Arch Biopartners

TSXV: **ARCH.V**
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New Drugs for Acute Kidney Injury and Chronic Kidney Disease

October 2025

Notes about forward looking statements

This presentation contains forward-looking statements within the meaning of applicable Canadian securities laws regarding expectations of our future performance, liquidity and capital resources, as well as the ongoing clinical development of our drug candidates targeting the dipeptidase-1 (DPEP1) pathway, including the outcome of our clinical trials relating to LSALT peptide (Metablok) and cilastatin, the successful commercialization and marketing of our drug candidates, whether we will receive, and the timing and costs of obtaining, regulatory approvals in Canada, the United States, Europe and other countries, our ability to raise capital to fund our business plans, the efficacy of our drug candidates compared to the drug candidates developed by our competitors, our ability to retain and attract key management personnel, and the breadth of, and our ability to protect, our intellectual property portfolio. These statements are based on management's current expectations and beliefs, including certain factors and assumptions, as described in our most recent annual audited financial statements and related management discussion and analysis under the heading "Business Risks and Uncertainties". As a result of these risks and uncertainties, or other unknown risks and uncertainties, our actual results may differ materially from those contained in any forward-looking statements. The words "believe", "may", "plan", "will", "estimate", "continue", "anticipate", "intend", "expect" and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. We undertake no obligation to update forward-looking statements, except as required by law. Additional information relating to Arch Biopartners Inc., including our most recent annual audited financial statements, is available by accessing the Canadian Securities Administrators' System for Electronic Document Analysis and Retrieval ("SEDAR") website at www.sedar.com.

Millions face acute and chronic kidney disease every year.

Acute Kidney Injury (AKI)

- Affects approximately 14–16 million people each year in the U.S. and E.U.[1, 2]
- No approved treatments; patients often require dialysis or transplant to survive.
- Two ongoing Phase II trials targeting inflammation- and toxin-related AKI.

Chronic Kidney Disease (CKD)

- More than 800 million people globally, with diabetic kidney disease as the leading cause of kidney failure.[10, 11]
- Current therapies slow progression; Arch is developing new on-target drugs addressing the IL-32 pathway driving CKD.

Sources

Arch Biopartners is developing novel drugs for acute and chronic kidney diseases.

Cardiac Surgery-Associated Acute Kidney Injury (CS-AKI)

LSALT peptide is in a Phase II trial to prevent CS-AKI, a common condition experienced by up to 30% of cardiac bypass patients.

Drug Induced Acute Kidney Injury (DI-AKI)

Cilastatin is in a Phase II trial to prevent DI-AKI caused by antibiotics, chemotherapy, and contrast agents, representing ~30% of AKI in hospitals.

Chronic Kidney Disease (CKD)

Pre-clinical platform targeting interleukin-32 (IL-32), an inflammatory mediator linked to diabetic kidney disease, the leading cause of kidney failure worldwide.

LSALT peptide is in a Phase II trial to protect kidneys from CS-AKI.

Up to 30% of cardiac surgery (CS) patients on bypass machines experience acute kidney injury (AKI).[3,4]

- Over one million cardiac surgeries, including bypass procedures, are performed each year.[5]
- No drugs are currently approved to prevent AKI during cardiac surgery.

- More information about the Phase II CS-AKI Trial: Clinicaltrials.gov.
- Learn more about LSALT peptide at archbiopartners.com/lsaltpeptide

Sources

LSALT peptide targets Dipeptidase-1 (DPEP1).

A novel pathway to block kidney inflammation.

Arch Scientists publication in *Cell* (2019): DPEP1 mediates neutrophil adhesion in the kidney, driving inflammation and AKI.[6] LSALT peptide targets DPEP1 to inhibit inflammation and AKI.

Watch LSALT peptide preventing inflammation:

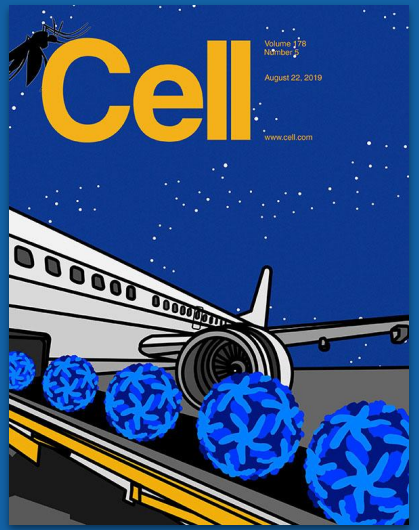
Inflammatory White Blood Cells

Healthy Blood Vessels

CLICK IMAGE TO WATCH VIDEO

Sources

Publication in CELL



***Cell*, August 2019**

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Cilastatin: a repurposed DPEP1 inhibitor in a Phase II trial for drug-induced AKI.

Drug-induced AKI is a common complication of widely used antibiotics, chemotherapy, and other nephrotoxic drugs, with no approved treatments.

The PONTiAK trial is testing cilastatin to prevent drug-induced (toxin-related) AKI, a frequent complication in hospitalized patients. Recruitment began in July 2025 at sites in Alberta, led by investigators at the University of Calgary.

The study is independently funded and managed, with Arch supplying cilastatin to support the trial.

Learn more:
archbiopartners.com/cilastatin

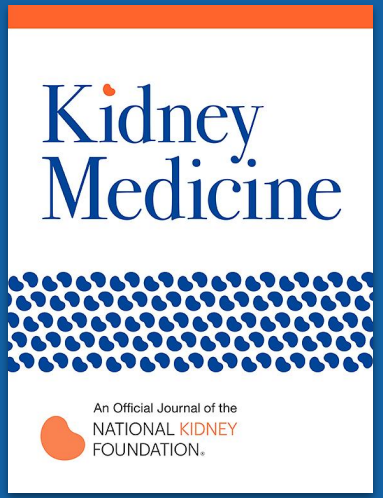
Repurposing cilastatin as a treatment for drug-induced AKI.

Cilastatin inhibits nephrotoxin uptake by kidney cells, an off-target effect that may prevent AKI caused by widely used antibiotics, chemotherapy drugs, and contrast agents used in medical imaging.

Pre-clinical studies (*JCI*, 2018) showed cilastatin reduced kidney toxin uptake and inflammation.[8] A 2024 meta-analysis of human data in the NKF Journal, *Kidney Medicine,* demonstrated strong safety and nephroprotective potential, with up to a 74% lower risk of AKI in clinical settings.[9]

Sources

Publication in NKF:
Kidney Medicine



***Kidney Medicine*, Dec. 2024**
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Hundreds of millions are affected by chronic kidney disease (CKD) worldwide.

Arch's CKD program targets interleukin-32 (IL-32), a human cytokine directly implicated in kidney inflammation and diabetic kidney disease (DKD).

- 800M people affected globally; 35–38M in the U.S.[10, 11, 12]
- Diabetes drives up to 40% of CKD.[13]
- Current treatments do not target the biological drivers of CKD.

Arch's IL-32 strategy advances a first-in-class therapeutic approach that directly targets disease-driving pathways in CKD, with potential to slow or prevent irreversible kidney damage.

Sources

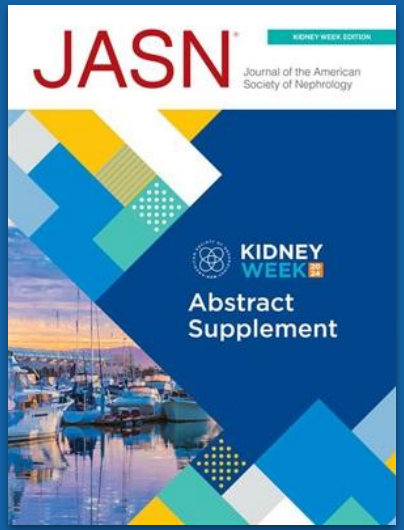
IL-32 as a novel driver of diabetic kidney disease.

Interleukin-32 (IL-32) has been identified as a potential mediator of lipid droplet accumulation and chronic inflammation in kidney cells, key processes underlying diabetic kidney disease (DKD), the leading cause of kidney failure worldwide.[15,13,14]

Evidence from patient samples and disease models confirms IL-32's role in kidney injury, establishing a mechanistic link between metabolic stress, inflammation, and tubular damage. These findings, published in the *Kidney Week Abstract Supplement of The Journal of the American Society of Nephrology* (2024), highlight IL-32 as a potential new target for DKD.

Sources

Abstract in JASN



***JASN*, October 2024**

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Arch's leadership in kidney therapeutics is protected by strong patents.

LSALT peptide

Composition and method-of-use patents. Approval for the CS-AKI indication could also support use of LSALT peptide in the lungs, liver, other AKI indications, and sepsis.

Cilastatin

Method-of-use patents to repurpose cilastatin as a treatment to prevent AKI. No prior commercial history of cilastatin as a stand-alone drug product.

CKD Platform

Patents covering both composition and method-of-use for targeting IL-32. Includes several therapeutic approaches to treat CKD and other metabolic disease indications.

Next steps: Completing Phase II AKI trials and advancing the IL-32 CKD program.

Arch's programs target the leading causes of acute and chronic kidney injury, addressing millions of patients worldwide.

The CS-AKI and PONTiAK Phase II trials target up to ~60% of all AKI cases in hospitalized patients.[3,7] Successful completion could establish LSALT peptide and cilastatin as urgently needed treatments for global kidney care.

Arch's IL-32 CKD program highlights a novel pathway in diabetic kidney disease, with next steps focused on advancing pre-clinical development and building future partnerships.

Sources

Investor Information

Read the latest news releases and download financial reports and filings (also at SEDAR+).
www.archbiopartners.com/investor-hub

Capitalization

Oct 1, 2025
$1.19 CAD **TSXV - ARCH.V**
$0.82 USD **OTCQB - ACHFF**
52 Week:
High $2.20 Low $1.13 CAD

Common shares outstanding:
66,106,366 August 29, 2025
Market Capitalization:
$79 M CAD
Options: 3,877,500
Exercisable Warrants: None

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Executive Management

Richard Muruve

CEO, Director, Co-founder

Mr. Muruve co-founded the company with the Arch Inflammation team in 2010. Prior to his work at Arch, Mr. Muruve was a Vice President at Bank of Montreal where he spent 12 years in the Investment Banking Group.

Andrew Bishop

CFO, Director

Mr. Bishop is a Partner and Co-Founder of Bingley Capital Inc. and brings over 20 years of experience in advising biotech and health care companies.

Dr. Daniel Muruve MD

CSO, Co-Founder

A Professor in the Dept. of Medicine at the University of Calgary. Dr. Muruve has undertaken extensive post-graduate medical and scientific training at the University of Calgary, Harvard University and the University of Lausanne.

A committed board and advisors.

Claude Allary, Director
Co-founder, partner of Bionest Consulting, Sanofi, Pfizer, Glaxo

Farris Smith, Strategic Advisor
President, Vimy Pharma, Former CFO, Leo Pharma (North America), Novo Nordisk Canada.

Richard Rossman, Director
Gastroenterologist (retired), Asst. Professor at McMaster University, Helix Biopharma (Board)

Patrick Vink, Strategic Advisor
Former COO, Cubist Pharma (purchased by Merck for $10B)

Dr. David Luke, Strategic Advisor
Previously at Pfizer Inc (20+ years), as Senior Medical Director.

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Bluesky
https://bsky.app/profile/archbiopartners.com

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