CORPORATE PRESENTATION

OCTOBER 21, 2014

WWW.DIAMEDICA.COM

A preliminary prospectus containing important information relating to the securities described in this document has been filed with the securities regulatory authorities in each of British Columbia, Alberta, Manitoba and Ontario. A copy of the preliminary prospectus, and any amendment, is required to be delivered with this document. The preliminary prospectus is still subject to completion. There will not be any sale or any acceptance of an offer to buy the securities until a receipt for the final prospectus has been issued. This document does not provide full disclosure of all material facts relating to the securities offered. Investors should read the preliminary prospectus, the final prospectus and any amendment for disclosure of those facts, especially risk factors relating to the securities offered, before making an investment decision.

DIAMEDICA INC

DMA LISTED ON TMX TSX Venture Exchange

FORWARD LOOKING STATEMENT

This presentation may contain forward-looking statements, which reflect the Company's current expectation regarding future events. These forward-looking statements involve risks and uncertainties that may cause actual results, events or developments to be materially different from any future results, events or developments expressed or implied by such forward-looking statements. Such factors include, but are not limited to, changing market conditions, the successful and timely completion of clinical studies, the establishment of corporate alliances, the impact of competitive products and pricing, new product development, uncertainties related to the regulatory approval process or the ability to obtain drug product in sufficient quantity or at standards acceptable to health regulatory authorities to complete clinical trial or to meet commercial demand, and other risks detailed from time to time in the Company's ongoing quarterly and annual reporting. Certain of the assumptions made in preparing forward-looking statements include but are not limited to the following: that DM199, DM204 and other programs will generate positive efficacy and safety data in preclinical and future clinical trials; that DiaMedica will complete preclinical and clinical trials within the timelines communicated. Except as required by applicable securities laws, we undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. Investing in securities of the Company involves certain risks that should be considered by a prospective purchaser. The risk factors identified under the heading “Risk Factors” in the preliminary prospectus and in other documents incorporated therein by reference should be carefully reviewed and evaluated by prospective purchasers before purchasing securities of the Company being offered thereunder.

CORPORATE HIGHLIGHTS

TREATMENTS FOR DIABETES AND KIDNEY DISEASE

DM199: Recombinant human tissue kallikrein-1 (KLK1)

- *Type 2 diabetes – in clinical trial*
  - First in class novel insulin sensitizer
- *Kidney disease – preparing for clinical trial*
  - First-in-class with new mechanism of action
  - Nobel Laureate, Prof. O. Smithies, acknowledges role of KLK1 pathway in kidney disease (Kidney International 2012 vol. 81, 733-744)

DM204: mAb follow-on to DM199

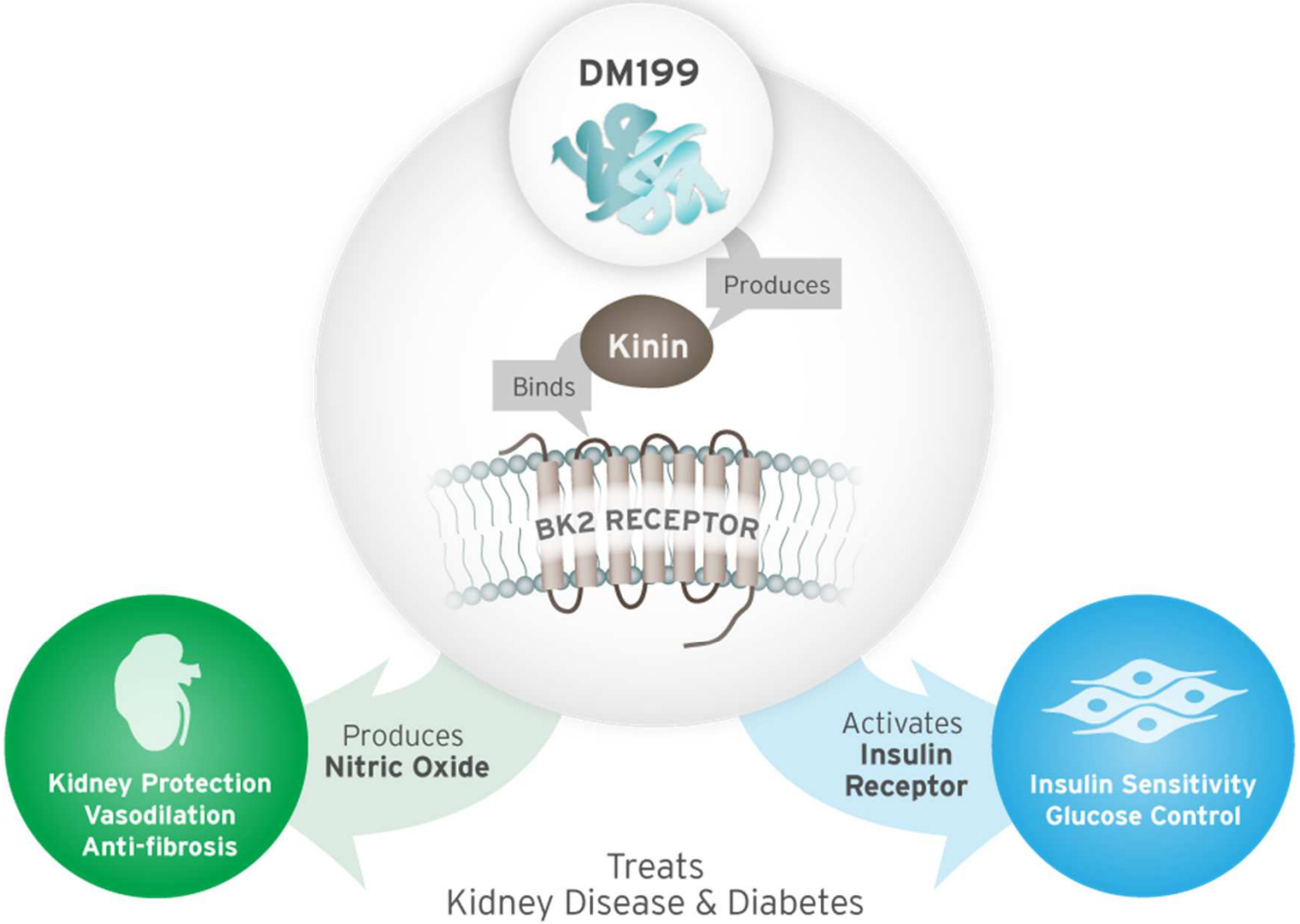
- Type 2 diabetes - Novel insulin sensitizer and vasodilator
  - In preclinical development

Filed 20-F with the SEC*

Registration of the Company's Common Shares with the SEC is dependent on the Company meeting certain requirements, some which may be delayed or never occur.

DM199 MECHANISM OF ACTION

rhKLK1 NATURAL MECHANISM RESTORES SIGNALING PATHWAYS



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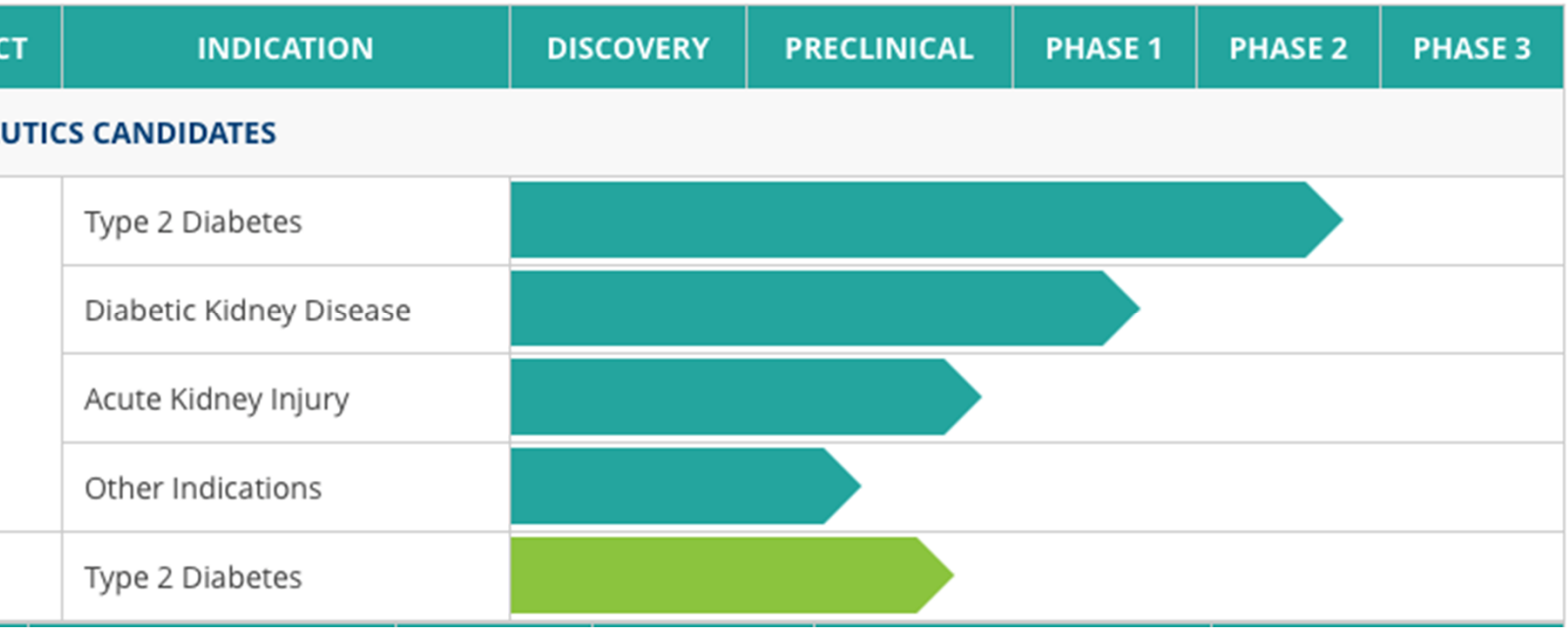
PRODUCT PIPELINE

PRODUCT	INDICATION	DISCOVERY	PRECLINICAL	PHASE 1	PHASE 2	PHASE 3
THERAPEUTICS CANDIDATES						
DM199	Type 2 Diabetes					
	Diabetic Kidney Disease					
	Acute Kidney Injury					
	Other Indications					
DM204	Type 2 Diabetes					



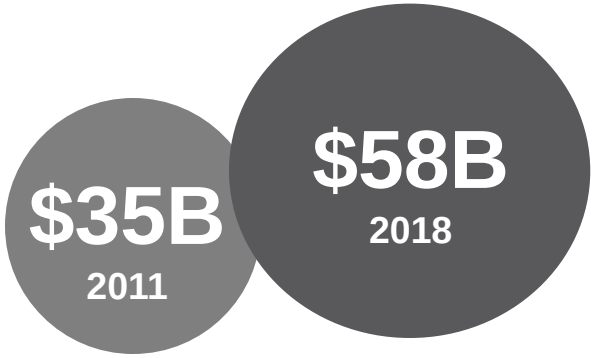
DM199 FOR TREATMENT OF DIABETES

KEY OPPORTUNITY IN HEALTH CARE:

Type 2 Diabetes (T2D): insulin resistance resulting in inefficient glucose control

382M
Global

90% are T2D patients[1]



Market for
diabetes drug treatments[2]

>50%
US & EU

T2D Patients not
achieving control of
glucose levels[3]

11%
Global

Total adult (ages 20 - 79)
health care expenditure[1]

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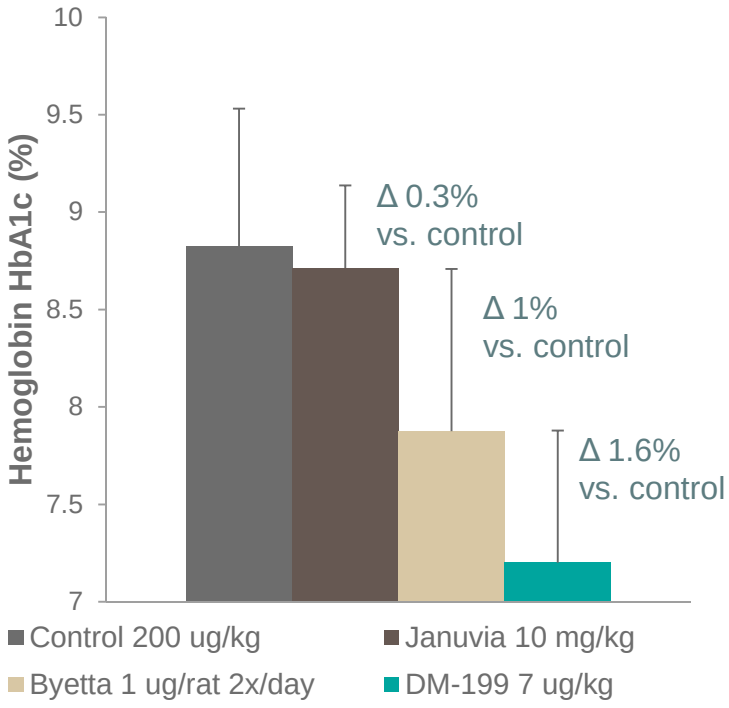
References
1. IDF Diabetes Atlas, 6th edn. 2013
2. Standard & Poor's 2012
3. Adelphi Disease Specific Program DSP III + IV

FAVORABLE PRECLINICAL DIABETES DATA

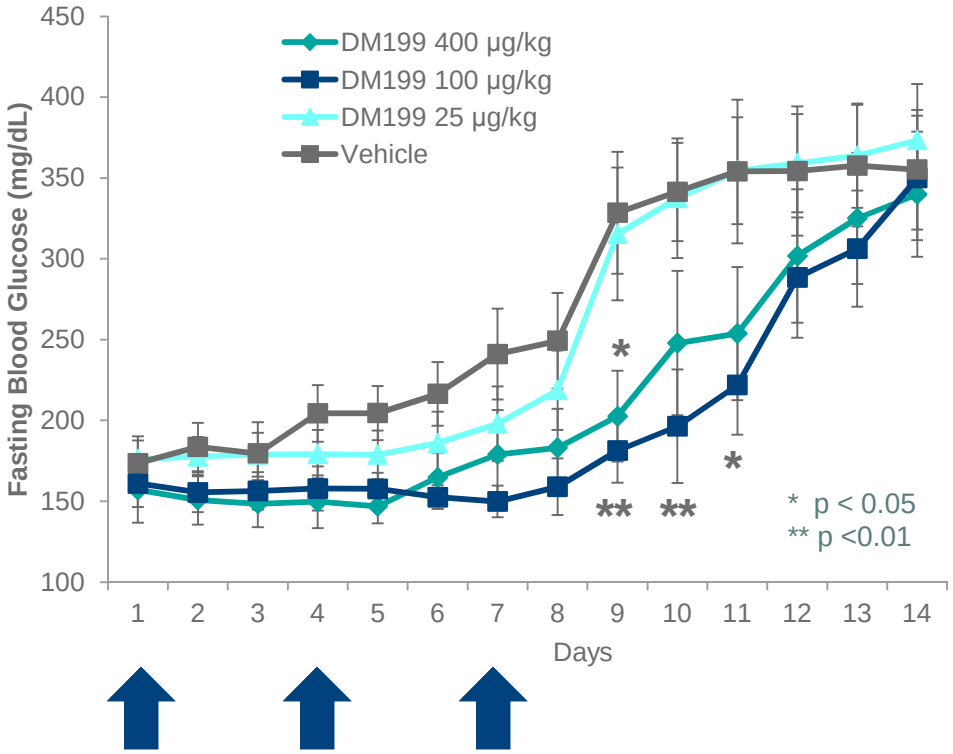
SUSTAINED GLUCOSE CONTROL IN PRE-CLINCAL TYPE 2 DIABETES MODELS

Study 1
ZDF Model - 3 weeks



- **Improvement in HbA1c**

Study 2
ZDF Model - 2 weeks



- **Sustained glucose control**

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KIDNEY DISEASE MARKETPLACE

40%

Diabetes patients with DKDs[1]

5-10M

DKD patients in US alone[2]

Limited Treatment Available

Current treatments limited to anti-hypertensive medications

$11.7B

Chronic kidney disease market size[3]

DM199 is Positioned to Treat Kidney Disease

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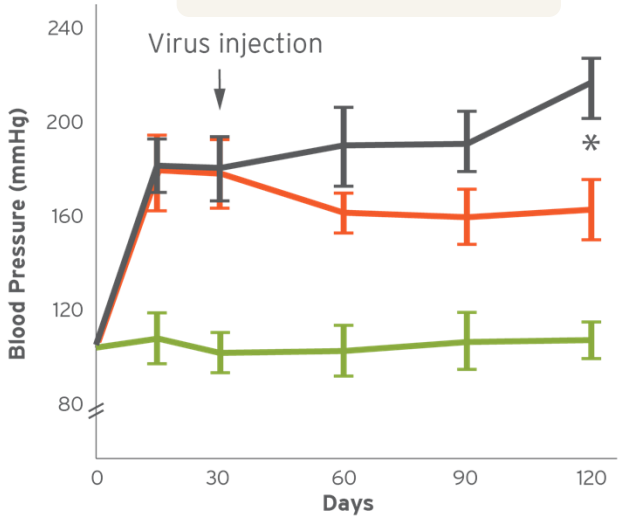
References
1. Reutens, AT. *Med Clin N Am* 2013: 97(1-18)
2. National Chronic Kidney Disease Fact Sheet 2014, CDC DDT
3. Decision Resources, January 28, 2014

DM199 FOR KIDNEY DISEASE

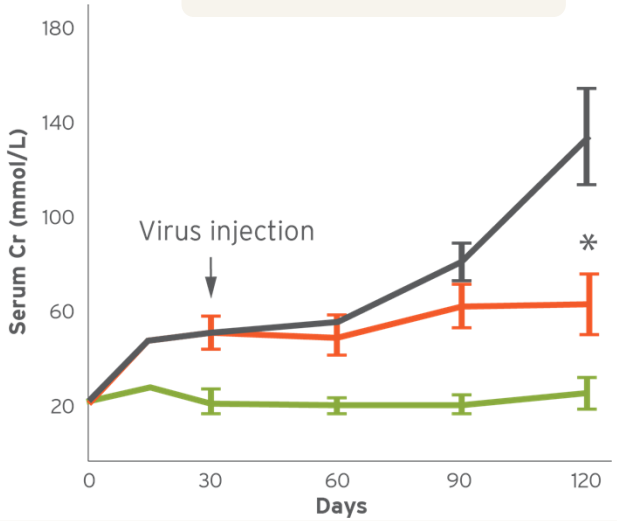
KLK1 IN KIDNEY DISEASE

- 5/6 nephrectomy animal model with KLK-1 gene therapy treatment
  - Stabilized kidney function as measured by significant improvements in:
    - Blood pressure, serum creatinine & microalbuminuria vs. untreated control
- Nobel Laureate, Prof. O. Smithies, acknowledges role of KLK1 pathway in kidney disease
  - Source: Kidney Int.(2012) 81: 733-744
- KLK-1 levels potentially correlated with severity of kidney disease
  - Source: (Immunopharmacology, (1999), 44:183-192)

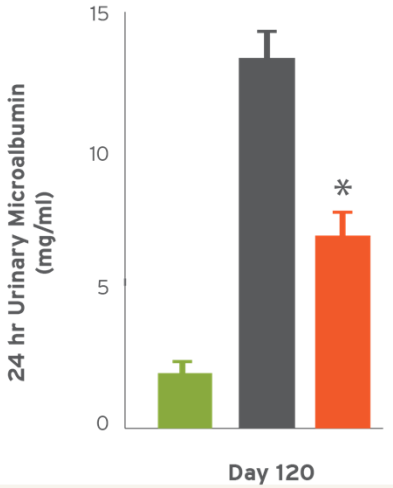
Blood Pressure



Serum Creatinine



Microalbuminuria



No nephrectomy Control (rAAV-GFP) KLK-1 (rAAV-HK)

(Hum. Gene Ther. (2008) 19:318-330)

ACUTE KIDNEY INJURY (AKI) OVERVIEW

10M

New patients yearly worldwide[1]

15-60%

Mortality rate[1]

Limited Treatment Available

Management limited to prophylactic & supportive care

$4.7B

Approximate aggregated cost of nearly 500,000 hospital stays[2]

AKI is a major unmet medical need

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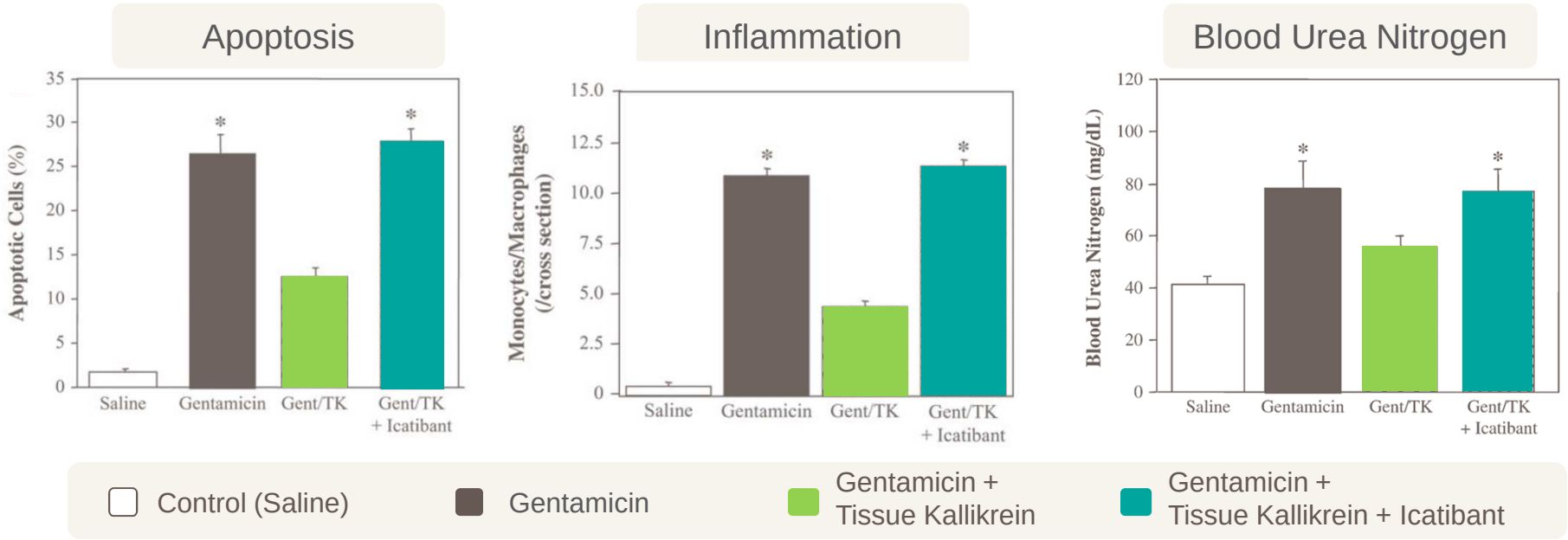
References
1. U.S. Government, 2013:http://www.sbir.gov/sbirsearch/detail/677804
2. Torio CM et al., *Healthcare Cost & Utilization Project* (2011)

DM199 FOR ACUTE KIDNEY INJURY

EFFICACY IN PRECLINICAL MODEL OF ACUTE KIDNEY INJURY

- Gentamicin (antibiotic) administration induces renal dysfunction, cell-death & inflammation
- KLK-1 (TK) I.V. infusion
  - Reduces apoptotic (cell-death) events
  - Reduces cytokines and inflammatory cell infiltration
  - Restores kidney function via reduced blood urea nitrogen

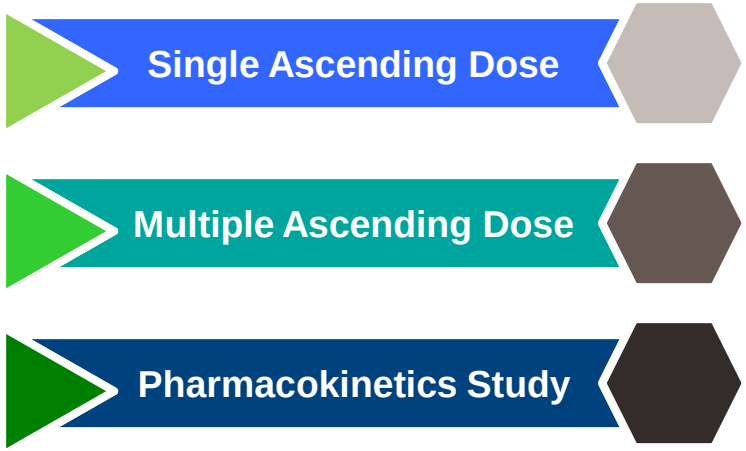


(Toxicol. Sci. (2008) 102(2): 433-443)

DM199 CLINICAL DEVELOPMENT

THREE PHASE 1 CLINICAL STUDIES IN HEALTHY VOLUNTEERS

- **50 Healthy Volunteers, 3 studies**
- Double-blinded, placebo controlled



Outcomes

- Safe and well tolerated
- Maximum tolerated dose established
- Extended PK profile supporting weekly dosing

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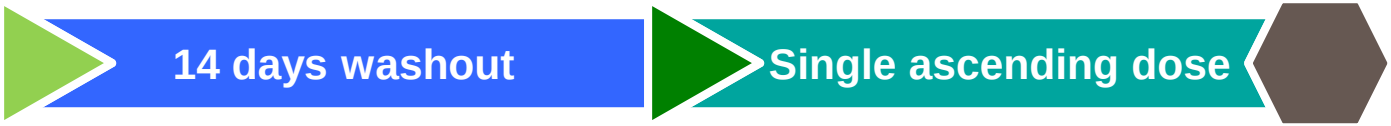
DM199 CLINICAL DEVELOPMENT

PHASE 1B CLINICAL STUDY IN TYPE 2 DIABETIC PATIENTS

- **10 Type 2 diabetic patients**
- Double-blinded, placebo-controlled
- 14 day washout period
- Placebo n=3, DM199 n=7
- 3 dose levels of DM199 over 8 days



Outcomes

- Safe and well tolerated

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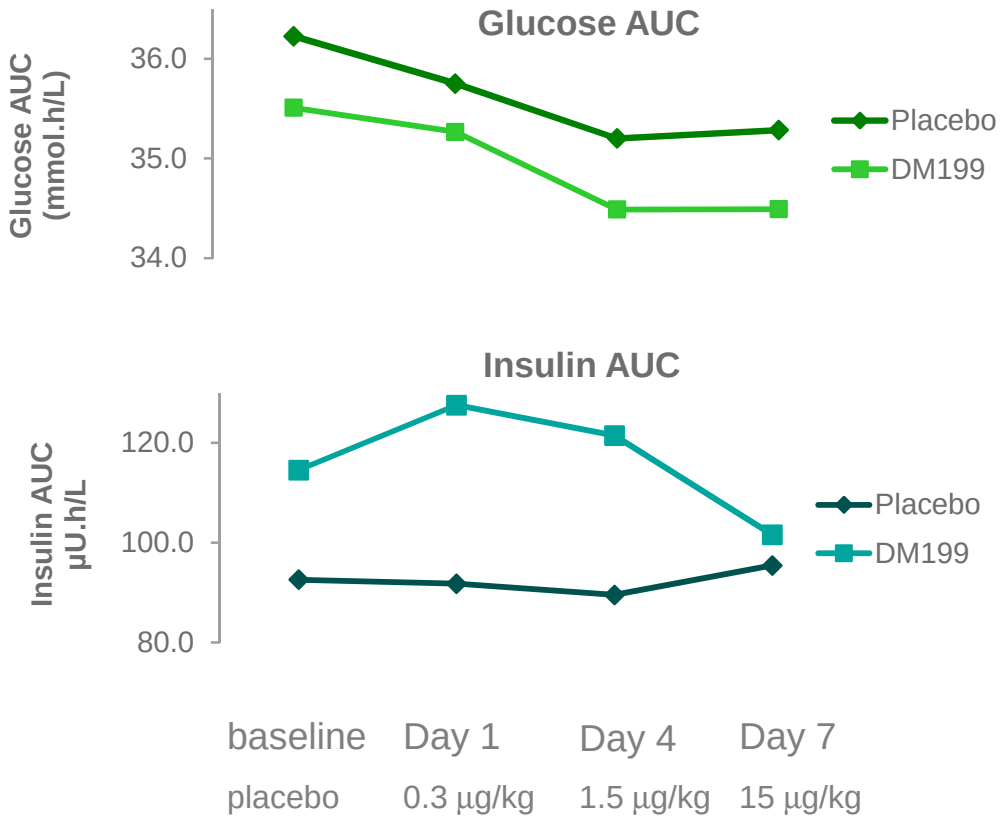
DM199: PHASE 1B
IMPROVEMENT IN INSULIN LEVELS

PATIENT BASELINE
DIABETIC DEMOGRAPHICS

	Placebo (N=3)	DM199 (N=7)
HbA1c (%)	6.9 (6.6-7.2)	7.0 (6.5-8.8)
Fasting Insulin (µU/mL)	**9.8** (8.6-12.1)	**14.0** (8.9-22.7)
HOMA2-IR (Insulin resistance)	1.2 (1.0-1.5)	1.9 (1.1-3.2)

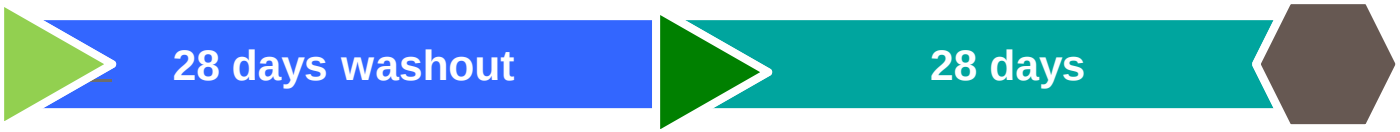
GLUCOSE & INSULIN
POST PRANDIAL



DM199 CLINICAL DEVELOPMENT

ONGOING PHASE 2 STUDY IN TYPE 2 DIABETIC PATIENTS

- **36 Type 2 diabetic patients**
- 28 day washout period
- 12 patients per arm, 3 dose groups
- Double-blinded, placebo-controlled
- Patients sequestered for 28 days
- First patient dosed January 2014



Primary outcome measures:
- Safety and tolerability

Secondary outcome measures:
- Changes in diabetic markers

Results in Q4 2014

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DM204 DIABETES AND COMPLICATIONS

FOLLOW-ON TO DM199

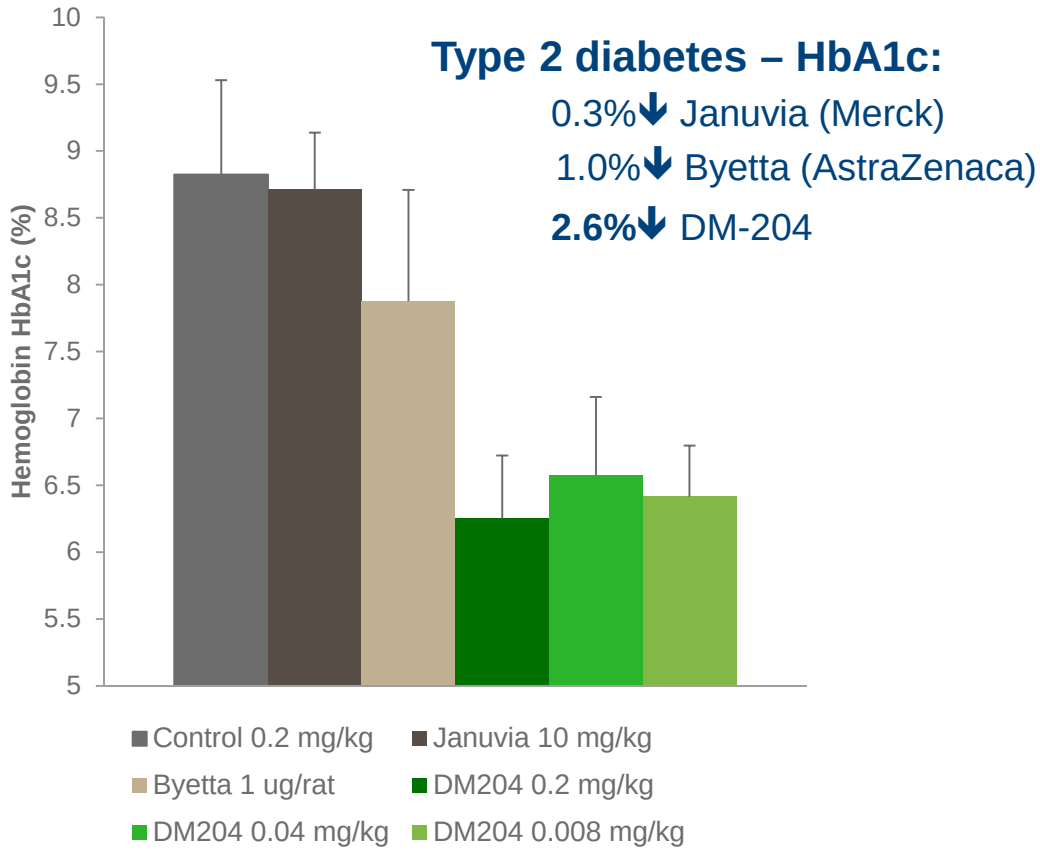
Monoclonal Antibody targeted to BK2R

- Superior glucose control
- Blood pressure control
- Total cholesterol improvement
- ~1x month administration

Status

- Preclinical development

ZDF fa/fa Rat Study - 3 weeks



Type 2 diabetes – HbA1c:

0.3%↓ Januvia (Merck)

1.0%↓ Byetta (AstraZenaca)

2.6%↓ DM-204

Significant improvement in Glucose Control (HbA1c)

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BROAD INTELLECTUAL PROPERTY PROTECTION

Composition of Matter	• DM199: Glycosylation & sialic acid content – novel structure (2033) • DM204: Complementarity determining regions for binding to BK2R (2031)
Methods of Use	• DM199 subcutaneous delivery with improved PK profile (2033) • DM199: For treatment of Type 2 Diabetes (2030) • DM199: For treatment of Type 1 Diabetes (2032) • DM199 for treatment of chronic kidney disease including DKD (2033) • DM199 for treatment of NAFLD and NASH (2034) • DM204 for Type 2 Diabetes and various other diseases (2031)
Combination Products	• DM199+GLP-1 analog (2027) • DM199+Insulin (2033) • DM204+diabetes medications (2031)
Freedom to Operate DM199 & DM204	• No third party patents detected that could block commercialization

EXPERIENCED TEAM

MANAGEMENT

Rick Pauls, MBA

PRESIDENT & CEO

Past co-founder & Managing Director of early stage life sciences venture capital fund

Mark Robbins, PhD, JD

EVP, CLINICAL & REGULATORY

30+ years biopharma & drug development, 11 successful NDA/BLA approvals

Dennis Kim, MD, MBA

CONSULTING CHIEF MEDICAL OFFICER

Previously with Amylin, Orexigen & Enteromedics

John Savage, CPA

CHIEF FINANCIAL OFFICER

17+ years with public co's. Previously with UnitedHealth Group, Best Buy & Golf Galaxy

Mark Williams, PhD

VP, RESEARCH

Co-inventor of DM199 & DM204, 4 phase II trials

SCIENTIFIC ADVISORS

John Amatruda, MD

Former Sr. VP & Franchise Head for Diabetes and Obesity at Merck
Lead development & regulatory approvals for Januvia™ and Janumet™ - 1st compounds in the DPP-IV inhibitor class for Type 2 diabetes

Paul Burn, PhD

Chair Sanford Project, former SVP at JDRF, Hoffman-La Roche Global Head Metabolic, Bayer Director Metabolic and Lilly Director

Alan Cherrington, PhD

Past President of America Diabetes Assoc.
Chairman of Molecular Physiology and Biophysics at Vanderbilt U Medical Center
Fredrick Banting Award Winner from the ADA

Daniel Porte Jr, MD

Past President of American Diabetes Assoc.
Prof of Medicine, U of California San Diego
Council member of National Institute of Diabetes

Ralph DeFronzo,MD

Professor of Medicine and Chief of the Diabetes Division at the U of Texas Health Science Center
Deputy Director of the Texas Diabetes Institute
Banting Award , Lily Award, & Albert Renold Award Winner from the ADA
Claude Bernard Award Winner EASD
Novartis Award Winner

BOARD OF DIRECTORS

Richard Pilnik, MBA (Chair)

President, Innovex (a Quintiles Company)
Former VP & Chief Marketing Officer at Eli Lilly
Former Board of Elan Pharma (acquired)

Dr. Michael Giuffre, MD, MBA

Clinical Professor of Cardiac Sciences at University of Calgary
Board of UNICEF Canada & AB Medical Assoc

Rick Pauls, MBA

President & CEO

Dawson Reimer, MEAS

CentreStone Ventures L.P. advisor

Thomas Wellner

CEO Revera Inc.,
former CEO CML Healthcare Ltd, (acquired)
Senior positions including Brand, Marketing and General Management at Eli Lilly

CORPORATE INFORMATION

Share Price	Oct 20, 2014	$0.34
Total Shares Outstanding	Oct 21, 2014	~62M
Market Capitalization (CDN)	Oct 21, 2014	~$21M
Warrants (w/ early expiry clauses)	June 30, 2014	~6.5M

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COMPARABLES

"In accordance with Section 13.7(4)(b) of National Instrument 41-101 – *General Prospectus Requirements*, all of the information relating to Diamedica's comparables and any disclosure relating to the comparables, which is contained in the presentation to be provided to potential investors, has been removed from this template version for purposes of filing on the System for Electronic Document Analysis and Retrieval ("SEDAR")"

OUTLOOK IN THE NEXT 12 MONTHS

POSITIONED FOR SEVERAL VALUATION INFLECTION POINTS

- **DM199 Clinical Trials**
  - Type 2 diabetes - complete
  - Endothelial function, cardiovascular & kidney - initiate & complete
  - Kidney disease - initiate
- DM199 Indication expansion
- Filed 20-F with the SEC*
- Ongoing partnering discussions

Registration of the Company's Common Shares with the SEC is dependent on the Company meeting certain requirements, some which may be delayed or never occur.

CONTACT

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763-710-4455

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