



Novel Immunotherapeutics for Cancer and Other Age-Associated Diseases

JULY 2021

Safe Harbor Statement

This presentation contains forward-looking statements regarding future events and the future results of HCW Biologics Inc. (the "Company") that are based on current expectations, estimates, forecasts, and projections about the industry in which the Company operates and the beliefs and assumptions of the management of the company. Forward-looking statements can be identified by the fact that they do not relate strictly to historical facts and generally contain words such as "believes," "expects," "may," "will," "should," "seeks," "approximately," "intends," "plans," "estimates," "anticipates," and other expressions that are predictions of or indicate future events and trends and that do not relate to historical matters. Such statements reflect the current views of the Company and its management with respect to future events and are subject to certain risks, uncertainties, and assumptions. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, the Company's actual results, performance, or achievements could differ materially from the results expressed in, or implied by, these forward-looking statements. This presentation has been prepared by the Company based on information it has obtained from sources it believes to be reliable. Summaries of documents contained in this presentation may not be complete. The Company does not represent that the information herein is complete. The information in this presentation is current only as of July 2021, and the Company's business or financial condition and other information in this presentation may change after that date. The Company undertakes no obligation to update any forward-looking statements in order to reflect any event or circumstance occurring after the date of this presentation or currently unknown facts or conditions.

This presentation contains projected financial information with respect to the Company. Such projected financial information constitutes forward-looking information and is for illustrative purposes only and should not be relied upon as necessarily being indicative of future results. The assumptions and estimates underlying such projected financial information are inherently uncertain and are subject to a wide variety of significant business, economic, competitive and other risks and uncertainties that could cause actual results to differ materially from those contained in the prospective financial information. Actual results may differ materially from the results contemplated by the projected financial information contained in this presentation, and the inclusion of such information in this presentation should not be regarded as a representation by any person that the results reflected in such projections will be achieved.

We have filed a registration statement (including a prospectus) with the SEC for the offering to which this communication relates. Before you invest, you should read the prospectus in the registration statement and other documents we have filed with the SEC for more complete information about us and this offering. You may get these documents for free by visiting EDGAR on the SEC website at <http://www.sec.gov>. Alternatively, any underwriter or any dealer participating in the offering will arrange to send you the prospectus if you request it by contacting EF Hutton, division of Benchmark Investments, LLC, at 590 Madison Avenue, 39th Floor, New York, NY 10022, Attention: Syndicate Department, or via email at syndicate@efhuttongroup.com or telephone at (212) 404-7002.

Offering Summary

Issuer:	HCW Biologics Inc.
Exchange / Ticker:	NASDAQ Global Market / HCWB
Offering Type:	Underwritten Initial Public Offering
Securities Issued:	Common Stock
Gross Offering Proceeds:	~\$50,000,000
Over-Allotment:	15%
Estimated Offering Price Range:	\$8.00 to \$10.00 per share of common stock
Pre-Money FD Shares Outstanding:	28,650,520 common shares
Anticipated Use of Proceeds:	Advance the development of HCW9218 and HCW9302; continue development of other discovery programs for cancer and other age-related diseases, including preclinical studies; build our cGMP manufacturing pilot plant and optimize manufacturing capabilities; general and administrative activities, including accounting, financial reporting, and legal; salaries and benefits for all employees; and general corporate purposes. *
Book-Running Manager:	EF Hutton, division of Benchmark Investments, LLC
Expected Close:	July 2021

* The allocation of proceeds of the offering as set forth below represents our estimates based upon our current plans and assumptions regarding industry and general economic conditions, our future revenues and expenditures. The amounts and timing of our actual expenditures will depend on numerous factors, including market conditions, cash generated by our operations, business developments and related rate of growth. We may find it necessary or advisable to use portions of the proceeds from this offering for other purposes.



Novel Immunotherapeutics for Cancer and Other Aging-Associated Diseases

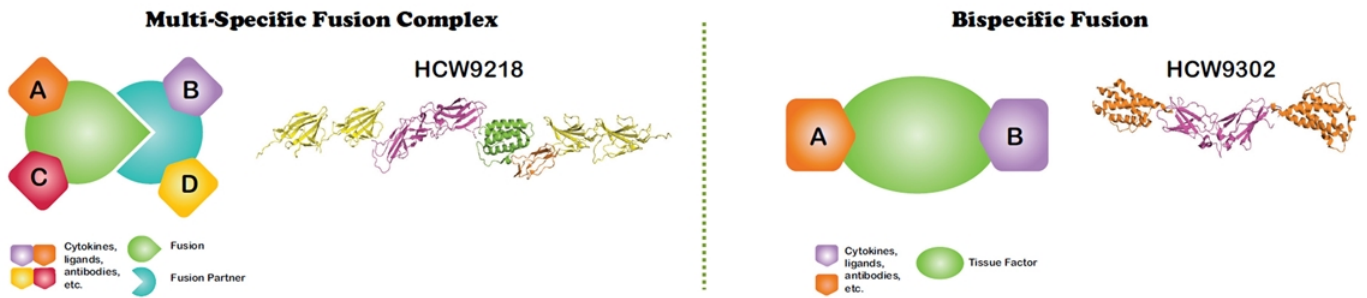
- Immunotherapeutics company in the emerging field of inflammaging
- Novel approach for treating age-related diseases
- Our gateway indication is oncology: AML, pancreatic, and solid tumors
- Many recent biotech IPOs have some similarities,
but none with immunotherapeutic that has multiple mechanisms of action



HCW Product Pipeline

Program	Product	Indication	Discovery	IND-Enabling	Phase 1	Phase 2	Phase 3
Oncology	HCW9218	Pancreatic Cancer					
		Other Solid Tumors					
Inflammaging	HCW9302	Pulmonary Fibrosis					
		Alopecia Areata					

TOBI™ Platform Technology “Tissue FactOrBased FusIon”

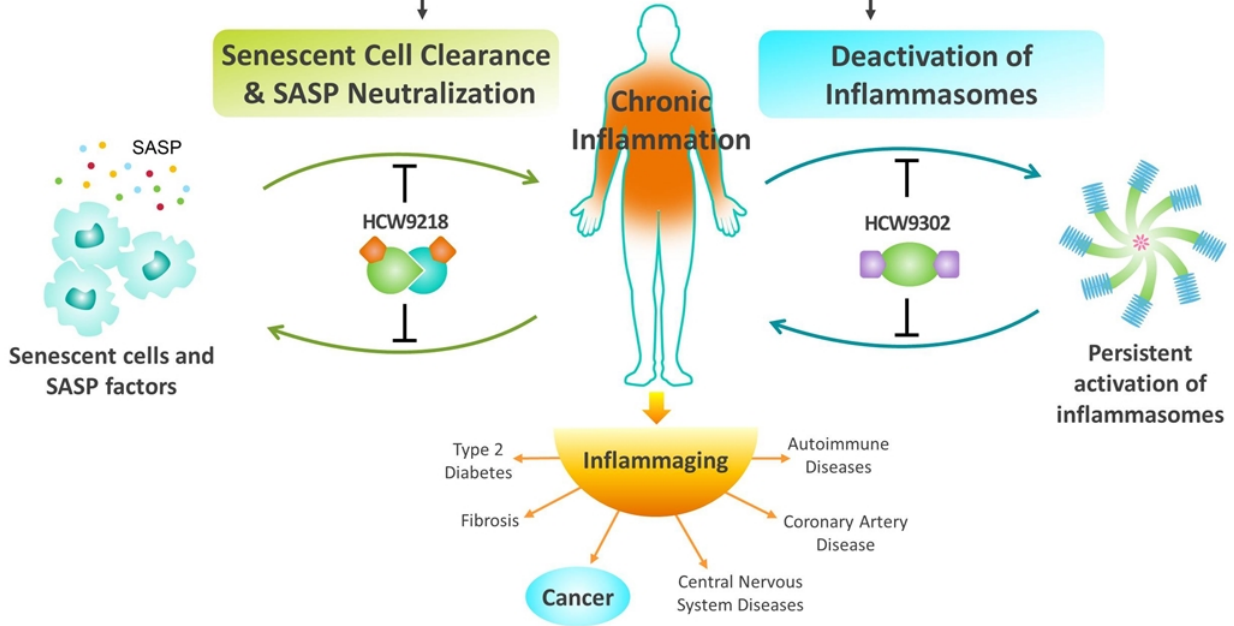


- Internally-developed, versatile scaffold can be utilized to generate designer, novel multi-functional fusion molecules.
- Scalable and reproducible for large-scale cGMP manufacturing. Drug product available to support clinical trials.
- Multiple protein targets (e.g., cytokines, sFvs, ligands, etc.) can be packaged as a targeted/nontargeted single fusion molecule to engage immunostimulatory functions and address many signaling pathways simultaneously.
- Fusion protein complexes have *ex vivo* and *in vivo* applications for stimulating NK and T cells for cancer cell and senescent cell killing and anti-immunosuppression.
- Platform described in: Becker-Hapak MK, et al. Novel Fusion Protein Complex Combines IL-12, IL-15, and IL-18 Signaling to Induce Memory-like NK Cells for Cancer Immunotherapy. *Cancer Immunol. Research* (2021) (In Press)



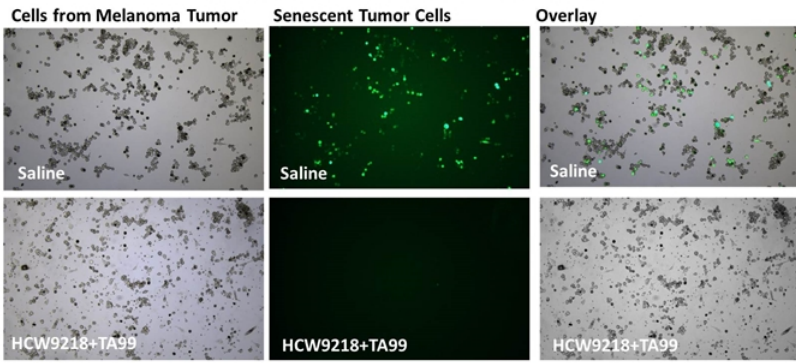
HCW Biologics' Immunotherapeutic Approach

Two Primary Pathways

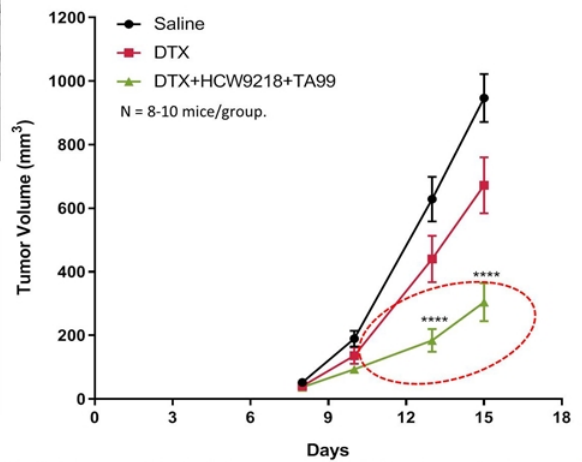
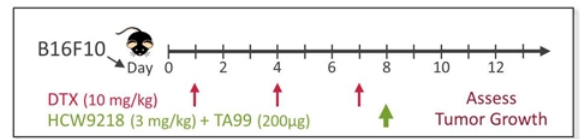


Potential* for HCW9218 + Chemotherapy as a Treatment for Cancer **

Therapy-Induced Senescence in Melanoma



Tumor Volume Reduction in Melanoma

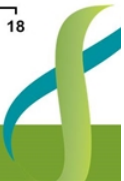


Animal Data Demonstrates Potential of HCW9218 as Adjunct to Chemotherapy:

- Stimulates anti-tumor effector immune cell responses to eliminate therapy-induced senescent cells and reduce SASP factors in tumors and normal tissues.
- Blocks TGF- β immunosuppressive activity in the tumor microenvironment.

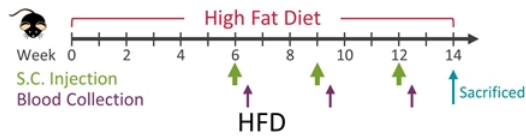
* Pending submission and FDA acceptance of the IND to proceed and successful completion of all other drug development phases, none of which can be assured.

** Updates prior statements in free writing prospectus dated July 7, 2021, as filed with the Securities and Exchange Commission on such date.



Potential* for HCW9302 as a Treatment for Atherosclerosis **

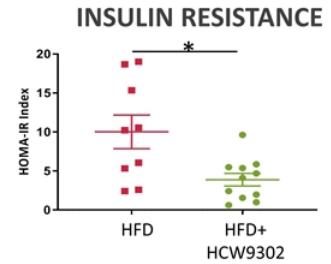
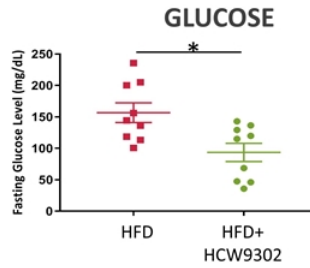
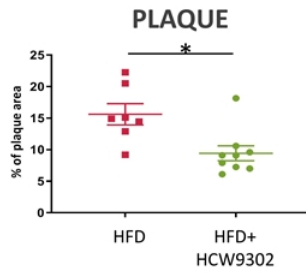
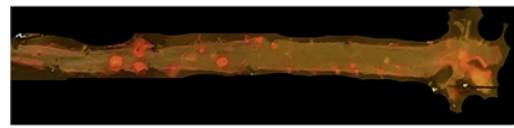
Atherosclerotic Model: ApoE^{-/-} and High Fat Diet.



HCW9302 reduced atherosclerotic plaques, fasting glucose, insulin resistance induced by high-fat diet in animal studies.



HFD + HCW9302



* P<0.05

* Pending submission and FDA acceptance of the IND to proceed and successful completion of all other drug development phases, none of which can be assured.
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Experienced Team with Success in Drug Discovery and Development



Hing C. Wong, PhD – Founder and CEO

- Former founder and CEO of Altor Bioscience, renamed ImmunityBio
- At Altor, developed ALT-803, an IL-15 superagonist complex (now named ANKTIVA)
- ANKTIVA received FDA Fast Track approval (2017) and Breakthrough Therapy Designation (2019)
- In 2017, led the merger of Altor with ImmunityBio at valuation over \$1 billion in cash and stock -- ImmunityBio merged with NantKwest in 2021 in a deal valued at \$13 billion on closing date
- Postdoc University of Washington – Seattle
- PhD University of Massachusetts – Amherst



Peter Rhode, PhD – CSO & VP of Clinical Operations

- Former SVP Research at Altor Bioscience
- Expertise in drug discovery and clinical development in recombinant protein technologies and immunotherapeutic approaches
- Post doc at California Institute of Technology
- PhD University of Wisconsin, Madison, Biochemistry



Philip M. Arlen, MD – Medical Director and Clinical Advisor

- Current Institutional Review Board Co-Chair, NIH
- Former Institutional Review Board Chair, National Cancer Institute
- Former Special Volunteer-Senior Clinical Staff, Medical Oncology Branch, Center for Cancer Research, NCI
- MD Georgia, School of Medicine, Augusta, Georgia



Bai Liu, MD, PhD – Principal Scientist

- Former Principal Scientist at Altor Bioscience
- Expertise in development of novel IL-15 based molecules and complexes
- PhD Beijing University - China, Immunology
- MD Xuzhou Medical University – China



Jin-an Jiao, PhD – VP of Development

- Former VP of Development at Altor Bioscience
- Expertise in process and product development for protein-based therapeutics, including CMC compliance and cGMP manufacturing
- Post doc University of California – Berkeley, Biochemistry
- PhD University of Nebraska-Lincoln, Biochemistry



Nicole Valdivieso, Esq – Director, Legal Affairs

- Was in-house counsel and attorney at law firms concentrating in all aspects of intellectual property including licensing/agreements, patents, trademarks and litigation
- Registered to practice before the U.S. Patent and Trademark Office
- Board Certified by the Florida Bar in Intellectual Property Law



Lee Flowers – SVP, Bus Dev








- Was Executive VP of Dade International, a spinoff of Baxter International
- As VP Venture Development of Baxter Diagnostics, led the spin off of this division to Bain Capital and Goldman Sachs
- BS University of Kentucky, Biology



Rebecca Byam, MBA, CPA – Chief Financial Officer

- Former Director in PwC Deals practice
- Previous experience as CFO in two start ups
- Investment professional at Apax Partners with focus on biotech
- MBA NYU Stern School of Business, Finance
- Active CPA license in New York and Florida

Recent IPOs

Company	Stage	Gateway Indications	Expanded Indications	Approach	Area
	Clinical Stage	Oncology	Fibrotic Diseases Diabetes Type 2 Autoimmune	TGF- β SASP Neutralization Inflammasome Deactivation	Immunotherapeutic
	×	✓	✓	✓	✓
	✓	×	✓	✓	×
	✓	✓	×	✓	✓
	✓	✓	×	✓	✓
	✓	✓	×	×	✓
	×	✓	×	×	✓
	×	✓	×	×	✓

Thank You!

Rebecca Byam, MBA, CPA
Chief Financial Officer
HCW Biologics Inc.
(917) 885-1264
rebeccabyam@hcwbiologics.com

Bryan Kobel
Managing Director
EF Hutton, division of Benchmark Investments, LLC
(646) 286-1962
bkobel@efhuttongroup.com