The information in this prospectus supplement is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus supplement 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.

Subject to completion, dated November 20, 2024

PROSPECTUS SUPPLEMENT (To the Prospectus dated August 26, 2022)



4,160,000 Shares of Common Stock,

Pre-Funded Warrants to Purchase up to 2,557,000 Shares of Common Stock and

Up to 2,557,000 Shares of Common Stock Underlying the Pre-Funded Warrants

We are offering to a certain institutional investor pursuant to this prospectus supplement and the accompanying prospectus (i) 4,160,000 shares (the "Shares") of our common stock, par value \$0.0001 per share ("Common Stock"), at an offering price of \$1.03 per Share, and (ii) pre-funded warrants to purchase up to 2,557,000 shares of Common Stock, at an offering price of \$1.0299 per pre-funded warrant, to the investor whose purchase of common stock in this offering would otherwise result in the investor, together with its affiliates and certain related parties, beneficially owning more than 4.99% (or at the election of the purchaser, 9.99%) of our outstanding common stock immediately following the consummation of this offering, in lieu of common stock. Each of the pre-funded warrants will be exercisable for one share of Common Stock. The pre-funded warrants will have an exercise price of \$0.0001 per share, will be immediately exercisable and may be exercised at any time until all of the pre-funded warrants being offering are exercised in full. We are also offering the common stock issuable from time to time upon exercise of the pre-funded warrants being offered by this prospectus supplement and accompanying prospectus.

In a concurrent private placement, we are issuing to such institutional investor unregistered warrants to purchase up to 6,717,000 shares of Common Stock at an exercise price of \$1.03 share, for each Share or pre-funded warrant issued in this offering. The warrants are exercisable at any time upon issuance and will expire five years following the date of issuance. In the concurrent private placement, the unregistered warrants and the unregistered shares of common stock issuable upon the exercise of the warrants are being offered pursuant to the exemptions provided in Section 4(a)(2) under the Securities Act of 1933, as amended, (the "Securities Act"), and/or Regulation D promulgated thereunder, and they are not being offered pursuant to this prospectus supplement and the accompanying prospectus.

This offering is made pursuant to a securities purchase agreement (the "**SPA**") dated November 18, 2024 between the Company and the Purchasers participating in the offering. The offering price was determined by arms' length negotiation between the Company and the Placement Agent (as hereinafter defined), with reference to the prevailing market price of the Common Shares. Maxim Group LLC ("Maxim", the "Agent" or the "Placement Agent") is acting as exclusive placement agent in respect of the offering pursuant to the terms and conditions of Placement Agency Agreement dated November 18, 2024 between the Company and the Placement Agent (the "Placement Agreement"), under which the Placement Agent agreed to arrange for the sale of the securities, on a reasonable best efforts basis, distributed under the Offering. The Placement Agent is not purchasing or selling any of the securities offered pursuant to this Prospectus Supplement.

Our common stock is traded on The Nasdaq Global Market under the symbol "HCWB". The official closing price of our common stock on The Nasdaq Global Market on November 18, 2024 was \$1.24 per share.

Prior to the offering, we have 37,823,394 shares of common stock, \$0.0001 par value per share, currently issued and outstanding. The aggregate market value of issued and outstanding shares of common stock held by non-affiliates was approximately \$22,369,934 based on 18,040,269 shares of outstanding common stock held by non-affiliates and a price per share of \$1.24, the official closing price of our common stock on November 18, 2024. Pursuant to General Instruction I.B.6 of Form S-3, we may not sell securities registered on Form S-3 with a value more than one-third of the aggregate market value of our common stock held by non-affiliates in any 12-month period, so long as the aggregate market value of our common stock held by non-affiliates in any 12-month period, so long as the aggregate market value of our common stock held by non-affiliates in any 12-month period, so long as the aggregate market value of our common stock held by non-affiliates in any 12-month period, so long as the aggregate market value of our common stock held by non-affiliates in any 12-month period, so long as the aggregate market value of our common stock held by non-affiliates remains less than \$75.0 million. In the event that the aggregate market value of our outstanding common stock held by non-affiliates equals or exceeds \$75.0 million, then the one-third limitation on sales does not apply. We have not sold any securities pursuant to General Instruction I.B.6 of Form S-3 during the 12 calendar months prior to, and including, the date of this prospectus supplement.

We are an "emerging growth company" as that term is used in the Jumpstart Our Business Startups Act of 2012 and, as such, have elected to comply with certain reduced public company reporting requirements for this prospectus supplement and future filings.

Investing in our securities involves certain risks. You should review carefully the risks and uncertainties referenced under the heading "<u>Risk Factors</u>" on page S-11 of this prospectus supplement as well as those contained in the accompanying base prospectus and any related free writing prospectus or prospectus supplement we prepare or authorize in connection with this offering, and in the other documents that are incorporated by reference into this prospectus supplement or the accompanying base prospectus.

The Placement Agent has agreed to use its reasonable best efforts to sell the securities offered by this prospectus supplement and the accompanying prospectus, but the Placement Agent has no obligation to purchase or sell any of such securities or to arrange for the purchase or sale of any specific number or dollar amount of such securities. We have agreed to pay the placement agent fees set forth in the table below.

		Per Pre-Funded		
	Per Share	Warrant	Total (2)	
Offering Price	\$ 1.03	\$ 1.0299	\$ 6,918,254.30	
Placement agent fees(1)	\$ 0.0721	\$ 0.07209	\$ 484,277.80	
Proceeds, before expenses, to us	\$ 0.9579	\$ 0.95781	\$ 6,433,976.50	

(1) We have agreed to pay the Placement Agent a cash fee equal to 7.0% of the aggregate purchase price paid by investors in this offering. See "Plan of Distribution" for additional disclosure regarding compensation payable to the Placement Agent.

(2) Does not include proceeds from the exercise of the Pre-Funded Warrants.

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

The securities will be delivered on or about November 20, 2024.

Sole Placement Agent

MAXIM GROUP LLC

The date of this Prospectus Supplement is November 18, 2024.

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ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement and accompanying base prospectus are part of a registration statement that we filed with the Securities and Exchange Commission (the "SEC") using a "shelf" registration process.

This document contains two parts. The first part consists of this prospectus supplement, which provides you with specific information about this offering. The second part, the accompanying base prospectus, provides more general information, some of which may not apply to this offering. Generally, when we refer only to the "prospectus," we are referring to both parts combined. This prospectus supplement describes the terms of this offering of common stock and pre-funded warrants and also adds to, and updates information contained in the accompanying base prospectus and in the documents incorporated by reference into this prospectus supplement. To the extent there is a conflict between the information contained in this prospectus supplement that was filed with the SEC before the date of this prospectus supplement, on the other hand, you should rely on the information in this prospectus supplement. If any statement in one of these documents is inconsistent with a statement in another document having the later date modifies or supersedes the earlier statement.

We have not, and the Agent has not, authorized anyone to provide you with any information other than that contained or incorporated by reference in this prospectus supplement, the accompanying base prospectus or any related free writing prospectus to which we have referred you. Neither we nor the Agent take any responsibility for, and can provide no assurance as to the reliability of, any other information others may give you. We are not, and the Agent is not, making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted or in which the person making that offer or solicitation is not qualified to do so or to anyone to whom it is unlawful to make an offer or solicitation. You should assume that the information appearing in this prospectus supplement, the accompanying base prospectus, the documents incorporated by reference herein and therein and any free writing prospectus that we have authorized for use in connection with this offering, is accurate only as of the date of those respective documents. Our business, financial condition, results of operations and prospects may have changed since those dates.

You should read this prospectus supplement, the accompanying base prospectus, the documents incorporated by reference herein and therein and any free writing prospectus that we have authorized for use in connection with this offering, in their entirety before making an investment decision. See "Incorporation of Certain Documents by Reference" and "Where You Can Find More Information" in this prospectus supplement and in the accompanying base prospectus.

In this prospectus supplement, unless the context otherwise requires, the terms "HCWB," the "Company," "we," "us," and "our" refer to HCW Biologics Inc., a Delaware corporation. This prospectus supplement, the accompanying base prospectus, and the information incorporated by reference herein and therein may contain additional trade names, trademarks and service marks of other companies, which are the property of their respective owners. We do not intend our use or display of other companies' trade names, trademarks or service marks to imply a relationship with, or endorsement or sponsorship of us by, these other companies.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement and the documents incorporated by reference into this prospectus supplement contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 concerning our business, operations and financial performance and conditions, as well as our plans, objectives and expectations for our business operations and financial performance and condition. Any statements contained herein that are not statements of historical fact may be deemed to be forward-looking statements. In some cases, you can identify forward-looking statements by such terminology as "believe," "may," "will," "potentially," "estimate," "continue," "anticipate," "intend," "could," "would," "project," "plan," "expect" and similar expressions that convey uncertainty of future events or outcomes, although not all forward-looking statements contain these words. Forward-looking statements include, but are not limited to, statements about:

- management's going concern assessment of the Company;
- our financial performance;
- the sufficiency of our existing cash and cash equivalents to fund our future operating expenses and capital expenditure requirements;
- 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 establish our own manufacturing facilities domestically;
- 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;

- our plans relating to the further development and manufacturing of our drug candidates, including additional indications for which we may pursue;
- 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;
- cost and timing of buildout of our new headquarters, including a biologics manufacturing facility, including risks of balances due to
 general contractor and subcontractors, cost overruns and delays, and ability to obtain additional funding required to complete the project;
- our ability to enter out-license agreements for the development and commercialization of the Company's non-core assets; and
- 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.

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 supplement and the documents incorporated by reference into this prospectus supplement.

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 supplement to conform these statements to actual results or to changes in our expectations, except as required by law.

You should read this prospectus supplement, the documents incorporated by reference into this prospectus supplement, 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 supplement 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.

PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights information contained in other parts of this prospectus supplement or incorporated by reference in this prospectus supplement from our Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2024, and our other filings with the SEC listed below under the heading "Where You Can Find More Information; Incorporation of Information by Reference." This summary may not contain all the information that you should consider before investing in securities. You should read the entire prospectus and the information incorporated by reference in this prospectus supplement carefully, including "Risk Factors" and the financial data and related notes and other information incorporated by reference, before making an investment decision. See "Cautionary Note Regarding Forward-Looking Statements."

Overview

HCW Biologics Inc. is a clinical-stage biopharmaceutical company focused on discovering and developing novel immunotherapies to lengthen health span by disrupting the link between chronic, low-grade inflammation and age-related diseases. We believe age-related, chronic, low-grade inflammation, or "inflammaging," is a significant contributing factor to several diseases and conditions, such as cancer, cardiovascular disease, diabetes, neurodegenerative diseases, and autoimmune diseases. The induction and retention of low-grade inflammation in an aging human body is mainly the result of the accumulation of non-proliferative but metabolically active senescent cells, which can also be caused by persistent activation of protein complexes, known as inflammasomes, in innate immune cells.

These two elements share common mechanisms in promoting secretion of proinflammatory proteins and in many cases interact to drive senescence, and thus, inflammaging. Our novel approach is to reduce senescent cells and eliminate the proinflammatory factors they secrete systemically through multiple pathways. We believe our approach has the potential to fundamentally change the treatment of age-related diseases. Accumulation of senescent cells with senescence-associated proinflammatory factors has been implicated as a major source of chronic sterile inflammation leading to many aging-related pathologies. The key to our immunotherapeutic approach is elimination of senescent cells and the proinflammatory factors they secrete.

The Settlement Agreement among the Company, Dr. Wong, Altor, NantCell and ImmunityBio, which was entered into as of July 13, 2024, and is described in Part II, Item 1.—"Legal Proceedings" below, eliminated the uncertainty of the outcome of the previously disclosed arbitration proceedings and provided clarity for the future direction and emphasis of our clinical development strategy. The settlement involved intellectual property the Company developed, including the proprietary TOBI drug discovery platform and its unique Tissue-Factor scaffold used to create protein-fusion molecules that include several elements, such as multiple protein targets, including cytokines, single-chain antibodies, and ligands, as well as proprietary TOBI-based molecules.

The Backbone of the Company's Clinical Development Program: Two Novel Proprietary Drug Discovery Platforms

Two Novel Drug Discovery Platforms. HCW Biologics created two novel drug discovery platforms, using two distinctly different scaffolds to anchor the composition of immunotherapeutic fusions. This results in the creation of molecules with different mechanisms of action, which opens up different pathways for treatment of diseases promoted by chronic inflammation.

TOBITM (Tissue factOr-Based fusIon) Platform. This patented drug discovery platform is built around a Tissue Factor scaffold. The TOBITM platform packs multiple protein targets, including cytokines, single-chain antibodies, and ligands, into a single fusion molecule. These molecules are capable of engaging immunostimulatory

functions and addressing many signaling pathways simultaneously. Some of these fusion protein complexes have ex vivo and in vivo applications, although the Company is primarily focused on drugs developed using subcutaneous injection. Molecules created with the TOBITM platform are reproducible and suitable for cGMP manufacturing. We have manufactured quantities of four TOBI-based molecules in a cGMP manufacturing setting.

The Company's clinical development program includes the following TOBI-based immunotherapeutics:

HCW9218. This is a clinical-stage bifunctional molecule that can impact senescence by reducing senescent cells (i.e., senescent-cell-reducing effect) and eliminating the proinflammatory factors they secrete (i.e., senomorphic effect). Subcutaneous administration of HCW9218 activates NK cells, innate lymphoid group-1, and CD8⁺ T cells, and neutralizes TGF-ß. Our future HCW9218 program includes a Phase 2 study in ovarian cancer in a neoadjuvant setting. The primary focus for future clinical development of HCW9218 will be in other senescence-associated diseases and conditions beyond cancer.

The Company has exclusive rights to develop treatments for all other age-related diseases other than cancer using HCW9218. We will be able to use the Recommended Phase 2 Dose ("RP2D") and other learnings based on findings in the Phase 1 studies which wrapped up at the beginning of 2024.

The Company has non-exclusive rights to develop HCW9218 treatments for ovarian cancer in a neoadjuvant setting. The University of Pittsburgh Medical Center ("UMPC") is the sponsor for an ongoing Phase 2 clinical study to evaluate HCW9218 in the treatment of ovarian cancer in a neoadjuvant setting. For this study, HCW9218 will be administered in combination with neoadjuvant chemotherapy as a first-line treatment with neoadjuvant chemotherapy alone serving as a control arm. The Company has learned that UPMC may change the principal investigator for this study, due to some changes at the institution. Patient recruitment is in progress, but no patients have been enrolled in this study as of the reporting date. Under the terms of the Settlement Agreement, UPMC has until year end to launch this study.

The Settlement Agreement among the Company, Dr. Wong, Altor, NantCell and ImmunityBio, which was entered into as of July 13, 2024, and is described in Part II, Item 1.—"Legal Proceedings" below, eliminated the uncertainty of the outcome of the previously disclosed arbitration proceedings and provided clarity for the future direction and emphasis of our clinical development strategy. However, under the Settlement Agreement, the Company agreed to transfer the HCW9218 master cell line to ImmunityBio. In turn, ImmunityBio agreed to enter into a supply agreement with the Company by the end of January 2025 to ensure clinical supply of HCW9218 is available to carry on clinical studies.

HCW9302. HCW9302 is the basis for the Company's autoimmune program. Subcutaneous administration of HCW9302 is designed to activate and expand Treg cells to reduce senescence by suppressing the activity of inflammasome-bearing immune cells and the inflammatory factors which they secrete.

The Company filed our IND application to the U.S. Food and Drug Administration ("FDA"), which is currently under review. The Company is seeking approval to conduct a clinical study to evaluate HCW9302 in an autoimmune indication. The Company cannot provide any assurance that the FDA will authorize it to initiate its planned clinical trials on a timely basis, or at all. In the event that the FDA does not accept the Company's IND, the Company may also be required to seek feedback, and the feedback may be unfavorable. In the event that the Company does not receive feedback on a timely basis, or the Company is required to change the design of the clinical protocol or address other feedback, clinical development of the products would be delayed and the costs may increase. Moreover, if the FDA does not accept the Company's IND, the Company may be required to conduct additional preclinical testing or other IND-enabling activities, which would result in further delay and additional costs.

We intend to explore utility of HCW9302 for other aging-related diseases, such as neurodegenerative diseases, in relevant animal models. Our plan is to identify the RP2D in patients based on a Phase 1b clinical trial to evaluate HCW9302 in an autoimmune indication, then expand to a neurodegenerative disease indication in a Phase 2 trial utilizing this RP2D.

HCW9206. HCW Biologics maintains the rights to the injectable form of HCW9206. This form of HCW9206 is preclinical, and we are beginning IND-enabling activities. *Ex vivo* rights have been licensed to Wugen. This form of HCW9206 is clinical stage, and Wugen is evaluating it in combination with HCW9201 in a Phase 1 clinical trial. HCW9206 has a unique design consisting of a multi-functional compound constructed with three powerful cytokines: IL-7, IL-15, and IL-21. It is designed to stimulate T cell proliferation and activation, enhance NK cell cytotoxicity, and improve overall immune surveillance against pathogens or tumors. HCW9206 is being considered to be the basis of our future oncology and anti-infectious disease programs.

HCW9201. This is a clinical-stage molecule currently being evaluated by Wugen in a Phase 1 clinical trial in Acute Myeloid Leukemia, as a cell-based treatment. We have not yet initiated any clinical trials to evaluate HCW9201 in other indications. We retain the rights for administration by subcutaneous injection. HCW9201 has a unique design that results in a multi-functional compound with three powerful cytokines, IL-12, IL-15, and IL-18, in a single protein complex. We are exploring intra-tumoral injection of HCW9201 for treatment of cancer.

New Drug Discovery Platform with Novel Protein-Based Scaffold. Our recently discovered a new drug development platform uses a novel protein scaffold that is not based on tissue factor, which differentiates it from TOBITM platform. With immunotherapeutic compounds that are constructed with this new platform without tissue factor, we expand the diseases and conditions that may be treated. The Company has already used this novel protein scaffold to construct several immunotherapeutic fusions, which we are testing to determine the most promising programs, including those that could be licensed to others.

This scaffold has the capability to construct multiple classes of immunotherapeutic compounds, including:

- Multifunctional, cytokine-based immunotherapeutic compounds.
- Constructs with immune-cell engagers targeting tissue factor and other cell-surface antigens associated with diseased cells.
- Multifunctional immunotherapeutic fusions which improve the performance of immune checkpoint inhibitors.

The Company is conducting rigorous preclinical animal studies using several different models to characterize these new compounds and identify those that indicate the greatest potential to evaluate in treatments of cancer and other diseases promoted by chronic inflammation. The clinical development plan is for at least one molecule constructed with this novel platform to be in clinical development in 2026, either through a Company-owned program or through an out-licensing program.

Business and Financing Strategies

The Company is exploring numerous additional molecules with substantial potential applications. The Company considers business development transactions, such as out-licensing agreements, to be fundamental elements of our financing strategy to provide future non-dilutive capital required to fund clinical development of the Company's lead immunotherapeutic programs.

We signed our first out-license agreement at the end of 2020, which was an exclusive worldwide license (the "Wugen License") with Wugen, Inc. ("Wugen"), a company that specializes in cell-based therapies for cancer.

As part of the upfront license fee, the Company received shares of Wugen's common stock that currently represents a 5.6% ownership interest based on fully converted issued and outstanding shares. Wugen licensed limited rights to develop, manufacture, and commercialize cell-based therapy treatments for cancer based on two of our internally-developed, multi-cytokine fusion protein molecules, HCW9201 and HCW9206. The licensed molecules are the basis for Wugen's memory-like NK cell therapy program. Wugen also has a promising CAR-T program, based on its lead molecule WU-CART-007. The WU-CART007 program was recognized by two regulatory designations by the FDA and EU, respectively, that have expedited regulatory review. Wugen has been cleared to initiate a pivotal Phase 2 study in the first quarter of 2025 for its first-in-class, investigational, anti-CD7 CAR-T cell therapy, WU-CART-007, in patients with relapsed or refractory (R/R) T cell acute lymphoblastic leukemia or T cell lymphoblastic lymphoma (T-ALL/LBL).

On November 17, 2024, the Company entered into an exclusive, worldwide License, Research, and Co-Development Agreement (the "License Agreement") with WY Biotech Co., Ltd. (the "Licensee") for one of the Company's preclinical, proprietary molecules (the "Licensed Molecule"). Under the terms of the License Agreement, the Company will receive an upfront fee of \$7.0 million, to be paid in two tranches. Within 90 days after the effective date of the License Agreement, which may be extended by an additional 30 days, if required, the Licensee will pay the Company \$4.0 million; and within 30 days of completing the technology transfer to the Licensee, the Company will receive \$3.0 million. All payments under the License Agreement will be made in U.S. Dollars. Upon the completion of a Phase 1 clinical trial in any jurisdiction, the Company has an "Opt-In Right," which gives the Company the option to assume all control and responsibility for the development, manufacture and commercialization of the Licensed Molecule in the Opt-In Territory. The "Opt-In Territory" is North America, South America, and Central America. Upon the completion of the exercise of the Opt-In Right, the Company will be responsible for all costs associated with research and development, manufacturing, clinical development, regulatory approval, and commercialization for the Licensed Molecule in the Opt-In Territory.

We plan to continue to work with the National Institutes of Health and the National Cancer Institute ("NCI") for collaborative agreements and assistance with funding research and clinical studies. In 2022, the Company entered a Cooperative Research and Development Agreement ("CRADA"), and under the CRADA we collaborated with NCI on a Phase 1b/2 clinical study in patients with advanced/metastatic and chemo-refractory/chemo-resistant pancreatic cancer. Our plan is to leverage these relationships to benefit the clinical development of HCW9206 and immunotherapeutic fusions we create in the future in cancer indications.

The Company remains committed to establishing some control over our clinical supply of materials, and the supply of licensed molecules for our licensees. The Company has retained manufacturing rights for the licensed molecules under the Wugen License and intends to use the same framework in future if we enter other licensing agreements. On September 9, 2024, the House of Representatives passed the BIOSECURE Act (the "Act"). With strong bi-partisan support, the bill is expected to become law in 2024. Somewhat unusually, the Act names specific companies as automatically qualifying as "biotechnology companies of concern." The expectation is that this provision of the Act would effectively prohibit U.S. companies from doing business with five Chinese firms, including WuXi AppTec, Complete Genomics and MGI Tech. For life sciences companies, WuXi is one of the largest global providers of contract development and manufacturing services in the world. By some estimates, WuXi, an important partner with many biotech and pharma companies, is involved in developing 25% of the drugs used in the United States. The Act would effectively ban WuXi from conducting business in the United States, which is expected to disrupt the supply chain for life sciences companies. The result is expected to produce delays, price increases, and supply shortages for many years as the industry replaces WuXi's capacity as well as other firms named in the Act.

Corporate Information

We were incorporated under the laws of the State of Delaware in April 2018. Our principal executive offices are located at 2929 N. Commerce Parkway, Miramar, Florida 33025, and our telephone number is (954) 842-2024. Our website address is www.hcwbiologics.com. The information contained on, or that can be accessed through, our website is not part of, and is not incorporated by reference into, this prospectus supplement. We have included our website address in this prospectus supplement solely as an inactive textual reference. Investors should not rely on any such information in deciding whether to purchase our common stock.

THE OFFERING				
Common stock offered by us	4,160,000 shares of our Common Stock			
Pre-Funded Warrants offered by us	2,557,000 pre-funded warrants to purchase up to 2,557,000 shares of Common Stock. The pre-funded warrants will have an exercise price of \$0.0001 per share of Common Stock, will be immediately exercisable and may be exercised at any time until all of the pre-funded warrants are exercised in full. This prospectus supplement also relates to the offering of the Common Stock issuable upon exercise of the pre-funded warrants.			
Common Stock to be outstanding immediately after this41,983,394 shares of Common Stock offering				
Common Stock outstanding immediately prior to this offering	37,823,394 shares of Common Stock			
Concurrent Private Placement	In a concurrent private placement, we are selling to the purchaser unregistered warrants to purchase up to $6,717,000$ shares of common stock at an exercise price of \$1.03 per share of Common Stock. The unregistered warrants are exercisable at any time upon issuance and will expire five years following the date of issuance. The unregistered warrants and the shares of Common Stock issuable upon the exercise of the unregistered warrants, are being offered pursuant to the exemption provided in Section $4(a)(2)$ under the Securities Act and/or Regulation D promulgated thereunder, and they are not being offered pursuant to this prospectus supplement and the accompanying prospectus.			
Use of Proceeds	We intend to use the net proceeds from the sale of any securities offered under this prospectus supplement for general corporate purposes. General corporate purposes may include funding the continued progress of our preclinical and clinical development, research and development costs, manufacture and supply of product, potential strategic acquisitions or licensing of complementary businesses, services or technologies, working capital, capital expenditures and other general corporate purposes. See "Use of Proceeds".			
Risk Factors	Investing in our common stock involves certain risks. See the disclosure under the heading "Risk Factors" on page S-11 in this prospectus supplement and under similar headings in other documents incorporated by reference into this prospectus supplement.			
The Nasdaq Global Market symbol	"HCWB"			

The number of shares of our common stock shown above to be outstanding after this offering is based on 37,823,394 shares of our common stock outstanding as of November 18, 2024, and excludes:

- 1,279,242 shares of common stock issuable upon the exercise of stock options outstanding as of September 30, 2024, with a weightedaverage exercise price of \$3.31 per share;
- 2,999,573 shares of common stock reserved for future issuance under our 2021 Equity Incentive Plan ("2021 EIP") as of September 30, 2024;
- 2,557,000 shares of common stock issuable upon the exercise of the pre-funded warrants to be issued to the investor in this offering, at an exercise price of \$0.0001; and
- 6,717,000 shares of common stock issuable upon the exercise of the warrants to be issued to the investor in the private placement concurrently with this offering, at an exercise price of \$1.03 per share.

RISK FACTORS

Investment in any securities offered pursuant to this prospectus supplement and the accompanying base prospectus involves risks. You should carefully consider the risk factors described below, in our most recent Amended Annual Report on Form 10-K filed on May 15, 2024, and in our most recent Quarterly Report on Form 10-Q, incorporated by reference in this prospectus supplement, any amendment or update thereto reflected in subsequent filings with the SEC, including in our most recent Amended Annual Report on Form 10-K and subsequent Quarterly Reports on Form 10-Q, and all other information contained or incorporated by reference in this prospectus supplement, as updated by our subsequent filings under the Exchange Act. The occurrence of any of these risks might cause you to lose all or part of your investment in the offered securities.

Risks Relating to this Offering

If you purchase shares of our common stock sold in this offering, you may experience immediate and substantial dilution in the net tangible book value of your shares.

The price per share of our common stock being offered may be higher than the net tangible book value per share of our outstanding common stock prior to this offering. Assuming that an aggregate of 6,717,000 shares of our common stock (or pre-funded warrants in lieu thereof) and accompanying warrants are sold at a combined effective price of \$1.03 per share, the official closing price of our common stock on The Nasdaq Global Market on November 18, 2024, for aggregate gross proceeds of approximately \$6,918,510 million, and after deducting commissions and estimated offering expenses payable by us, new investors in this offering will incur immediate dilution of \$1.11 per share. For a more detailed discussion of the foregoing, see the section entitled "Dilution" below.

You may experience future dilutions as a result of future equity offerings.

To the extent outstanding stock options are exercised, or outstanding unvested restricted stock units vest, there will be further dilution to new investors. In addition, to the extent we need to raise additional capital in the future and we issue additional shares of common stock or securities convertible or exchangeable for our common stock, our then existing stockholders may experience dilution and the new securities may have rights senior to those of our common stock offered in this offering. The price per share at which we sell additional shares of our common stock, or securities convertible or exchangeable into common stock, in any future transactions may be higher or lower than the price per share paid by investors in this offering.

We have broad discretion in the use of the net proceeds from this offering and may not use them effectively.

Our management will have broad discretion in the application of the net proceeds we receive from this offering, including for any of the purposes described in the section entitled "Use of Proceeds," and you will not have the opportunity as part of your investment decision to assess whether the net proceeds are being used appropriately. Because of the number and variability of factors that will determine our use of the net proceeds from this offering, their ultimate use may vary substantially from their currently intended use. Our management might not apply our net proceeds in ways that ultimately increase the value of your investment. We expect to use the net proceeds from this offering to fund research, clinical and process development, working capital, capital expenditures and other general corporate purposes. Additionally, we may use a portion of the net proceeds from this offering to expand our current business by in-licensing or acquiring, as the case may be, commercial products, product candidates, technologies, compounds, other assets or complementary businesses, using cash or shares of our common stock. However, we have no current commitments or obligations to do so. The failure by our management to apply these funds effectively could harm our business. Pending their use, we plan to invest the net proceeds from this offering in short-term or long-term, investment-grade, interest-bearing securities. These investments may not yield a favorable return to our stockholders. If we do not invest or apply the net proceeds from this offering in ways that enhance stockholder value, we may fail to achieve expected financial results, which could cause our stock price to decline.

Because we do not anticipate paying any cash dividends on our capital stock in the foreseeable future, capital appreciation, if any, will be your sole source of gain.

We have never paid or declared any cash dividends on our capital stock. We currently intend to retain earnings, if any, to finance the growth and development of our business and we do not anticipate paying any cash dividends in the foreseeable future. As a result, it is likely that only capital appreciation, if any, of our common stock will provide a return to our stockholders.

We are subject to market price volatility.

The stock markets in general, and the markets for pharmaceutical, biopharmaceutical and biotechnology stocks in particular, have experienced extreme volatility that has often been unrelated to the operating performance of the issuer. Furthermore, the trading price of our common stock may be adversely affected by third-parties trying to drive down the market price. Short sellers and others, some of whom post anonymously on social media, may be positioned to profit if our stock declines and their activities can negatively affect our stock price. These broad market and industry factors may seriously harm the market price of our common stock, regardless of our operating performance.

Investment in warrants is speculative and involves high risk.

There is no public market for pre-funded warrants offered in this offering or for the common stock warrants offered in the concurrent private placement, and holders of those warrants will not have the rights of common stock shareholders unless and until the warrants are exercised.

USE OF PROCEEDS

We estimate that the net proceeds from this offering and the sale of unregistered warrants in the concurrent private placement will be \$6,233,976.50, based on the offering price of \$1.03 per share of common stock and \$1.0299 per pre-funded warrant, after deducting placement agent's fees and commissions and estimated expenses payable by us.

We intend to use the net proceeds from the sale of any securities offered under this prospectus supplement for research and development activities for the discovery of new compounds, identifying lead compounds with the most potential for the treatment of proinflammatory diseases and other age-related diseases, preclinical activities to prepare information required for IND applications to obtain permission from the FDA to evaluate our immunotherapeutics in clinical trials, completing the response to FDA comments to obtain clearance to initiate a Phase 1b/2 clinical trial to evaluate HCW9302 in patients with an autoimmune disorder, manufacturing costs to product the immunotherapeutic compounds needed for research and development for the Company as well as our licensees, and other general corporate purposes. General corporate purposes may include working capital, capital expenditures and other general corporate purposes. We may temporarily invest the net proceeds in a variety of capital preservation instruments, including in short and immediate-term, interest-bearing obligations, investment-grade instruments, certificates of deposit or direct or guaranteed obligations of the U.S. government, until they are used for their stated purpose. We have not determined the amount of net proceeds to be used specifically for such purposes.

The amounts and timing of our actual expenditures will depend on numerous factors, including the progress of our clinical trials and other development efforts and other factors described under "Risk Factors" in this prospectus supplement, the accompanying base prospectus and the documents incorporated by reference herein and therein, as well as the amount of cash used in our operations. We may find it necessary or advisable to use the net proceeds for other purposes, and we will have broad discretion in the application of the net proceeds.

DILUTION

If you invest in our common stock, your interest will be diluted to the extent of the difference between the price per share you pay in this offering and the net tangible book value per share of our common stock immediately after this offering. Our net tangible book value of our common stock as of September 30, 2024 was approximately (\$3.8) million, or approximately (\$0.26) per share of common stock based upon 37,823,394 shares outstanding. Net tangible book value per share is equal to our total tangible assets, less our total liabilities, divided by the total number of shares outstanding as of September 30, 2024.

After giving effect to the sale of our common stock (or pre-funded warrants in lieu thereof) and accompanying unregistered warrants to purchase shares of our common stock in the aggregate amount of approximately \$6.9 million at a combined effective offering price of \$1.03 per share, and after deducting commissions and estimated offering expenses payable by us, our as adjusted net tangible book value as of September 30, 2024 would have been approximately (\$2.9) million, or approximately (\$0.08) per share of common stock. This represents an immediate increase in net tangible book value of \$0.18 per share to our existing stockholders and an immediate dilution in net tangible book value of \$1.11 per share to new investors in this offering.

The following table illustrates this calculation on a per share basis, the actual number of shares sold and other terms of the offering determined at the time shares of our common stock are sold pursuant to this prospectus supplement. The as-adjusted information assumes that all of our common stock to purchase shares of our common stock in the aggregate amount of \$6,918,510 is sold at the offering price of \$1.03 per share.

Public offering price per share		\$ 1.03
Net tangible book value per share as of September 30, 2024	(\$ 0.26)	
Increase in net tangible book value per share attributable to the offering	\$0.18	
As adjusted net tangible book value per share after giving effect to the offering		(\$0.08)
Dilution per share to new investors participating in the offering		\$ 1.11

The table above assumes that an aggregate of 6,717,000 shares of our common stock and pre-funded warrants to purchase shares of our common stock are sold pursuant to this prospectus supplement at a price of \$1.03 per share.

The number of shares of our common stock to be outstanding immediately after this offering is based on 37,823,394 shares of our common stock outstanding as of September 30, 2024. The number of shares outstanding as of excludes:

- 1,279,242 shares of common stock issuable upon the exercise of stock options outstanding as of September 30, 2024, with a weightedaverage exercise price of \$3.31 per share; and
- 2,999,573 shares of common stock reserved for future issuance under our 2021 EIP as of September 30, 2024.

The foregoing table does not give effect to any exercise of outstanding options or vesting of restricted stock units after September 30, 2024. To the extent options are exercised or restricted stock units vest, there may be further dilution to new investors.

DESCRIPTION OF SECURITIES WE ARE OFFERING

Common Stock

The material terms and provisions of our common stock is described under the heading "Description of Share Capital" in the accompanying prospectus.

Pre-Funded Warrants

The following is a summary of the material terms and provisions of the pre-funded warrants that are being offered hereby. This summary is subject to and qualified in its entirety by the form of pre-funded warrants, which has been provided to the investor in this offering and which will be filed with the SEC as an exhibit to our Current Report on Form 8-K in connection with this offering and incorporated by reference into the registration statement of which this prospectus forms a part. Prospective investors should carefully review the terms and provisions of the form of warrant for a complete description of the terms and conditions of the pre-funded warrants.

Duration and Exercise Price

The pre-funded warrants offered hereby will have an exercise price of \$0.0001 per share of common stock. The pre-funded warrants will be immediately exercisable and may be exercised at any time after their original issuance until such pre-funded warrants are exercised in full. The exercise prices and numbers of shares of common stock issuable upon exercise are subject to appropriate adjustment in the event of share dividends, share splits, reorganizations or similar events affecting our common stock. Pre-funded warrants will be issued in certificated form only.

Exercisability

The pre-funded warrants will be 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). A holder (together with its affiliates) may not exercise any portion of such holder's warrants to the extent that the holder would own more than 4.99% (or, at the election of the purchaser, 9.99%) of our outstanding common stock immediately after exercise, except that upon at least 61 days' prior notice from the holder to us, the holder may increase the amount of ownership of outstanding common stock after exercise, as such percentage ownership is determined in accordance with the terms of the pre-funded warrants. The investor in this offering may also elect prior to the issuance of pre-funded warrants to have the initial exercise limitation set at 9.99% of our outstanding common stock.

Cashless Exercise

The holder may elect to receive upon such exercise (either in whole or in part) the net number of shares of common stock determined according to a formula set forth in the warrant.

Fundamental Transactions

In the event of any fundamental transaction, as described in the pre-funded warrants and generally including any merger with or into another entity, sale of all or substantially all of our assets, tender offer or exchange offer, or reclassification of our common stock, then upon any subsequent exercise of a pre-funded warrant, the holder will have the right to receive as alternative consideration, for each share of common stock that would have been issuable upon such exercise immediately prior to the occurrence of such fundamental transaction, the number of common shares of the successor or acquiring corporation or of our company, if it is the surviving corporation, and any additional consideration receivable upon or as a result of such transaction by a holder of the number of shares of common stock for which the pre-funded warrant is exercisable immediately prior to such event.

Transferability

In accordance with its terms and subject to applicable laws, a pre-funded warrant may be transferred at the option of the holder upon surrender of the pre-funded warrant to us together with the appropriate instruments of transfer and payment of funds sufficient to pay any transfer taxes (if applicable).

Fractional Shares

No fractional shares of common stock will be issued upon the exercise of the pre-funded warrants. Rather, the number of shares of common stock to be issued will, at our election, either be rounded up to the nearest whole number or we will pay a cash adjustment in respect of such final fraction in an amount equal to such fraction multiplied by the exercise price.

Trading Market

There is no established trading market for any of the pre-funded warrants, and we do not expect a market to develop. We do not intend to apply for a listing for any of the warrants on any securities exchange or other nationally recognized trading system. Without an active trading market, the liquidity of the pre-funded warrants will be limited.

Rights as a Shareholder

Except as otherwise provided in the pre-funded warrants or by virtue of the holders' ownership of shares of common stock, the holders of pre-funded warrants do not have the rights or privileges of holders of our shares of common stock, including any voting rights, until such pre-funded warrant holders exercise their warrants.

PRIVATE PLACEMENT OF WARRANTS

In a concurrent private placement, we are selling to the same investor warrants to purchase up to 6,717,000 shares of Common Stock. These warrants and shares of Common Stock issuable upon the exercise of such warrants are not being registered under the Securities Act and are not being offered pursuant to this prospectus supplement and the accompanying prospectus and are being offered pursuant to an exemption from the registration requirements of the Securities Act provided in Section 4(a)(2) of the Securities Act and Rule 506(b) promulgated thereunder. Accordingly, investors may only sell common issued upon exercise of these warrants pursuant to an effective registration statement under the Securities Act covering the resale of those shares, an exemption under Rule 144 under the Securities Act or another applicable exemption under the Securities Act.

These warrants are exercisable for a period of five years at an initial exercise price of \$1.03 per share. The exercise price is subject to customary adjustments in the event of stock splits, stock dividends, stock combinations and similar recapitalization transactions.

These warrants also contain a beneficial ownership limitation which provides that we shall not effect any exercise, and a holder shall not have the right to exercise, any portion of a warrant to the extent that, after giving effect to the exercise, such holder (together with such holder's affiliates) would beneficially own in excess of 4.99% of the number of shares of common stock outstanding immediately after giving effect to the issuance of shares issuable upon the exercise. This limitation may be waived (up to a maximum of 9.99%) by a holder in its sole discretion upon not less than sixty-one (61) days' prior notice to us.

The holder of a warrant may exercise its warrant by delivering an appropriately competed and signed exercise notice in the form attached to the warrant. Payment of the exercise price for the number of shares for which a warrant is being exercised is required to be delivered within two trading days after exercise of such warrant. A holder of a warrant will also have the right to exercise such warrant on a cashless basis if at the time of exercise there is no effective registration statement registering, or the prospectus contained therein is not available for the resale of, the shares issuable upon exercise of such warrant. Upon the holder's exercise of a warrant, we will issue the shares of common stock issuable upon such exercise by the date that is the earliest of (i) two trading days after the delivery of the exercise notice to us and (ii) one trading day after the delivery of the aggregate exercise price to us, if not exercised on a cashless basis.

If a fundamental transaction occurs, then the successor entity will succeed to, and be substituted for us, and may exercise every right and power that we may exercise and will assume all of our obligations under the warrants with the same effect as if such successor entity had been named in the warrant itself. If holders of our common stock are given a choice as to the securities, cash or property to be received in a fundamental transaction, then the holder shall be given the same choice as to the consideration it receives upon any exercise of the warrant following such fundamental transaction. If a fundamental transaction occurs, then the successor entity will succeed to, and be substituted for us, and may exercise every right and power that we may exercise and will assume all of our obligations under the warrants with the same effect as if such successor entity had been named in the warrant itself. If holders of our common stock are given a choice as to the securities, cash or property to be received in a fundamental transaction, then the successor entity will succeed to, and be substituted for us, and may exercise every right and power that we may exercise and will assume all of our obligations under the warrants with the same effect as if such successor entity had been named in the warrant itself. If holders of our common stock are given a choice as to the securities, cash or property to be received in a fundamental transaction, then the holder shall be given the same choice as to the consideration it receives upon any exercise of the warrant following such fundamental transaction. In certain circumstances, the holder will have the right to receive the Black Scholes Value of the warrant calculated pursuant to a formula set forth in the warrants, payable either in cash or in the same type or form of consideration that is being offered and being paid to the holders of our common stock as described in the warrants.

We have entered into a purchase agreement directly with an investor in connection with this offering. Pursuant to the purchase agreement, we shall use commercially reasonable efforts to include the shares of common stock issued and issuable upon the exercise of the warrants in the next registration statement to become effective after closing of the transactions contemplated by the purchase agreement, and to have such registration statement declared and maintained effective.

PLAN OF DISTRIBUTION

Pursuant to the Placement Agreement, dated November 18, 2024. we have retained Maxim as the Agent, to act as our exclusive placement agent in connection with this offering of our Common Stock pursuant to this prospectus supplement and accompany prospectus. The Agent is not purchasing or selling any of the shares of our Common Stock or pre-funded warrants offered by this prospectus supplement, nor is it required to arrange the purchase or sale of any specific number or dollar amount of shares of our Common Stock and pre-funded warrants offered warrants offered hereby and we may not sell the entire amount of shares of our Common Stock and pre-funded warrants offered hereby and we may not sell the entire amount of shares of our Common Stock and pre-funded warrants offered pursuant to this prospectus supplement. We have entered into a securities purchase agreement directly with investors in connection with this offering.

We expect to deliver the shares of Common Stock and pre-funded warrants being offered pursuant to this prospectus supplement on or about November 20, 2024.

We have agreed to pay the placement agent a total cash fee equal to 7.0% of the aggregate gross proceeds of this offering. We have agreed to reimburse the placement agent for all reasonable and accountable travel and other out-of-pocket expenses, including the reasonable fees, costs and disbursements of its legal counsel which shall be limited to, in the aggregate, \$50,000. We estimate our total expenses associated with the offering, excluding placement agent fees and expenses, will be approximately \$150,000.

The following table shows the per share and total cash placement agent fees we will pay to the placement agent in connection with the sale of the shares of our Common Stock, pre-funded warrants offered pursuant to this prospectus supplement and the accompanying prospectus:

	Per Share	Per Pre-Funded Warrant	Total
Offering Price	\$ 1.03	\$ 1.0299	\$ 6,918,254.30
Placement agent fees	\$0.0721	\$ 0.07209	\$ 484,277.80
Proceeds, before expenses, to us	\$0.9579	\$ 0.95781	\$ 6,433,976.50

After deducting those fees and expenses due to the placement agent and our other estimated offering expenses, we expect the net proceeds from this offering and the sale of the unregistered warrants in the concurrent private placement to be approximately \$6,233,976.50.

Lock-Up Agreements

Our directors and officers have entered into lock-up agreements in connection with this offering. Under these agreements, these individuals have agreed, subject to specified exceptions, not to sell or transfer any shares of common stock or securities convertible into, or exchangeable or exercisable for, our common stock during a period ending 90 days after the date of this prospectus supplement. Specifically, these individuals have agreed, in part, not 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), or establish or increase a put equivalent position or liquidate or decrease a call equivalent position within the meaning of Section 16 of the Exchange Act, with respect to, any shares of our common stock or securities convertible, exchangeable or exercisable into shares of our common stock beneficially owned by them. Notwithstanding these limitations, these shares of common stock may be transferred under limited circumstances, including, without limitation, by gift, will or intestate succession.

In addition, we have agreed that we will not conduct any issuances of our shares of common stock for a period of 90 days following closing of this offering.

Other Relationships

The placement agent and certain of its affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, investment research, principal investment, hedging, financing and brokerage activities. The placement agent and certain of its affiliates have, from time to time, performed, and may in the future perform, various commercial and investment banking and financial advisory services for us and our affiliates, for which they received or will receive customary fees and expenses.

In the ordinary course of their various business activities, the placement agent and certain of its affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers, and such investment and securities activities may involve securities and/or instruments issued by us and our affiliates. If the placement agent or its affiliates have a lending relationship with us, they routinely hedge their credit exposure to us consistent with their customary risk management policies. The placement agent and its affiliates may hedge such exposure by entering into transactions that consist of either the purchase of credit default swaps or the creation of short positions in our securities of the securities offered hereby. Any such short positions could adversely affect future trading prices of the securities offered hereby. The placement agent and certain of its affiliates may also communicate independent investment recommendations, market color or trading ideas and/or publish or express independent research views in respect of such securities or instruments and may at any time hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

Indemnification

We have agreed to indemnify the placement agent and specified other persons against certain civil liabilities, including liabilities under the Securities Act, and the Securities Exchange Act of 1934, as amended, or the Exchange Act, and to contribute to payments that the placement agent may be required to make in respect of such liabilities.

Regulation M

The placement agent may be deemed to be an underwriter within the meaning of Section 2(a)(11) of the Securities Act, and any commissions received by it, and any profit realized on the resale of the securities sold by it while acting as principal, might be deemed to be underwriting discounts or commissions under the Securities Act. As an underwriter, the placement agent would be required to comply with the requirements of the Securities Act and the Securities Exchange Act of 1934, as amended, or Exchange Act, including, without limitation, Rule 415(a)(4) under the Securities Act, Rule 10b-5 and Regulation M under the Exchange Act. These rules and regulations may limit the timing of purchases and sales of shares of common stock and warrants by the placement agent acting as principal. Under these rules and regulations, the placement agent:

- may not engage in any stabilization activity in connection with our securities; and
- may not bid for or purchase any of our securities, or attempt to induce any person to purchase any of our securities, other than as permitted under the Exchange Act, until it has completed its participation in the distribution in the securities offered by this prospectus supplement.

Listing

Our common stock is listed on the Nasdaq Global Market under the symbol "HCWB".

Transfer Agent

The transfer agent and registrar for our Common Stock is Equiniti Trust Company, LLC located at 55 Challenger Road, Ridgefield Park, NJ 07660.

LEGAL MATTERS

Clark Hill PLC, Chicago, Illinois, will pass upon certain legal matters relating to the issuance and sale of the securities offered hereby on behalf of HCW Biologics Inc. Maxim Group LLC is being represented in connection with this offering by Ellenoff Grossman & Schole LLP, New York, New York.

EXPERTS

The audited financial statements as of and for the years ended December 31, 2021, 2022 and 2023 incorporated by reference in this prospectus supplement and elsewhere in the registration statement have been so incorporated by reference in reliance upon the report of Grant Thornton LLP, independent registered public accountants, upon the authority of said firm as experts in accounting and auditing. As of September 20, 2024, the Audit Committee of the Company's Board of Directors appointed Crowe LLP as the Company's independent registered accounting firm.

WHERE YOU CAN FIND MORE INFORMATION; INCORPORATION BY REFERENCE

Available Information

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

Our web site address is www.hcwbiologics.com. The information on our web site, however, is not, and should not be deemed to be, a part of this prospectus supplement.

This prospectus supplement is part of a registration statement that we filed with the SEC and does not contain all of the information in the registration statement. The full registration statement may be obtained from the SEC or us, as provided below. Documents establishing the terms of the offered securities are or may be filed as exhibits to the registration statement. Statements in this prospectus supplement about these documents are summaries and each statement is qualified in all respects by reference to the document to which it refers. You should refer to the actual documents for a more complete description of the relevant matters. You may inspect a copy of the registration statement through the SEC's website, as provided above, or at our principal executive offices, 2929 N Commerce Parkway, Miramar, Florida 33025, during normal business hours.

Incorporation by Reference

The SEC allows us to "incorporate by reference" information that we file with the SEC, which means that we can disclose important information to you by referring you to those other documents. The information incorporated by reference is an important part of this prospectus supplement, and information we file later with the SEC will automatically update and supersede this information. A Current Report (or portion thereof) furnished, but not filed, on Form 8-K shall not be incorporated by reference into this prospectus supplement. We incorporate by reference the documents listed below and any future filings we make with the SEC under Section 13(a), 13(c), 14, or 15(d) of the Exchange Act prior to the termination of any offering of securities made by this prospectus supplement:

- our Amended <u>Annual Report on Form 10-K</u> for the fiscal year ended December 31, 2023, filed with the SEC on May 15, 2024;
- our Quarterly Reports on Form 10-Q for the quarters ended <u>March 31, 2024</u>, <u>June 30, 2024</u> and <u>September 30, 2024</u> filed with the SEC on May 15, 2024, August 14, 2024 and November 14, 2024, respectively;

- our Current Reports on Form 8-K filed on January 12, 2024, February 22, 2024, May 1, 2024, May 3, 2024, May 15, 2024, June 17, 2024, June 20, 2024, July 18, 2024, August 12, 2024, August 14, 2024, August 23, 2024, September 20, 2024, November 14, 2024, November 18, 2024, and November 20, 2024;
- <u>Our Definitive Proxy Statement</u> on Schedule 14A, filed with the SEC on April 26, 2024 (but only with respect to information required by Part III of our Annual Report on Form 10-K for the year ended December 31, 2023, which information shall update and supersede information included in Part III of our Annual Report on Form 10-K for the year ended December 31, 2023);
- the description of our common stock contained in our registration statement on <u>Form 8-A</u> filed with the SEC on July 9, 2021 under Section 12 of the Exchange Act, including any amendment or report filed for the purpose of updating such description, including <u>Exhibit</u> <u>4.2</u> to our Annual Report on Form 10-K for the fiscal year ended December 31, 2023; and
- filings we make with the SEC pursuant to the Exchange Act after the date of the initial registration statement, of which this prospectus supplement is a part, and prior to the effectiveness of the registration statement.

All reports and other documents we subsequently file pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act prior to the termination of this offering, including all such documents we may file with the SEC after the date of the initial registration statement and prior to the effectiveness of the registration statement, but excluding any information furnished to, rather than filed with, the SEC, will also be incorporated by reference in this prospectus supplement and deemed to be part of this prospectus supplement from the date of the filing of such reports and documents.

We will furnish without charge to you, on written or oral request, a copy of any or all of such documents that has been incorporated herein by reference (other than exhibits to such documents unless such exhibits are specifically incorporated by reference into the documents that this prospectus supplement incorporates). Written or oral requests for copies should be directed to HCW Biologics Inc., Attn: Corporate Secretary, 2929 N. Commerce Parkway, Miramar, Florida 33025, telephone (954) 842-2024.

PROSPECTUS

\$100,000,000



HCW Biologics Inc.

Common Stock, Preferred Stock,

Debt Securities, Warrants, Subscription Rights and Units

From time to time, we may offer up to \$100 million aggregate dollar amount of shares of our common stock or preferred stock, debt securities, warrants to purchase our common stock, preferred stock or debt securities, subscription rights to purchase our common stock, preferred stock or debt securities and/or units consisting of some or all of these securities, in any combination, together or separately, in one or more offerings, in amounts, at prices and on the terms that we will determine at the time of the offering and which will be set forth in a prospectus supplement and any related free writing prospectus. The prospectus supplement and any related free writing prospectus. The total amount of these securities will have an initial aggregate offering price of up to \$100 million.

You should read this prospectus, the information incorporated, or deemed to be incorporated, by reference in this prospectus, and any applicable prospectus supplement and related free writing prospectus carefully before you invest.

The aggregate market value of our outstanding common stock held by non-affiliates was approximately \$51.8 million, which was calculated based on 20,151,063 shares of outstanding common stock held by non-affiliates as of August 10, 2022, and a price per share of \$2.57, the closing price of our common stock on July 12, 2022. Pursuant to General Instruction I.B.6 of Form S-3, in no event will we sell securities pursuant to this registration statement with a value more than one-third of the aggregate market value of our common stock held by non-affiliates is less than \$75.0 million. In the event that subsequent to the effective date of this registration statement, the aggregate market value of our outstanding common stock held by non-affiliates equals or exceeds \$75.0 million, then the one-third limitation on sales shall not apply to additional sales made pursuant to this registration statement. We have not sold any securities pursuant to General Instruction I.B.6 of Form \$-3 and including, the date of this registration statement.

Our common stock is traded on The Nasdaq Global Market under the symbol "HCWB". On August 18, 2022 the last reported sales price for our common stock was \$2.26 per share. None of the other securities we may offer are currently traded on any securities exchange. The applicable prospectus supplement and any related free writing prospectus will contain information, where applicable, as to any other listing on The Nasdaq Global Market or any securities market or exchange of the securities covered by the prospectus supplement and any related free writing prospectus.

Investing in our securities involves certain risks. See "Risk Factors" included in any accompanying prospectus supplement and in the documents incorporated by reference in this prospectus for a discussion of the factors you should carefully consider before deciding to purchase these securities. Also see "<u>Risk Factors</u>" on page 8 of this registration statement.

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

The date of this prospectus is August 26, 2022

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission, or the SEC, using a "shelf" registration process. Under this shelf registration process, from time to time, we may sell any combination of the securities described in this prospectus in one or more offerings, up to a total dollar amount of \$100 million.

This prospectus provides you with a general description of the securities we may offer. Each time we offer our securities under this prospectus, we will provide a prospectus supplement that will contain more specific information about the terms of the offering. We may also add, update or change in a prospectus supplement any of the information contained in this prospectus or in documents we have incorporated by reference into this prospectus. To the extent there is a conflict between the information contained in this prospectus and the prospectus supplement, you should rely on the information in the prospectus supplement; provided that, if any statement in one of these documents is inconsistent with a statement in another document having a later date—for example, a document incorporated by reference in this prospectus or any prospectus supplement—the statement in the document having the later date modifies or supersedes the earlier statement. You should carefully read both this prospectus and the applicable prospectus supplement, together with the additional information described under the headings "Incorporation of Information by Reference" and "Where You Can Find More Information" before buying any of our securities in this offering.

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 exhibits to the registration statement contain the full text of certain contracts and other important documents we have summarized in this prospectus. You should review the full text of these documents because these summaries may not contain all the information that you may find important in deciding whether to purchase the securities we offer. You may obtain copies of these documents as described below under the heading "Where You Can Find More Information."

We have not authorized anyone to provide you with any additional information or any information that is different from that contained in or incorporated by reference into this prospectus, any accompanying prospectus supplement or any free writing prospectus provided in connection with an offering. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. You should not assume that the information contained in this prospectus is accurate as of any date other than that date, unless we otherwise note in this prospectus or any accompanying prospectus supplement.

No dealer, salesperson or any other person is authorized to give any information or to make any representation other than the information and representations contained in or incorporated by reference into this prospectus or any applicable prospectus supplement. If different information is given or different representations are made, you may not rely on that information or those representations as having been authorized by us. You may not imply from the delivery of this prospectus and any applicable prospectus supplement, that our affairs are unchanged since the date of this prospectus and any applicable prospectus supplement or that the information contained in any document incorporated by reference is accurate as of any date other than the date of the document incorporated by reference, regardless of the time of delivery of this prospectus and any applicable prospectus supplement or any sale of a security. This prospectus and any applicable prospectus supplement may only be used where it is legal to sell the securities.

THIS PROSPECTUS MAY NOT BE USED TO OFFER AND SELL SECURITIES UNLESS IT IS ACCOMPANIED BY A PROSPECTUS SUPPLEMENT.

Unless otherwise indicated or the context otherwise requires, the terms "HCW," the "Company," "we," "us," and "our" refer to HCW Biologics Inc., a Delaware corporation. This prospectus, the accompanying prospectus and the information incorporated by reference herein and therein may contain additional trade names, trademarks and service marks of other companies, which are the property of their respective owners. We do not intend our use or display of other companies' trade names, trademarks or service marks to imply a relationship with, or endorsement or sponsorship of us by, these other companies.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-3 under the Securities Act with respect to the securities offered hereby. This prospectus, which constitutes a part of the registration statement, does not contain all of the information set forth in the registration statement, the exhibits filed therewith or the documents incorporated by reference therein. For further information about us and the securities offered hereby, reference is made to the registration statement, the exhibits filed therewith and the documents incorporated by reference therein. Statements contained in this prospectus regarding the contents of any contract or any other document that is filed as an exhibit to the registration statement are not necessarily complete, and in each instance, we refer you to the copy of such contract or other document filed as an exhibit to the registration statement.

We are subject to the informational requirements of the Securities Exchange Act of 1934, as amended, or the Exchange Act, and are required to file annual, quarterly and other reports, proxy statements and other information with the SEC. The SEC maintains an Internet site (http://www.sec.gov) that contains reports, proxy and information statements, and various other information about us.

Information about us is also available at our website at http://www.hcwbiologics.com. This reference to our Internet address is for informational purposes only and shall not, under any circumstances, be deemed to incorporate the information available at or through such Internet address into this prospectus.

INCORPORATION OF INFORMATION BY REFERENCE

The SEC allows us to "incorporate by reference" information that we file with the SEC, which means that we can disclose important information to you by referring you to those other documents. The information incorporated by reference is an important part of this prospectus, and information we file later with the SEC will automatically update and supersede this information. A Current Report (or portion thereof) furnished, but not filed, on Form 8-K shall not be incorporated by reference into this prospectus. We incorporate by reference the documents listed below and any future filings we make with the SEC under Section 13(a), 13(c), 14, or 15(d) of the Exchange Act prior to the termination of any offering of securities made by this prospectus:

- our <u>Annual Report on Form 10-K</u> for the fiscal year ended December 31, 2021, filed with the SEC on March 29, 2022;
- our Quarterly Reports on Form 10-Q for the quarters ended <u>March 31, 2022</u> and <u>June 30, 2022</u> and filed with the SEC on May 13, 2022 and August 12, 2022, respectively;
- our Current Reports on Form 8-K filed on June 17, 2022 and August 18, 2022;
- Our <u>Definitive Proxy Statement</u> on Schedule 14A, filed with the SEC on April 25, 2022 (but only with respect to information required by Part III of our Annual Report on Form 10-K for the year ended December 31, 2021, which information shall update and supersede information included in Part III of our Annual Report on Form 10-K for the year ended December 31, 2021);
- the description of our common stock contained in our registration statement on <u>Form 8-A</u> filed with the SEC on July 9, 2021, and any amendment
 or report updating that description, including the description contained in <u>Exhibit 4.2</u> to our Annual Report on Form 10-K for the fiscal year ended
 December 31, 2021; and
- future filings we make with the SEC under Sections 13(a), 13(c), 14, or 15(d) of the Exchange Act after the date of this prospectus and before the termination of the offering of the securities made under this prospectus.

We will furnish without charge to you, on written or oral request, a copy of any or all of such documents that has been incorporated herein by reference (other than exhibits to such documents unless such exhibits are specifically incorporated by reference into the documents that this prospectus incorporates). Written or oral requests for copies should be directed to HCW Biologics Inc., Attn: Corporate Secretary, 2929 N Commerce Parkway, Miramar, FL 33025, and our telephone number is (954) 842-2024. See the section of this prospectus entitled "Where You Can Find More Information" for information concerning how to obtain copies of materials that we file with the SEC.

PROSPECTUS SUMMARY

This summary highlights information contained in other parts of this prospectus or incorporated by reference in this prospectus from our Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2022, and our other filings with the SEC listed below under the heading "Incorporation of Information by Reference." This summary may not contain all the information that you should consider before investing in securities. You should read the entire prospectus and the information incorporated by reference in this prospectus carefully, including "Risk Factors" and the financial data and related notes and other information incorporated by reference, before making an investment decision. See "Cautionary Note Regarding Forward-Looking Statements."

Overview

We are a biopharmaceutical company focused on discovering and developing novel immunotherapies to lengthen health span by disrupting the link between chronic, low-grade inflammation and age-related diseases. We believe age-related, chronic, low-grade inflammation, or "inflammaging," is a significant contributing factor to several diseases and conditions, such as cancer, cardiovascular disease, diabetes, neurodegenerative diseases, and autoimmune diseases. The induction and retention of low-grade inflammation in an aging human body is mainly the result of the accumulation of non-proliferative senescent cells and persistent activation of protein complexes, known as inflammasomes, in innate immune cells. These two elements share common mechanisms in promoting secretion of proinflammatory proteins and in many cases interact to drive inflammaging. Our novel approach is to treat both of these elements. We believe our approach has the potential to fundamentally change the treatment of age-related diseases.

We have combined our deep understanding of disease-related immunology with our expertise in advanced protein engineering to develop our TOBITM (Tissue factOr-Based fusIon) discovery platform for the design of category-defining immunotherapeutic drugs. This modular and tunable technology has allowed us to generate a novel pipeline of internally-developed product candidates capable of activating and targeting desired immune responses and blocking unwanted immunosuppressive activities. Using our TOBITM platform, we have successfully developed over 30 molecules that can be administered by subcutaneous injection as well as used in adoptive cell therapy approaches. Our focus is to develop immunotherapeutic therapies administered by subcutaneous injection, and we intend to out-license cell therapy based approaches. We have selected two molecules as our lead product candidates: HCW9218 and HCW9302. We have chosen these product candidates because we believe they have the potential to become transformative immunotherapeutics for the treatment of a broad range of age-related diseases, and both can be administered to patients by subcutaneous injection.

In response to physiological or environmental stress, normal tissue cells enter a senescent state of irreversible growth arrest accompanied by the release of Senescence-Associated Secretory Phenotype ("SASP") factors. SASP factors, including proinflammatory cytokines, chemokines, and proteinases, drive the inflammation cycle, including activation of inflammasomes. As our body ages, senescent cells accumulate and increase the release of SASP factors leading to chronic, low-grade inflammation, and organ/tissue damage. Studies have shown that strategies to reduce or eliminate senescent cells can delay, prevent, and improve age-related dysfunctions, including cancer.

The bifunctionality of HCW9218 allows it to function as both a senolytic and senomorphic immunotherapeutic. HCW9218 is designed to treat the impact of accumulated senescent cells and the SASP factors which they secrete by eliminating senescent cells (i.e., senolytic effect) and reducing SASP factors (i.e., senomorphic effect). This molecule is a heterodimeric, bifunctional fusion protein complex comprising extracellular domains of the human transforming growth factor- $\hat{1}^2$ ("TGF- $\hat{1}^2$ ") receptor II, as a TGF- $\hat{1}^2$ trap for TGF- $\hat{1}^2$ neutralization, and a human interleukin ("IL")-15/IL-15 receptor $\hat{1}^\pm$ complex for immune cell stimulation. Together, the activities of these domains drive senescent cell clearance and SASP factor neutralization. The Company published a paper

authored by our scientific research team in the peer-reviewed journal, Molecular Therapy, entitled, "Bifunctional TGF- $\hat{1}^2$ trap/IL-15 Protein Complex Elicits Potent NK Cell and CD8+ T Cell Immunity Against Solid Tumors." The paper highlights preclinical data from in vivo studies demonstrating the potential of HCW9218 as a novel immunostimulant with the ability to simultaneously lessen immunosuppression in patients with cancer.

As the first line of defense to infections or tissue injuries, the innate immune system activates inflammasomes to initiate protective immune responses. Similar to senescent cells, activated inflammasomes promote the release of proinflammatory factors. Unresolved activation of inflammasomes due to chronic infection or persistent tissue injury leads to chronic low-grade inflammation which perpetuates this cycle.

HCW9302 is designed to activate and expand regulatory T ("Treg") cells to suppress the activity of inflammasome-bearing cells and the inflammatory factors which they secrete. This molecule is a single-chain, IL-2-based fusion protein. Inflammasomes are expressed in innate immune cells. When these cells are stimulated by various signals, the inflammasomes become active and the cells release inflammatory factors. In certain conditions, these signaling pathways persist leading to chronic inflammatory responses and associated tissue destruction. Preclinical studies in mouse models have demonstrated the ability of HCW9302 to activate Treg cells and reduce inflammation-related diseases, supporting the potential of HCW9302 to treat a wide variety of autoimmune and age-related diseases.

To date, there has been limited clinical success in targeting senescent cell accumulation or aberrant inflammasome activity using small moleculebased approaches. Studies have found the immune cell activity in young individuals is capable of limiting these processes, which we believe indicates that immunotherapeutic approaches that combine relevant stimulatory and inhibitory components may provide a means of treating age-related diseases by addressing chronic inflammation.

Corporate Information

We were incorporated in Delaware on April 2, 2018. Our principal executive offices are located at 2929 N Commerce Parkway, Miramar, FL 33025. Our telephone number at that location is (954) 842-2024. Our corporate website address is www.hcwbiologics.com. Information contained on our website is not a part of this prospectus and the inclusion of our website address in this prospectus is an inactive textual reference only.

The Securities We May Offer

With this prospectus, we may offer common stock, preferred stock, debt securities, warrants to purchase our common stock, preferred stock or debt securities, subscription rights to purchase our common stock, preferred stock or debt securities, and/or units consisting of some or all of these securities in any combination. The aggregate offering price of securities that we offer with this prospectus will not exceed \$100 million. Each time we offer securities with this prospectus, we will provide offerees with a prospectus supplement that will contain the specific terms of the securities being offered. The following is a summary of the securities we may offer with this prospectus.

Common Stock

We may offer shares of our common stock, par value \$0.0001 per share.

Preferred Stock

We may offer shares of our preferred stock, par value \$0.0001 per share, in one or more series. Our board of directors or a committee designated by the board will determine the dividend, voting, conversion and other rights of the series of shares of preferred stock being offered. Each series of preferred stock will be more fully

described in the particular prospectus supplement that will accompany this prospectus, including redemption provisions, rights in the event of our liquidation, dissolution or the winding up, voting rights and rights to convert into common stock.

Debt Securities

We may offer general obligations, which may be secured or unsecured, senior or subordinated and convertible into shares of our common stock or preferred stock. In this prospectus, we refer to the senior debt securities and the subordinated debt securities together as the "debt securities." Our board of directors will determine the terms of each series of debt securities being offered.

We will issue the debt securities under an indenture between us and a trustee. In this document, we have summarized general features of the debt securities from the indenture. We encourage you to read the form of indenture, which is an exhibit to the registration statement of which this prospectus is a part.

Warrants

We may offer warrants for the purchase of debt securities, shares of preferred stock or shares of common stock. We may issue warrants independently or together with other securities. Our board of directors will determine the terms of the warrants.

Subscription Rights

We may offer subscription rights for the purchase of common stock, preferred stock or debt securities. We may issue subscription rights independently or together with other securities. Our board of directors will determine the terms of the subscription rights.

Units

We may offer units consisting of some or all of the securities described above, in any combination, including common stock, preferred stock, warrants and/or debt securities. The terms of these units will be set forth in a prospectus supplement. The description of the terms of these units in the related prospectus supplement will not be complete. You should refer to the applicable form of unit and unit agreement for complete information with respect to these units.

RISK FACTORS

An investment in our securities involves a high degree of risk. The prospectus supplement applicable to each offering of securities will contain a discussion of the risks applicable to an investment in our securities. Prior to making a decision about investing in our securities, you should carefully consider the specific factors discussed under the heading "Risk Factors" in the applicable prospectus supplement, together with all of the other information contained or incorporated by reference in the prospectus supplement or appearing or incorporated by reference in this prospectus. You should also consider the risks, uncertainties and assumptions discussed under Part II, Item 1A, "Risk Factors," in our most recent Quarterly Report on Form 10-Q, which is incorporated herein by reference, and may be amended, supplemented or superseded from time to time by other reports we file with the SEC in the future and which are incorporated herein by reference. The risks and uncertainties we have described are not the only ones we face. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also affect our operations.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and documents incorporated herein by reference contain "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. All statements other than statements of historical facts contained or incorporated herein by reference are forward-looking statements. In some cases, you can identify forward-looking statements by terms such as "may," "will," "should," "expect," "plan," "anticipate," "could," "intend," "target," "project," "contemplate," "believe," "estimate," "predict," "potential" or "continue" or the negative of these terms or other similar expressions, although not all forward-looking statements regarding our future results of operations and financial position, business strategy, market size, potential growth opportunities, nonclinical and clinical development activities, efficacy and safety profile of our product candidates, potential therapeutic benefits and economic value of our product candidates, the timing and results of nonclinical studies and clinical trials, are forward-looking statements. We intend that such forward-looking statements be subject to the safe harbors created thereby.

These forward-looking statements are based on the current beliefs and expectations of our management and are subject to significant risks and uncertainties. If underlying assumptions prove inaccurate or unknown risks or uncertainties materialize, actual results may differ materially from current expectations and projections. Factors that might cause such a difference include those discussed in Part I, Item IA, "Risk Factors" in our most recent Annual Report on Form 10-K and in any subsequent Quarterly Report on Form 10-Q, as well as those discussed in this prospectus, the documents incorporated by reference into this prospectus and any free writing prospectus. You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date of this prospectus or, in the case of documents referred to or incorporated by reference, the date of those documents.

All subsequent written or oral forward-looking statements attributable to us or any person acting on our behalf are expressly qualified in their entirety by the cautionary statements contained or referred to in this section. We do not undertake any obligation to release publicly any revisions to these forward-looking statements to reflect events or circumstances after the date of this prospectus or to reflect the occurrence of unanticipated events, except as may be required under applicable U.S. securities law. If we do update one or more forward-looking statements, no inference should be drawn that we will make additional updates with respect to those or other forward-looking statements.

USE OF PROCEEDS

We will retain broad discretion over the use of the net proceeds to us from the sale of our securities under this prospectus. Unless otherwise provided in the applicable prospectus supplement, we intend to use the net proceeds from the sale of securities under this prospectus for general corporate purposes, which may include funding research, clinical development, process development and manufacturing of our product candidates, increasing our working capital, reducing indebtedness, acquisitions or investments in businesses, products or technologies that are complementary to our own and capital expenditures. We will set forth in the applicable prospectus supplement our intended use for the net proceeds received from the sale of any securities. Pending the application of the net proceeds, we intend to invest the net proceeds in short-term or long-term, investment-grade, interest-bearing securities.

DESCRIPTION OF CAPITAL STOCK

The following description summarizes the most important terms of our capital stock. Because it is only a summary, it does not contain all the information that may be important to you. For a complete description, you should refer to our restated certificate of incorporation and restated bylaws, which are included as exhibits to the registration statement of which this prospectus forms a part, and to the applicable provisions of Delaware law.

General

Our authorized capital stock consists of 250,000,000 shares of common stock, par value \$0.0001 per share, and 10,000,000 shares of redeemable preferred stock, par value \$0.0001 per share.

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.

Dividends

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.

Liquidation

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.

Rights and Preferences

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.

Fully Paid and Nonassessable

All of our outstanding shares of common stock are fully paid and nonassessable.

Preferred Stock

No shares of our preferred stock are outstanding. Our board of directors has the authority, without further action by the stockholders, to issue up to 10,000,000 shares of redeemable preferred stock in one or more series and to

fix the rights, preferences, privileges and restrictions thereof. These rights, preferences, and privileges could include dividend rights, conversion rights, voting rights, redemption rights, liquidation preferences, sinking fund terms and the number of shares constituting any series or the designation of such series, any or all of which may be greater than the rights of common stock. The issuance of redeemable preferred stock could adversely affect the voting power of holders of common stock and the likelihood that such holders will receive dividend payments and payments upon liquidation. In addition, the issuance of redeemable preferred stock could have the effect of delaying, deferring or preventing change in our control or other corporate action. We have no present plan to issue any shares of redeemable preferred stock.

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

Certain provisions of our restated certificate of incorporation, restated bylaws and Delaware law, which are summarized below, are expected to discourage coercive takeover practices and inadequate takeover bids. These provisions are also designed, in part, to encourage persons seeking to acquire control of us to negotiate first with our board of directors. We believe that the benefits of increased protection of our potential ability to negotiate more favorable terms with an unfriendly or unsolicited acquirer outweigh the disadvantages of discouraging a proposal to acquire us.

Undesignated Preferred Stock

As discussed above, our board of directors has the ability to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to change control of us. These and other provisions may have the effect of deterring hostile takeovers or delaying changes in control or management of our company.

Limits on Ability of Stockholders to Act by Written Consent or Call a Special Meeting

Our amended and restated certificate of incorporation provides that our stockholders may not act by written consent, which may lengthen the amount of time required to take stockholder actions. As a result, a holder controlling a majority of our capital stock would not be able to amend our bylaws or remove directors without holding a meeting of our stockholders called in accordance with our bylaws.

In addition, our amended and restated bylaws provides that special meetings of the stockholders may be called only by the chairperson of the board, the Chief Executive Officer or our board of directors. Stockholders may not call a special meeting, which may delay the ability of our stockholders to force consideration of a proposal or for holders controlling a majority of our capital stock to take any action, including the removal of directors.

Requirements for Advance Notification of Stockholder Nominations and Proposals

Our amended and restated bylaws establishes advance notice procedures with respect to stockholder proposals and the nomination of candidates for election as directors, other than nominations made by or at the direction of our board of directors or a committee of our board of directors. These provisions may have the effect of precluding the conduct of certain business at a meeting if the proper procedures are not followed. These provisions may also discourage or deter a potential acquirer from conducting a solicitation of proxies to elect the acquirer's own slate of directors or otherwise attempting to obtain control of our company.

Board Classification

Our board of directors is divided into three classes, one class of which is elected each year by our stockholders. The directors in each class will serve three-year terms. A third party may be discouraged from making a tender offer or otherwise attempting to obtain control of us as it is more difficult and time-consuming for stockholders to replace a majority of the directors on a classified board.

No Cumulative Voting

Our amended and restated certificate of incorporation and amended and restated bylaws do not permit cumulative voting in the election of directors. Cumulative voting allows a stockholder to vote a portion or all of its shares for one or more candidates for seats on the board of directors. Without cumulative voting, a minority stockholder may not be able to gain as many seats on our board of directors as the stockholder would be able to gain if cumulative voting were permitted. The absence of cumulative voting makes it more difficult for a minority stockholder to gain a seat on our board of directors to influence our board's decision regarding a takeover.

Amendment of Charter and Bylaws Provisions

The amendment of the above provisions of our amended and restated certificate of incorporation will require approval by holders of at least two-thirds of our outstanding capital stock entitled to vote generally in the election of directors. The amendment of our bylaws will require approval by the holders of at least two-thirds of our outstanding capital stock entitled to vote generally in the election of directors.

Choice of Forum

Our amended and restated certificate of incorporation provides that the Court of Chancery of the State of Delaware will be the exclusive forum for the following types of actions or proceedings under Delaware statutory or common law: (1) any derivative action or proceeding brought on our behalf; (2) any action asserting a claim of breach of a fiduciary duty or other wrongdoing by any of our directors, officers, or employees to us or our stockholders; (3) any action asserting a claim against us or our stockholders arising pursuant to any provision of the General Corporation Law of the State of Delaware or our certificate of incorporation or bylaws; (4) any action to interpret, apply, enforce, or determine the validity of our certificate of incorporation or bylaws; (5) any action asserting a claim governed by the internal affairs doctrine. The provisions would not apply to suits brought to enforce a duty or liability created by the Securities Act of 1933, as amended (the "Securities Act creates concurrent jurisdiction for federal and state courts over all such Securities Act actions. Accordingly, both state and federal courts have jurisdiction to entertain such claims. To prevent having to litigate claims in multiple jurisdictions and the threat of inconsistent or contrary rulings by different courts, among other considerations, our amended and restated certificate of incorporation provides that the federal district courts of the United States of America will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act.

While the Delaware courts have determined that such choice of forum provisions are facially valid, a stockholder may nevertheless seek to bring a claim in a venue other than those designated in the exclusive forum provisions. In such instance, we would expect to vigorously assert the validity and enforceability of the exclusive forum provisions of our amended and restated certificate of incorporation. This may require significant additional costs associated with resolving such action in other jurisdictions and there can be no assurance that the provisions will be enforced by a court in those other jurisdictions.

Delaware Anti-Takeover Statute

We are subject to the provisions of Section 203 of the DGCL 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, our board of directors approved either the business combination or the transaction which 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, calculated as provided under Section 203; or
- at or subsequent to the date of the transaction, the business combination is approved by our 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 which 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. We expect the existence of this provision to have an anti-takeover effect with respect to transactions our board of directors does not approve in advance. We anticipate that Section 203 may also discourage attempts that might result in a premium over the market price for the shares of common stock held by stockholders.

The provisions of Delaware law and the provisions of our amended and restated certificate of incorporation and amended and restated 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 our common stock that often result from actual or rumored hostile takeover attempts. These provisions might also have the effect of preventing changes in our management. It is possible that these provisions could make it more difficult to accomplish transactions that stockholders might otherwise deem to be in their best interests.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is American Stock Transfer & Trust Company LLC. The transfer agent and registrar's address is 6201 15th Avenue, Brooklyn, NY 11219, and its telephone number is (718) 921-8124.

Nasdaq Global Select Market Listing

Our common stock is listed on the Nasdaq Global Market under the symbol "HCWB".

DESCRIPTION OF DEBT SECURITIES

The following description, together with the additional information we include in any applicable prospectus supplements, summarizes the material terms and provisions of the debt securities that we may offer under this prospectus. While the terms we have summarized below will apply generally to any future debt securities we may offer under this prospectus, we will describe the particular terms of any debt securities that we may offer in more detail in the applicable prospectus supplement. The terms of any debt securities we offer under a prospectus supplement may differ from the terms we describe below.

The following summary description, together with the additional information we may include in any applicable prospectus supplements, does not purport to be complete and is subject to, and qualified in its entirety by reference to, the form of indenture filed as an exhibit to the registration statement of which this prospectus is a part, as it may be supplemented, amended or modified from time to time, as well as the notes and supplemental agreements relating to each series of debt securities that will be incorporated by reference as exhibits to the registration statement that includes this prospectus or as exhibits to a current report on Form 8-K if we offer debt securities.

We will issue senior debt securities under one or more senior indentures that we will enter into with a trustee named in the relevant senior indenture. We will issue subordinated debt securities under one or more subordinated indentures that we will enter into with a trustee named in the relevant subordinated indenture. We have filed a form of indenture as an exhibit to the registration statement of which this prospectus is a part. We use the terms "indenture" and "indentures" in this prospectus to refer to both the senior indenture and the subordinated indenture.

The indentures will be qualified under the Trust Indenture Act of 1939, as amended. We use the term "trustee" to refer to either the trustee under the senior indenture or the trustee under the subordinated indenture, as applicable.

The following summaries of material provisions of the senior debt securities, the subordinated debt securities and the indentures are subject to, and qualified in their entirety by reference to, all the provisions of the indenture applicable to a particular series of debt securities. We urge you to read the applicable prospectus supplements related to the debt securities that we sell under this prospectus, as well as the indenture that would contain the terms of the debt securities. Except as we may otherwise indicate, the terms of the senior indenture and the subordinated indenture would be identical.

General

We may issue the debt securities offered by this prospectus and any accompanying prospectus supplement under an indenture to be entered into between us and the trustee identified in the applicable prospectus supplement. The terms of the debt securities will include those stated in the indenture and those made part of the indenture by reference to the Trust Indenture Act of 1939, as in effect on the date of the indenture. We have filed a copy of the form of indenture as an exhibit to the registration statement in which this prospectus is included. The indenture will be subject to and governed by the terms of the Trust Indenture Act of 1939. We may offer under this prospectus up to an aggregate principal amount of \$100.0 million in debt securities, or if debt securities are issued at a discount, or in a foreign currency, foreign currency units or composite currency, the principal amount as may be sold for an aggregate public offering price of up to \$100.0 million. Unless otherwise specified in the applicable prospectus supplement, the debt securities will represent our direct, unsecured obligations and will rank equally with all of our other unsecured indebtedness.

We may issue the debt securities in one or more series with the same or various maturities, at par, at a premium, or at a discount. We will describe the particular terms of each series of debt securities in a prospectus supplement relating to that series, which we will file with the SEC. The prospectus supplement relating to the particular

series of debt securities being offered will specify the particular amounts, prices and terms of those debt securities. These terms may include:

- the title of the series;
- the aggregate principal amount, and, if a series, the total amount authorized and the total amount outstanding;
- the issue price or prices, expressed as a percentage of the aggregate principal amount of the debt securities;
- any limit on the aggregate principal amount;
- the date or dates on which principal is payable;
- the interest rate or rates (which may be fixed or variable) or, if applicable, the method used to determine such rate or rates;
- the date or dates from which interest, if any, will be payable and any regular record date for the interest payable;
- the place or places where principal and, if applicable, premium and interest, is payable;
- the terms and conditions upon which we may, or the holders may require us to, redeem or repurchase the debt securities;
- the denominations in which such debt securities may be issuable, if other than denominations of \$1,000 or any integral multiple of that number;
- whether the debt securities are to be issuable in the form of certificated securities (as described below) or global securities (as described below);
- the portion of principal amount that will be payable upon declaration of acceleration of the maturity date if other than the principal amount of the debt securities;
- the currency of denomination;
- the designation of the currency, currencies or currency units in which payment of principal and, if applicable, premium and interest, will be made;
- if payments of principal and, if applicable, premium or interest, on the debt securities are to be made in one or more currencies or currency units
 other than the currency of denomination, the manner in which the exchange rate with respect to such payments will be determined;
- if amounts of principal and, if applicable, premium and interest may be determined by reference to an index based on a currency or currencies or by reference to a commodity, commodity index, stock exchange index or financial index, then the manner in which such amounts will be determined;
- the provisions, if any, relating to any collateral provided for such debt securities;
- any addition to or change in the covenants and/or the acceleration provisions described in this prospectus or in the indenture;
- any events of default, if not otherwise described below under "Events of Default";
- the terms and conditions, if any, for conversion into or exchange for shares of our common stock or preferred stock;
- any depositaries, interest rate calculation agents, exchange rate calculation agents or other agents; and
- the terms and conditions, if any, upon which the debt securities shall be subordinated in right of payment to our other indebtedness.

We may issue discount debt securities that provide for an amount less than the stated principal amount to be due and payable upon acceleration of the maturity of such debt securities in accordance with the terms of the

indenture. We may also issue debt securities in bearer form, with or without coupons. If we issue discount debt securities or debt securities in bearer form, we will describe material U.S. federal income tax considerations and other material special considerations which apply to these debt securities in the applicable prospectus supplement.

We may issue debt securities denominated in or payable in a foreign currency or currencies or a foreign currency unit or units. If we do, we will describe the restrictions, elections, and general tax considerations relating to the debt securities and the foreign currency or currencies or foreign currency unit or units in the applicable prospectus supplement.

Debt securities offered under this prospectus and any prospectus supplement will be subordinated in right of payment to certain of our outstanding senior indebtedness. In addition, we will seek the consent of the holders of any such senior indebtedness prior to issuing any debt securities under this prospectus to the extent required by the agreements evidencing such senior indebtedness.

Conversion or Exchange Rights

We will set forth in the prospectus supplement the terms on which a series of debt securities may be convertible into or exchangeable for our common stock or our other securities. We will include provisions as to whether conversion or exchange is mandatory, at the option of the holder or at our option. We may include provisions pursuant to which the number of shares of our common stock or our other securities that the holders of the series of debt securities receive would be subject to adjustment.

Consolidation, Merger or Sale

Any successor to or acquiror of the indentures must assume all of our obligations under the indentures or the debt securities, as appropriate. If the debt securities are convertible for our other securities or securities of other entities, the person with whom we consolidate or merge or to whom we sell all of our property must make provisions for the conversion of the debt securities into securities that the holders of the debt securities would have received if they had converted the debt securities before the consolidation, merger or sale.

Events of Default

Unless otherwise provided in any applicable prospectus supplement, documents incorporated by reference or free writing prospectus, the following will be events of default under the indenture with respect to each series of debt securities issued thereunder:

- a) if we fail to pay interest when due and payable and our failure continues for 30 days, or within such other time period as may be specified in the applicable indenture, and the time for payment has not been extended or deferred;
- b) if we fail to pay the principal, premium or sinking fund payment, if any, when due and payable and the time for payment has not been extended or delayed;
- c) if specified events of bankruptcy, insolvency or reorganization occur; and
- d) if we fail to observe or perform any other covenant contained in the debt securities or the indentures, other than a covenant specifically relating to another series of debt securities, and our failure continues for 60 days, or within such other time period as may be specified in the applicable indenture, after we receive notice from the trustee or holders of at least a majority in principal amount of the outstanding debt securities of an affected series, or such other percentage as may be specified in the applicable indenture, in aggregate principal amount of the outstanding debt securities of the applicable series.

If an event of default with respect to debt securities of any series occurs and is continuing, other than an event of default specified in the last bullet point above, the trustee or the holders of at least 25%, or such other percentage

as may be specified in the applicable indenture, in aggregate principal amount of the outstanding debt securities of that series, by notice to us in writing, and to the trustee if notice is given by such holders, may declare the unpaid principal of, premium, if any, and accrued interest, if any, due and payable immediately. If an event of default specified in the last bullet point above occurs with respect to us, the principal amount of and accrued interest, if any, of each issue of debt securities then outstanding shall be due and payable without any notice or other action on the part of the trustee or any holder.

The holders of a majority in principal amount of the outstanding debt securities of an affected series may waive any default or event of default with respect to the series and its consequences, except defaults or events of default regarding payment of principal, premium, if any, or interest, unless we have cured the default or event of default in accordance with the indenture. Any waiver shall cure the default or event of default.

Subject to the terms of the indentures, if an event of default under an indenture shall occur and be continuing, the trustee will be under no obligation to exercise any of its rights or powers under such indenture at the request or direction of any of the holders of the applicable series of debt securities, unless such holders have offered the trustee reasonable indemnity. The holders of a majority in principal amount of the outstanding debt securities of any series will have the right to direct the time, method and place of conducting any proceeding for any remedy available to the trustee, or exercising any trust or power conferred on the trustee, with respect to the debt securities of that series, provided that:

- the direction so given by the holder is not in conflict with any law or the applicable indenture; and
- subject to its duties under the Trust Indenture Act of 1939, the trustee need not take any action that might involve it in personal liability or might be unduly prejudicial to the holders not involved in the proceeding.

A holder of the debt securities of any series will only have the right to institute a proceeding under the indentures or to appoint a receiver or trustee, or to seek other remedies if:

- the holder has given written notice to the trustee of a continuing event of default with respect to that series;
- the holders of at least 25% (or, in the case of a default of the type described under subsection (d), above, a majority in principal amount of the outstanding debt securities of an affected series), or such other percentage as may be specified in the applicable indenture, in aggregate principal amount of the outstanding debt securities of that series have made written request, and such holders have offered reasonable indemnity to the trustee to institute the proceeding as trustee; and
- the trustee does not institute the proceeding, and does not receive from the holders of a majority in aggregate principal amount of the outstanding debt securities of that series other conflicting directions within 60 days, or within such other time period as may be specified in the applicable indenture, after the notice, request and offer of indemnity.

These limitations do not apply to a suit instituted by a holder of debt securities if we default in the payment of the principal, premium, if any, or interest on, the debt securities.

We will periodically file statements with the trustee regarding our compliance with specified covenants in the indentures.

Modification and Waiver

We and the trustee may change an indenture without the consent of any holders with respect to specific matters:

- to evidence the succession of another corporation to us and the assumption by any such successor of our covenants in such indenture and in the debt securities issued thereunder;
- to add to our covenants or to surrender any right or power conferred on us pursuant to the indenture;

- to establish the form and terms of debt securities issued thereunder;
- to evidence and provide for a successor trustee under such indenture with respect to one or more series of debt securities issued thereunder or to provide for or facilitate the administration of the trusts under such indenture by more than one trustee;
- to cure any ambiguity, to correct or supplement any provision in the indenture that may be defective or inconsistent with any other provision of the indenture or to make any other provisions with respect to matters or questions arising under such indenture; provided that no such action adversely affects the interests of the holders of any series of debt securities issued thereunder in any material respect;
- to add to, delete from or revise the conditions, limitations and restrictions on the authorized amount, terms or purposes of issue, authentication and delivery of securities under the indenture;
- to add any additional events of default with respect to all or any series of debt securities;
- to supplement any of the provisions of the indenture as may be necessary to permit or facilitate the defeasance and discharge of any series of debt securities, provided that such action does not adversely affect the interests of any holder of an outstanding debt security of such series or any other security in any material respect;
- to make provisions with respect to the conversion or exchange rights of holders of debt securities of any series;
- to pledge to the trustee as security for the debt securities of any series any property or assets;
- to add guarantees in respect of the debt securities of one or more series;
- to change or eliminate any of the provisions of the indenture, provided that any such change or elimination becomes effective only when there is no security of any series outstanding created prior to the execution of such supplemental indenture which is entitled to the benefit of such provision;
- to provide for certificated securities in addition to or in place of global securities;
- to qualify such indenture under the Trust Indenture Act of 1939, as amended;
- with respect to the debt securities of any series, to conform the text of the indenture or the debt securities of such series to any provision of
 the description thereof in our offering memorandum or prospectus relating to the initial offering of such debt securities, to the extent that
 such provision, in our good faith judgment, was intended to be a verbatim recitation of a provision of the indenture or such securities; or
- to make any other change that does not adversely affect the rights of holders of any series of debt securities issued thereunder in any material respect.

In addition, under the indentures, the rights of holders of a series of debt securities may be changed by us and the trustee with the written consent of the holders of at least a majority in aggregate principal amount of the outstanding debt securities of each series that is affected. However, we and the trustee may only make the following changes with the consent of each holder of any outstanding debt securities affected:

- extending the fixed maturity of the series of debt securities;
- reducing the principal amount, reducing the rate of or extending the time of payment of interest, or reducing any premium payable upon the redemption of any debt securities;
- reducing the percentage of debt securities, the holders of which are required to consent to any amendment, supplement, modification or waiver; or
- make any change that adversely affects the right to convert or exchange any security into or for common stock or other securities, cash or other property in accordance with the terms of the applicable debt security.

Each indenture provides that we can elect to be discharged from our obligations with respect to one or more series of debt securities, except for specified obligations, including obligations to:

- register the transfer or exchange of debt securities of the series;
- replace stolen, lost or mutilated debt securities of the series;
- maintain paying agencies;
- hold monies for payment in trust;
- recover excess money held by the trustee;
- compensate and indemnify the trustee; and
- appoint any successor trustee.

In order to exercise our rights to be discharged, we must deposit with the trustee money or government obligations sufficient to pay all the principal of, any premium, if any, and interest on, the debt securities of the series on the dates payments are due.

Form, Exchange and Transfer

We will issue the debt securities of each series only in fully registered form without coupons and, unless we otherwise specify in the applicable prospectus supplement, in denominations of \$1,000 and any integral multiple thereof. The indentures provide that we may issue debt securities of a series in temporary or permanent global form and as book-entry securities that will be deposited with, or on behalf of, The Depository Trust Company or another depositary named by us and identified in a prospectus supplement with respect to that series.

At the option of the holder, subject to the terms of the indentures and the limitations applicable to global securities described in the applicable prospectus supplement, the holder of the debt securities of any series can exchange the debt securities for other debt securities of the same series, in any authorized denomination and of like tenor and aggregate principal amount.

Subject to the terms of the indentures and the limitations applicable to global securities set forth in the applicable prospectus supplement, holders of the debt securities may present the debt securities for exchange or for registration of transfer, duly endorsed or with the form of transfer endorsed thereon duly executed if so required by us or the security registrar, at the office of the security registrar or at the office of any transfer agent designated by us for this purpose. Unless otherwise provided in the debt securities that the holder presents for transfer or exchange, we will make no service charge for any registration of transfer or exchange, but we may require payment of any taxes or other governmental charges.

We will name in the applicable prospectus supplement the security registrar, and any transfer agent in addition to the security registrar, that we initially designate for any debt securities. We may at any time designate additional transfer agents or rescind the designation of any transfer agent or approve a change in the office through which any transfer agent acts, except that we will be required to maintain a transfer agent in each place of payment for the debt securities of each series.

If we elect to redeem the debt securities of any series, we will not be required to:

- issue, register the transfer of, or exchange any debt securities of that series during a period beginning at the opening of business 15 days, or within such other time period as may be specified in the applicable indenture, before the day of mailing of a notice of redemption of any debt securities that may be selected for redemption and ending at the close of business on the day of the mailing; or
- register the transfer of or exchange any debt securities so selected for redemption, in whole or in part, except the unredeemed portion of any debt securities we are redeeming in part.

Repurchases on the Open Market

We, or an affiliate of ours, may at any time or from time to time repurchase any debt security in the open market or otherwise. Such debt securities may, at our option (or our affiliate's option), be held, resold or surrendered to the trustee for cancellation.

Information Concerning the Trustee

The trustee, other than during the occurrence and continuance of an event of default under an indenture, undertakes to perform only those duties as are specifically set forth in the applicable indenture. Upon an event of default under an indenture, the trustee must use the same degree of care as a prudent person would exercise or use in the conduct of his or her own affairs. Subject to this provision, the trustee is under no obligation to exercise any of the powers given him or her by the indentures at the request of any holder of debt securities unless he or she is offered reasonable security and indemnity against the costs, expenses and liabilities that he or she might incur.

Payment and Paying Agents

Unless we otherwise indicate in the applicable prospectus supplement, we will make payment of the interest on any debt securities on any interest payment date to the person in whose name the debt securities, or one or more predecessor securities, are registered at the close of business on the regular record date for the interest.

We will pay principal of and any premium and interest on the debt securities of a particular series at the office of the paying agents designated by us, except that unless we otherwise indicate in the applicable prospectus supplement, we will make interest payments by check that we will mail to the holder or by wire transfer to certain holders. Unless we otherwise indicate in a prospectus supplement, we will designate the corporate trust office of the trustee in the City of New York as our sole paying agent for payments with respect to debt securities of each series. We will name in the applicable prospectus supplement any other paying agents that we initially designate for the debt securities of a particular series. We will maintain a paying agent in each place of payment for the debt securities of a particular series.

All money we pay to a paying agent or the trustee for the payment of the principal of or any premium or interest on any debt securities that remains unclaimed at the end of two years after such principal, premium or interest has become due and payable will be repaid to us, and the holder of the debt security thereafter may look only to us for payment thereof.

Governing Law

The indentures and the debt securities will be governed by and construed in accordance with the laws of the State of New York, except to the extent that the Trust Indenture Act of 1939 is applicable.

DESCRIPTION OF WARRANTS

General

We may issue warrants for the purchase of our debt securities, preferred stock, common stock, or any combination thereof. Warrants may be issued independently or together with our debt securities, preferred stock or common stock and may be attached to or separate from any offered securities. Each series of warrants will be issued under a separate warrant agreement to be entered into between us and a bank or trust company, as warrant agent. The warrant agent will act solely as our agent in connection with the warrants. The warrant agent will not have any obligation or relationship of agency or trust for or with any holders or beneficial owners of warrants. This summary of certain provisions of the warrant agreement for that particular series of warrants, you should refer to the prospectus supplement for that series of warrants and the warrant agreement for that particular series.

Debt Warrants

The prospectus supplement relating to a particular issue of warrants to purchase debt securities will describe the terms of the debt warrants, including the following:

- the title of the debt warrants;
- the offering price for the debt warrants, if any;
- the aggregate number of the debt warrants;
- the designation and terms of the debt securities, including any conversion rights, purchasable upon exercise of the debt warrants;
- if applicable, the date from and after which the debt warrants and any debt securities issued with them will be separately transferable;
- the principal amount of debt securities that may be purchased upon exercise of a debt warrant and the exercise price for the warrants, which may be payable in cash, securities or other property;
- the dates on which the right to exercise the debt warrants will commence and expire;
- if applicable, the minimum or maximum amount of the debt warrants that may be exercised at any one time;
- whether the debt warrants represented by the debt warrant certificates or debt securities that may be issued upon exercise of the debt warrants will be issued in registered or bearer form;
- information with respect to book-entry procedures, if any;
- the currency or currency units in which the offering price, if any, and the exercise price are payable;
- if applicable, a discussion of material U.S. federal income tax considerations;
- the antidilution provisions of the debt warrants, if any;
- the redemption or call provisions, if any, applicable to the debt warrants;
- any provisions with respect to the holder's right to require us to repurchase the debt warrants upon a change in control or similar event; and
- any additional terms of the debt warrants, including procedures and limitations relating to the exchange, exercise, and settlement of the debt warrants.

Debt warrant certificates will be exchangeable for new debt warrant certificates of different denominations. Debt warrants may be exercised at the corporate trust office of the warrant agent or any other office indicated in the

prospectus supplement. Prior to the exercise of their debt warrants, holders of debt warrants will not have any of the rights of holders of the debt securities purchasable upon exercise and will not be entitled to payment of principal or any premium, if any, or interest on the debt securities purchasable upon exercise.

Equity Warrants

The prospectus supplement relating to a particular series of warrants to purchase our common stock or preferred stock will describe the terms of the warrants, including the following:

- the title of the warrants;
- the offering price for the warrants, if any;
- the aggregate number of warrants;
- the designation and terms of the common stock or preferred stock that may be purchased upon exercise of the warrants;
- if applicable, the designation and terms of the securities with which the warrants are issued and the number of warrants issued with each security;
- if applicable, the date from and after which the warrants and any securities issued with the warrants will be separately transferable;
- the number of shares of common stock or preferred stock that may be purchased upon exercise of a warrant and the exercise price for the warrants;
- the dates on which the right to exercise the warrants shall commence and expire;
- if applicable, the minimum or maximum amount of the warrants that may be exercised at any one time;
- the currency or currency units in which the offering price, if any, and the exercise price are payable;
- if applicable, a discussion of material U.S. federal income tax considerations;
- the antidilution provisions of the warrants, if any;
- the redemption or call provisions, if any, applicable to the warrants;
- any provisions with respect to a holder's right to require us to repurchase the warrants upon a change in control or similar event; and
- any additional terms of the warrants, including procedures and limitations relating to the exchange, exercise and settlement of the warrants.

Holders of equity warrants will not be entitled:

- to vote, consent, or receive dividends;
- receive notice as stockholders with respect to any meeting of stockholders for the election of our directors or any other matter; or
- exercise any rights as stockholders.

DESCRIPTION OF SUBSCRIPTION RIGHTS

We may issue subscription rights to purchase our common stock, preferred stock or debt securities. These subscription rights may be offered independently or together with any other security offered hereby and may or may not be transferable by the stockholder receiving the subscription rights in such offering. In connection with any offering of subscription rights, we may enter into a standby arrangement with one or more underwriters or other purchasers pursuant to which the underwriters or other purchasers may be required to purchase any securities remaining unsubscribed for after such offering.

The prospectus supplement relating to any subscription rights we offer, if any, will, to the extent applicable, include specific terms relating to the offering, including some or all of the following:

- the price, if any, for the subscription rights;
- the exercise price payable for our common stock, preferred stock or debt securities upon the exercise of the subscription rights;
- the number of subscription rights to be issued to each stockholder;
- the number and terms of our common stock, preferred stock or debt securities which may be purchased per each subscription right;
- the extent to which the subscription rights are transferable;
- any other terms of the subscription rights, including the terms, procedures and limitations relating to the exchange and exercise of the subscription rights;
- the date on which the right to exercise the subscription rights shall commence, and the date on which the subscription rights shall expire;
- the extent to which the subscription rights may include an over-subscription privilege with respect to unsubscribed securities or an overallotment privilege to the extent the securities are fully subscribed; and
- if applicable, the material terms of any standby underwriting or purchase arrangement which may be entered into by us in connection with the offering of subscription rights.

The description in the applicable prospectus supplement of any subscription rights we offer will not necessarily be complete and will be qualified in its entirety by reference to the applicable subscription rights certificate, which will be filed with the SEC if we offer subscription rights. We urge you to read the applicable subscription rights certificate and any applicable prospectus supplement in their entirety.

DESCRIPTION OF UNITS

We may issue units consisting of some or all of the securities described above, in any combination, including common stock, preferred stock, warrants and/or debt securities. The terms of these units will be set forth in a prospectus supplement. The description of the terms of these units in the related prospectus supplement will not be complete. You should refer to the applicable form of unit and unit agreement for complete information with respect to these units.

PLAN OF DISTRIBUTION

We may sell the securities covered by this prospectus to one or more underwriters for public offering and sale by them, and may also sell the securities to investors directly or through agents. We will name any underwriter or agent involved in the offer and sale of securities in the applicable prospectus supplement. We have reserved the right to sell or exchange securities directly to investors on our own behalf in jurisdictions where we are authorized to do so. We may distribute the securities from time to time in one or more transactions:

- at a fixed price or prices, which may be changed;
- at market prices prevailing at the time of sale;
- · at prices related to such prevailing market prices; or
- at negotiated prices.

We may directly solicit offers to purchase the securities being offered by this prospectus. We may also designate agents to solicit offers to purchase the securities from time to time. We will name in a prospectus supplement any agent involved in the offer or sale of our securities. Unless otherwise indicated in a prospectus supplement, an agent will be acting on a best efforts basis, and a dealer will purchase securities as a principal for resale at varying prices to be determined by the dealer.

If we utilize an underwriter in the sale of the securities being offered by this prospectus, we will execute an underwriting agreement with the underwriter at the time of sale and we will provide the name of any underwriter in the prospectus supplement that the underwriter will use to make resales of the securities to the public. In connection with the sale of the securities, we, or the purchasers of securities for whom the underwriter may act as agent, may compensate the underwriter in the form of underwriting discounts or commissions. The underwriter may sell the securities to or through dealers, and those dealers may receive compensation in the form of discounts, concessions or commissions from the underwriters or commissions from the purchasers for whom they may act as agent.

We will provide in the applicable prospectus supplement any compensation we pay to underwriters, dealers, or agents in connection with the offering of the securities, and any discounts, concessions or commissions allowed by underwriters to participating dealers. Underwriters, dealers and agents participating in the distribution of the securities may be deemed to be underwriters within the meaning of the Securities Act of 1933, as amended, or the Securities Act, and any discounts and commissions received by them and any profit realized by them on resale of the securities may be deemed to be underwriting discounts and commissions. In compliance with the guidelines of the Financial Industry Regulatory Authority, Inc., or FINRA, the aggregate maximum discount, commission or agency fees or other items constituting underwriting compensation to be received by any FINRA member or independent broker-dealer shall be fair and reasonable. We may enter into agreements to indemnify underwriters, dealers and agents against civil liabilities, including liabilities under the Securities Act, and to reimburse them for certain expenses. We may grant underwriters who participate in the distribution of our securities under this prospectus an option to purchase additional securities in connection with the distribution.

The securities we offer under this prospectus may or may not be listed through the Nasdaq Global Market or any other securities exchange. To facilitate the offering of securities, certain persons participating in the offering may engage in transactions that stabilize, maintain or otherwise affect the price of the securities. This may include short sales of the securities, which involves the sale by persons participating in the offering of more securities than we sold to them. In these circumstances, these persons would cover such short positions by making purchases in the open market or by exercising their option to purchase additional securities. In addition, these persons may stabilize or maintain the price of the securities by bidding for or purchasing securities in the open market or by imposing penalty bids, whereby selling concessions allowed to dealers participating in the offering may be reclaimed if securities sold by them are repurchased in connection with stabilization transactions. The effect of these transactions may be to stabilize or maintain the market price of the securities at a level above that which might otherwise prevail in the open market. These transactions may be discontinued at any time.

We may engage in at the market offerings into an existing trading market in accordance with Rule 415(a)(4) under the Securities Act. In addition, we may enter into derivative transactions with third parties, or sell securities not covered by this prospectus to third parties in privately negotiated transactions. If the applicable prospectus supplement indicates, in connection with those derivatives, the third parties may sell securities covered by this prospectus and the applicable prospectus supplement, including short sale transactions. If so, the third party may use securities pledged by us or borrowed from us or others to settle those sales or to close out any related open borrowings of stock, and they may use securities received from us in settlement of those derivatives to close out any related open borrowings of stock. The third party in these sale transactions will be an underwriter and will be identified in the applicable prospectus supplement. In addition, we may otherwise loan or pledge securities to a financial institution or other third party that in turn may sell the securities short using this prospectus. The financial institution or other third party may transfer its economic short position to investors in our securities or in connection with a concurrent offering of other securities.

We will file a prospectus supplement to describe the terms of any offering of our securities covered by this prospectus. The prospectus supplement will disclose:

- the terms of the offer;
- the names of any underwriters, including any managing underwriters, as well as any dealers or agents;
- the purchase price of the securities from us;
- the net proceeds to us from the sale of the securities;
- any delayed delivery arrangements;
- any options under which underwriters, if any, may purchase additional securities from us;
- any underwriting discounts, commissions or other items constituting underwriters' compensation, and any commissions paid to agents;
- in a subscription rights offering, whether we have engaged dealer-managers to facilitate the offering or subscription, including their name or names and compensation;
- any public offering price; and
- other facts material to the transaction.

We will bear all or substantially all of the costs, expenses and fees in connection with the registration of our securities under this prospectus. The underwriters, dealers and agents may engage in transactions with us, or perform services for us, in the ordinary course of business.

Under Rule 15c6-1 of the Exchange Act, trades in the secondary market generally are required to settle in two business days, unless the parties to any such trade expressly agree otherwise or the securities are sold by us to an underwriter in a firm commitment underwritten offering. The applicable prospectus supplement may provide that the original issue date for your securities may be more than two scheduled business days after the trade date for your securities. Accordingly, in such a case, if you wish to trade securities on any date prior to the second business day before the original issue date for your securities, you will be required, by virtue of the fact that your securities initially are expected to settle in more than two scheduled business days after the trade date for your securities, to make alternative settlement arrangements to prevent a failed settlement.

LEGAL MATTERS

Unless the applicable prospectus supplement indicates otherwise, Orrick, Herrington & Sutcliffe LLP will pass upon the validity of any securities issued under this prospectus. Any underwriters will be represented by their own legal counsel, which will be named in an accompanying prospectus supplement.

EXPERTS

The audited consolidated financial statements incorporated by reference in this prospectus and elsewhere in the registration statement have been so incorporated by reference in reliance upon the report of Grant Thornton LLP, independent registered public accountants, upon the authority of said firm as experts in accounting and auditing.



4,160,000 Shares of Common Stock,

Pre-Funded Warrants to Purchase up to 2,557,000 Shares of Common Stock and

Up to 2,557,000 Shares of Common Stock Underlying the Pre-Funded Warrants

PROSPECTUS SUPPLEMENT

MAXIM GROUP LLC

November 18, 2024