

## A simple blood draw – using adult stem cells to treat vascular diseases

### DOCTOR, MANAGEMENT & PATIENT TESTIMONIALS

**Dr. Pierre Leimgruber, MD, FACC – Scientific Advisory Board**

“I encourage my colleagues in cardiology and vascular medicine to take the time necessary to understand ACP-01’s efficacy and safety profile and what Hemostemix represents as a company.”

**Dr. Norman C.W. Wong, B.Sc (Hon), M.Sc, M.D., FRCP(C) – Scientific Advisory Board**

“I feel that Hemostemix has a promising platform technology that will lead to novel therapies for many human diseases with unmet needs benefiting from the use of stem cells. HEM’s current Phase 2 clinical trial in Critical Limb Ischemia (CLI) will yield much needed information applicable to patients with Peripheral Artery Disease (PAD). This proof of concept step will open the doors to a much bigger therapeutic arena for treating Congestive Heart Failure (CHF) and other related conditions. The stem cell therapies with HEM’s reach has the potential to impact the lives of patients with not only CLI arising from PAD but in the near future expand to those with CHF.”

**Dr. York N. Hsiang, MB ChB. MHSc. FRCSC Professor of Vascular Surgery, UBC and Consultant Surgeon, VGH – Scientific Advisory Board**

“This trial is an important step forward in technology for treating vascular diseases such as CLI... I feel this is an important study and we have seen some very impressive results.”

**J. Tarachione, Patient**

“After I had the stem cell surgery I felt 100% better. I kept slowly improving and improving.... It’s almost like a miracle that I could go from bad to feeling good again. I’m more physically and mentally capable now. This is something that absolutely needs to be done and made available for the public in this country “

**Dr. Thomas Lindsay, Head of Division of Vascular Surgery, UHN, Toronto General Hospital**

“Our experience with patients in this trial was very positive.... New evidence from other trials continues to support stem cell therapy in PAD and the technology in the ACP-01 has promise. Obtaining definitive evidence of the benefit of this therapy, is a critical step in moving forward both scientifically and clinically.”

### Regenerative medicine is at the leading edge of biotech investment

## KEY HIGHLIGHTS

### Intellectual Property

- 91 Patents issued or pending worldwide
- 5 patent families including automation of production patent

### Expandable Platform

- ACP-01 – 5 indications
- NCP-01 – stroke model as an indication
- Machine engineered

### Resource Optimization

- Lean structure
- Experienced board and management team
- World class Scientific Advisory Board
- International world class Advisory Board

### Key Partnerships

- License Negotiations Started
  - By Indication by Country

### Data Driven

- Historical Data (>300 patients treated)
- 12 Years of treatment History
- Multiple Trials (2) and Investigator led studies (3) completed

### Clinical Trial Pipeline

- 20 NA Sites: 56<sup>th</sup> patient enrollment
- Abstract results show 83% of patients (10 of 12) show improvement
- Midpoint reached: Results expected in Q3 2020



# PATENTED AUTOLOGOUS STEM CELL THERAPY PLATFORM

**LEAD PRODUCT ACP-01: Studied and clinically trialled for the treatment of ischemia-based conditions:**



Peripheral Arterial Disease  
Critical Limb Ischemia



Angina  
Dilated Cardiomyopathy  
Ischemic Cardiomyopathy



Future potential:  
Other Cardiovascular  
Diseases

## Technology Differentiators:

- ✓ Simple protocol (blood draw – safer and less invasive than fat or bone marrow)
- ✓ Autologous (patients own cells)
- ✓ No reported safety or ethical concerns
- ✓ Scalable – simple, cost-effective production process

## LEAD PRODUCT ACP-01 – PHASE II CLINICAL TRIAL

### Promising Treatment for a Disease With Limited Treatment Options

Critical limb ischemia (CLI) is a chronic condition and is the most severe and deadliest form of peripheral arterial disease (PAD) with limited treatment options and no current approved drug treatments. CLI has a high rate of amputation and mortality. CLI is quickly becoming a global economic burden as it is expensive to treat.

#### ACP-01 Abstract:

**Results:** Twelve patients with CLI and no interventional options were enrolled (10 male, 2 female, mean age 76 years). Prior to treatment with ACP-01 or placebo, 3 patients had ischemic rest pain, 8 patients had ulceration, and one patient had gangrene. Post treatment, one patient with unremitting rest pain and toe gangrene required a below knee amputation, and one patient with gangrene of the first to third toes required a forefoot amputation. Healing of ulcers and resolution of ischemic rest pain occurred in the other 10 (83%) patients. There were no clinically significant safety issues. Outcomes have been maintained for up to 4.5 years (3.5 years for 2 patients, 3 years for 1 and 1 patient died after ulcer healing secondary to congestive heart failure at 6 months).

**Conclusions:** Preliminary long-term results of ACP-01 autologous stem cell treatment in CLI patients with no revascularization options are encouraging. Enrollment in the study is ongoing at medical centers in Canada and the US. We recommend Vascular surgeons to discuss this study with their CLI patients who have no further revascularization options available.

Source:  
AUTOLOGOUS STEM CELL TREATMENT FOR CLI PATIENTS WITH NO REVASCLARIZATION OPTIONS: AN UPDATE OF THE HEMOSTEMIX ACP-01 TRIAL WITH 4.5 YEAR FOLLOWUP

#### Lead Product – ACP-01:

- **Current Phase II Clinical Trial for Critical Limb Ischemia**
  - US FDA and Health Canada approved Phase II Clinical Trial for CLI
  - 20 NA trial sites with 56th patient enrolled
  - Min. 6 month up to 12 month followup
  - Phase II midpoint reached: Results expected in Q3 2020
- **Open Phase II Studies of Angina, PAD, Ischemic Cardiomyopathy, Dilated Cardiomyopathy completed**



1. Source: The Sage Group

2. Source: American Heart Association Report: Cardiovascular Disease: A costly Burden for America

## CONTACT FOR ADDITIONAL INFORMATION

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# EXPERIENCED BOARD AND MANAGEMENT TEAM

## **Peter Lacey, ICD.D, Chairman of the Board**

Chairman of Cervus Equipment Corporation (CERV.TO), from inception to date. President and Chief Executive Officer of Cervus Equipment Corporation and its predecessor entities from 1982 to April 2012. Cervus is a company he and his partners started in 1999 and built from five John Deere dealerships to 63 dealerships selling six brands in three countries with revenues of \$1.1 Billion. Graduate of the Institute of Corporate Directors Education Program at the University of Toronto.

## **Dr. Ronnie Hershman, M.D., F.C.C.S., Director**

Graduated Magna Cum Laude from Sophie Davis Center for Biomedical Research in 1980. Practicing Cardiologist since 1987 and Medical Director of NYU Langone Long Island Cardiac Care. Pioneer in performing laser assisted coronary angioplasty. Entrepreneur and investor for more than two decades and director and/or officer of over 9 life science companies. Advisor to late stage life science VC.

## **Loran Swanberg, Director**

Part owner and a director of a private company, Landsman Properties Ltd. since 2005. From 1992 to 2005, Mr. Swanberg was a director of the family owned oilfield transportation company, Swanberg Bros. Trucking Ltd., which was purchased by Producers Oilfield Services Inc. in 2005. Director of privately held Swanberg Air Inc. from 2000 to 2012, and was a director of the Northern B.C. Truckers' Association for 10 years, 1992 to 2002. Most recently, Mr. Swanberg was a partner and director of Vieworx Geophoto Inc. from 2012 until Q1 2020.

## **Thomas Smeenk, BA, President, CEO, Co-Founder & Director**

Founder, President and VP Business Development, TheraVita Inc., which went public as Hemostemix Inc. QT. A public company executive since 1996, serving most recently as President & CEO of Broadway Gold Mining Ltd. Prior, VP Business Development, Memex Inc.; President & CEO of e-Manufacturing Networks Inc.; President and CEO of Tyranex Gold Inc. and President and CEO of IBI Corporation.

# WORLD CLASS ADVISORY BOARDS

## **Dr. York Hsiang, MB, ChB, MHSc, FRCS – Scientific Advisory Board**

Professor of Vascular Surgery at University of British Columbia, and Consultant Surgeon at the Vancouver General Hospital with diverse interests in vascular biology, vascular engineering and clinical epidemiology. Past President of the Chinese-Canadian Medical Society and the Western Vascular Society. Written or co-written and presented 165 continuing medical education accredited papers; and he presented the Company's blinded results to the 41st annual meeting of the Canadian Society for Vascular Surgery, held September 13-14, 2019.

## **Dr. Pierre Leimgruber, MD, FACC – Scientific Advisory Board**

Board-certified in internal medicine, cardiovascular diseases, and interventional cardiology. A specialist in cardiovascular disease treatment. Has worked for 32 years as an interventional cardiologist, affiliated with four leading Spokane hospitals and serves as Clinical Associate Professor of Medicine at the University of Washington School of Medicine in Seattle. Received his medical degree from University of Zurich Medical School and trained with Andreas Gruentzig, MD, the inventor of balloon angioplasty, at Emory University Hospital in Atlanta. Author of 26 peer-reviewed research studies published in leading medical journals.

## **Dr. Norman C. W. Wong, B.Sc (Hon), M.Sc, M.D., FRCP(C) – Scientific Advisory Board**

Co-Founder and Chief Scientific Officer since 2003 of Resverlogix Corp. (TSX:RVX). Currently Professor of Medicine and Biochemistry & Molecular Biology and Director of the Libin Gene/Cell Therapy Unit within the Faculty of Medicine at the University of Calgary specializing in the areas of Endocrinology, Internal Medicine, Molecular Biology, and Gene/Cell Therapy.

## **Dr. Alan B. Lumsden, M.D. – Scientific Advisory Board**

Walter W. Fondren III Chair, Medical Director of the Houston Methodist DeBakey Heart & Vascular Center and Chair of the Department of Cardiovascular Surgery at Houston Methodist Hospital since 2008.

## **Dr. Kumar L. Hari, Ph.D. – Scientific Advisory Board**

Chief Scientific Officer at cBio, a private disease diagnostics and tracking firm. Expertise is in chromosome biology, functional genomics, and bioinformatics and oversaw the development of the MRS and PATRN platforms.

## **Timothy Chang, BA - Advisory Board**

Currently a Private Investor and investment committee member of an Asian-based hedge fund with average total AUM of approx. US\$1 billion. He has also been a consultant to Newport Healthcare Advisors and to SSG Capital Management. Previously, Managing Director of Citigroup Venture Capital International Asia Ltd., (CVCI) Hong Kong, 2005 – 2008. Prior to CVCI, Mr. Chang was Managing Director and Head of Greater China for Cerberus. Mr. Chang was also an Executive Director, Direct Investments and the Head of the Special Situations Group at AIG Investment Corp. Ltd., Hong Kong. Graduated Harvard University, Summa Cum Laude - B.A. in Applied Mathematics and Economics.

## **David H. Tsubouchi, B.A., J.D., LL.D., D.S.Litt., C.Dir. – Advisory Board**

The first Japanese Canadian to be elected to any provincial legislature in Canada and to be appointed as a Cabinet Minister. He has served as Minister of Consumer and Commercial Relations, Solicitor General, Chair of Management Board and Minister of Culture. He sits on the boards of OMERS Pension Fund, Lakefront Utilities and the Ontario Arts Council. Previously served as Honorary Consul General of Mongolia. Former Registrar and CEO of the Ontario College of Trades. He has also served as the Integrity Commissioner for the Town of Richmond Hill.

## **Honorable Shelia Copps, OC, PC - Advisory Board**

Former Deputy Prime Minister of Canada, Minister of Environment, Minister of Heritage and a senior member of the federal cabinet for 10 years. Sheila has had a storied career that has left an indelible mark on Canadian public policy. She earned a Bachelor of Arts (Honors) in French and English from the University of Western Ontario in London and pursued further studies at McMaster University in Hamilton and the University of Rouen in France. In 1998, received an Honorary Doctorate in Law from Université Sainte-Anne in Nova Scotia.