Transformative Fusion Immunotherapeutics

Revolutionary Treatments for Autoimmune Disease, Cancers, and Senescence-Associated Dysplasia

NASDAQ: HCWB

MARCH 2026

Forward Looking Statements

Certain information about HCW Biologics Inc. (the “Company”) contained in this presentation and statements made orally during this presentation include forward-looking statements that involve substantial risks and uncertainties. All statements included in this presentation, other than statements of historical facts, are forward-looking statements.

Forward-looking statements contained in this presentation may be identified by the use of words such as “anticipate,” “expect,” “believe,” “will,” “may,” “should,” “estimate,” “project,” “outlook,” “forecast” or other similar words, statements regarding the potential for TOBI and TRBC molecules to redefine or fundamentally change the approach for treating aging conditions and age-related diseases, or constitute a new class of immunotherapeutics; that trials may not have satisfactory outcomes; that preclinical studies of product candidates may not be predictive of the results of future preclinical studies or trials; the ability to timely start the clinical trial; the ability of TOBI and TRBC molecules as multifunctional immune cell stimulators, multi-specific target fusions, and enhanced immune engagers; that the Company may have difficulty obtaining a new manufacturing agreement; that the Company’s third party manufacturers or suppliers may encounter difficulties in production of product candidates for clinical trials; the timing and completion of the Company’s new headquarters and manufacturing facility; the timing and ability of the Company to raise additional capital; the risk that the Company is unable to file INDs to commence additional trials; the risk the Company is unable to obtain access to checkpoint inhibitors or other standard-of-care cancer treatments to do a combination trial; timing and ability to identify and discover product candidates; the potential advantages of the Company’s current and future product candidates; the Company’s anti-inflammaging clinical development strategy and the Company’s intellectual property strategy; successfully closing financings including the bridge financing, license(s) of non-core assets and equity offerings, competition, and other risks described in the sections titled “Risk Factors” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in the Company’s Annual Report on Form 10-K filed with the United States Securities and Exchange Commission (the “SEC”) on March 28, 2025, the latest Quarterly Report on Form 10-Q filed with the SEC on November 14, 2025, and in other filings filed from time to time with the SEC. The forward-looking statements in this presentation represent the Company's view as of the date of this presentation and the Company does not assume any obligation to update any forward-looking statements, except as required by law.

About HCW Biologics Inc.

Our Company	A US-based commercial- and clinical-stage biopharmaceutical company developing transformative fusion immunotherapeutics to support and treat diseases promoted by chronic inflammation.
Our Focus	Our focus is development of fusion immunotherapeutics for the treatment of autoimmune disorders and other proinflammatory diseases, cancer and senescence-associated dysplasia. Our specialty is to develop treatments administered by subcutaneous injection.
Novel Platforms and Compounds	We have internally developed over 50 novel compounds with our proprietary drug discovery and development platforms.
Two-Prong Drug Development Strategy	We have selected the strongest candidates for clinical development, which we may develop internally or in partnership with larger pharmaceutical companies. We continually assess our clinical development programs to determine the optimal path for development and commercialization.
New Class of Drugs	We believe that our drugs have the potential to fundamentally change the treatment of cancer and many other diseases and conditions that are promoted by chronic inflammation, to improve quality of life and possibly extend longevity.

Our Founder & CEO: Proven Track Record for Success

Hing C. Wong, Ph.D.

Founded multiple successful start-ups, which delivered superior returns to investors.

- Founded HCW Biologics Inc. in April 2018. Provided all the capital for seed and start-up financing. Participated in several other rounds of financing. Total investment of $20.0 million.
- Previously founded other successful start-ups, including Altor BioScience Corporation (“Altor”), where he served as Founder and Chief Executive Officer from 2002 to 2017. The business was sold in 2017 to ImmunityBio for $1 billion.

One of a very few biotech leaders who successfully developed a first-in-class, blockbuster immunotherapeutic.

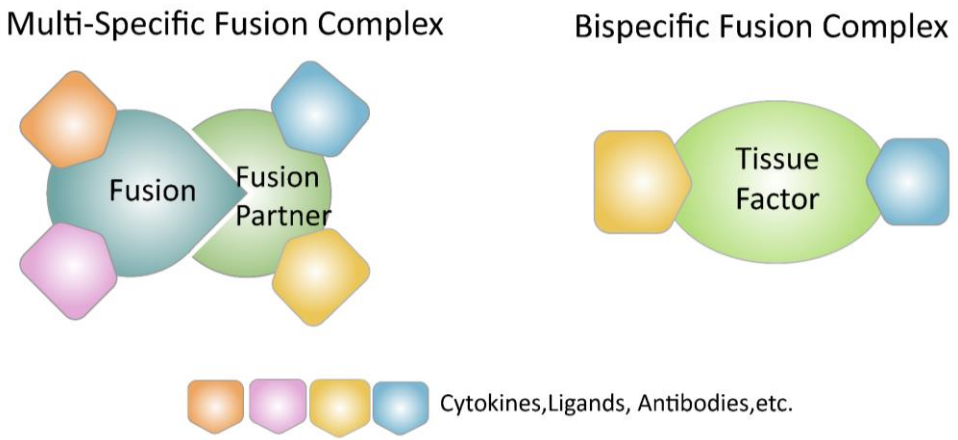
- Leader of scientific team who invented and developed ALT-803, recognized as a Breakthrough Therapy and granted Fast Track for clinical trials by the USFDA.
- In April 2024, ALT-803 was approved by USFDA as ANKTIVA® for its first indication, the treatment of BCG-Unresponsive Non-Muscle Invasive Bladder Cancer.

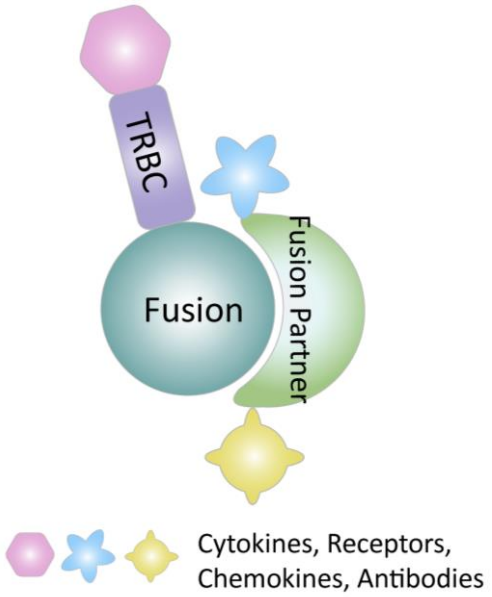
Over 30 years of experience in biotechnology and pharmaceutical industries.

- Principal investigator of NIH grants.
- Inventor of numerous patents.
- Author of over 130 scientific publications in top-tier, peer-review journals.

TWO Proprietary Drug Discovery & Development Platform Technologies for the Creation of Novel Immunotherapeutic Fusions

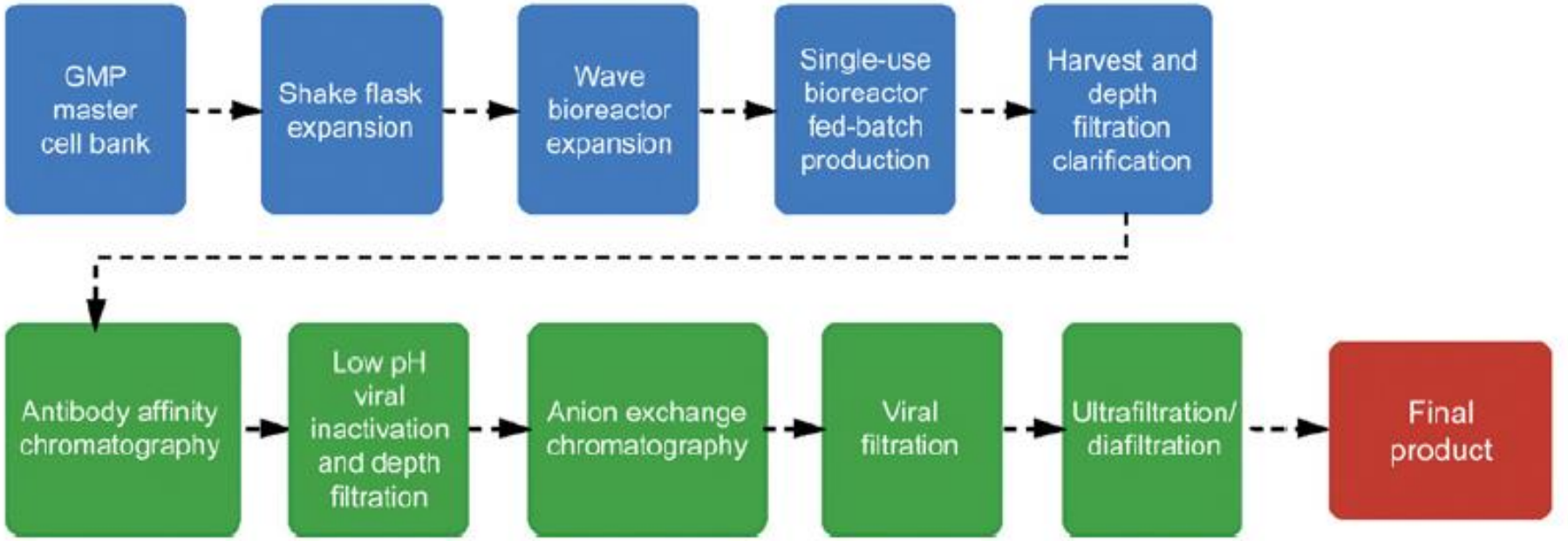
TOBI™ Platform Technology "Tissue FactOr-Based FusIon"	**TRBC Platform Technology** "T-Cell Receptor β-Chain Constant Region"





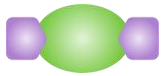
Established cGMP Manufacturing of HCWB's Fusion Molecules

Example:
HCW9302 Manufacturing Process

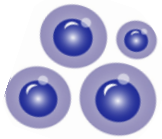


A Novel Immunotherapeutic Approach

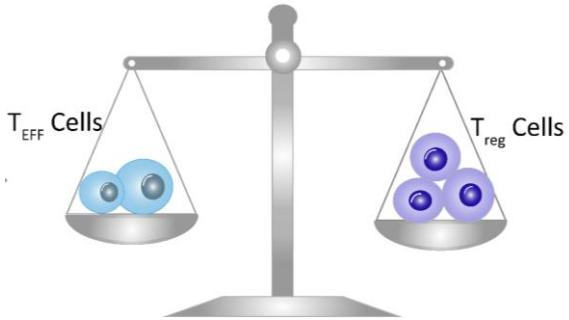
Autoimmune Diseases



HCW9302

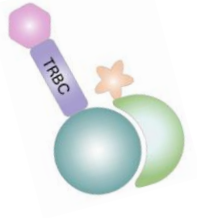
Treg Cells 

Expansion & Functionality ↑



Rebalance between
effector T cells and Treg cells

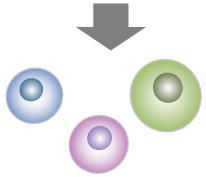
Cancer & Other Senescence-Associated Dysplasia



HCW11-006
(Multi-Functional Immune Cell Stimulator)

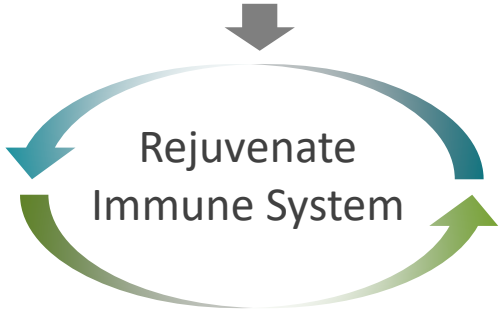
HCW11-040
(2nd-Gen Immune Checkpoint Inhibitor)

HCW11-018b
("BIG BITE", 2nd-Gen T-Cell Engager)



Immune Cells

Activation, Proliferation, Anti-Cancer Activity ↑

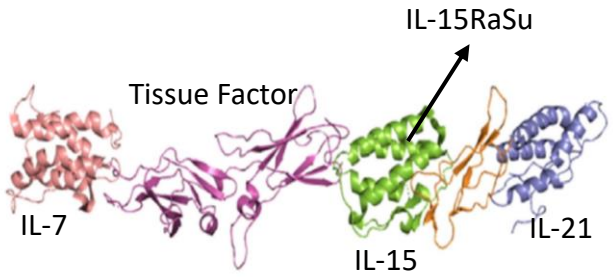


Lead Product Candidates

Commercial-Stage Programs	**HCW9206 – Generates highly functional CAR-T cells and lowers cost of production.** **HCW9201 – Generates highly functional Memory-Like NK cells and lowers cost of production.**
Clinical-Stage Program	**HCW9302 – Designed to expand T_{reg} cells and increase their functionality, developed for treatment of autoimmune diseases and other pro-inflammatory diseases such as atherosclerosis. Initiated Phase 1 clinical trial in November 2025.**
IND-Enabling-Stage Programs	**HCW11-006 – Multi-functional immune cell stimulator being developed by corporate partner.** **HCW11-018b – Second generation T-cell engager designed to address weaknesses of previous generation, including ability to treat hard-to-treat cancers, such as pancreatic cancer.** **HCW11-040 – Second generation immune checkpoint inhibitor made with pembrolizumab (generic Keytruda®). Designed to treat hard-to-treat target indications such as solid tumors and Bronchopulmonary Dysplasia (BPD).**

Commercial-Stage
HCW9206 as Reagent for CAR-T Manufacturing (*Ex Vivo*)

- Designed to increase persistence and functionality of CAR-Ts, enhancing their efficacy for treatment of infectious disease and cancer. Also expected to lower treatment costs by streamlining production.*
- **HCW9206** is **ready for commercialization.**
- In preclinical research, the activity of HCW9206 was **significantly superior compared to standard methods employing anti-CD3/anti-CD28 and IL-2 reagents for CAR lentiviral transduction and subsequent expansion and persistence of human CAR-Ts*.**
- Improves therapeutic efficacy by promoting high-quality CAR-T_{SCM} cells with better persistence and anti-cancer activity. This also helps lower treatment costs by enhancing product performance and streamlining production.*
- HCWB has completed the GMP manufacturing process for HCW9206, and a Drug Master File with FDA.
- Discussions underway with large biopharma and biopharma manufacturers of cell-based products for use of HCW9206 and like molecules as a reagent in the manufacturing process.

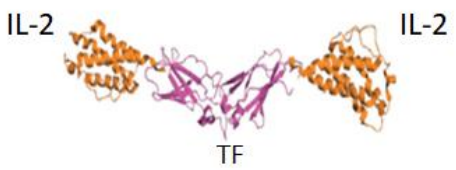


HCW9206

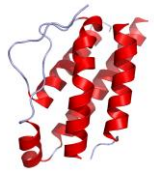
** Erin B. Cole…Hing C. Wong, Harris Golstein, et al., IL-7/IL-15/IL-21 cytokine-fusion scaffold generates highly functional CAR T cells enriched in long-lived T memory stem cells, Science Advances, Vol. 12, No.11, 13 Mar 2026*

Clinical-Stage

HCW9302: Best-in-Class IL-2-Based Immunotherapeutic for Regulatory-T-Cell Expansion for Autoimmune Diseases



HCW9302



rhIL-2

- **HCW9302** is **well tolerated** and can be **administered subcutaneously** at a dosing range that expands and activates T_{reg} cells but not $CD4^+$ effector T cells.
- **HCW9302** exhibits a **longer serum half-life** enables infrequent dosing regimen (monthly) at low dosages with an approximately 1,000-fold higher affinity for the IL2Rα than rhIL-2.
- **GMP drug** product is **available** for trials.
- Broad intellectual property protection.
- **First patient was dosed in November 2025** in a multi-center Phase 1 clinical study to evaluate HCW9302 in patients with alopecia areata (NCT07049328).
- **Preliminary safety and biomarkers** (i.e. Treg-cell expansion and increased functionality) **readout expected in 1H 2026.**

Clinical Development Strategy

HCW9302

Activates and Expands T_{reg} Cells

Exceptional Potency

Longer Half Life

Well-Tolerated

Primary Treatment indications

Alopecia Areata

Organ Transplant

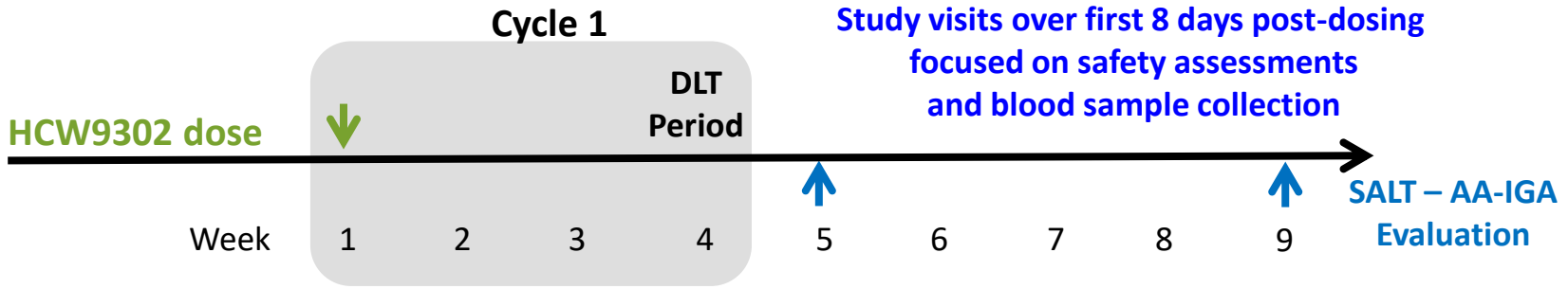
Vitiligo

Expansion to Additional Indications:
Atopic Dermatitis, Ulcerative Colitis, and Other Autoimmune Conditions

HCWALO101: Phase 1 Study of HCW9302, an IL-2 Fusion Protein, for Alopecia Areata

Phase 1 Dose Escalation to evaluate the safety profile and determine the Maximum Tolerated Dose (MTD) and Recommended Phase 2 Dose (RP2D) of HCW9302 in subjects with alopecia areata (AA) (ClinicalTrials.gov ID: NCT07049328)

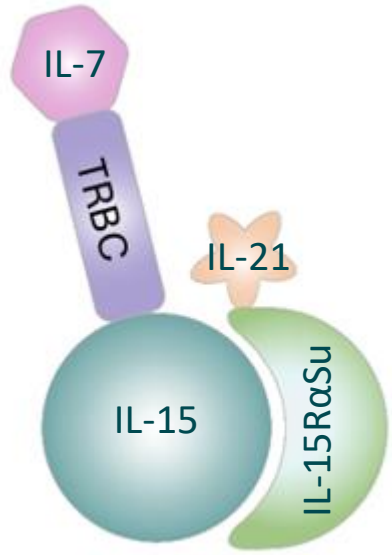
- Subjects of 18 years of age and above with **clinical diagnosis of AA** (ophiasis, totalis or universalis forms) will be considered for inclusion.
- Exclusions also include pregnant and breast-feeding women; positive status for tuberculosis, HIV, HCV and HBV; cardiac, kidney or liver insufficiency; diabetes mellitus; and any active infection.
- Dose escalation – 5 dose levels: 1.0 – 24 µg/kg, 3-6 subjects per cohort, up to 27 subjects.
- Review of protocol defined dose limiting toxicities, dose reduction/escalation, cohort expansion and MTD will be conducted by HCWB's Data Safety Monitoring Board (DSMB) with Investigators' participation.
- Single subcutaneous dose (Phase 1), multi-dose Phase 2 study to follow.
- Correlative studies for pharmacokinetic (PK) profiles and immunogenicity of HCW9302; serum cytokine, chemokine, and inflammatory marker levels; and **blood immune cell counts and phenotypes**.
- The current PIs are Dr. Benjamin Kaffenberger (The Ohio State University Wexner Medical Center) and Dr. Thomas Beachkofsky (James A. Haley Veterans' Hospital, Tampa, FL).



IND-ENABLING STAGE IMMUNE CELL STIMULATOR

HCW11-006: Activation and Expansion of Immune Cells

- A multi-cytokine fusion for immune cell activation and expansion.
- HCWB has licensed HCW11-006 to Trimmune Biotech for *in vivo* applications.
- Upfront license fee with value of $7.0 million in cash and payment-in-kind of a minority interest in Trimmune and milestone payments.
- Licensee expects to initiate the Phase 1 clinical study in Q2 2027 for an undisclosed indication for a large patient population.
- HCWB has free-opt-in right which may be exercised upon completion of the Phase 1 trial in China. Opt-in Territory is for the American Markets.

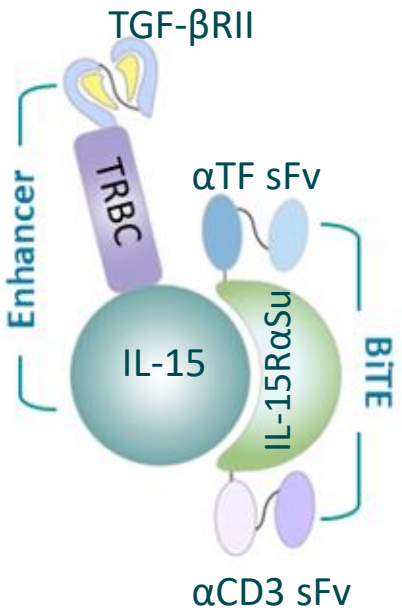


HCW11-006

IND-ENABLING STAGE T-CELL ENGAGER

HCW11-018b: HCWB's Lead Tetravalent "BIG-BiTE" Program

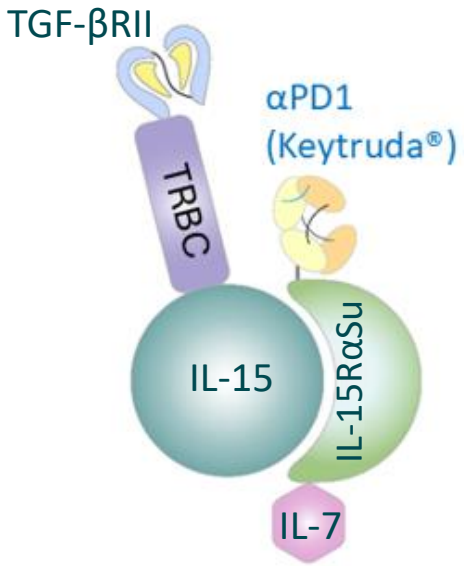
- HCW11-018b was selected as lead compound from those created for the second-generation. The Big BiTE T-Cell Engager Program was created with the TRBC Platform.
- Designed to address key challenges for first generation T-Cell Engagers: manufacturability, preclinical safety profile, and ability to treat solid tumors.
- A novel **tetravalent** T-Cell Engager consisting of BiTE (common for all T-Cell Engagers) and an Enhancer (which makes the HCWB T-Cell Engager the "BIG BiTE").
- In preclinical studies, it induces robust, sustained, antigen-specific tumor killing, enhances $CD8^+$ T-cell activation, survival, and effector function and promotes tumor infiltration. Combines a TF-targeting BiTE with IL-15 immune stimulation and a TGFβ trap to overcome immunosuppression and poor T-cell infiltration in solid tumors.
- IND-enabling studies expected to be completed in Q1 2027.



HCW11-018b

IND-ENABLING STAGE IMMUNE CHECKPOINT INHIBITOR

HCW11-040: Second-Generation Immune Checkpoint Inhibitor ("ICI")



HCW11-040

- HCW11-040 is the lead candidate of the family of compounds created as a second-generation immune checkpoint inhibitor using the TRBC platform.
- Unique combination of cytokines in multi-functional fusion molecule with generic form of Keytruda®.
- Exhibits ability to expand Tpex cells without cytokine storm in preclinical studies.
- HCW11-040 exhibits superior immune-cell activation, expansion, and cytotoxicity against cancer cells and tumors over pembrolizumab (Keytruda®) in in-vitro and in-vivo studies.
- Target indications include senescence-associated disease, i.e. Bronchopulmonary Dysplasia (BPD) and solid tumors.
- IND-enabling studies expected to be completed in Q3 2027.

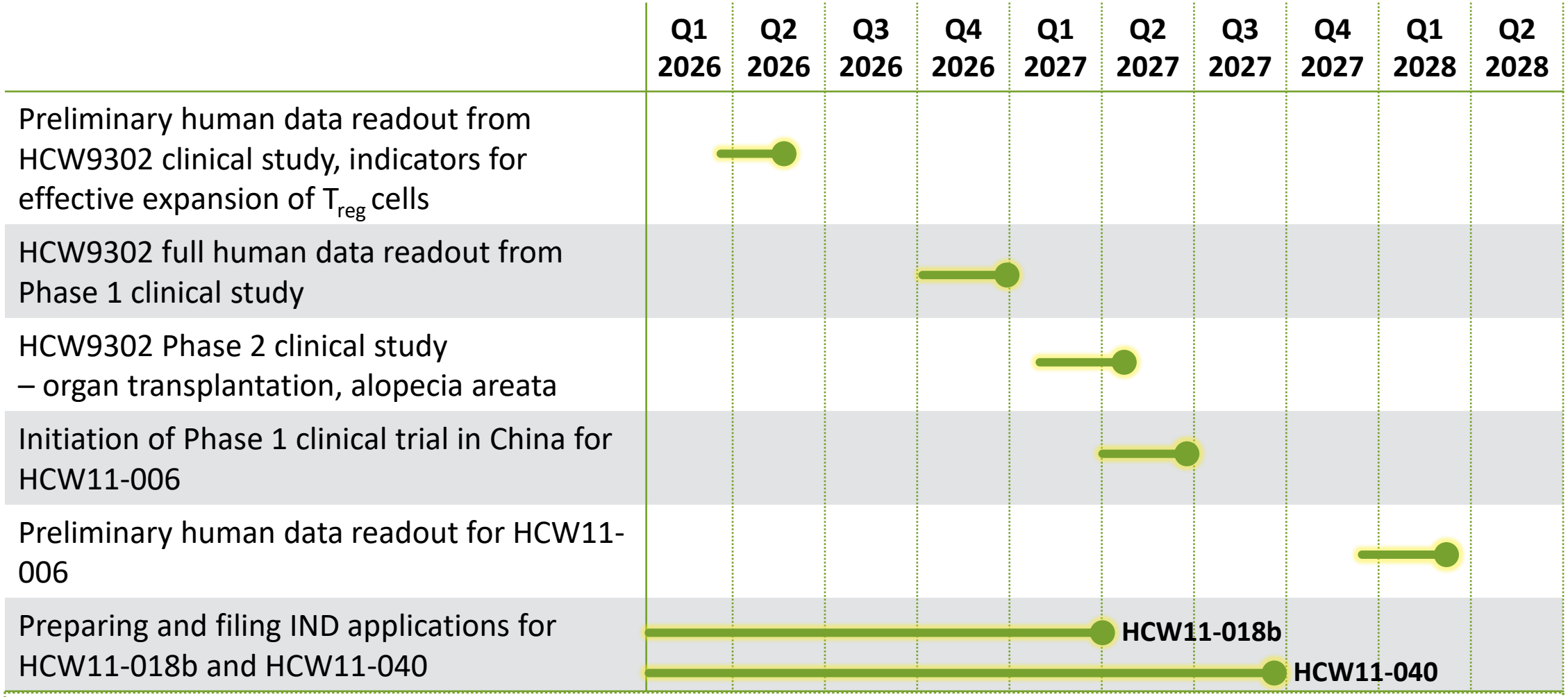
Product Pipeline

Molecule Name	Mechanism	Indications	Preclinical	IND-Enabling	Phase 1	Phase 2	Phase 3	Commercial Stage
HCW9201	Memory-like NK Cell Expansion &Activation	Manufacturing of CIML-NK Products						✓
HCW9206	CAR-T (CAR-Tscm) Expansion	Manufacturing CAR-T Cells without αCD3/αCD28 and IL-2 products						✓
HCW9302	T_{reg} Expansion	Autoimmune Diseases						
		Atopic Dermatitis/ Organ Transplant Rejection						
		Neurodegenerative Diseases						
HCW11-018b	Enhanced T-Cell Engager	Solid Tumors (i.e.Pancreatic/ Ovarian Cancer)						
HCW11-040	Targeted Immune Checkpoint Inhibitors	Cancers/Senescence-Associated Dysplasia						
HCW11-006[a]	Immune-Cell Activation	Not Disclosed						

Note:

a. Beijing Trimmune Biotech Co., Ltd. holds the exclusive worldwide license rights to HCW11-006 for in vivo applications.

Projected Clinical Milestones



Burn rate has averaged $800,000 - $1,000,000 per month historically, including clinical trial expenses.

Financial Strategy

Private Placements	The Company is focused on attracting fundamental investors who would be strategic investors focused on the long-term scientific and medical potential of biotechnology, especial our novel immunotherapeutics.
Direct Registered and Follow-on Public Offerings	The Company has utilized S-1 and S-3 offering to provide the capital needed to fund clinical development programs. In time, we will rely less on these types of financing.
Opportunistic ATM, ELOC	Our trading volume tends to react positively to announcements of clinical developments and achievements of business development milestones. In 2025, we raised over $2.6 million through an ELOC.
Business Development Transactions	We expect business development transactions will play a major role in providing capital for development and commercialization. We continually assess our programs to identify those compounds which are strong candidates for a corporate partnership or out-licensing as the optimal path to advance development or commercialization.

Management Team

Peter Rhode, PhD

Chief Science Officer, VP Clinical Operations

- Joined HCWB in 2019 and previously served as Senior Vice President of Research and Development at Altor.
- Highly involved in discovery, research, manufacturing, and clinical development of ALT-803, known as ANKTIVA®.
- Ph.D. degree in Biochemistry/Biophysics at the University of Wisconsin, Madison, postdoctoral fellow at the California Institute of Technology.

Jack Egan, PhD

VP, Manufacturing and Development

- Joined HCWB in 2019 and previously served as Director of Upstream Process Development / Assay Development at Altor.
- Integral to preclinical research, analytical and upstream process development and manufacturing for ALT-803, known as ANKTIVA®.
- Ph.D. degree in Molecular and Cell Biology at the University of Vermont, postdoctoral fellow at the University of Vermont, and retired U.S. Army Reserve Colonel.

Lee Flowers

SVP, Business Development

- Joined HCWB in 2019 to lead the Company's business development program.
- After negotiating spin-off of Dade International from Baxter International, served as its EVP.
- Prior to Dade International, held several senior management positions at various Baxter divisions.
- BS degree in biology from University of Kentucky.

Rebecca Byam, MBA, CPA

Chief Financial Officer

- Joined HCWB in 2019, with mandate to complete pre-IPO private financing and IPO.
- Prior to HCWB, Director in Transaction Services at PwC and served as CFO at two other startups.
- Private equity investing at Apax Partners, with biotech focus.
- MBA degree from NYU, BA degree from Kenyon College, CPA New York and Florida.

Nicole Valdivieso, Esq.

VP, Legal Affairs

- Joined HCWB in 2019 and previously was in private practice at leading intellectual property law firm and in-house counsel at two other companies.
- Board Certified by the Florida Bar in Intellectual Property law, registered patent attorney with the U.S. Patent and Trademark Office and admitted to State Bars of Florida and Texas.
- JD degree from University of Miami School of Law and BS degree in biotechnology from Ferris State University.

Thank You!

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