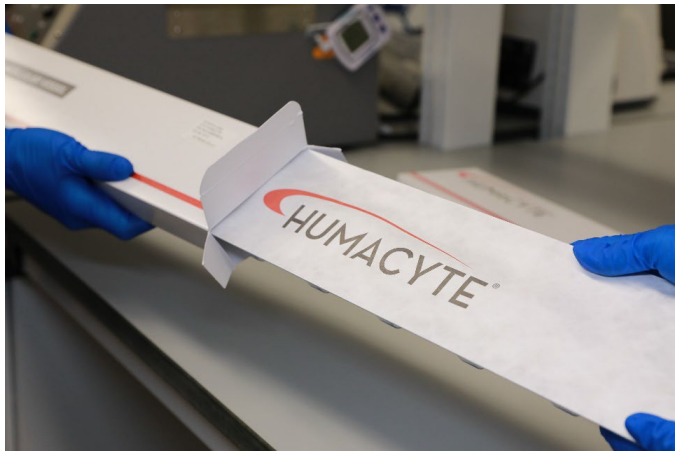
Humacyte®

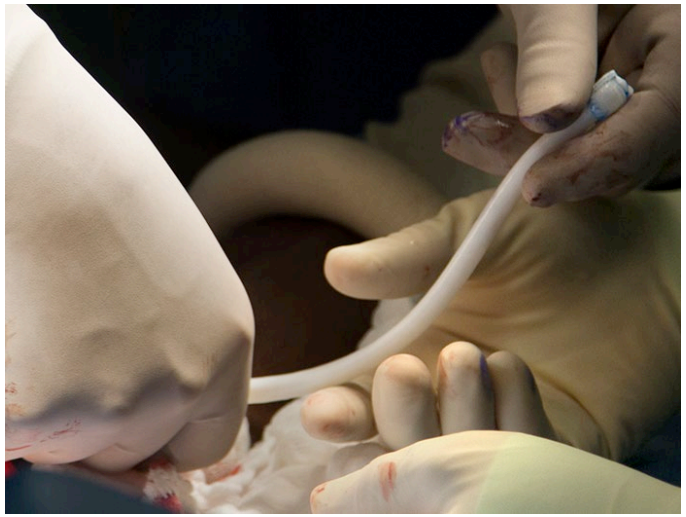
Universally Implantable Regenerative Human Tissue

Disclaimer

These slides and the accompanying oral presentation contain forward-looking statements. All statements, other than statements of historical fact, included in these slides and the accompanying oral presentation are forward-looking statements reflecting management's current beliefs and expectations. In some cases, you can identify forward-looking statements by terminology such as "will," "anticipate," "expect," "believe," "intend" and "should" or the negative of these terms or other comparable terminology. Forward-looking statements in these slides and the accompanying oral presentation include, but are not limited to, statements about our plans and ability to execute product development, process development and preclinical development efforts successfully and on our anticipated timelines; our plans, anticipated timelines and ability to obtain marketing approval from the U.S. Food and Drug Administration ("FDA") and other regulatory authorities, including the European Medicines Agency, for our bioengineered acellular tissue engineered vessels ("ATEVs") and other product candidates, including our Biologics License Application seeking approval of the ATEV in urgent arterial repair following extremity vascular trauma when synthetic graft is not indicated and when autologous vein use is not feasible; our ability to design, initiate and successfully complete clinical trials and other studies for our product candidates and our plans and expectations regarding our ongoing or planned clinical trials, including for our V007 Phase 3 clinical trial; the outcome of our ongoing discussions with the FDA concerning the design of our clinical trials; our anticipated growth rate and market opportunities; the potential liquidity and trading of our securities; our ability to raise additional capital in the future; our ability to use our proprietary scientific technology platform to build a pipeline of additional product candidates; the characteristics and performance of our ATEVs; our plans and ability to commercialize our ATEVs and other product candidates, if approved by regulatory authorities; the expected size of the target populations for our product candidates; the anticipated benefits of our ATEVs relative to existing alternatives; our assessment of the competitive landscape; the degree of market acceptance of ATEVs, if approved, and the availability of third-party coverage and reimbursement; our ability to manufacture ATEVs and other product candidates in sufficient quantities to satisfy our clinical trial and commercial needs; our expectations regarding our strategic partnership with Fresenius Medical Care Holdings, Inc. to sell, market and distribute our 6 millimeter ATEV for certain specified indications and in specified markets; the performance of other third parties on which we rely, including our third-party manufacturers, our licensors, our suppliers and the organizations conducting our clinical trials; our ability to obtain and maintain intellectual property protection for our product candidates as well as our ability to operate our business without infringing, misappropriating or otherwise violating the intellectual property rights of others; our ability to maintain the confidentiality of our trade secrets, particularly with respect to our manufacturing process; our compliance with applicable laws and regulatory requirements, including FDA regulations, healthcare laws and regulations, and anti-corruption laws; our ability to attract, retain and motivate qualified personnel and to manage our growth effectively; our future financial performance and capital requirements; our ability to implement and maintain effective internal controls; and the impact of the overall global economy and increasing interest rates and inflation on our business. These statements relate to future events or to our future financial performance and involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by these forward-looking statements. The potential risks and uncertainties that could cause actual results to differ from the results predicted include, among others, those risks and uncertainties included under the captions "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our Form 10-K filed with the Securities and Exchange Commission on March 28, 2024 and subsequent annual reports, quarterly reports and other filings made with the Securities and Exchange Commission from time to time. Any forward-looking statements contained herein are based on assumptions that we believe to be reasonable as of the date hereof. Except as required by law, we assume no obligation to update these forward-looking statements, even if new information becomes available in the future. This presentation shall not constitute an offer to sell or the solicitation of an offer to buy, nor shall there be any sale of our securities, in any state or other jurisdiction in which such offer, solicitation or sale would be unlawful prior to the reregistration or qualification under the securities laws of any such state or other jurisdiction.

Humacyte is a Leader the Field of Regenerative Medicine:
Investigational Bioengineered Tissues & Organs





- Off-the-shelf
- Universally implantable with no immuno-suppression
- Observed to regenerate as the patient's own tissue

Category-Defining Innovation that Creates New Tissues

Universally Implantable Regenerative Human Tissue

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Potential First-in-Class Technology & Manufacturing Platform

Large addressable markets

(trauma, dialysis, peripheral artery disease, diabetes, coronary bypass)

U.S. Market Launch Q1 2025

FDA approved SYMVESS (ATEV) BLA

in December 2024 for treatment of extremity vascular trauma; U.S. market launch planned for early Q1 2025

Commercial-Scale Manufacturing

Commercial-scale manufacturing in place with annual capacity of up to 40,000 ATEVs in existing facility

Validated through Multiple Partnerships

MAYO CLINIC

U.S. DEPT OF DEFENSE

JDRF IMPROVING LIVES. CURING TYPE 1 DIABETES.

FRESENIUS MEDICAL CARE

Humacyte Leadership & Board

Leadership Team

Laura E. Niklason, MD, PhD
Founder, President, Chief Executive Officer

Dale Sander
Chief Financial Officer, Chief Corporate Development Officer

Heather Prichard, PhD
Chief Operating Officer

Shamik Parikh, MD
Chief Medical Officer

Cindy Cao
Chief Regulatory Officer

BJ Scheessele
Chief Commercial Officer

Sabrina Osborne
Chief People Officer

Harold Alterson
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Diane Seimetz, PhD

Max Wallace, JD

Susan Windham-Bannister, PhD

Prior Experience

Lilly
AstraZeneca
AVITA MEDICAL
Biogen
bluebirdbio
Bristol Myers Squibb™
U.S.Department of Heath and Human Services
Duke University School of Medicine
Johnson & Johnson
KRIYA THERAPEUTICS
NOVARTIS
novo nordisk®
SANDOZ A Novartis Division
sanofi
Yale University School of Medicine
GSK

Platform & Manufacturing:
Enable Broad Pipeline of Regenerative Medicine Products

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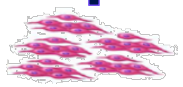
Bioengineering Platform

1 Cell seeding



Working cell stock

Cells transferred onto polymer mesh

2 Tissue formation

Cells proliferate & build extracellular matrix

Polymer mesh degrades, leaving vascular cells and extracellular matrix

3 Cell removal and packaging

Decellularization solutions clean and remove vascular cells from vessel

Enables creation of universally implantable tissues and organs

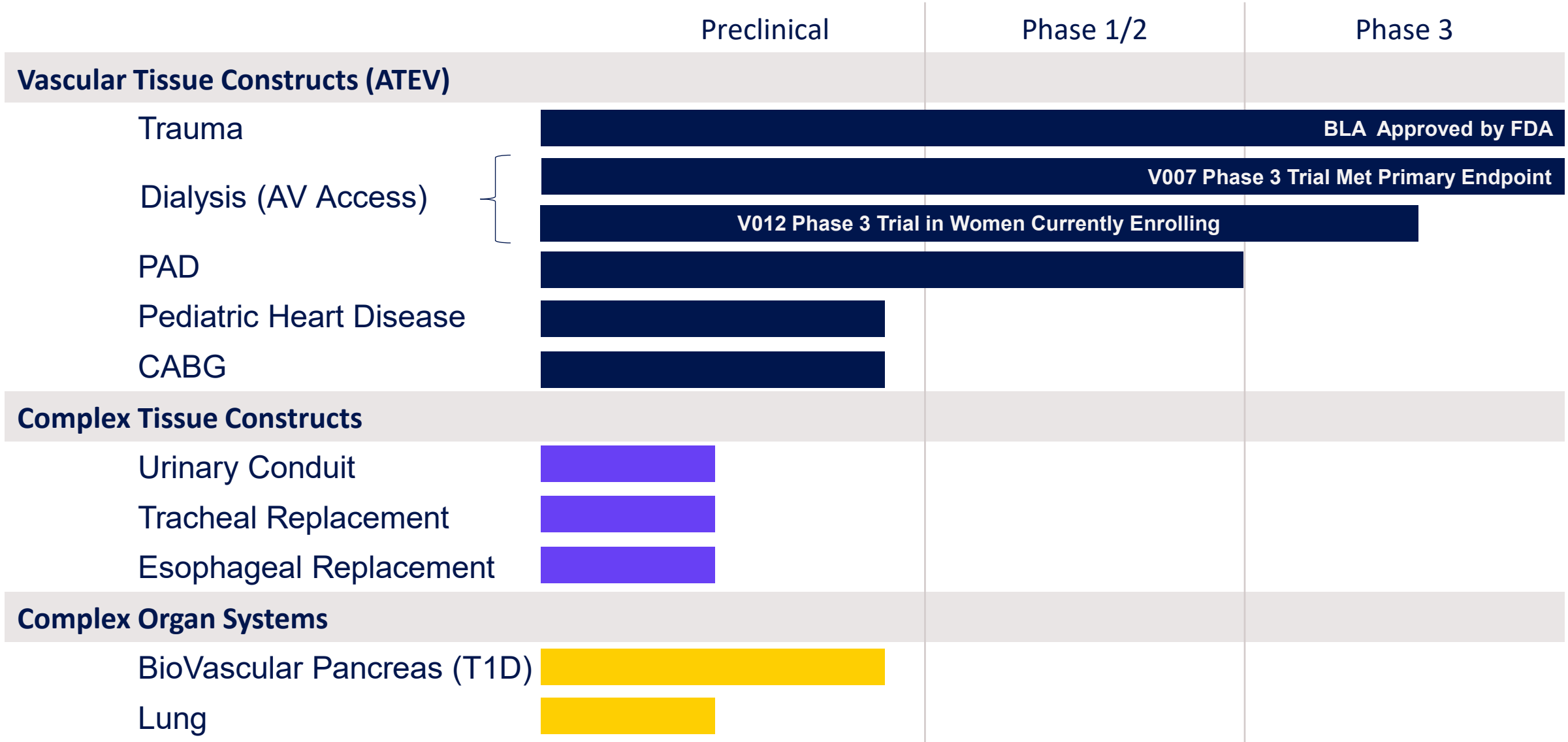
Commercial-Scale Manufacturing

Strategically designed with modular capabilities to manufacture products at scale

Vascular tissue constructs (ATEV) ⟷ **Advanced tissue constructs** ⟷ **Advanced organ systems**

Our platform technology enables development of a broad range of product candidates

Pipeline with Multiple Potential Commercial Launches



ATEV Observed to Repopulate with Patient's Own Cells
Potentially Enabling Infection Resistance & Self-Healing

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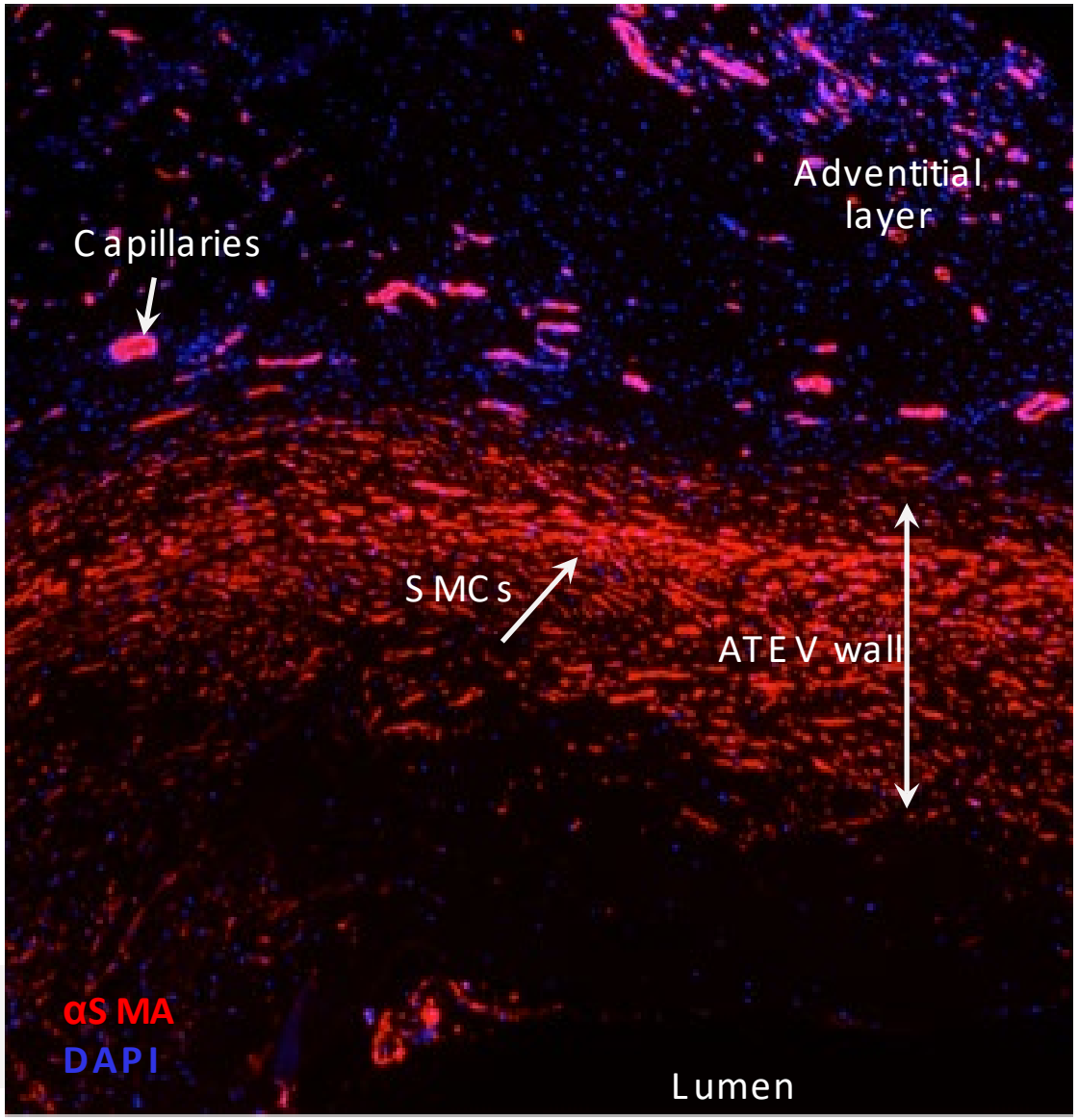
ATEV Overview

Host cells observed to repopulate the ATEV[1]

ATEV observed to have low rates of infection

ATEV may have the ability to self-heal

Nearly 600 patients across multiple indications



Benefits of ATEV

Off-the-shelf, immediately available with 18-month shelf life

Long-term durability

No evidence of immunogenicity

1. Kirkton, R.D., et al, Science Translational Medicine 2019; 11:eaau6934.

Vascular Trauma

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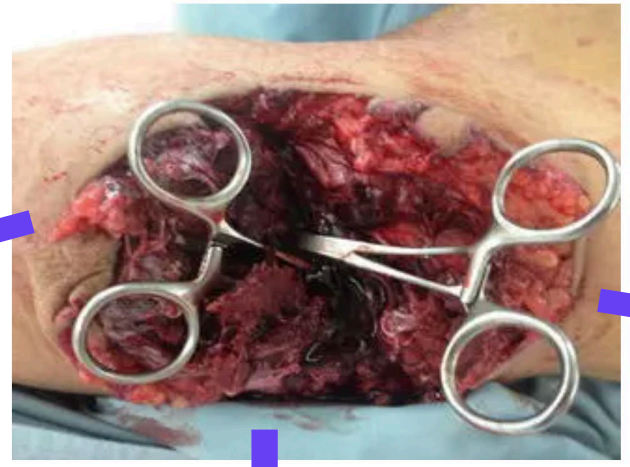
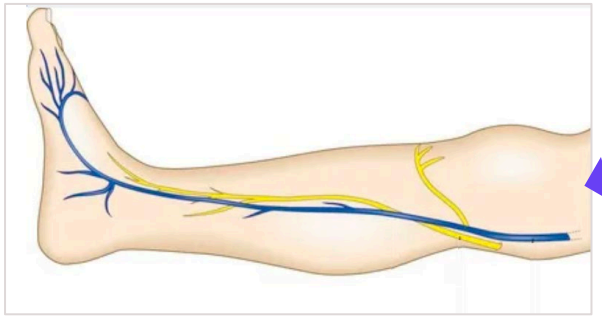
Vascular Injuries – Value Proposition for the ATEV

- Common causes of vascular injuries include workplace injuries, car accidents, gunshots and stabbings, and sports injuries
- Currently available treatment options have significant drawbacks:

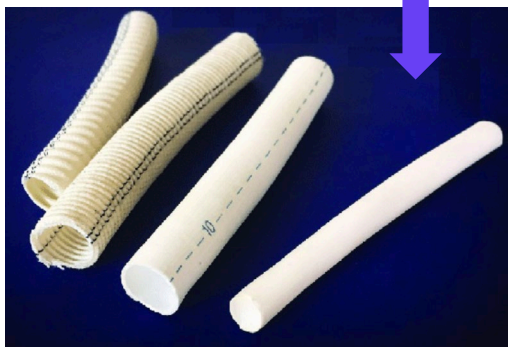
Shotgun Wound

Exit wound of a shotgun injury





1. Vein is the standard of care, but causes injury from harvest and takes valuable time, delaying revascularization



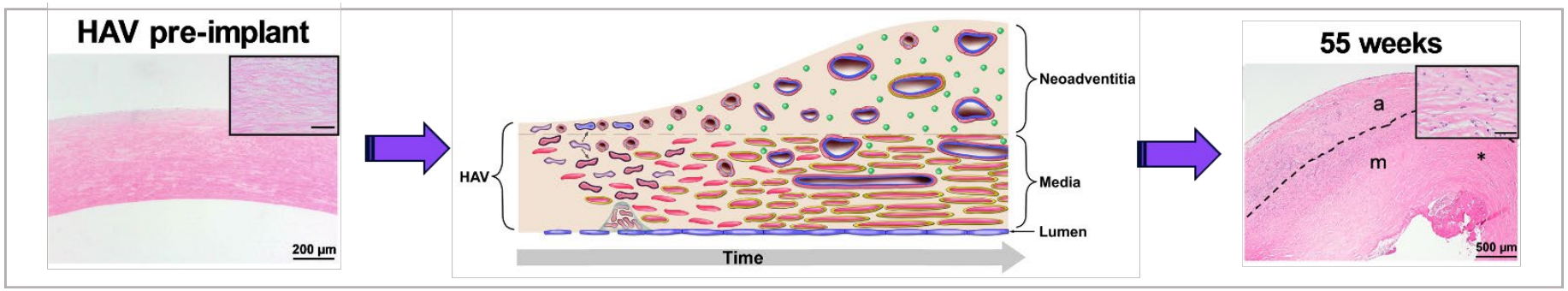
2. Synthetics are quick, but have infection risk and high rates of amputation

3. Amputation

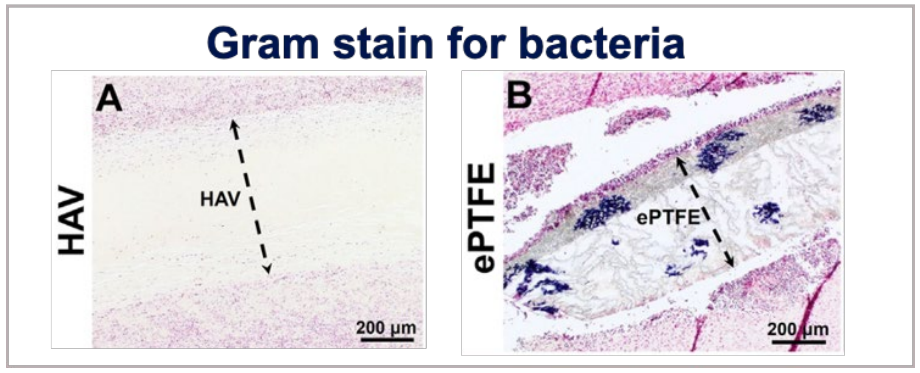
Why ATEV for Traumatic Vascular Injury?

- **ATEV is off the shelf and immediately available for implant**
  - In contrast to harvesting vein from the patient which can take an hour [1]

- **ATEV repopulates with the patient's cells, becoming a living tissue** [2]



- **ATEV is resistant to infection, compared to synthetic grafts** [3]



1: Zenati, M.S., et al, New England Journal of Medicine 2019; 380: 2.
2. Kirkton, R.D., et al, Science Translational Medicine 2019; 11:eaau6934.
3. Wang, J., et al, Journal of Vascular Surgery – Vascular Science 2023; 4: 100120.

CLN-PRO-V005 Phase 2/3 Pivotal Trial

acellular tissue engineered vessel (ATEV) in Vascular Trauma (NCT03005418)

- Single-arm, open label trial
- Level 1 trauma centers in US and Israel
- Arterial injury repair

→ Primary endpoint 30-day patency in patients with extremity injuries

69 total patients enrolled as of data cut off
51 patients with extremity injuries – focus for BLA filing

- ALL patients had NO VEIN for repair, as assessed by treating surgeons
- Hence, patients would have received synthetic grafts, ligation of the bleeding vessel and/or amputation, had they not gotten the ATEV.
- Extremity Injuries at high risk of contamination/infection[1]

- Historical Benchmarks
  - Systematic literature review of synthetics in vascular trauma
- Primary Comparison
  - 30-day endpoint of patency
- Secondary Comparisons
  - Infection rate
  - Amputation rate

Success Criteria
- Comparable (or higher) Patency
- Infection rate comparable or lower than Synthetic Grafts
- Amputation rate comparable or lower than Synthetic Grafts
- No unexpected safety signals

1: Prevaldi et al, 2016 World Journal of Emergency Surgery

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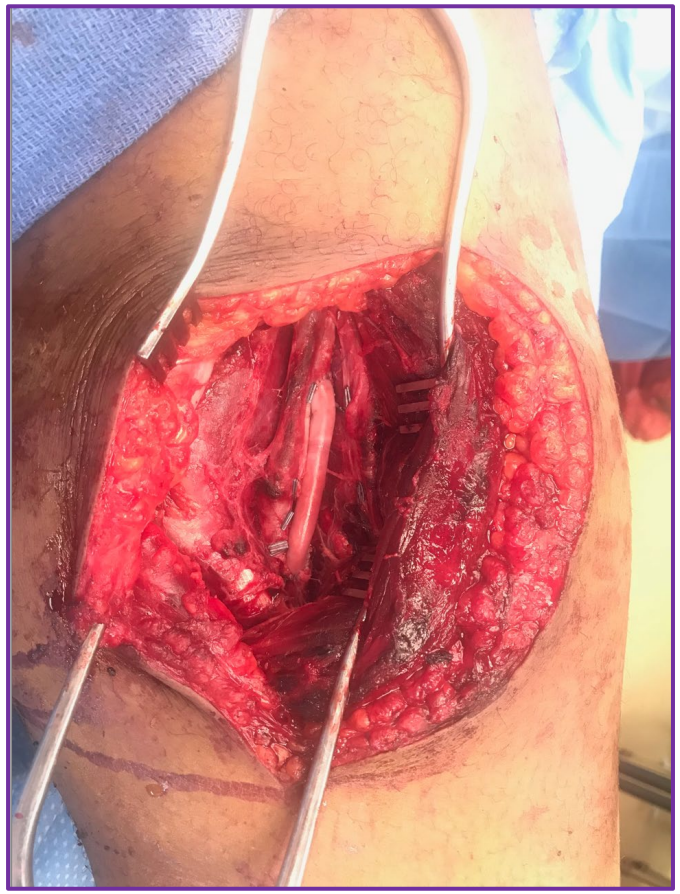
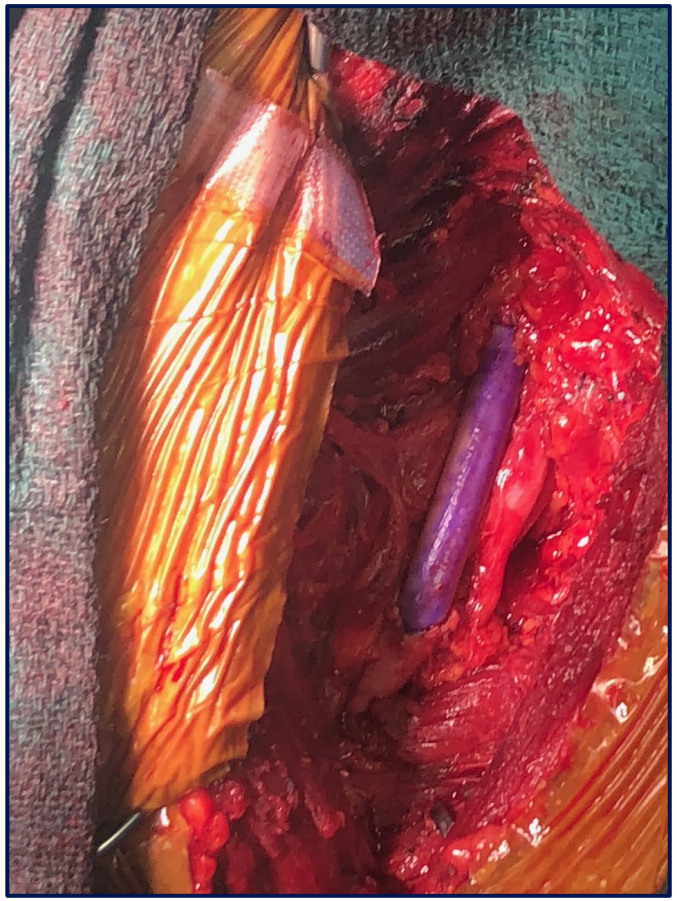
Vascular Injuries Treated in CLN-PRO-V005 Trial



Gunshot Wound



Industrial Accident

Knee Dislocation

V005 Trial: ATEV vs Prosthetic Graft

Endpoint (30 Days)	ATEV Extremity (V005) %	Prosthetic Graft Benchmark %
Secondary Patency	90.2%	78.9%
Conduit Infections	2.0%	8.4%
Amputations	9.8%	24.3%

V005 Trial was a Success and Met All Objectives

Observations from V005 trial:

- **Secondary Patency**
  - ATEV performed better than historic benchmark
- **Conduit Infections**
  - ATEV point estimate lower than historic benchmark
- **Amputations**
  - ATEV performed better than historic benchmark

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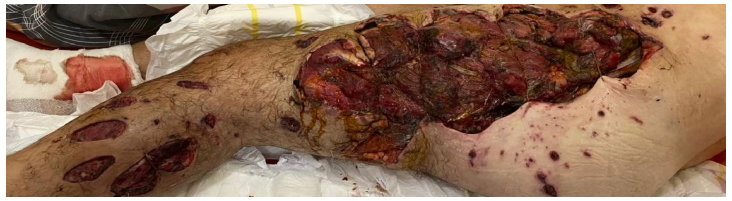
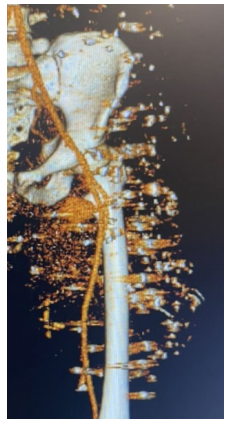
Ukraine Real World Experience of ATEV Use in Vascular Repair

- 19 patients received an ATEV
- 17 consented for data collection and study participation
- 16 patients had extremity trauma repair; one patient required ATEV for Iatrogenic Trauma Repair
- Ukraine Humanitarian Experience presented at MHSRS[1] 2023 Annual meeting on August 14th 2023

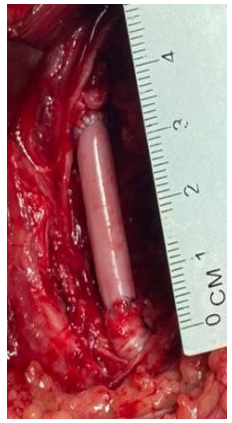
Measure	V017 Trial Ukraine Extremity Patients (n=16)
30-day Patency	93.8%
Amputation	0.0%
Limb Salvage	100.0%
Conduit Infection	0.0%



Ukraine Patient Blast Injury



Pre-op CT Scan



ATEV repair of Femoral artery

Walking once again (Day 113)

1: MHSRS - Military Health System Research Symposium

Results from V005 and V017 Trials

The FDA advised Humacyte to include in its BLA submission patient outcomes from V017 (the humanitarian program conducted in Ukraine)

Endpoint (30 Days)	ATEV Extremity (V005 + V017 Meta Analysis) %	Synthetic Graft Benchmark %
Secondary Patency	91.5%	78.9%
Conduit Infections	0.9%	8.4%
Amputations	4.5%	24.3%

Combined V005 + V017 Results Further Supports ATEV Performance Versus Synthetic Graft Benchmarks

- **Observations from combined V005 and V017 trials:**
- **Secondary Patency**
  - ATEV performed better than historic benchmark
- **Conduit Infections**
  - ATEV performed better than historic benchmark
- **Amputations**
  - ATEV performed better than historic benchmark

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FDA Approval of BLA and Planned Market Launch

- **BLA submitted to FDA** in December 2023
- Priority Review granted by FDA in February 2024
- Factors supporting Priority Review:
  - In May 2023 the **FDA granted Regenerative Medicine Advanced Therapy (RMAT)** designation for use of the ATEV in urgent arterial repair following extremity vascular trauma
  - The ATEV was assigned a **priority designation by the Secretary of Defense** under Public Law 115-92, enacted to expedite the FDA's review of products that are intended to diagnose, treat or prevent serious or life-threatening conditions facing American military personnel
- **FDA approved the BLA on December 19, 2024**
- Planned market launch early in Q1 2025

AV Access for Dialysis

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AV Access for Hemodialysis Has Limitations

Estimates of Access (U.S.)

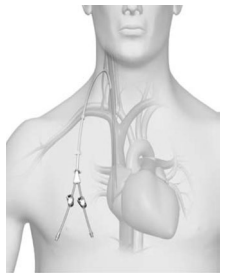
~60% AV fistulas

Primary/AV Fistula (Autogenous)

Market targeted by ongoing V007 Phase 3 Trial

~20% Catheters

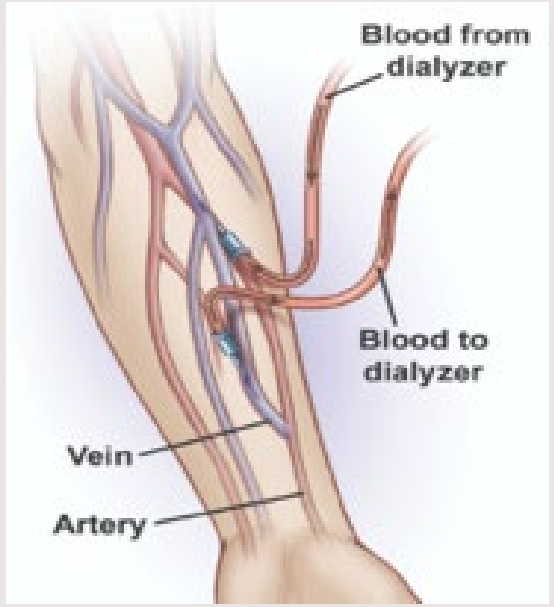
Venous / Temporary Catheter

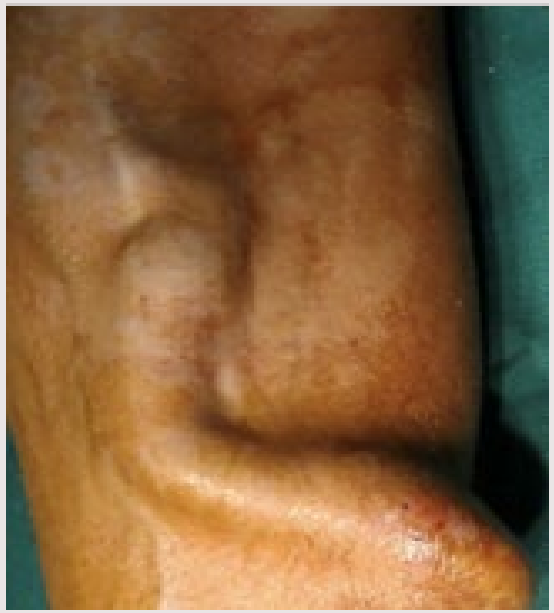


~20% Grafts

Secondary / Graft

Limitations of AV Fistulas (Current Standard of Care)



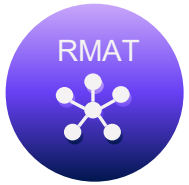


- ~40% of fistulas fail to mature
- Even the fistulas that do mature take 3-6 months to become usable for dialysis
  - Catheter infection rates are up to 200% per patient-year

ATEV is Designed to Address Failures in AV Access

Expected Improved Patient Outcome

- ATEV usable for dialysis after only four weeks
- ATEV reduces catheter contact time, thereby reducing risk of catheter infection
- >80% of ATEVs functional for dialysis at 6
- ATEV infection rate is comparable to AVF



RMAT designation granted by FDA

ATEV Expected Economic Benefits

- Expected reduction in catheter contact time, infection, and failure rate have potential to reduce costs, including the following:

Reduce Costs from Infection

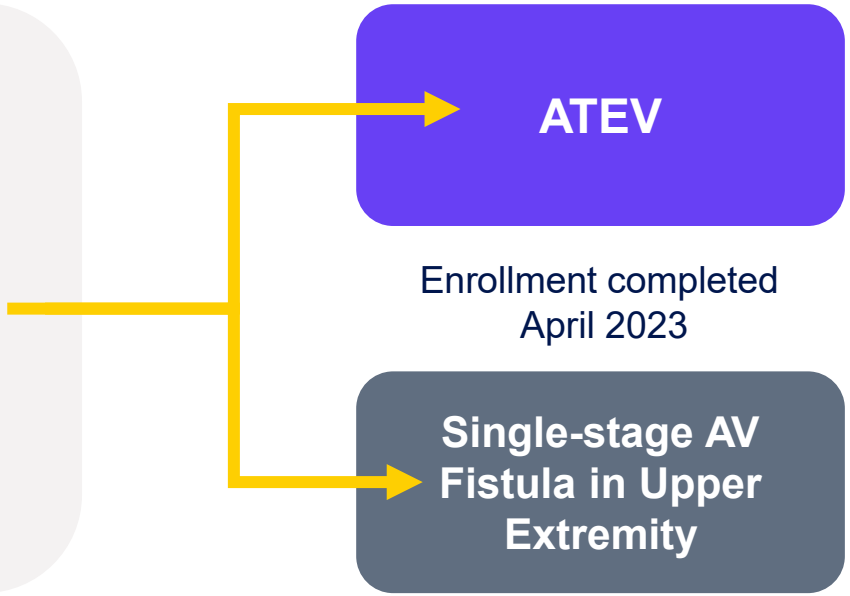
Reduce Costs of Additional Access Procedures

Lawson, J.H, et al, The Lancet 2016; 387: 2026-2034.
Halbert, R.J., et al, Kidney360 2020; doi: 10.34067/KID.003502020

V007 Phase 3 Trial: ATEV vs. Fistula

V007 Phase 3 Trial Design: Compare the Efficacy and Safety of Humacyte's Human Acellular Vessel with that of an Autologous Arteriovenous Fistula in Subjects with End-Stage Renal Disease

- Subjects with end-stage renal disease in need of dialysis and suitable for single-stage arteriovenous fistula
- Target 240 total subjects



"Excellent" fistula candidates

> Endpoints

- > Efficacy: Useability for dialysis and patency during the first year
- > Safety: interventions, infections, etc.

> Duration

- > Subjects followed for 24 months after implantation

> Sites

- > 30 centers in the U.S.

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V007 Top-Line Results – ATEV Met Co-Primary Endpoints

ATEV demonstrated superior function and patency at six and 12 months (co-primary endpoints) compared to autogenous fistula, the current standard of care for hemodialysis

Co-Primary Endpoints	ATEV	AVF	p-value
Functional Patency at Month 6	81.3%	66.4%	.0071
Secondary Patency at Month 12	68.3%	62.2%	

- Patients on ATEV also achieved a significantly longer duration of hemodialysis over the first 12 months, as compared to autogenous fistula (p=0.0162)
- More adverse events were reported in patients on the ATEV treatment arm than those on the AV fistula treatment arm
- More detailed results from the study, including secondary analysis and subgroup results, pot be presented at upcoming medical conferences

Current AV Access in Women Work Poorly and is Expensive

Partnered with Fresenius / Frenova Renal Research to identify the hemodialysis subpopulations with highest unmet needs

Analysis of 178,575 adults with in-center hemodialysis established that:

- Women are more likely to use AVG ± CVC for access within 90 days of initiation
  - Women have up to 90% increased risk of AVG ± CVC use, as compared to men
- AVG ± CVC access has much higher complication rates: ~2X higher than AVF
  - Nearly $3 billion spent by Medicare in 2013 for on access complications/maintenance
  - Top quintile of dialysis patients cost between **$91,841 to >$155,632 annually to maintain access**
- Women are more likely to fail AVF maturation: **Cost >$30,000 in first year**
  - Women are 20% more likely to fail AVF maturation
  - Women are 20% more likely to have multiple access failures in the first 6 months
  - Women are 24% more likely to have multiple hospitalizations for access complications
- Some female sub-groups are at especially high risk
  - Example: Obese, diabetic women have **excess costs of ~$27,000 to $91,000 during the first year**

V012 (HUMAXX) Trial in Women Dialysis Patients

Trial comparing Humacyte's (ATEV™) to AVF in women

To Compare the Efficacy and Safety of the ATEV With AVF in Female Patients With End-Stage Renal Disease Requiring Hemodialysis (HUMAXX)

Female patients currently receiving hemodialysis via catheter and who are candidates for creation of an AVF or implantation of an ATEV™.

- **Enrollment:**
  - Target 150 total subjects (interim analysis at 80 subjects)
  - 1:1 Prospective randomization
  - ATEV vs. Autogenous fistula

Comparators:

Surgically created AV Fistula in the upper extremity

Follow-up Duration:

12 months without regard of patency status.

24 months (if access not abandoned)

Objectives:

- **Primary Efficacy:** Total days free from in-dwelling catheter ("catheter-free days") until 365 days, or until access abandonment, whichever occurs first.
- **Primary Safety:** Number and severity of infections related to all accesses (including catheters) from access creation until 365 days.

Strategic Value of V012 Study

Women are 43% of the US dialysis population and many struggle with access

V012 was designed in consultation with nephrologists and FDA to quantify value of ATEV vs. AVF for women

- V012 is focused on catheter exposure in women:
  - Captures failures of AVFs
  - Catheters are the most expensive access for dialysis
- V012 was designed in consultation with FDA:
  - Agency acknowledges that women have high unmet need in dialysis
  - Agency notes that women suffer high rates of fistula failure
- V012 captures important access complications and adds to health economic narrative:
  - No study has quantified AVF access complications specifically in women
  - Will provide strong health economic data on ATEV^{T}
  - Should provide additional support for reimbursement in women

Peripheral Arterial Disease (PAD)

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Peripheral Artery Disease (PAD)

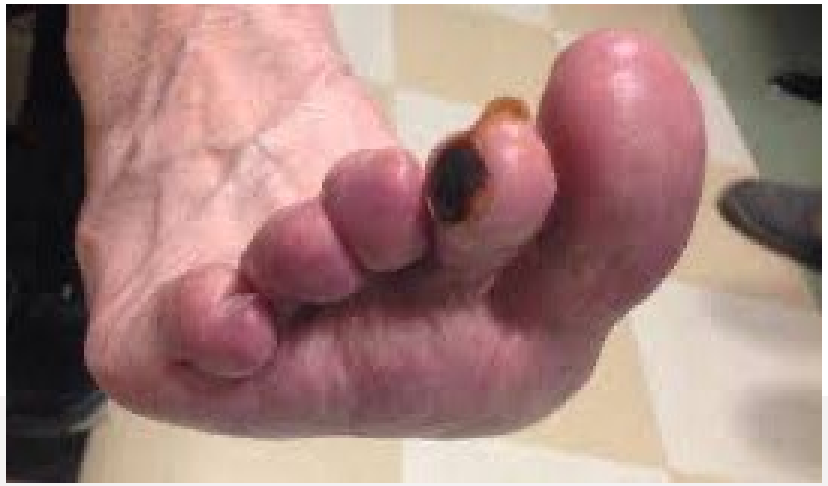
Can progress to multiple leg arteries, further reducing circulation

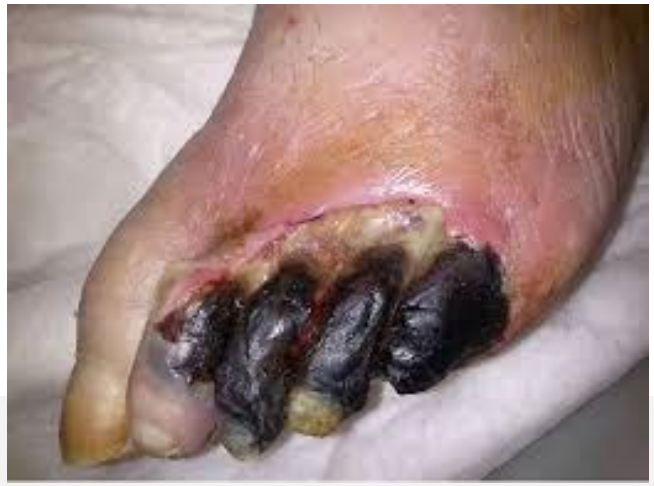
Critical Limb Threatening Ischemia

- Tissue does not receive enough blood flow to survive
- If untreated, leads to tissue loss, gangrene, and ultimately amputation

Treatment Requires Restoration of Blood Flow

- Non-surgical, catheter-based intervention
- Surgical bypass





For the 40% of PAD patients who do not have an ipsilateral saphenous vein for arterial bypass, ATEV may represent a promising means of revascularization and limb salvage

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Current Clinical Experience with ATEV in Peripheral Arterial Disease

Phase 2 Trials

- V002 – 20 patients (EU)
- V004 – 15 patients (US)

EA

Over 20 U.S. patients with critical limb ischemia treated under FDA Expanded Access program

Mayo IND

Investigator-sponsored IND

- 29 patients with severe PAD at risk of limb loss
- Patients did no have saphenous vein available

- Six-year results from V002 published in *Journal of Vascular Surgery – Vascular Science*[1]
- Publication of First Eight Expanded Access Cases in *Annals of Vascular Surgery*[2]
- Outcomes published in *Midwestern Vascular Surgical Society* showing 86% limb salvage rate

[1]Piotr Gutowski, et al, 6-Year Outcomes of a Phase 2 Study of Human-Tissue Engineered Blood Vessels for Peripheral Arterial Bypass, JVS: Vascular Science (2023)

[2]Lauria A, Kersey A, Propper B, et al. *Annals of Vascular Surgery*. 2022 Apr 6:S0890-5096(22)00180-7

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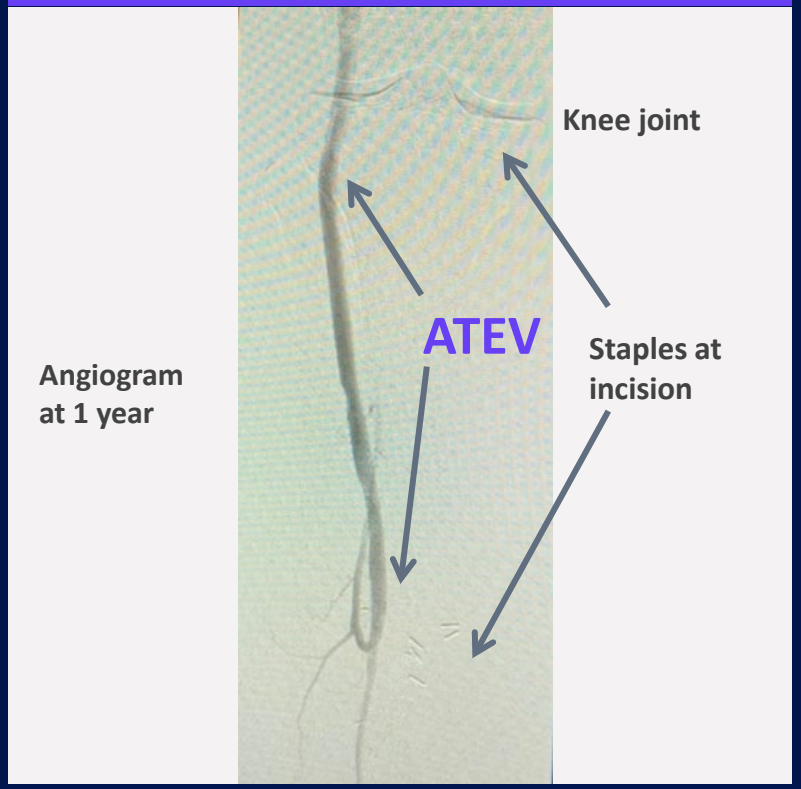
Expanded Access: Restoring Mobility with ATEV

- The ATEV was used under compassionate use program in 70-year-old patient with severe vascular disease
- No vein was available to perform a bypass, as the vein was previously harvested for a CABG
- A right distal superficial femoral artery-to-peroneal artery bypass was performed using an ATEV
- The patient's postoperative course was unremarkable
- At 1-year follow-up the angiography showed a patent ATEV without significant stenosis at the distal anastomosis
- **Four years after ATEV implantation, the patient continues to do well and is walking.**

VESS Vascular & Endovascular Surgery Society

This case was included in ATEV results in critical limb ischemia presented at VESS meeting in January 2022

Bypass performed using the ATEV in patient with severe vascular disease



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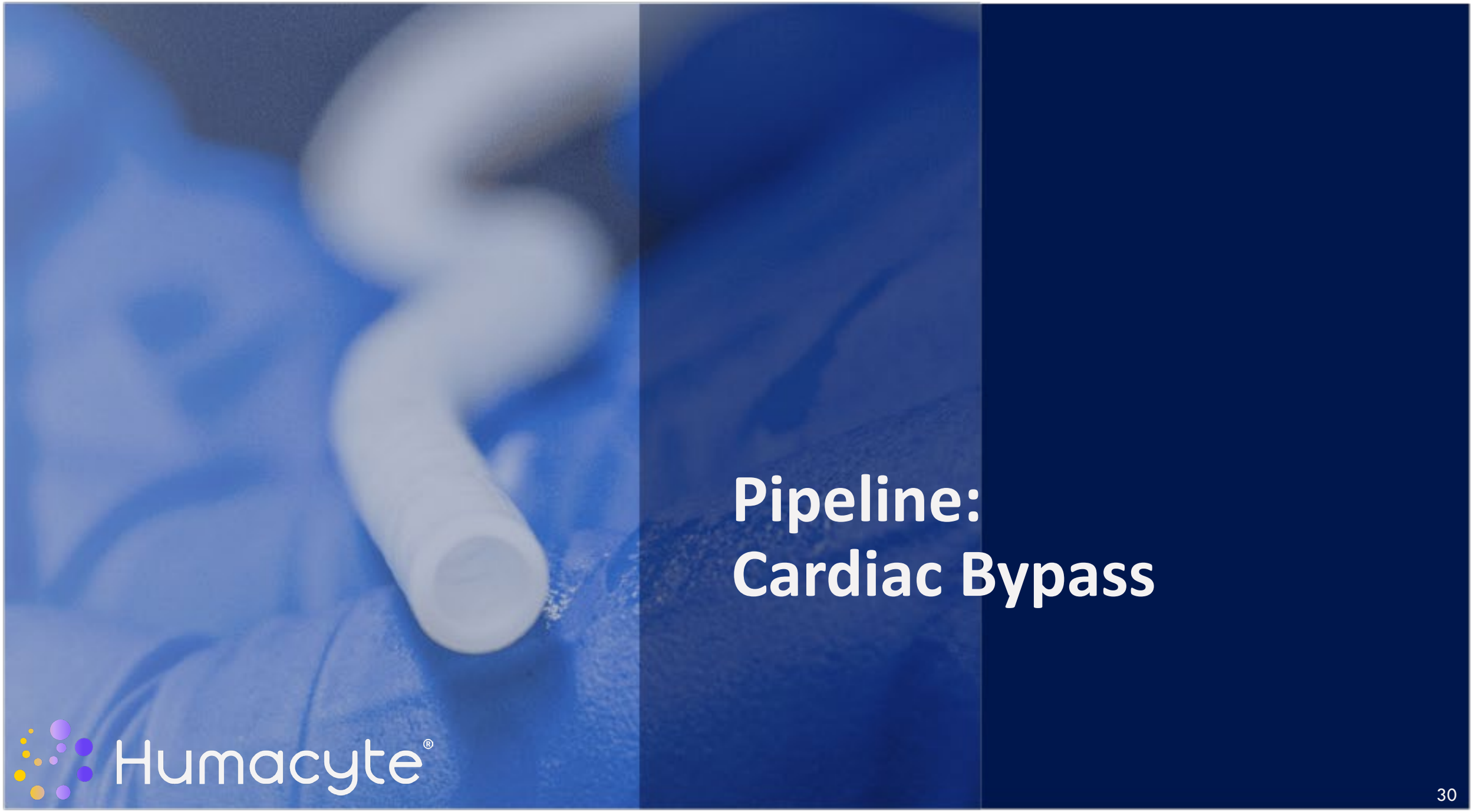

Pipeline:
Cardiac Bypass

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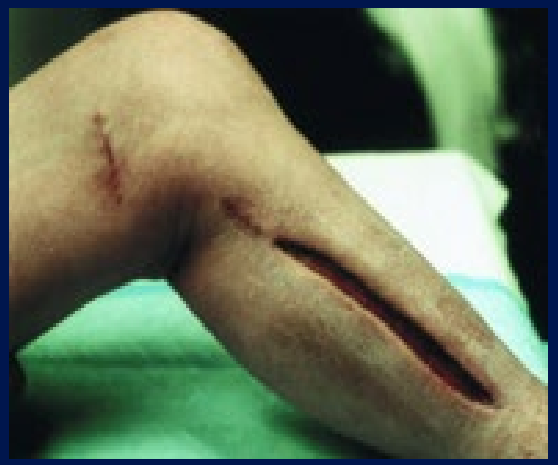
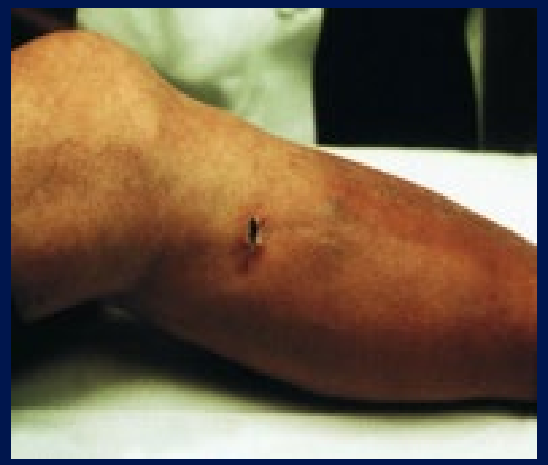
Potentially Transforming CABG Care: Greater Durability, Less Morbidity





- Saphenous Vein Graft (SVG)
  - Harvesting SVG from the patient is painful and complicated:
    - 41% have persistent numbness
    - 32% develop infection
    - 23% have persistent swelling; worse in obese and diabetic patients; 2x worse in women
  - SVGs do not last long enough: ~33% of patients will require one or more re-grafting procedures during their lifetimes

Humacyte's ATEV

- Does not require tissue harvest from the patient
- Immediately available and avoids morbidity of vein harvest
- Particularly important to avoid vein harvest in diabetics, women, and the overweight
- Durable and highly uniform in diameter and quality

Surgeons know what they are getting each time

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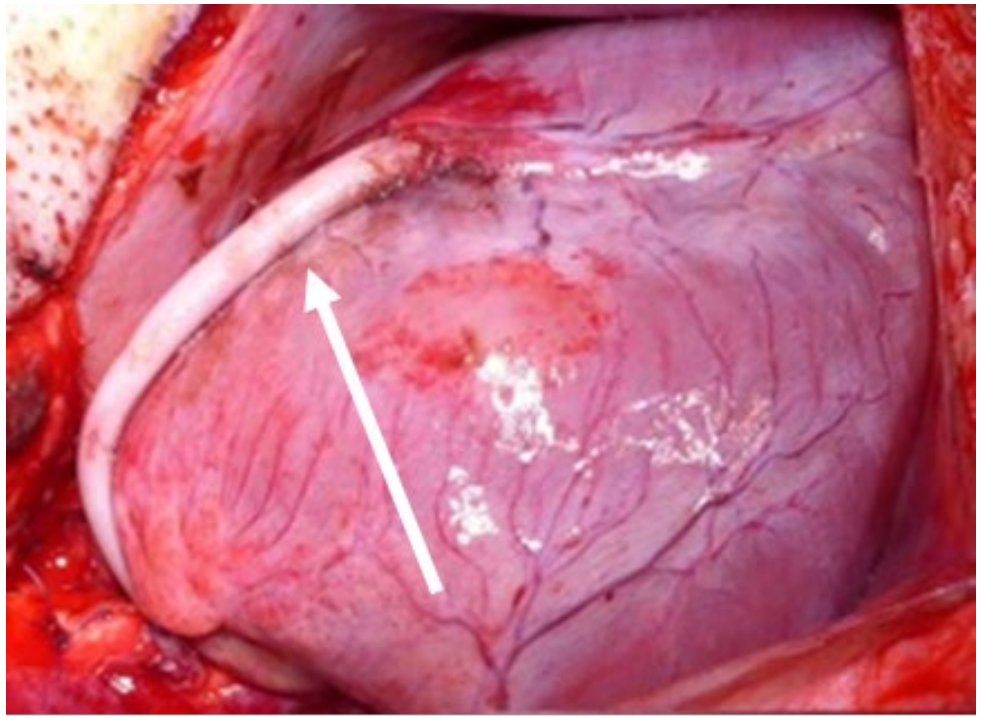
CABG Preclinical Results

American Heart Association. Scientific Sessions

- Testing of ATEV in baboon model has transitioned to right coronary artery (RCA) as distal target
- Results showing ATEV maintained patency and exhibited host-cell remodeling through six months



Humacyte ATEV in Baboon

Next Steps in CABG Development

Proceeding to IND enabling non-clinical studies to support first-in-human clinical trials

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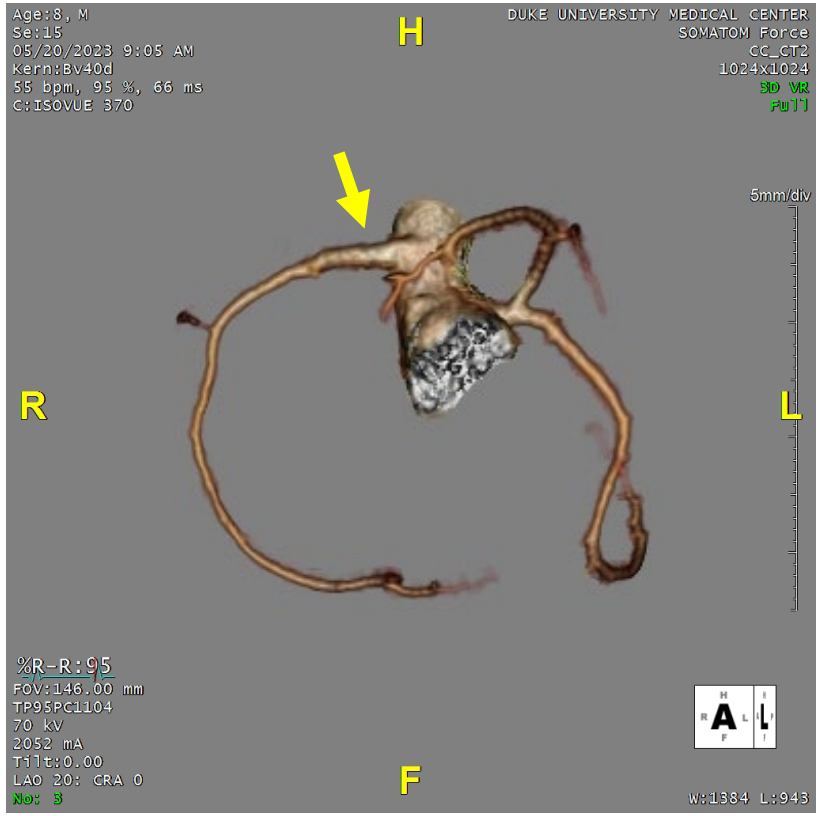
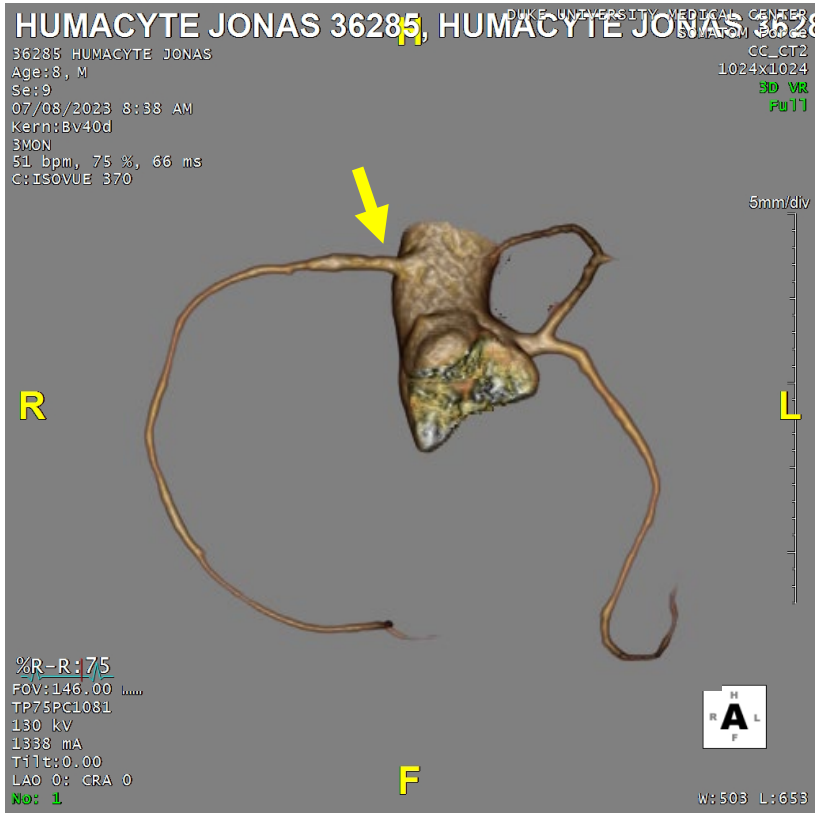
Primate – CABG Angiography – Adaptive Remodeling

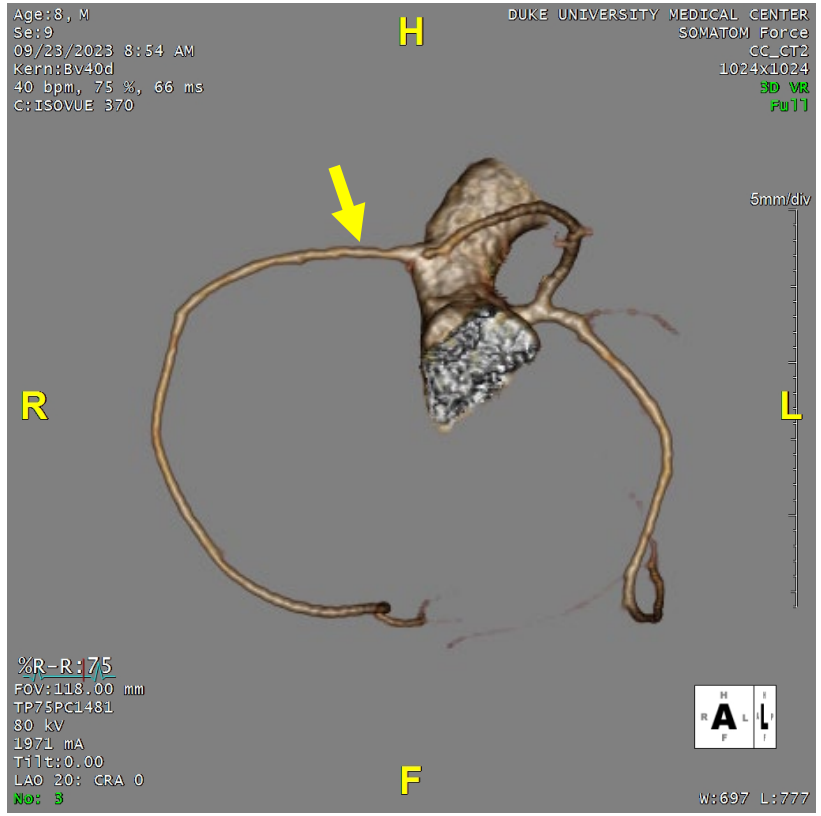
1 Month



3 Months



6 Months



Jonas – Left Ventricular Function (%)			
Pre-Op	1-Month	3-Month	6-Month
70%	73%	74%	73%

Pipeline:
BioVascular Pancreas

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Biovascular Pancreas May Deliver Curative Islets to Diabetics

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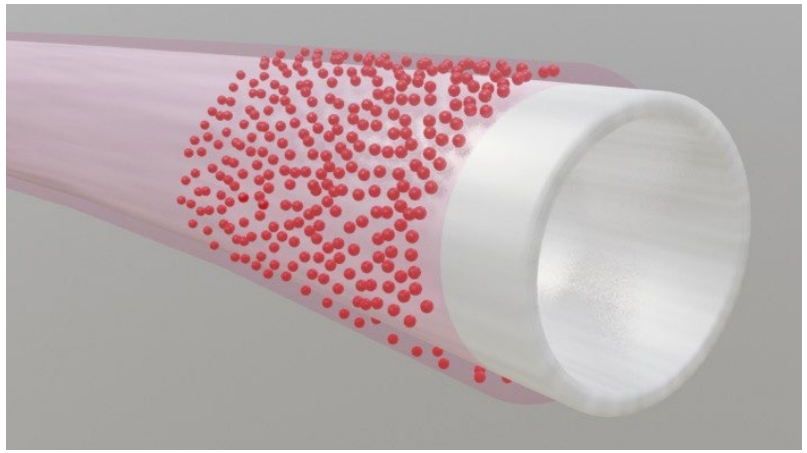
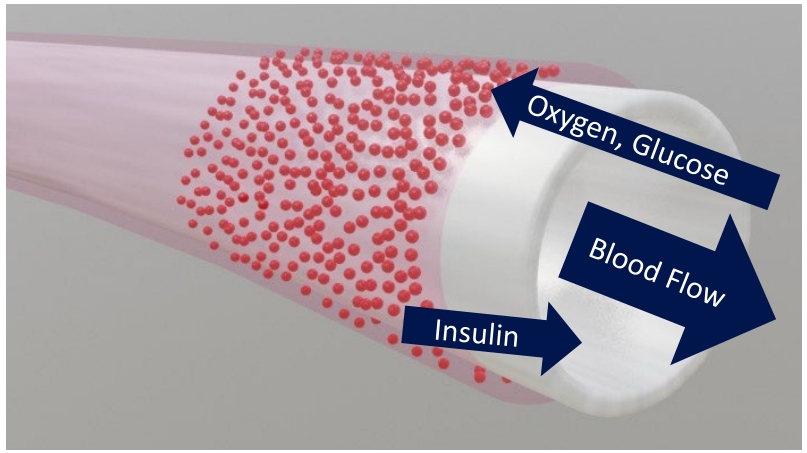
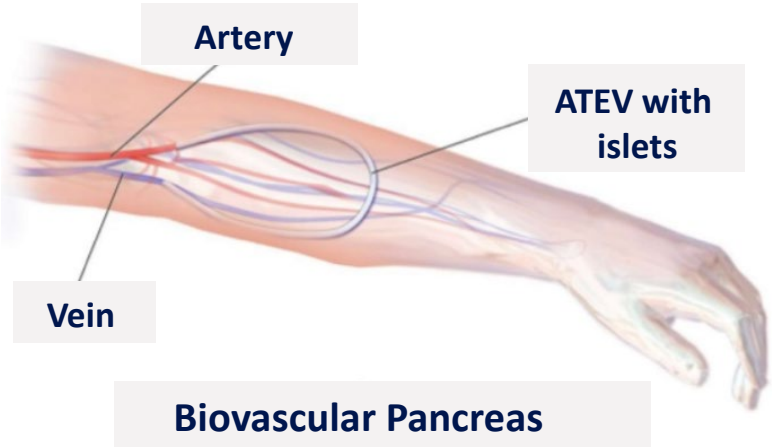
Islets + ATEV = Biovascular Pancreas (BVP)



Blood Flow Supports Islets



BVP Implanted In The Arm

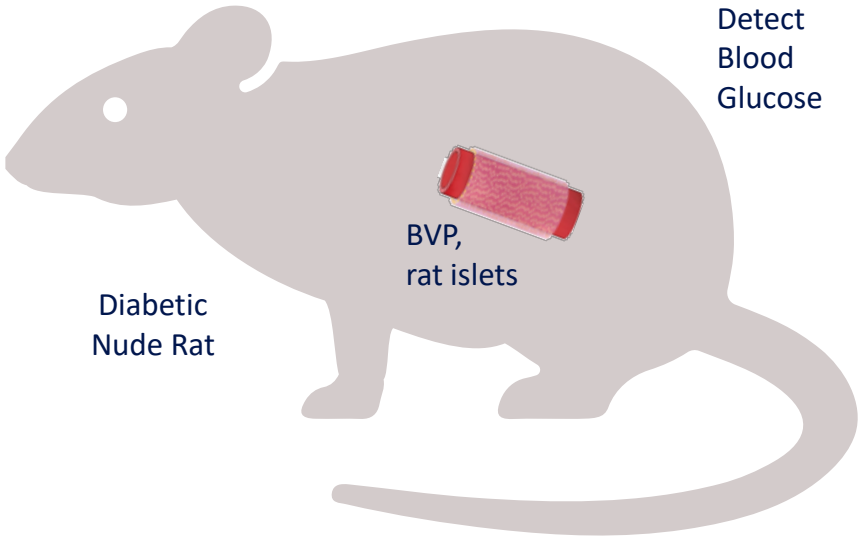


- Islets die after injection into the liver, due to lack of oxygen and nutrients
- Humacyte's ATEV is being developed as a means to provide oxygen and nutrients to islets that are coated on the outside: "Biovascular Pancreas" (BVP)
- Once implanted in the vasculature, blood flow supplies oxygen and nutrients to islets
- One 42-cm ATEV is expected to accommodate all the islets in an entire human pancreas

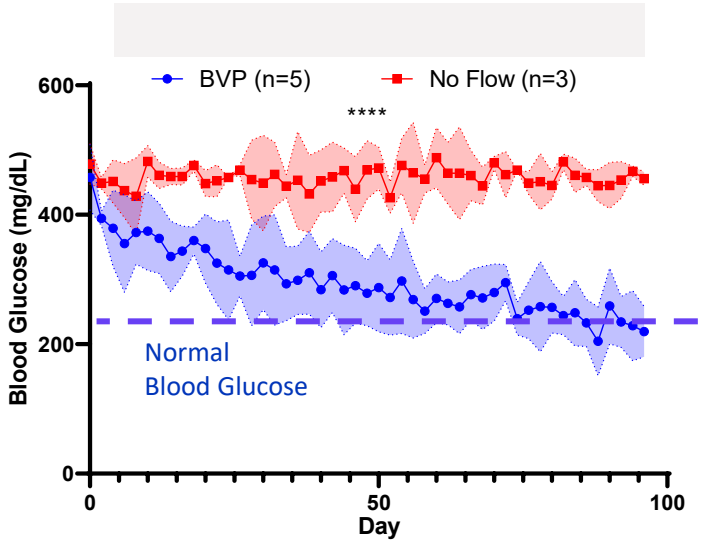
Biovascular Pancreas Normalized Glucose in Diabetic Animals

- Diabetic rodents implanted with BVPs
- All treated animals normalized glucose over time. All sham-treated animals ("No Flow") remained diabetic

Transplant BVP into Vasculature



Blood Glucose Levels



DIABETES RESEARCH INSTITUTE FOUNDATION
The Best Hope for a Cure®

JDRF IMPROVING LIVES. CURING TYPE 1 DIABETES.

Han EX, Wang J, Kural M, et al. Journal of Tissue Engineering; 12: 1-18

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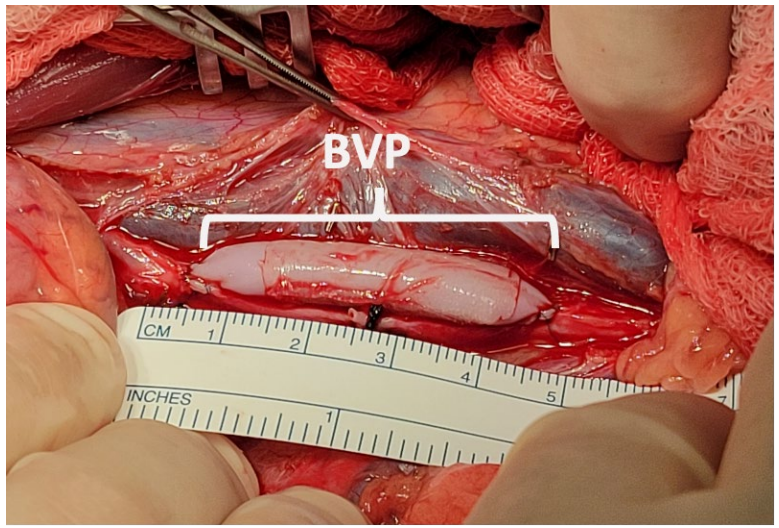
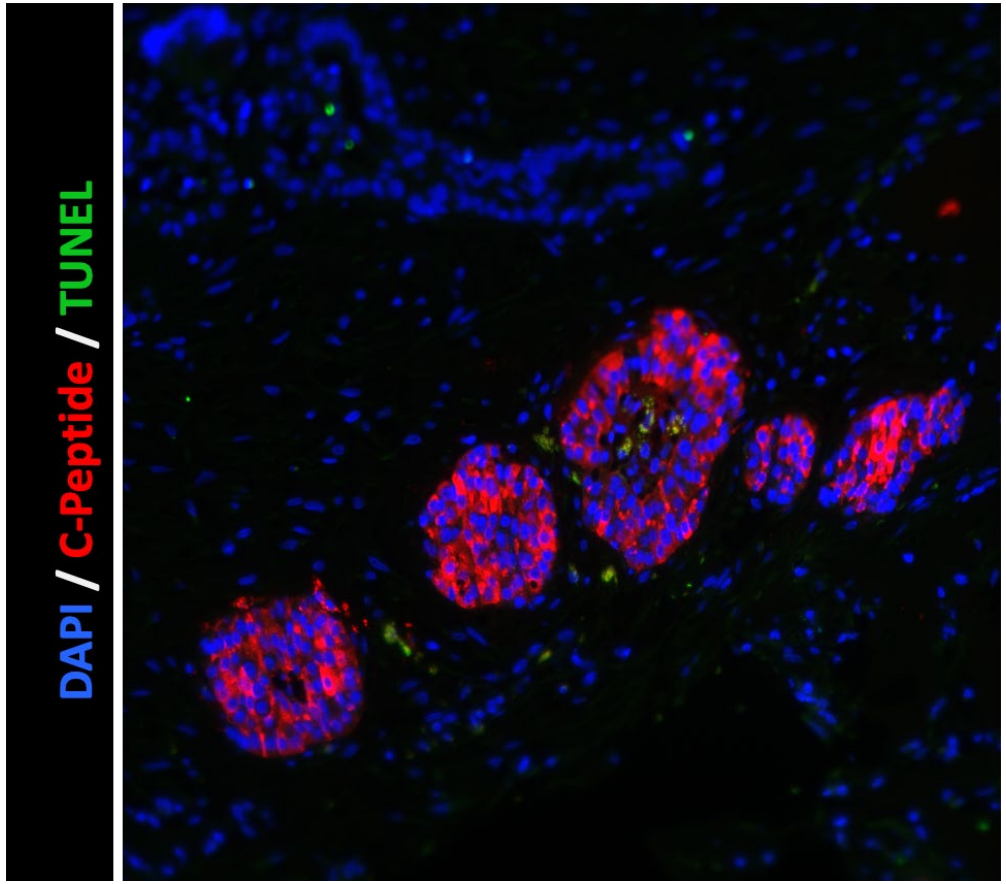
Primate BVP – Islets Survive, and Produce Insulin

- In this model, the BVP is produced by harvesting islets from one animal, and creating a BVP comprising human ATEV and primate islets
- Animal receives the primate-islet BVP into the aorta
  - 25,600 islet equivalents
  - Corresponds to a potentially curative number of islets in a human



Islets survive for weeks after implantation, continue making insulin (c-peptide).



Anticipated Path to Market

Humacyte®

Our Technology Addresses Compelling Unmet Needs in Attractive Markets

Vascular Tissue Constructs

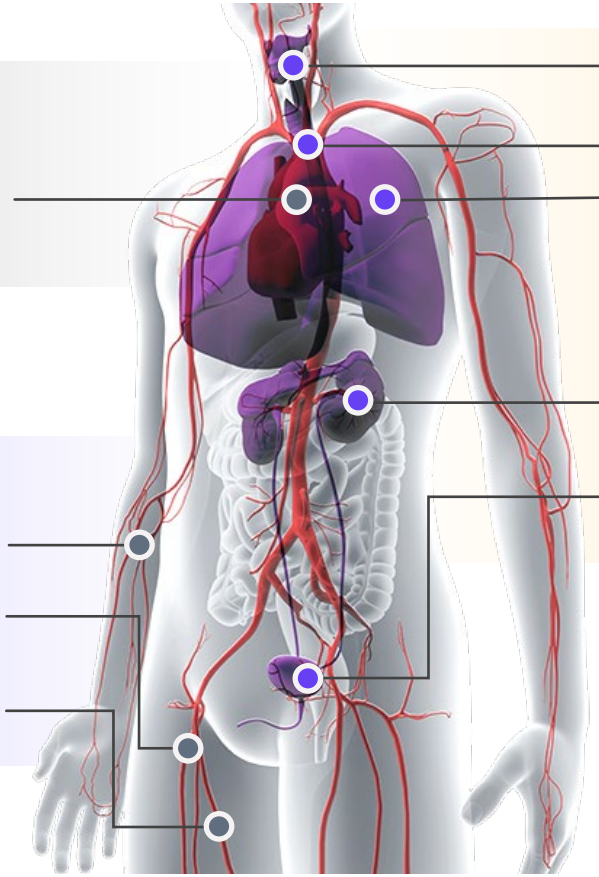
Complex Tissue Constructs and Organ Systems

Pre-Clinical

- Coronary Artery Bypass Graft (CABG)
- BT Shunt

Clinical Programs

- Dialysis AV Access
- Vascular Trauma
- Peripheral Arterial Disease (PAD)



Pre-Clinical

- Trachea
- Esophagus
- Lung
- Pancreas
- Urinary Conduit

Preparing for Strong Commercial Launch

Vascular Trauma is a Concentrated Market

- Majority of trauma vascular repair performed at Level 1 centers
- Approximately 200 level 1 trauma centers in U.S.
- Clear call point as majority of cases performed by vascular surgeons
- Humacyte expects DoD to stockpile for deployment to sites of conflicts

Compelling Health Economic Value Proposition for ATEV

- Budget Impact Model expected to support economic benefit of ATEV
- Costs associated with complications in vascular trauma potentially avoided with ATEV:

  Amputation Infection Harvest Site Infection
- Opportunity for incremental CMS and private pay NTAP payment

Experienced Hospital / Surgical Sales Professionals

- Estimate we can reach market with fewer than 20 sales representatives
- Direct force expected to secure hospital approvals through VACs and also drive adoption by vascular surgeons

Strategic Collaboration

- Large shareholder with $175 million invested in Humacyte
- Global collaboration for ATEV in trauma, dialysis and PAD
- Largest provider of renal care services in the U.S.

Commercial Manufacturing Scale – LUNA200 System

Bioreactor bag

Each bioreactor bag contains a single polymer mesh scaffold, seeded with banked human cells

Growth drawer

10 bioreactor bags per growth drawer; tubing connects to shared nutritive media

LUNA200 System

Each LUNA200 can produce 200 ATEVs per batch (or ~1,000 ATEVs annually) [1]

Commercial 83,000 sq ft Bioprocessing Facility

- Currently operating 8 LUNA200 systems
- Annual Capacity expected to exceed 40,000 ATEVs
- Functionally closed system with state-of-the-art process automation

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2024 Milestones

Completed in 2023

- *Vascular Trauma (ATEV):*
  - *Completion and positive results from V005 Phase 2/3 trial* ✓
  - *Positive Ukraine humanitarian trauma results* ✓
  - ***BLA submission*** ✓
- *Completion of enrollment of Phase 3 ATEV dialysis trial* ✓
- *Positive Phase 2 results from PAD trial conducted by Mayo Clinic* ✓
- *Preclinical BVP results showing survival and function of islets* ✓

Planned for 2024

- Vascular Trauma (ATEV):
  - BLA filing acceptance by FDA ✓
  - FDA approval ✓
  - U.S. commercial launch
- Favorable top-line results V007 ATEV dialysis (AV Access) Phase 3 trial ✓
- Publication of Mayo Clinic ATEV Phase 2 trial results in severe PAD ✓
- BioVascular Pancreas (BVP) for type-1 diabetes:
  - Results from preclinical studies showing survival and function of islets cells in large animals and diabetes models ✓
- Results from large animal studies of small-diameter ATEV in Cardiac Bypass Surgery (CABG) ✓

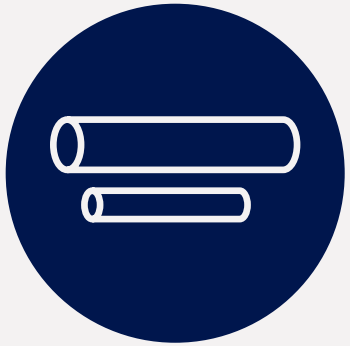
Publications & Presentations
(Multiple other clinical and preclinical publications and presentations expected for 2024)

All milestone dates are only management estimates

The Promise of Regenerative Medicine

Bioengineering Platform

Broad platform of universally implantable off-the-shelf bioengineered human tissues and organs



Extensive Markets

Platform targets extensive markets across multiple indications

Commercial Scale Manufacturing

Existing facilities expected to support anticipated commercial launch with room for modular expansion

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Universally Implantable Regenerative Human Tissue

Thank You