the financial statements of HCW Biologics Inc. appearing in the 2025 Form 10-K of HCW Biologics Inc., and to the reference to us under the heading “Experts” in the prospectus.

/s/ Crowe LLP

Indianapolis, Indiana
October 2, 2026

Calculation of Filing Fee Tables

S-1

HCW Biologics Inc.

Table 1: Newly Registered and Carry Forward Securities

☐ Not Applicable

	Security Type	Security Class Title	Fee Calculation or Carry Forward Rule	Amount Registered	Proposed Maximum Offering Price Per Unit	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee	Carry Forward Form Type	Carry Forward File Number	Carry Forward Initial Effective Date	Filing Fee Previously Paid in Connection with Unsold Securities to be Carried Forward
Newly Registered Securities												
Fees to be Paid	1 Equity	Common Stock, par value \$0.0001 per share, Underlying Pre-Funded Warrants	Other	903,614	\$ 1.8025	1,628,764.24	\$ 0.000087	\$ 141.70				
Fees to be Paid	2 Equity	Pre-Funded Warrants	Other		\$ 0.00	\$ 0.00	0.000087	\$ 0.00				
Fees to be Paid	3 Equity	Common Warrants	Other		\$ 0.00	\$ 0.00	0.000087	\$ 0.00				
Fees to be Paid	4 Equity	Common Stock underlying Common Warrants	Other	903,614	\$ 1.66	1,499,999.24	0.000087	\$ 130.50				
Fees Previously Paid												
Carry Forward Securities												
Carry Forward Securities												
Total Offering Amounts:						\$ 3,128,763.48		\$ 272.20				
Total Fees Previously Paid:								\$ 0.00				
Total Fee Offsets:								\$ 0.00				
Net Fee Due:								\$ 272.20				

Offering Note

1

Pursuant to Rule 416 under the Securities Act of 1933, as amended (the "Securities Act"), the shares of Common Stock being registered hereby include an indeterminate number of shares of Common Stock that may be issuable as a result of stock splits, stock dividends or similar transactions. The shares of Common Stock being registered for resale consist of 903,614 shares of Common Stock issuable upon exercise of pre-funded warrants issued in the September 2026 Private Placement. Estimated solely for purposes of calculating the registration fee pursuant to Rule 457(c) under the Securities Act based on the average of the high and low sale prices of the registrant's Common Stock on The Nasdaq Capital Market on September 28, 2026. The registrant will not receive any proceeds from the sale of the shares of Common Stock by the selling stockholders.

2

Represents 903,614 Pre-Funded Warrants issued in the September 2026 Private Placement. Pursuant to Rule 457(g) under the Securities Act, because the shares of Common Stock issuable upon exercise of the Pre-Funded Warrants are being registered hereby, no separate registration fee is payable with respect to the pre-funded warrants.

3

Represents up to 903,614 Common Stock purchase Warrants issuable pursuant to the Securities Purchase Agreement entered into in connection with the September 2026 Private Placement, subject to stockholder approval under Nasdaq Listing Rule 5635(d). Pursuant to Rule 457(g) under the Securities Act, because the shares of Common Stock issuable upon exercise of the Common Warrants are being registered hereby, no separate registration fee is payable with respect to the Common Warrants.

4

Pursuant to Rule 416 under the Securities Act, the shares of Common Stock being registered hereby include an indeterminate number of shares of Common Stock that may be issuable as a result of stock splits, stock dividends or similar transactions. Represents 903,614 shares of Common Stock issuable upon exercise of common stock purchase warrants issuable in the September 2026 Private Placement, subject to stockholder approval under Nasdaq Listing Rule 5635(d). Estimated solely for purposes of calculating the registration fee pursuant to Rule 457(g) under the Securities Act based upon the exercise price of \$1.66 per share of the Common Warrants.

Table 2: Fee Offset Claims and Sources

☒Not Applicable

		Registrant or Filer Name	Form or Filing Type	File Number	Initial Filing Date	Filing Date	Fee Offset Claimed	Security Type Associated with Fee Offset Claimed	Security Title Associated with Fee Offset Claimed	Unsold Securities Associated with Fee Offset Claimed	Unsold Aggregate Offering Amount Associated with Fee Offset Claimed	Fee Paid with Fee Offset Source
Rules 457(b) and 0-11(a)(2)												
Fee Offset Claims												
Fee Offset Sources												
Rule 457(p)												
Fee Offset Claims												
Fee Offset Sources												

Table 3: Combined Prospectuses

☒Not Applicable

	Security Type	Security Class Title	Amount of Securities Previously Registered	Maximum Aggregate Offering Price of Securities Previously Registered	Form Type	File Number	Initial Effective Date
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