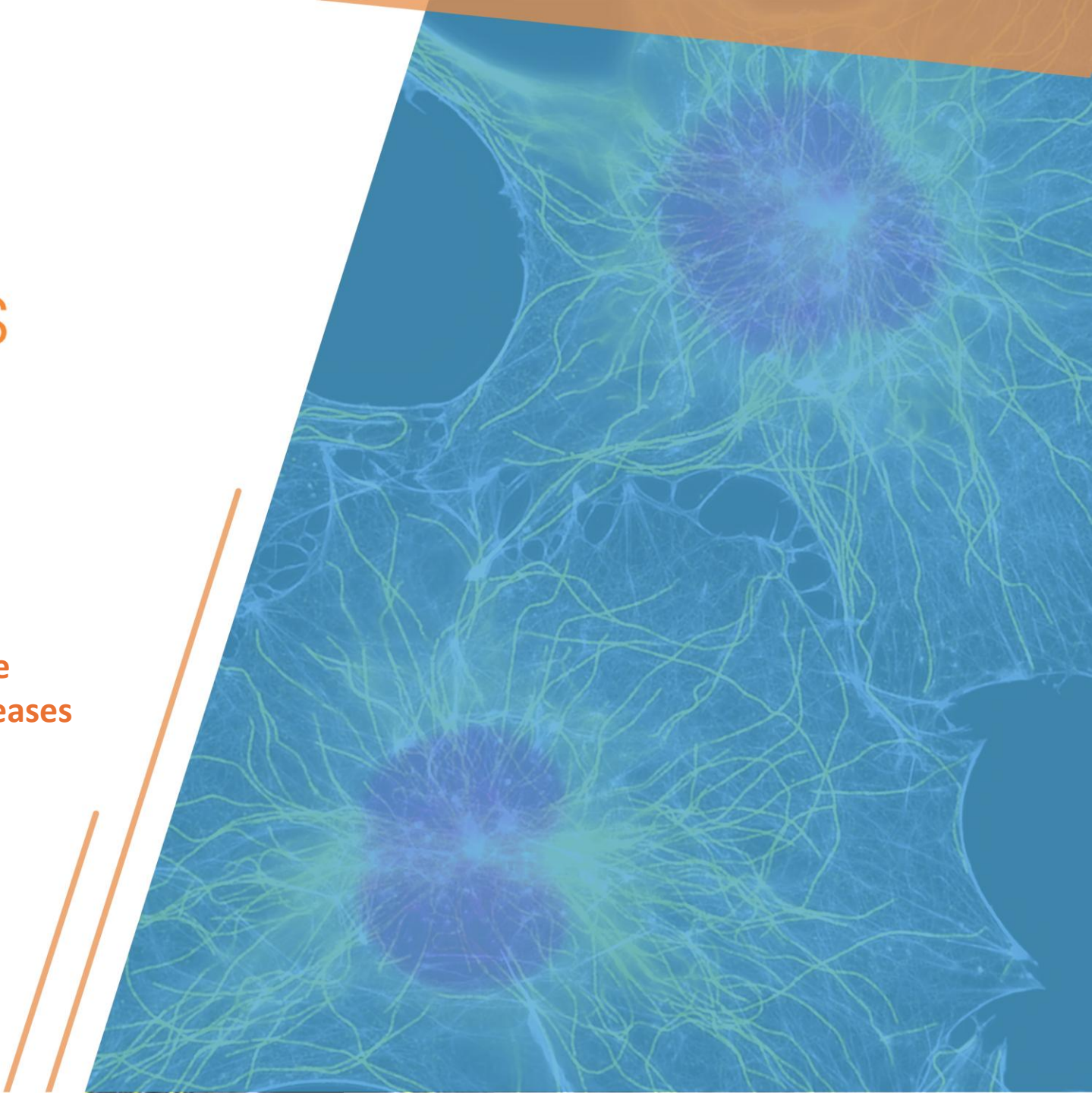




Corporate Presentation

September 2026

**Harnessing the Immune Modulation and Regenerative
Potential of Fibroblasts to Treat and Cure Chronic Diseases**



Forward-Looking Statements

This presentation contains “forward-looking statements” under applicable securities laws. Forward-looking statements include, but are not limited to, information concerning (i) plans for, and the anticipated timing of the initiation of and results from, FibroBiologics’ (“FBLG”) current and future preclinical studies, clinical trials and research and development programs; (ii) potential clinical benefits of fibroblasts and fibroblast-derived materials; (iii) potential indications for FBLG’s programs; (iv) estimates of market size; (v) plans for, and the timing of, regulatory filings, and expectations regarding the timing of regulatory approvals; (vi) FBLG’s projected financial performance; and (vii) future liquidity, working capital, and capital requirements. Forward-looking statements are provided to allow individuals the opportunity to understand management’s beliefs and opinions in respect of the future so that they may use such beliefs and opinions as one factor in evaluating FBLG.

These statements are not guarantees of future performance and undue reliance should not be placed on them. Such forward-looking statements necessarily involve known and unknown risks and uncertainties, which may cause actual performance and financial results in future periods to differ materially from any projections of future performance or results expressed or implied by such forward-looking statements. These risks, uncertainties, assumptions and other important factors include, but are not limited to: (a) FBLG’s ability to continue to meet Nasdaq listing requirements; (b) risks related to FBLG’s liquidity and ability to maintain capital resources sufficient to conduct its business; (c) the unpredictable relationship between R&D and preclinical results and clinical study results; (d) FBLG’s ability to successfully prosecute its patent applications and defend its intellectual property portfolio; (e) FBLG’s ability to manufacture its product candidates; (f) FBLG’s ability to conduct clinical trials; and (g) the risks set forth under the caption “Risk Factors” and elsewhere in FibroBiologics’ annual, quarterly and current reports (i.e., Form 10-K, Form 10-Q and Form 8-K) as filed or furnished with the SEC and any subsequent public filings. Copies are available on the SEC’s website, www.sec.gov.

Although forward-looking statements contained in this presentation are based upon what FBLG’s management believes are reasonable assumptions, there can be no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. FBLG undertakes no obligation to update forward-looking statements if circumstances or management’s estimates or opinions should change except as required by applicable securities laws. The reader is cautioned not to place undue reliance on forward-looking statements.

FibroBiologics Highlights

Untapped, differentiated cell therapy

Fibroblasts are the body's most abundant and architecturally central cell type. Unlike immune cells or stem cells, they have been overlooked as a therapeutic modality, despite their native capacity to remodel tissue, regulate inflammation, and communicate across every organ system.

Clinical Momentum

Currently enrolling and dosing patients in a Phase 1/2 clinical trial in diabetic foot ulcers and submitted an IND for a Phase 1/2 clinical trial in psoriasis all utilizing the Company's fibroblast technology platform.

Patent Fortress

Fibroblast-based platform technology with 270+ issued/pending patents with potential to address multiple therapeutic areas.

Massive Market Potential

Address a \$4 trillion chronic disease market across multiple high-value indications giving FibroBiologics a rare opportunity to build a diversified, durable revenue base from a single biological engine.

Chronic Conditions Deserve More than Maintenance

Despite decades of pharmaceutical innovation, chronic diseases remain uncured.



We believe cures will come from cell therapy, gene therapy, and immunotherapy.

Fibroblasts: The Body's Hidden Healing Machine

As the most prevalent cell type in the human body, they orchestrate wound repair, immune response, and tissue regeneration, yet remain underutilized in medicine.

Wound Healing & Repair

Fibroblasts are the regulators of wound closure and tissue repair across the body.

Immune Modulation

Fibroblasts regulate immune response; calming overactive immune system without dangerous suppression.

Tissue Regeneration

Fibroblasts secrete the proteins and signals that rebuild damaged tissue at a cellular level.

- ✓ Allogeneic — one donor treats many patients
- ✓ Immune privileged — low rejection risk
- ✓ Validated library of commercial-use fibroblasts
- ✓ Low manufacturing cost
- ✓ Scalable spheroid delivery platform
- ✓ Broad chronic disease applicability
- ✓ 30+ years of peer-reviewed science

Our approach uses allogeneic fibroblast-based cell therapy to naturally guide the immune system back to homeostasis, enabling the body's own healing process, with the potential of a durable treatment with significantly reduced side effects

The Allogeneic Fibroblast Platform

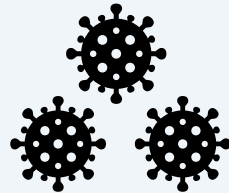
A versatile, scalable cell therapy engine with broad therapeutic reach

Cell Sourcing



Allogeneic fibroblasts are harvested from accessible tissue sources providing an abundant, readily available starting material with minimal invasiveness.

Expansion



Disease indication-specific cell subtypes are expanded at scale with specific therapeutic properties.

Delivery



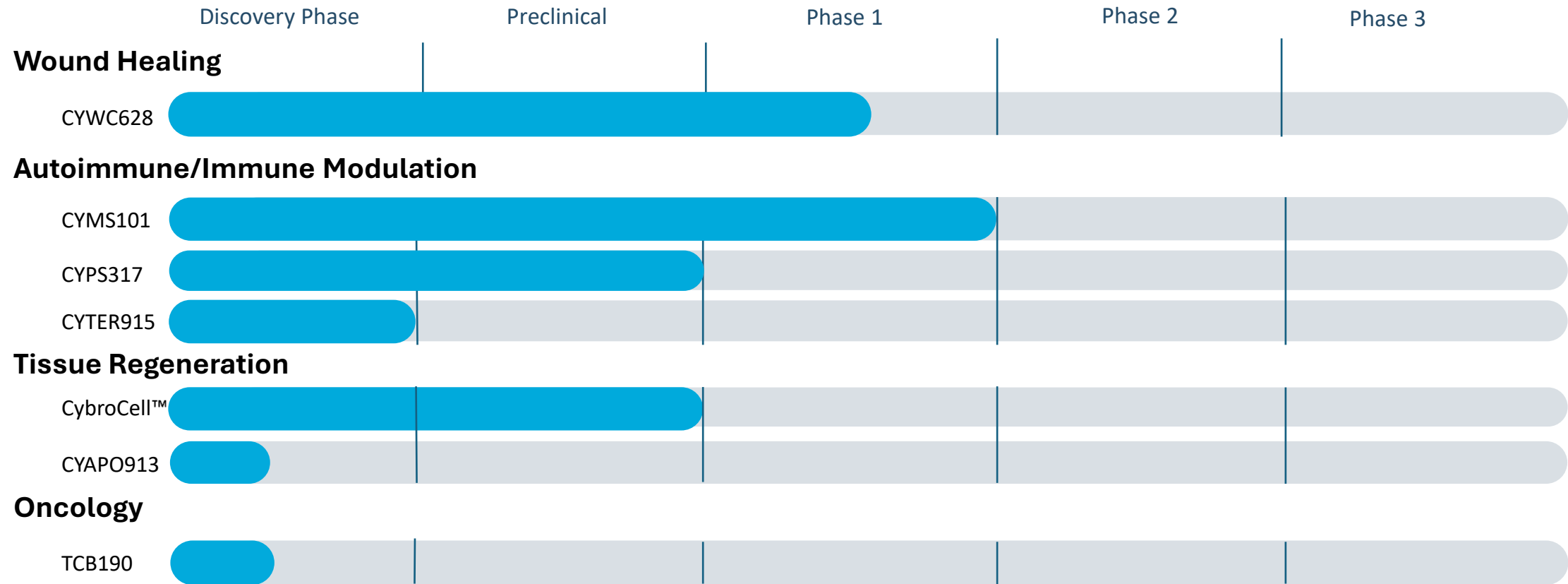
Fibroblasts are delivered to disease sites where they modulate tissue repair and immune response.

Therapeutic Action



Fibroblasts act as living factories: releasing cytokines, growth factors, and extracellular matrix proteins that potentially drive anti-inflammatory and regenerative outcomes.

Product Pipeline



CYWC628	CYMS101	CYPS317	CYTER915	CybroCell™	CYAPO317	TBC190
Diabetic Wound Care	Multiple Sclerosis	Psoriasis	Thymic Involution Reversal	Degenerative Disc Disease	Diabetes	Cancer Immunotherapy
○ Accelerate wound healing ○ Recruit stem cells for tissue remodeling	○ Stimulates Remyelination ○ Stimulates Endogenous Neural Stem Cells	○ Reduction of clinical score ○ Immune modulation to reduce inflammation	○ Restore thymus function ○ Suppress impact of aging on the immune system	○ FDA IND Clearance	○ Insulin producing artificial pancreatic organoid ○ Immune resistance	○ T cell Expansion ○ Stressed Fibroblasts for Dendritic Cell maturation

The Disease Burden of Diabetic Foot Ulcers

33M+

diabetes patients develop a diabetic foot ulcer (DFU) globally

CRITICAL UNMET NEED

- Significant shortage of FDA-approved therapies specifically designed to promote effective DFU healing and reduce recurrence.
- DFUs are the leading cause of non-traumatic lower-limb amputation worldwide.

70%

Recurrence rate within 3 years

60%

Infection rate among DFU patients

50–68%

Increased risk of mortality

40%

Recurrence rate within 1 year

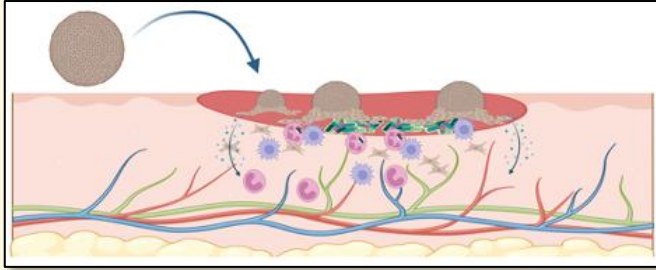
20%

Require lower extremity amputation

10%

Mortality rate within 1 year of first DFU

CYWC628 Product Candidate for Wound Healing



1. Use of **spheroids** instead of single cells, containing 1,000 – 3,000 fibroblasts



6 Hours post administration

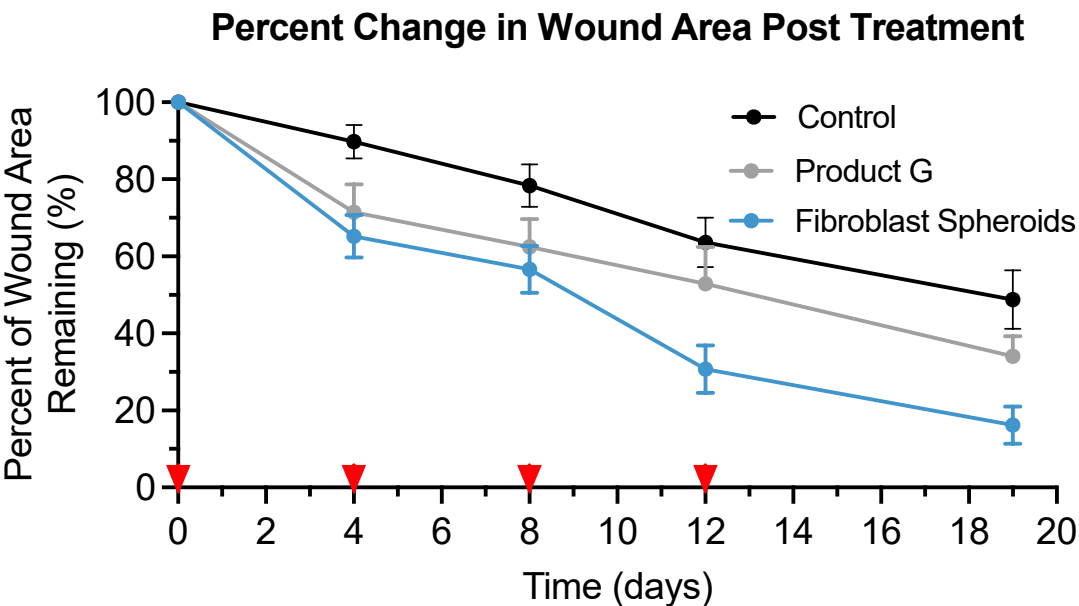
2. Spheroid attachment and migration on chronic wound surface

3. Release of all necessary **chemokines, cytokines,** and **growth factors** necessary to initiate the wound healing process

CYWC628 Significantly Improved Wound Closure Rate in Animal Models



Multiple Administration Comparison to FDA approved Grafix™ and Control



Multiple administration of Grafix™ and CYWC628

	1 st dose	2 nd dose	3 rd dose	4 th dose
Product G vs. Control	ns	ns	ns	ns
Fibroblast spheroids vs. Control	*	**	**	**
Fibroblast spheroids vs. Product G	ns	ns	*	*

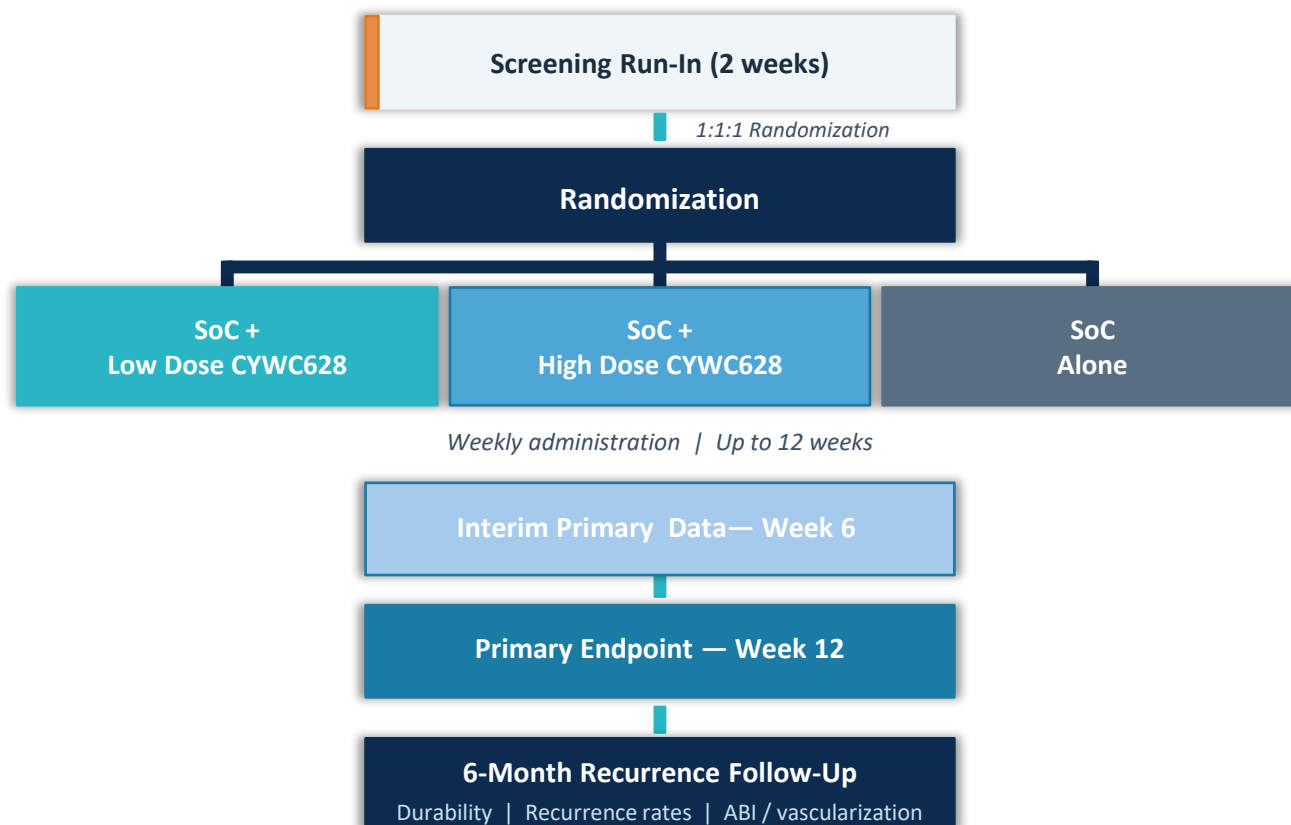
n=10 for each cohort

At day 19: **83.8% average wound closure for fibroblast spheroids** compared with 66.0% for Grafix™ and 51.2% for Control

Note: * indicates level of statistical significance with a p value of ≤ 0.05
** indicates level of statistical significance with a p value of ≤ 0.01

CYWC628 Phase I/II Clinical Trial Ongoing

~120 Patients	3 Arms	12 wks Treatment	6 mo Follow-Up
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Key Design Features

- Randomized controlled design with SoC comparator arm
- Low and high dose – enables dose selection for Phase 3
- Refractory wounds only – meaningful, hard-to-treat population
- Weekly dosing – designed to evaluate healing and durability

Endpoints

PRIMARY

- Complete wound closure at Week 12
- Percent area reduction (PAR)
- Safety and tolerability

KEY SECONDARY

- Time to wound closure
- Recurrence rates through 6 months
- Vascularization / ABI improvement

Psoriasis Unmet Medical Needs



Global prevalence of Psoriasis at 123 million worldwide

- US prevalence at 7.5 million



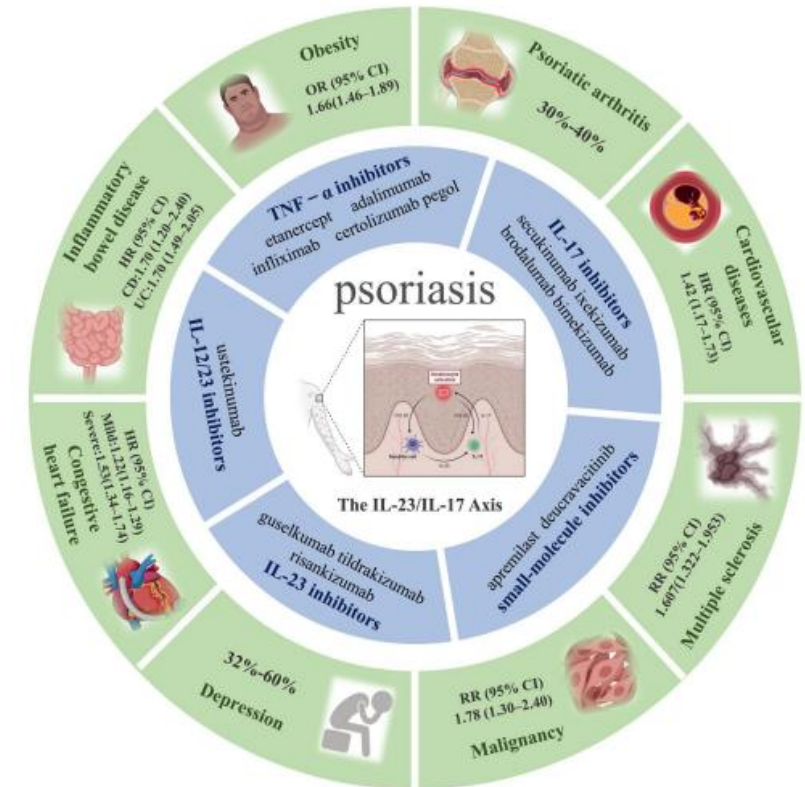
Significant lifestyle and psychological impact on patients

- Mild to severe disease progression impacting patient QoL
- Associated with considerable comorbidities



Lack of disease-modifying treatment for Psoriasis

- Current therapies often lack long-term relief and may result in adverse side effects

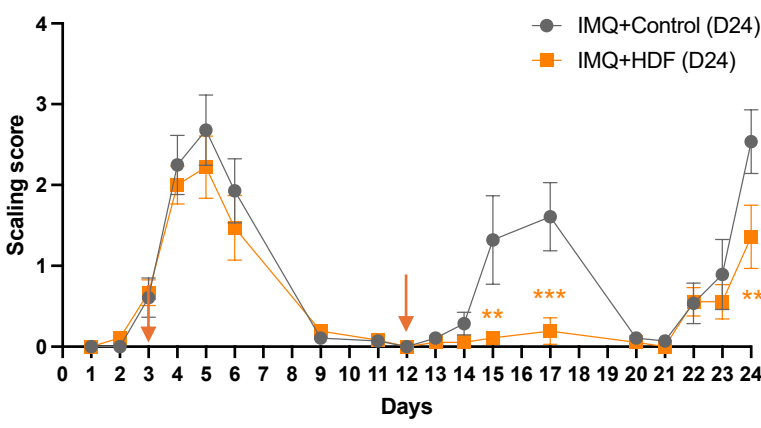
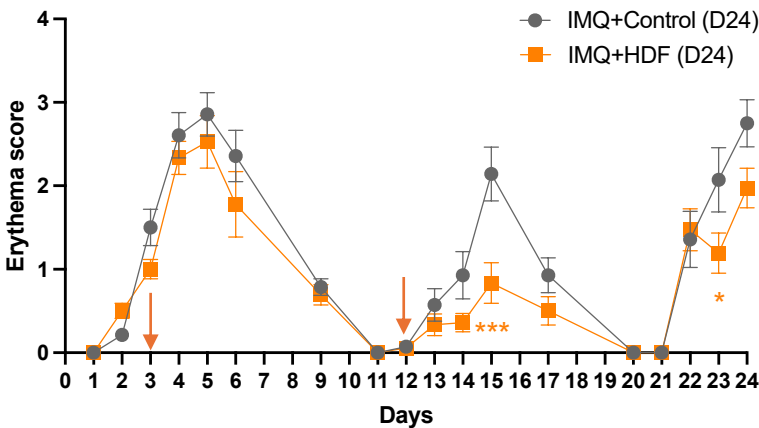
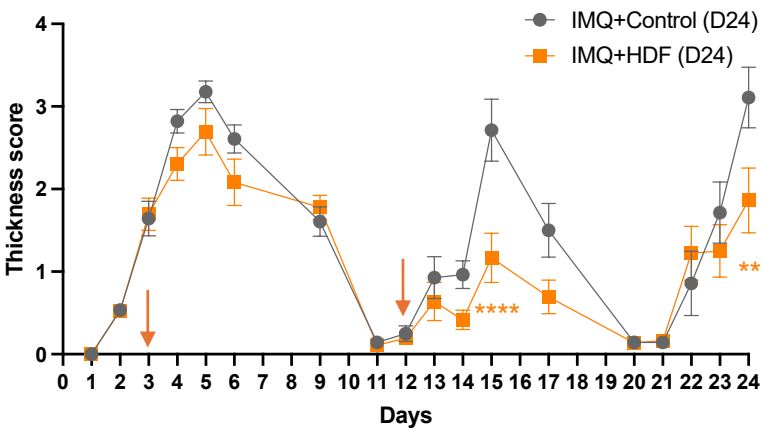


Potential for the use of Allogeneic Human Dermal Fibroblasts (HDFs) and their immune modulation capacity to treat Psoriasis

Significant Improvement in Chronic Relapse Psoriasis Model

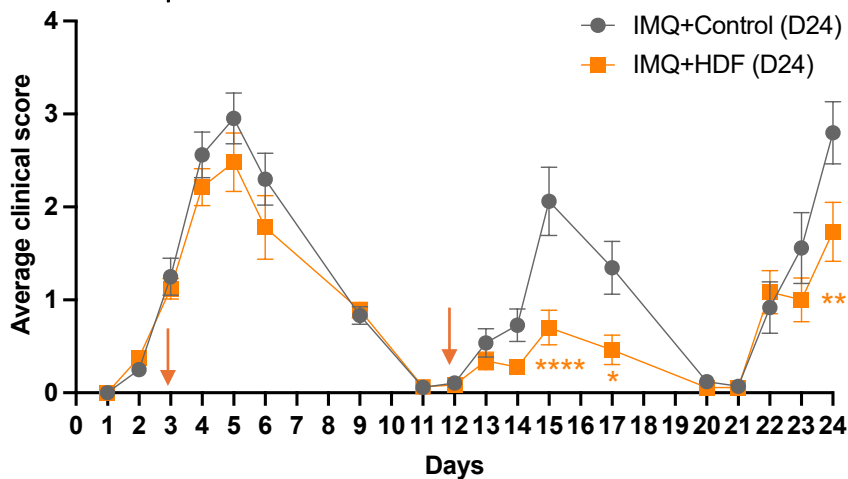


Durability of a single administration of PSY317



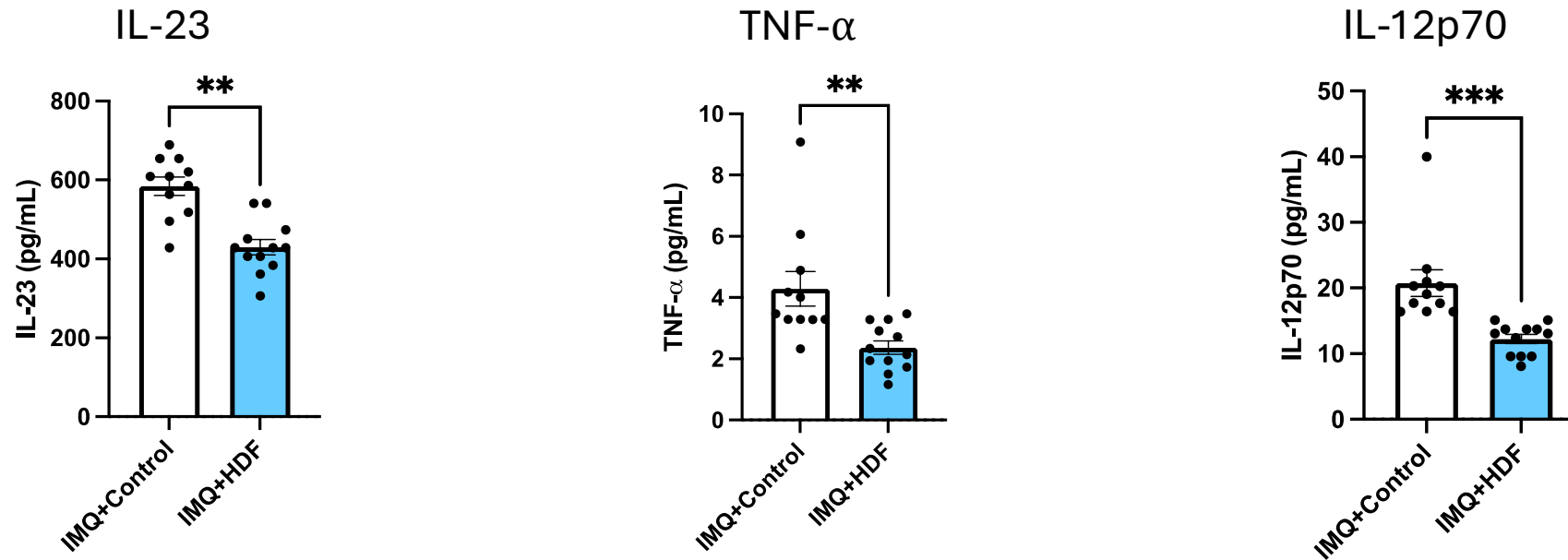
PASI peak levels during induction and relapse of psoriasis.

Cycle	Control	HDF	% decrease
Induction	3.0	2.5	17% (ns)
1 st Relapse	2.1	0.7	67% (****)
2 nd Relapse	2.8	1.7	39% (**)



IMQ + + + + + + + + + + +

Reduction of Pro-inflammatory Cytokines in Psoriasis Skin Lesions



These are the same 3 cytokines targeted by monoclonal antibodies currently approved:

- **IL-23 inhibitors:** **Guselkumab** (Tremfya), **Tildrakizumab** (Ilumya, Ilumetri), **Risankizumab** (Skyrizi)
- **TNF-alpha inhibitors:** **Adalimumab** (Humira, Amgevita, Hulio, Hyrimoz, Idacio, Imraldi), **Etanercept** (Enbrel, Benepali), **Infliximab** (Remicade, Flixabi, Remsima, Zessly, Inflectra), **Certolizumab pegol** (Cimzia)
- **IL-12/IL-23 inhibitors:** **Ustekinumab** (Stelara)

Competitive Landscape Psoriasis

Criteria	FibroBiologics <i>CYPS317</i>	IL-17 Inhibitors <i>e.g., Cosentyx, Bimzelx</i>	IL-23 Inhibitors <i>e.g., Tremfya, Skyrizi</i>	IL-12/23 Inhibitor <i>Stelara (dual IL-12/23)</i>	TNF Inhibitors <i>e.g., Humira, Remicade</i>
Disease-Modifying Potential (Durable remission of psoriasis)					
Cytokine Targeting Breadth (Multi-cytokine modulation vs single target)					
Immune Restoration (Homeostatic reset vs immunosuppression)					
Administration Mode/Frequency (Limited infusions vs chronic injections)					
Scalability & Cost Efficiency (Ease of manufacturing at scale)					

CYPS317 offers a unique combination of durable immune reset, safety, and scalable manufacturing—positioning it as a transformative, platform-level therapy for Psoriasis.

Additional Pipeline & Early-Stage Research Projects



PRECLINICAL

Multiple Sclerosis

Fully characterized HDF subtype with secretion profile essential for remyelination and immune system homeostasis

Potential for the use of HDFs and their superior immune modulation capacity to treat



PRECLINICAL

Degenerative Disc Disease

HDFs reduce inflammation through immune modulation and replace damaged cartilage

High-value orthopedic indication with limited regenerative options



EARLY RESEARCH

Human Longevity

Fibroblast-based artificial thymic organoids (ATOs) used to replace the lost functionality of the thymus, potentially defeating diseases driven by decline of this vital organ

Potentially transformative category at the intersection of cell therapy and aging biology



EARLY RESEARCH

Cancer

Exploratory research into the role of fibroblasts in tumor microenvironment modulation and immune-oncology applications

Broad oncology opportunity; research in earliest stages with significant long-term optionality

Company Leadership



Pete O'Heeron, MSHA
(Founder, Chairman/CEO)



- Leads an operational investment group which identifies early-stage opportunities in the medical field with strong intellectual property positions.
- One of the leading Biotech Inventors of his generation with 350+ patents.
- 25+ years of medical product development experience.
- Completed the sale of NeoSurg Technologies to Cooper Surgical.
- Graduated from Texas State University with a BS in Healthcare Administration and a minor in Business Administration.
- Received an MS in Healthcare Administration from the University of Houston and has completed Executive Management Certification in Mergers and Acquisition from University of Chicago.



Hamid Khoja, Ph.D.
(CSO)



- 20+ years of clinical and product development.
- Research positions held at Chiron, Novartis Vaccines, and Eli Lilly.
- Finalized sequencing of the *S. pneumoniae* genome using sequencing strategies.
- Developed screening method identification of novel G-protein Coupled Seven Transmembrane Receptors.
- Awarded 6+ patents.
- Authored 28+ peer reviewed papers.
- Stanford University, University of Southern California (USC), Boston University.
- USC - BS Molecular Biology.
- Boston University – Ph.D. Molecular Biology.



Jason Davis, CPA
(CFO)



- 20+ years of corporate finance with both publicly traded and PE backed companies.
- Mergers & Acquisitions.
- IPOs and Capital Markets.
- Numerous capital raises using multiple strategies.
- Track record of increasing company market value.
- Extensive SEC experience.
- Big Four Accounting background.
- Experience in complex operational accounting.
- B.B.A from University of Houston.
- Certified Public Accountant.

Advisors



Pete O'Heeron, MSHA (Chairman/CEO)



Richard C. Cilento, Jr., MBA



Victoria Niklas, MD



Kathleen Rubins, Ph.D.



Robert E. Hoffman, CPA



Leigh Steinberg, JD



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