Resverlogix Corp.

BIO International Convention – June 2018

Boston, MA

Forward Looking Statement

This news release may contain certain forward-looking information as defined under applicable Canadian securities legislation, that are not based on historical fact, including without limitation statements containing the words "believes", "anticipates", "plans", "intends", "will", "should", "expects", "continue", "estimate", "forecasts" and other similar expressions. In particular, this news release includes forward looking information relating to the Phase 3 BETonMACE clinical trial, Phase 2a kidney dialysis clinical trial and Fabry Disease clinical trial, and the potential role of apabetalone in the treatment of CVD, DM, chronic kidney disease, end-stage renal disease treated with hemodialysis, neurodegenerative disease, Fabry disease, peripheral artery disease and other orphan diseases. Our actual results, events or developments could be materially different from those expressed or implied by these forward-looking statements. We can give no assurance that any of the events or expectations will occur or be realized. By their nature, forward-looking statements are subject to numerous assumptions and risk factors including those discussed in our Annual Information Form and most recent MD&A which are incorporated herein by reference and are available through SEDAR at www.sedar.com. The forward-looking statements contained in this news release are expressly qualified by this cautionary statement and are made as of the date hereof. The Company disclaims any intention and has no obligation or responsibility, except as required by law, to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

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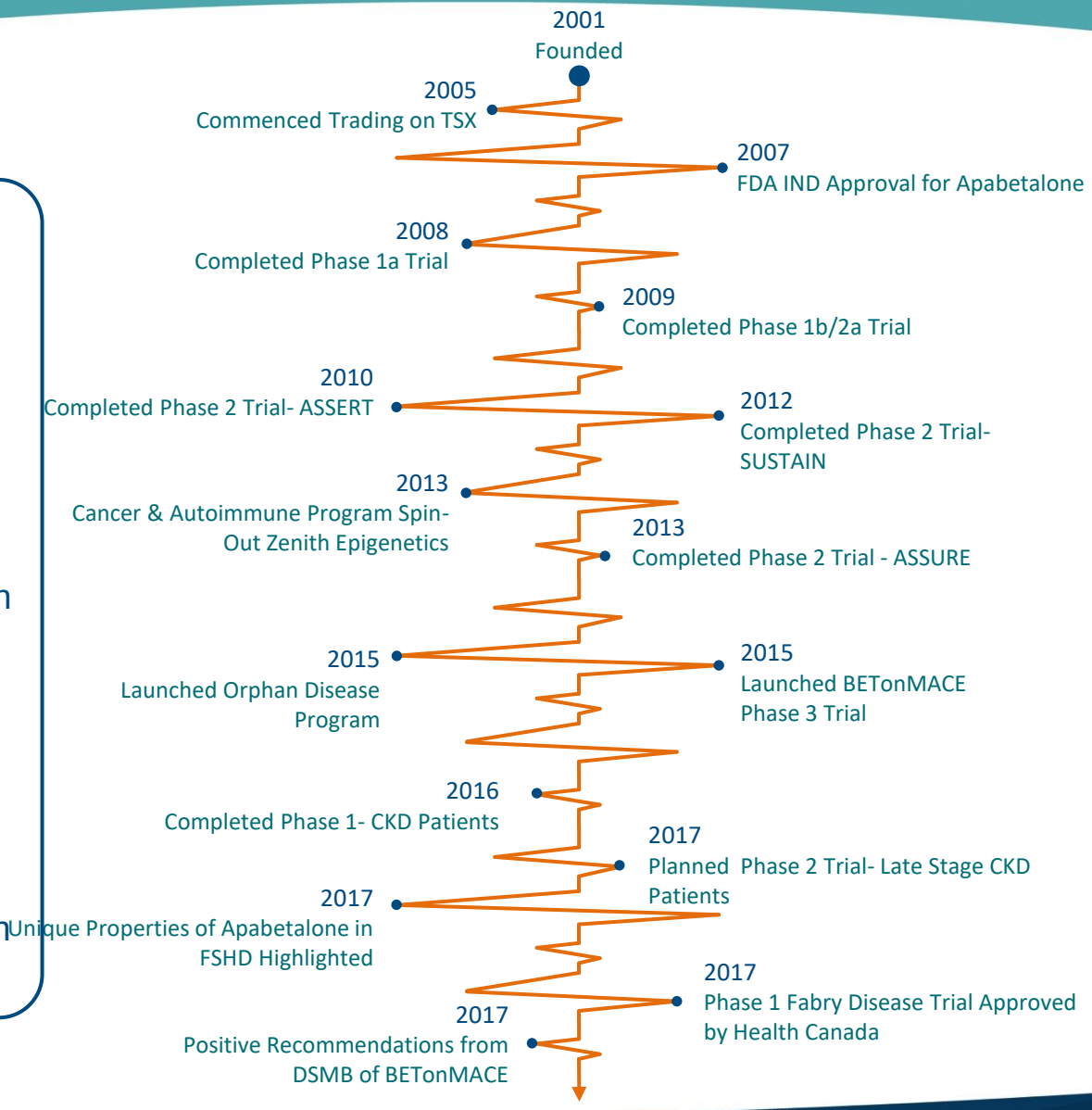
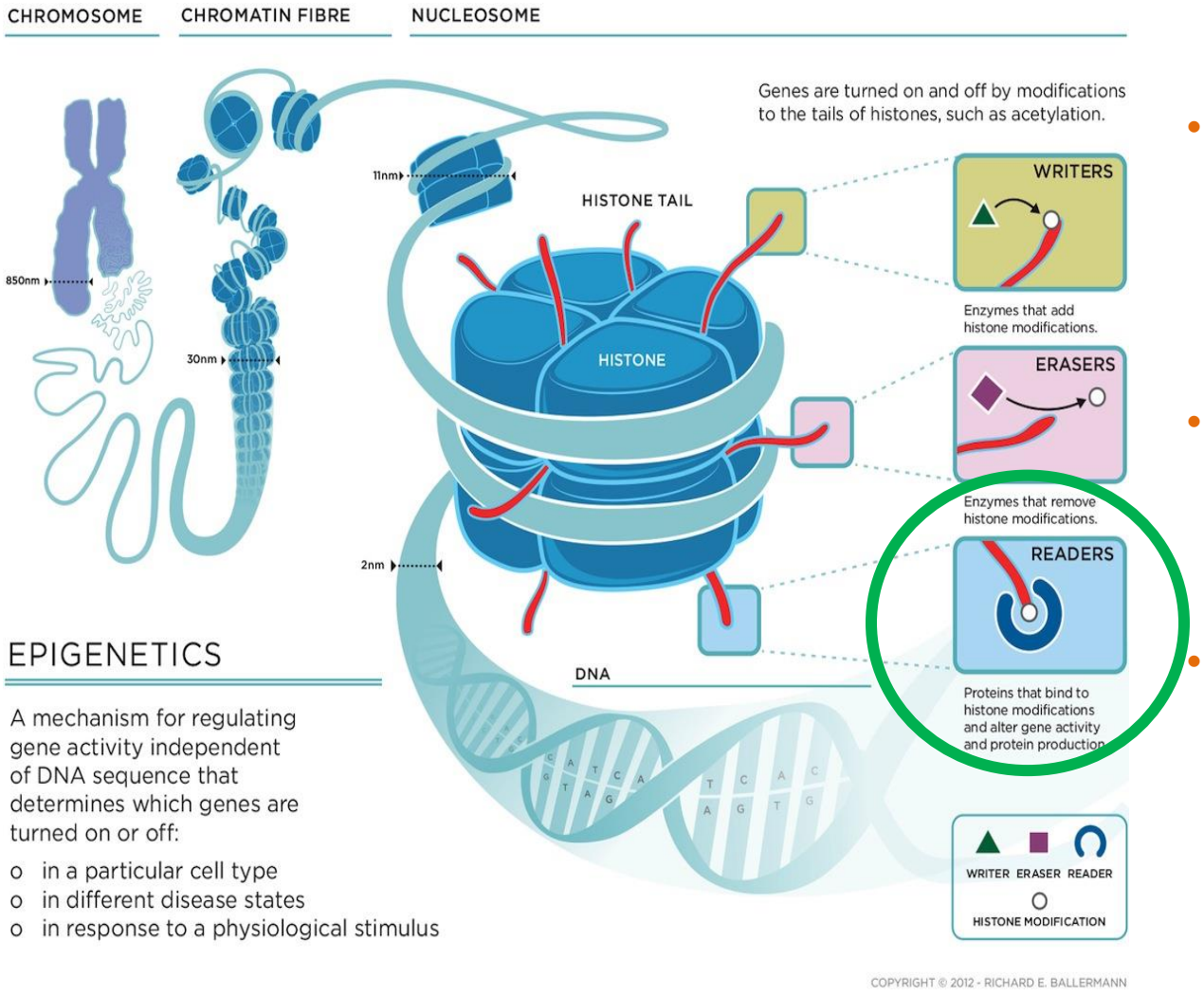
About Resverlogix

- Resverlogix Corp. (TSX:RVX) is a Calgary and San Francisco based clinical stage biotechnology company focused on the development of apabetalone
- Apabetalone (RVX-208) is a first-in-class small molecule selective BET bromodomain inhibitor, which acts via an epigenetic mechanism that can turn disease-causing genes off, returning them to a quiescent state
- Apabetalone has been the only selective BET bromodomain inhibitor in clinical trials for the past 10 years
  - Discovered & synthesized in 2006
  - Selected using a cell based screen for Apolipoprotein A-I

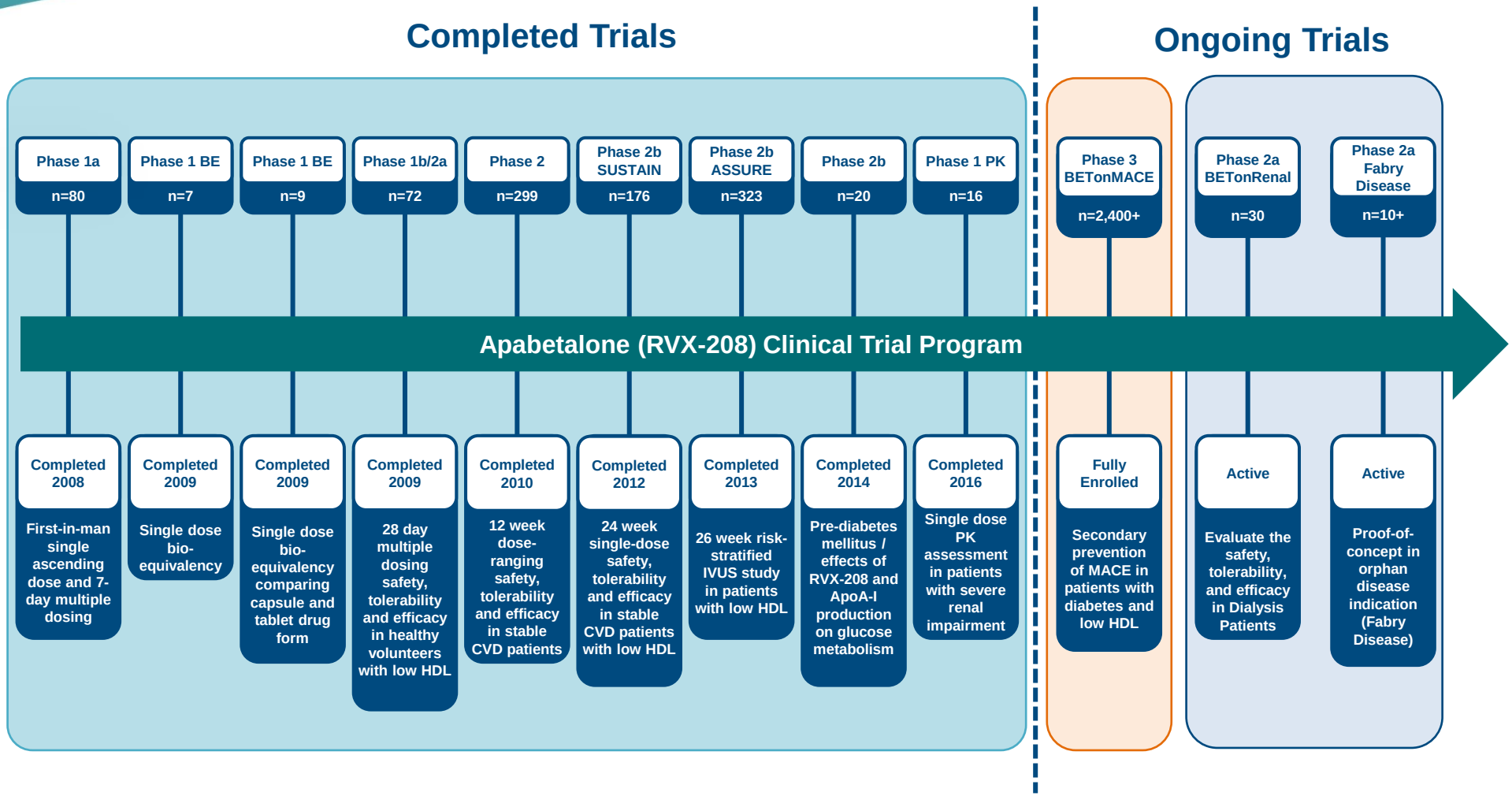


Epigenetics



- The epigenetic code refers to modifications to chromatin components that regulate its activity
- Turning genes on or off is regulated by these modifications
- BET (Bromodomain and Extraterminal Domain) proteins recognize these modifications and turn genes on

Apabetalone Clinical Trials to Date



BET Literature Impact Growing CVD and Renal Risk

RESVERLOGIX

OPEN ACCESS Freely available online

PLOS ONE

RVX-208, an Inducer of ApoA-I in H
Bromodomain Antagonist

Am J Cardiovasc Drugs
DOI 10.1007/s40256-017-0250-3

CrossMark

ORIGINAL RESEARCH ARTICLE

Selective BET Protein Inhibition with Apabetalone and Cardiovascular Events: A Pooled Analysis of Trials in Patients with Coronary Artery Disease

Data in Brief 8 (2016) 1280–1288

Contents lists available at ScienceDirect

ELSEVIER

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Data Article

Data on gene and p
induced by apabetal
treated human who
primary hepatocyte

Sylwia Wasiak [a], Dean Gil
Christopher Halliday [a], Ka
Kevin G. McLure [a], Peter
Ewelina Kulikowski [a], Jan
Norman C. Wong [a,*]

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Article in Press

Benefit of Apabetalone on Plasma Proteins in Renal Disease

Sylwia Wasiak[5], Laura M. Tsujikawa[5], Christopher Halliday, Stephanie C. Stotz, Dean Gilham, Ravi Jahagirdar, Kamyar Kalantar-Zadeh, Richard Robson[6], Michael Sweeney, Jan O. Johansson, Norman C. Wong, Ewelina Kulikowski

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J. of Cardiovasc. Trans. Res.
DOI 10.1007/s12265-017-9755-z

ORIGINAL ARTICLE

Downregulation of the Complement Cascade In Vitro, in Mice and in Patients with Cardiovascular Disease by the BET Protein Inhibitor Apabetalone (RVX-208)

Sylwia Wasiak [1] · Dean Gilham [1] · Laura M. Tsujikawa [1] · Christopher Halliday [1] · Cyrus Calosing [1] · Ravi Jahagirdar [1] · Jan Johansson [2] · Michael Sweeney [2] · Norman C. Wong [1] · Ewelina Kulikowski [1]

Received: 21 December 2016 / Accepted: 17 May 2017
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, Has Therapeutic Effects
ation and

Autoimmune Disease

Ravi Jahagirdar, Sarah Attwell, Suzana Marusic, Alison Bendele, Narmada Shenoy, Kevin G. McLure, Dean Gilham, Karen Norek, Henrik C. Hansen, Raymond Yu, Jennifer Tobin, Gregory S. Wagner, Peter R. Young, Norman C. W. Wong, and Ewelina Kulikowski

Resverlogix Corporation, Calgary, Alberta, Canada (R.J., S.A., K.G.M., D.G., K.N., H.C.H., R.Y., J.T., G.S.W., P.R.Y., N.C.W.W., E.K.); Hooke Laboratories Inc., Lawrence, Massachusetts (S.M.); Bolder BioPATH Inc., Boulder, Colorado (A.B.); and Aravasc Inc., Sunnyvale, California (N.S.)

BET Inhibition and HIV-1

- Recent high profile publications illustrate apabetalone-induced activation of latent HIV-1 *in vitro and ex vivo*
- Suggest that apabetalone synergistically reactivated latent HIV-1 and could combine with cART drugs to inhibit viral infection

Acta Pharmacologica Sinica

www.nature.com/aps

ARTICLE

The BET bromodomain inhibitor apabetalone induces apoptosis of latent HIV-1 reservoir cells following viral reactivation

Xuan-xuan Zhang[1], Jian Lin[1], Tai-zhen Liang[1], Heng Duan[2], Xing-hua Tan[3], Bao-min Xi[1], Lin Li[1] and Shu-wen Liu[1]

SCIENTIFIC REPORTS

OPEN

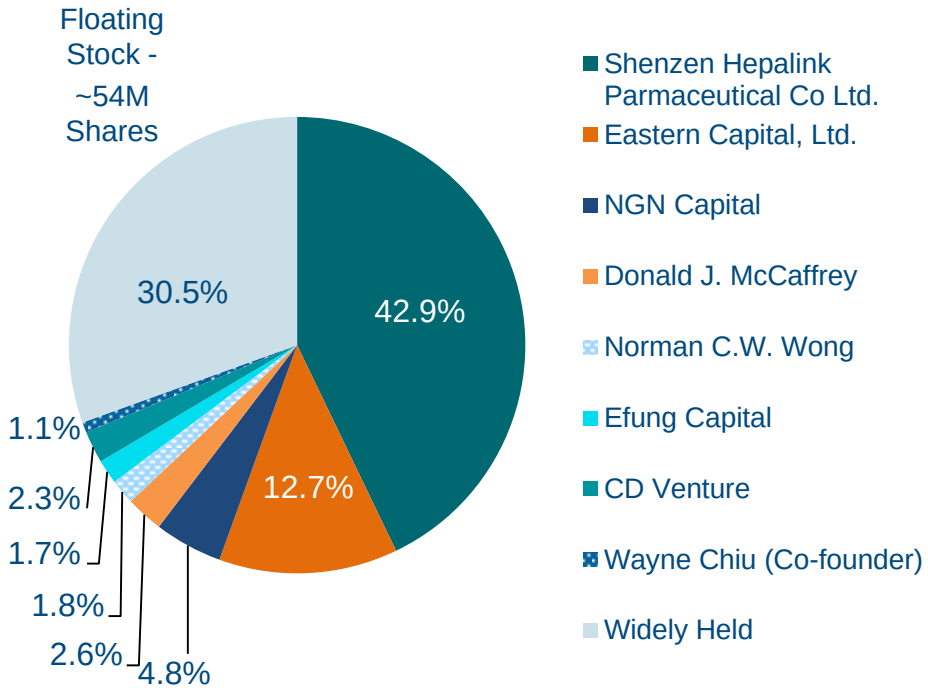
BET inhibitors RVX-208 and PFI-1 reactivate HIV-1 from latency

Panpan Lu[1], Yinzhong Shen[2], He Yang[1], Yanan Wang[1], Zhengtao Jiang[1], Xinyi Yang[1], Yangcheng Zhong[1], Hanyu Pan[1], Jianqing Xu[2], Hongzhou Lu[2] & Huanzhang Zhu[1]

Capitalization and Financial Profile

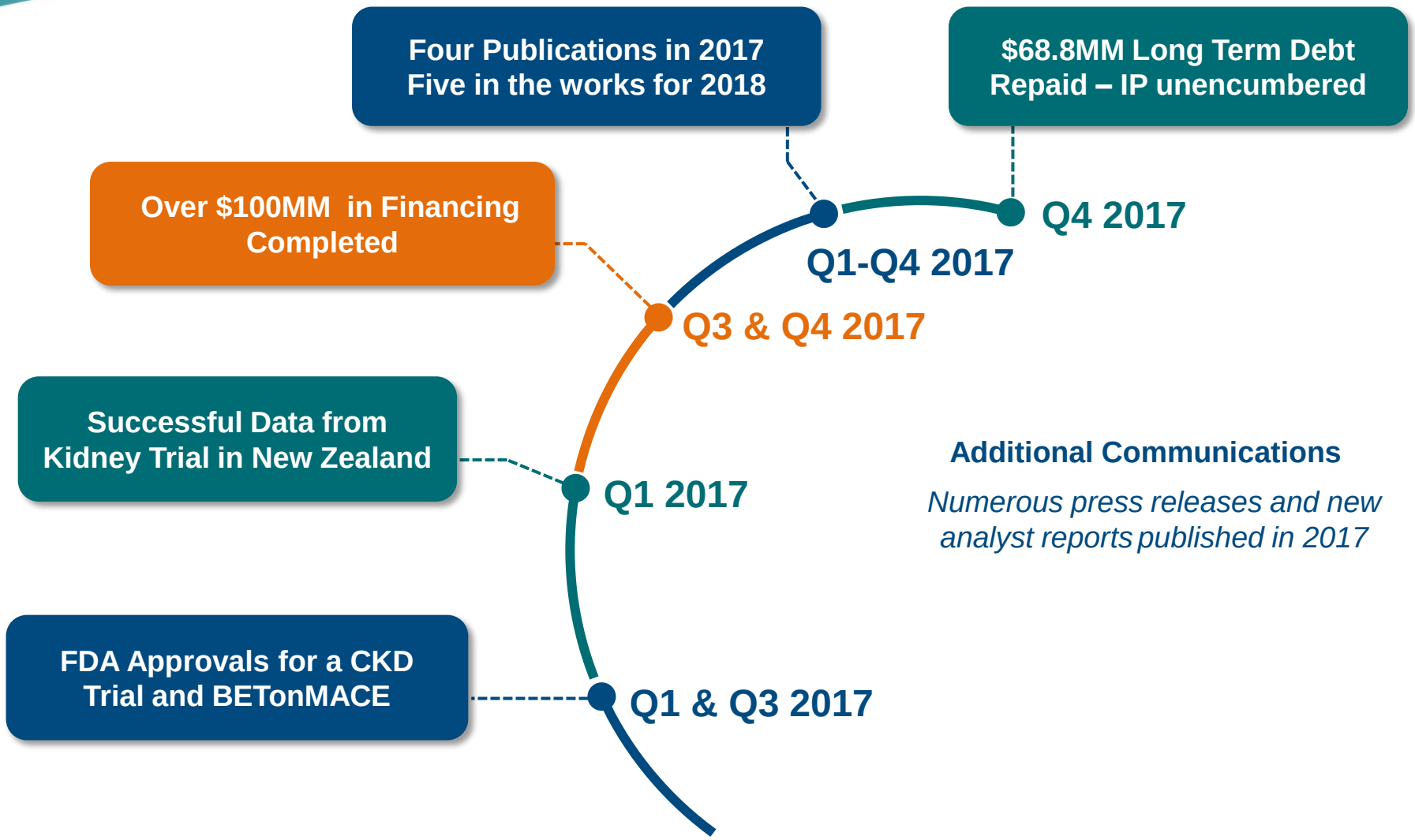
Founded	**2001**
Ticker	**TSX: RVX**
Market Cap	**~C$250MM**
Shares Outstand	**175.04MM**
Cash Burn (Annual)	**~C$40.0M**
Finance	**$30MM USD– Announced April 2018**

RVX Top Shareholders



- RVX shareholder base consists of several long term investors who have been supportive over 10 years
- RVX maintains a diversified public market float of approximately 54M shares

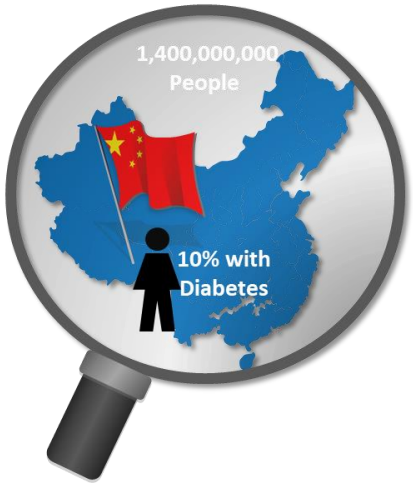
2017 Major Accomplishments



Shenzhen Hepalink Partnership

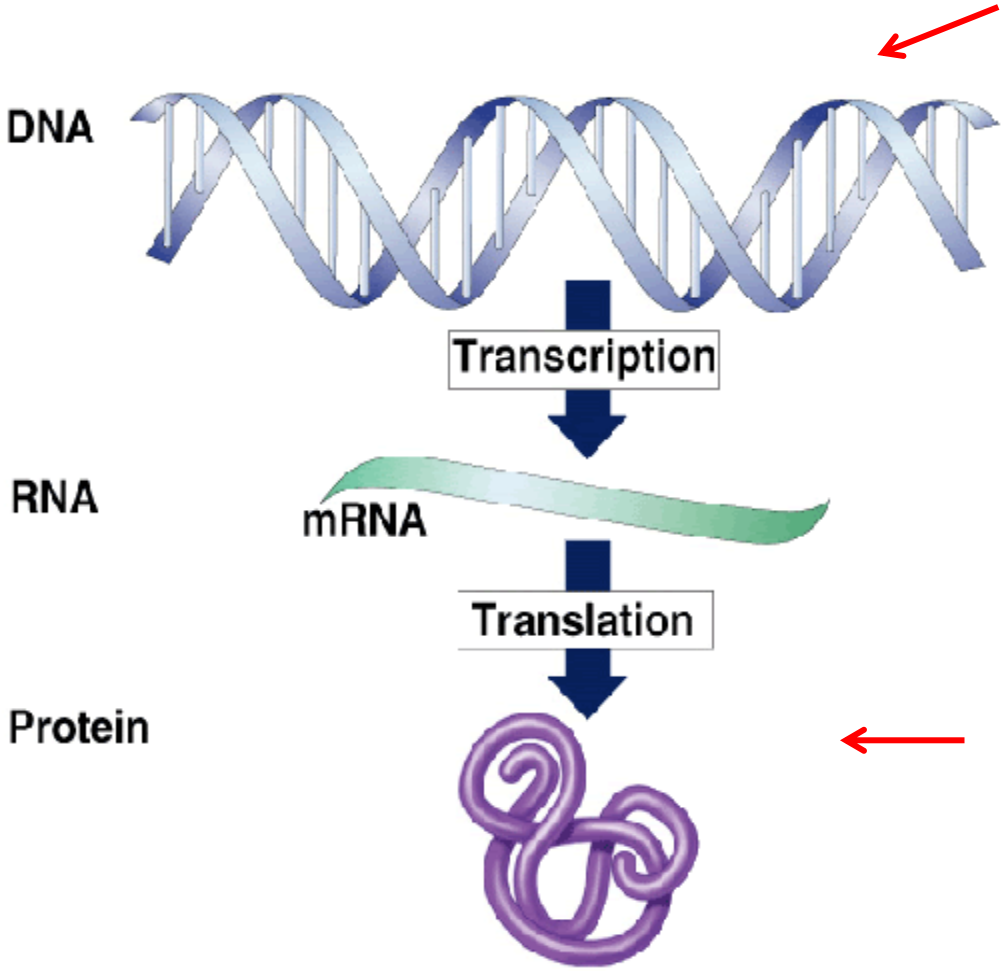
Resverlogix's partnership with Shenzhen Hepalink represents the largest single molecule deal in the history of China

Resverlogix – Shenzhen Hepalink Exclusive Licensing Agreement	
Compound	• Apabetalone (RVX-208)
Licensor	• Resverlogix Corp.
Licensee	• Shenzhen Hepalink Pharmaceutical Co., Ltd.
Territory	• China, Hong Kong, Taiwan, and Macau
Indications	• Any approved indication
Deal Structure	• US$35M in equity investments in Resverlogix • >US$400M in projected future China sales milestones and licensing royalties
Developmental Costs	• Shenzhen Hepalink is responsible for all developmental costs for the licensed territories • This includes the cost of additional clinical trials in the licensed territories, regulatory applications, etc.



Apabetalone and the BET Platform

Unique Mechanism of Action



Genome Editing

The mechanism is based on cutting and pasting undesired/desired sequences into or out of the DNA, thereby altering the gene sequence and then re-introducing the modified DNA into the body.

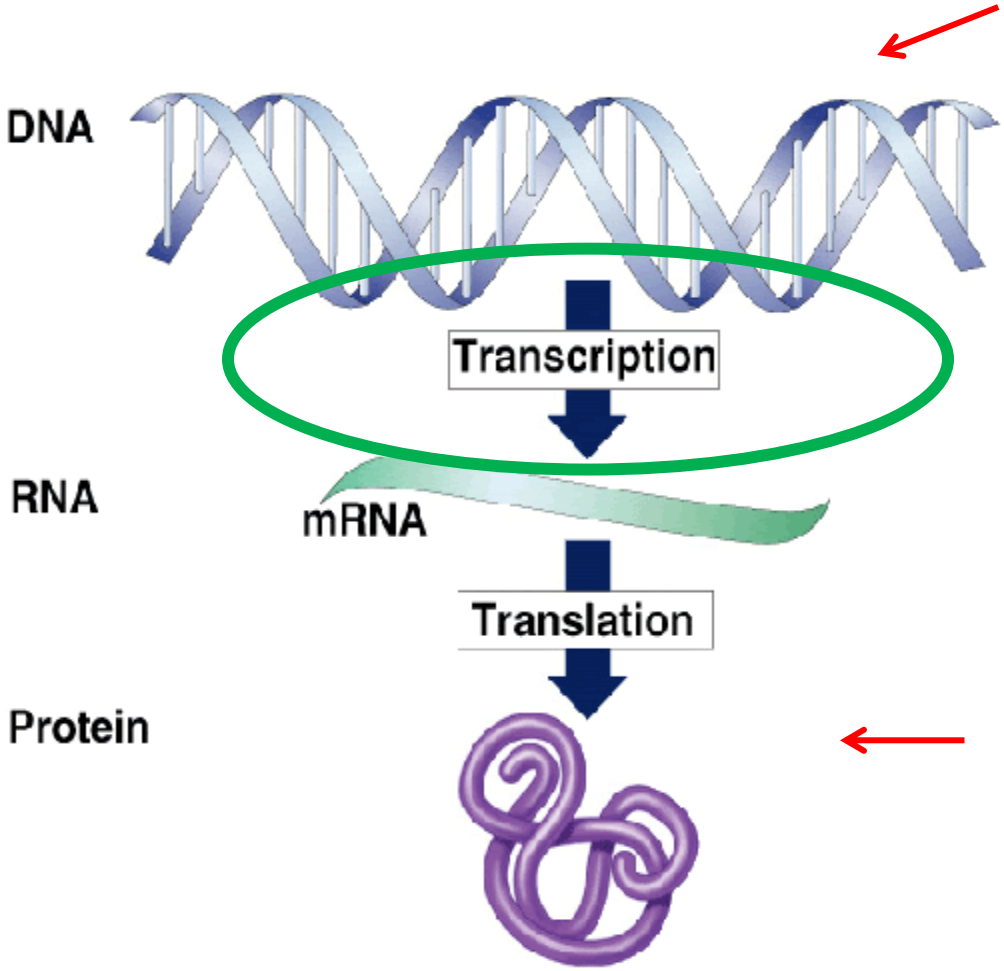
CRISPR – gene editing within a cell sub population

Protein Targeting

Focus on reducing or blocking the activity of **one** disease protein by using an inhibitor or antibody

Antibody or Inhibitor – blocks activity of one mediator of disease

Unique Mechanism of Action



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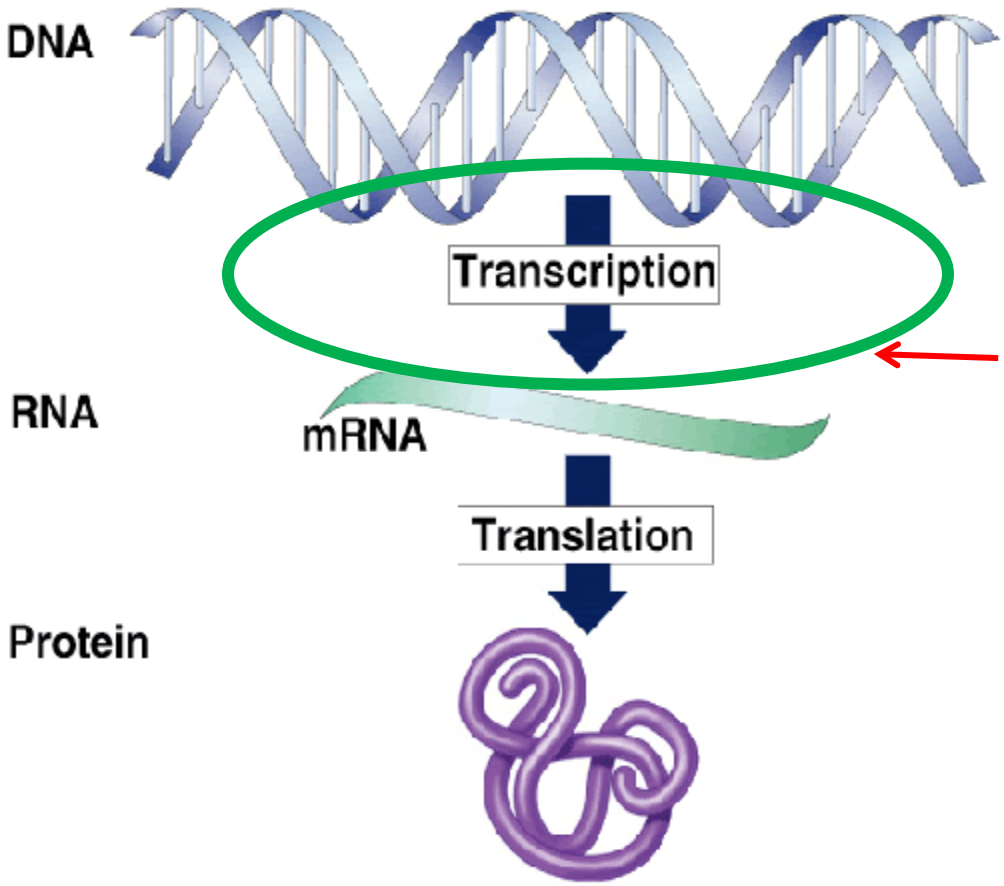


Transcriptional Regulation

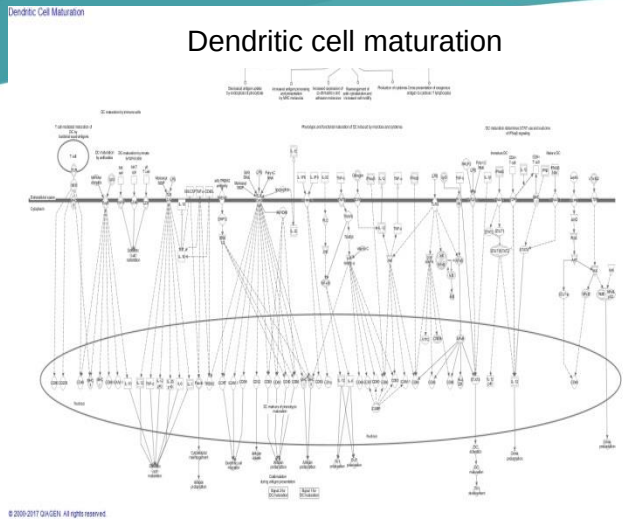
Mechanism is based on changing the levels of disease causing **proteins** by modulating their expression at the gene level

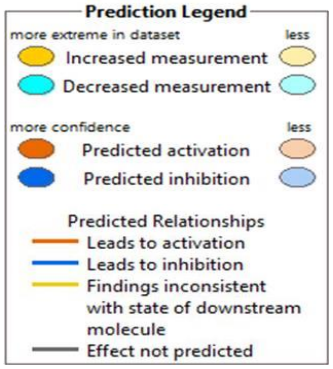
Apabetalone – reduces expression of disease mediators

SOMAscan® Analysis of Plasma Proteome in CKD Patients

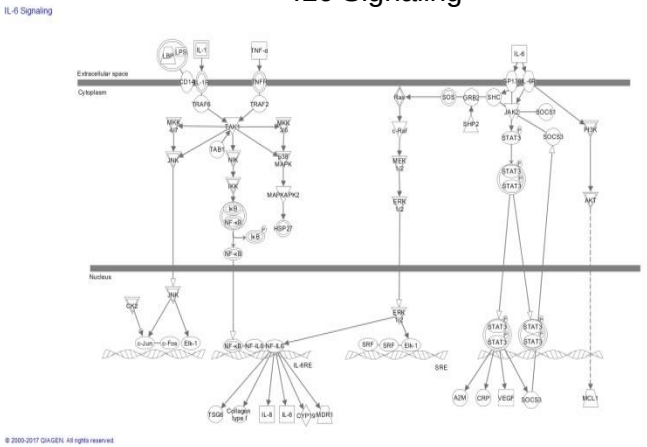
IPA Canonical Pathways

Dendritic cell maturation

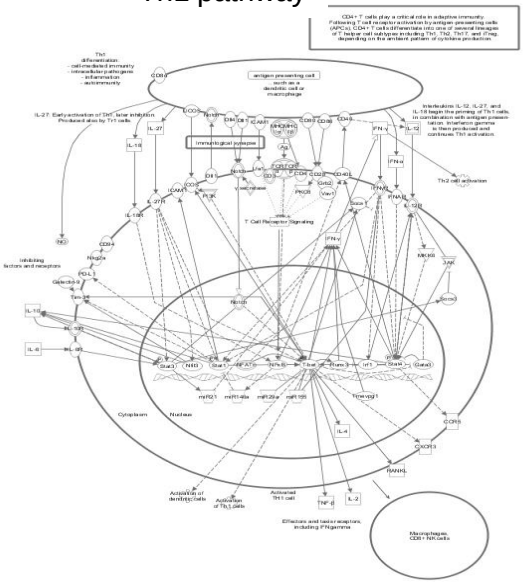




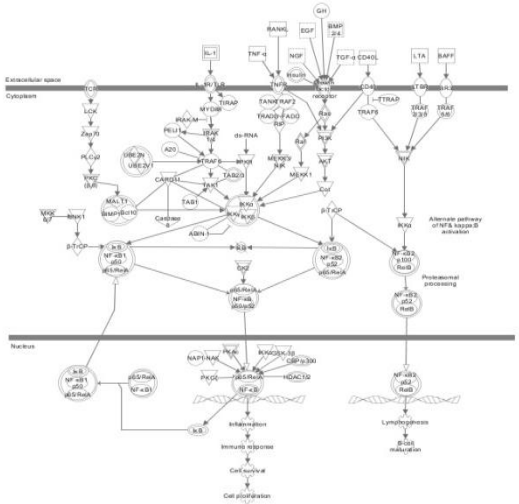
IL6 Signaling



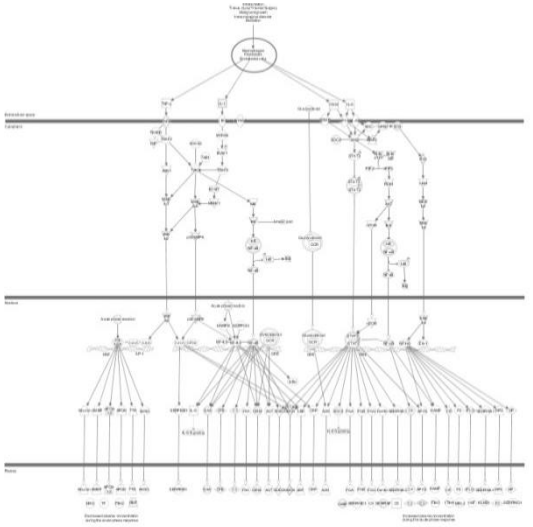
Th1 pathway



NF-kB Signaling



Acute Phase Response



Wasiak et al., 2017

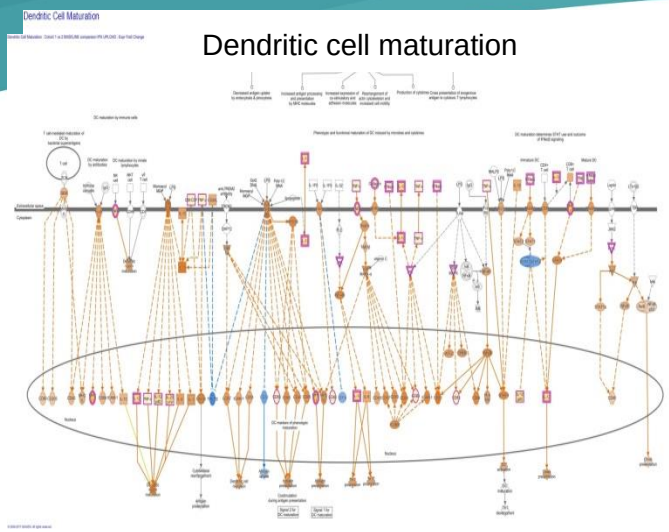
Δ>10% p≤0.05

SOMAscan® Analysis of Plasma Proteome in CKD Patients

IPA Canonical Pathways: Top 5 Pathways Upregulated at Baseline

Baseline

Dendritic cell maturation



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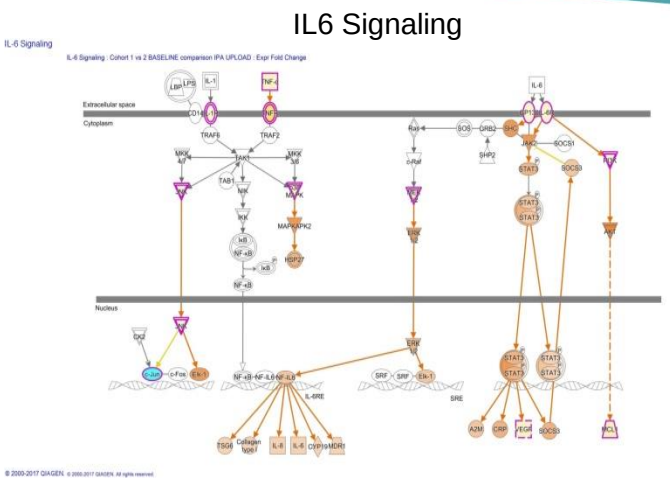

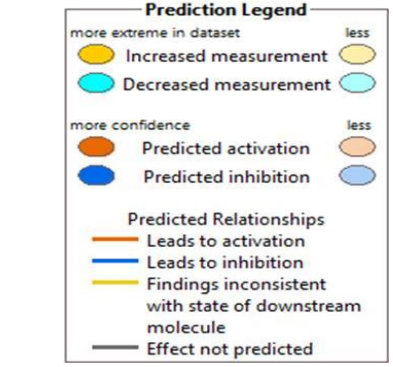

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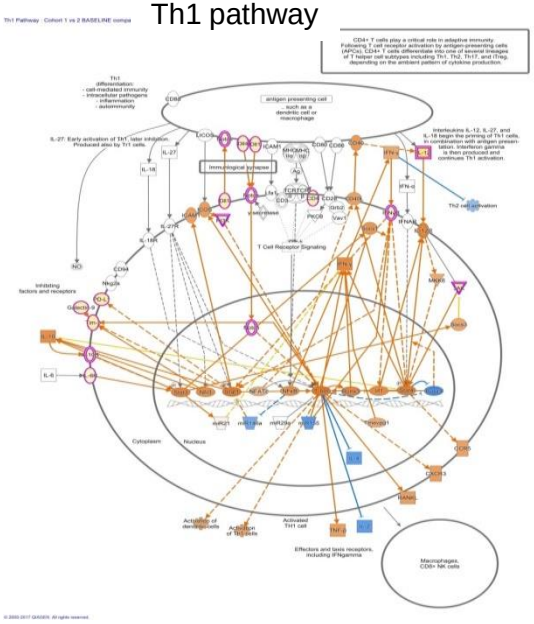

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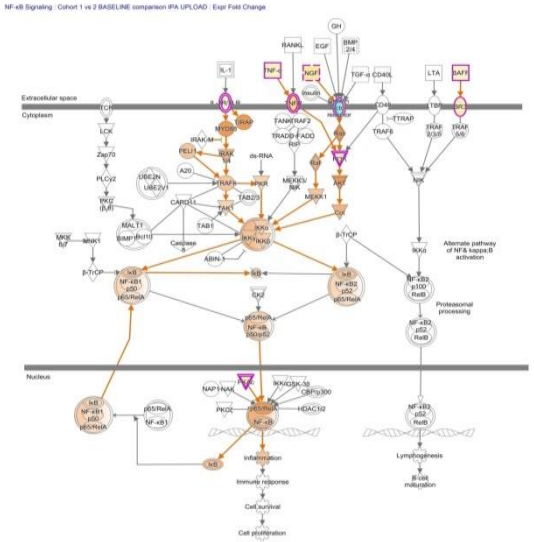

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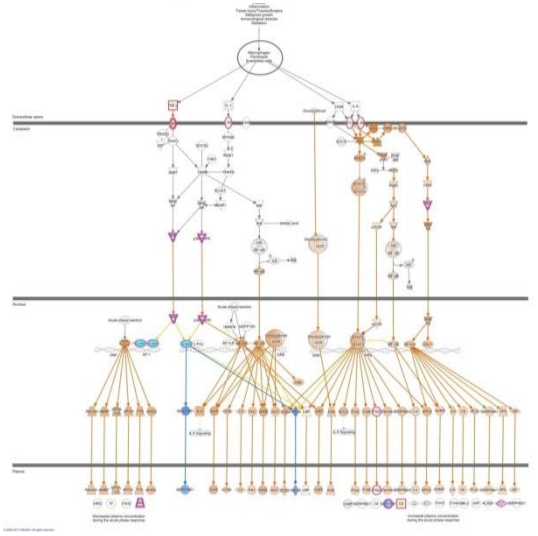


Wasiak et al., 2017

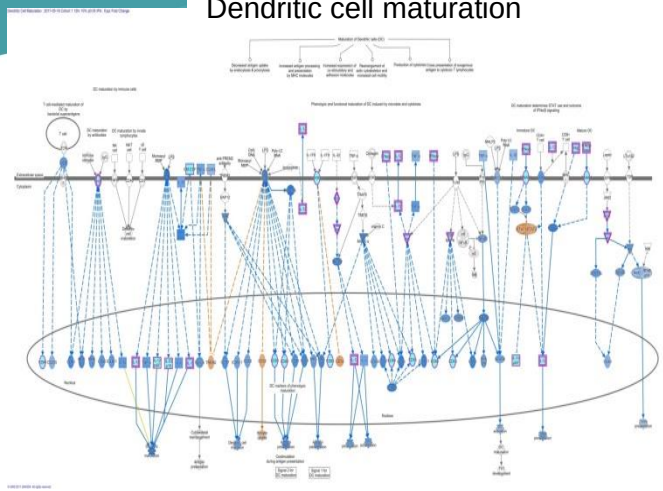
Δ>10% p≤0.05

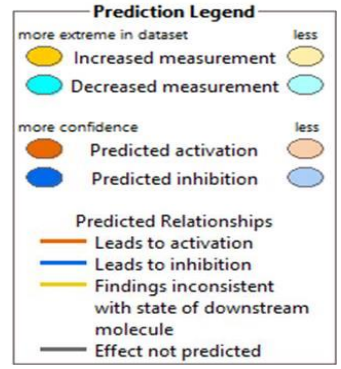
SOMAscan® Analysis of Plasma Proteome in CKD Patients

IPA Canonical Pathways: Top 5 Pathways Downregulated with Apabetalone

Apabetalone

Dendritic cell maturation





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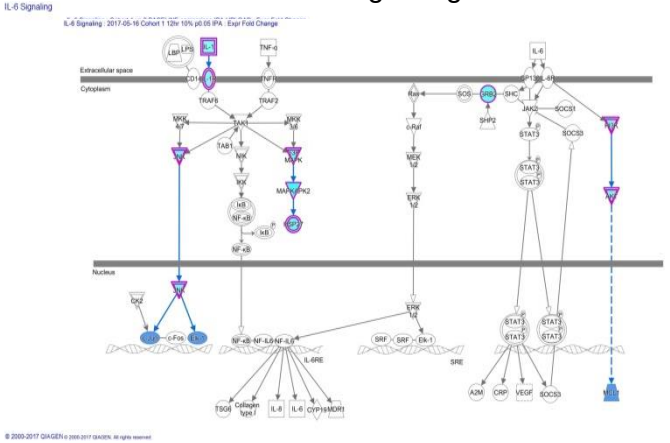

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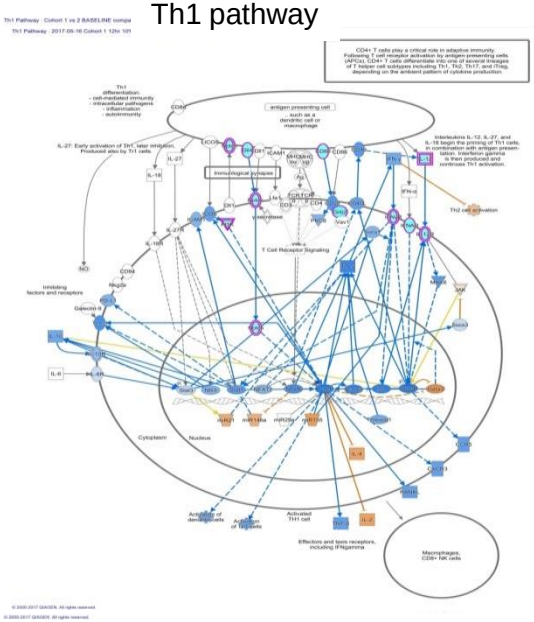

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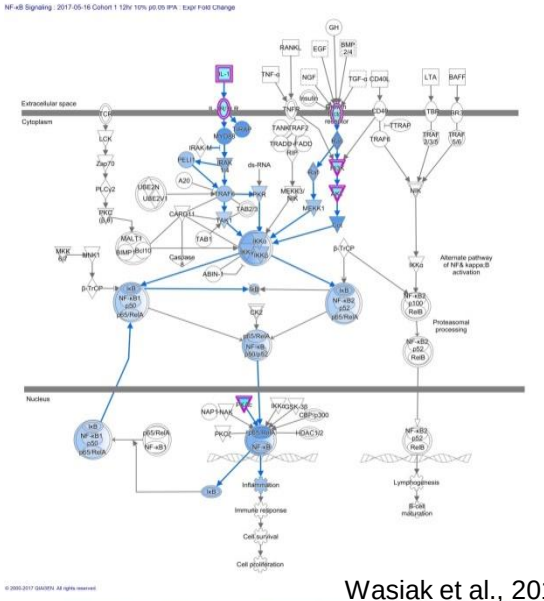
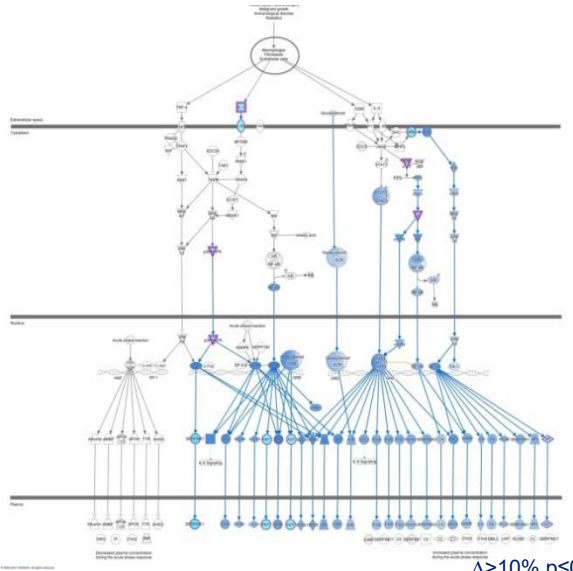


Acute Phase Response



Δ>10% p≤0.05

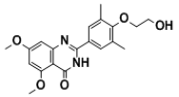
Wasiak et al., 2017

Differentiation (RVX's BET Platform)

- Resverlogix has discovered compounds that **selectively** bind the bromodomains of BET proteins
  - Bromodomain selectivity: Resverlogix's apabetalone selectively targets BD2
  - BET (BRD2, BRD3, BRD4) protein selectivity: Our expertise in medicinal chemistry and epigenetics allows us to identify small molecules that target one or a specified subset of BET proteins
- Our Phase 2 clinical program provided us with what was **the only blood bank of BET inhibitor-treated patients in the world**
  - In-depth analysis such as proteomics, genomics, and pathway analysis revealed advanced knowledge of BET activities
  - The resulting knowledge from these activities provided a level of sophistication around BET that surpasses that of many others working in this area
- The properties of Resverlogix's molecules **avoid side effects seen with other BETi**
  - BET programs in oncology can tolerate a high degree of side effects due to the nature of the disease being treated
  - Chronic conditions such as cardiovascular disease and renal impairment require treatments with a side-effect profile acceptable for long-term treatment

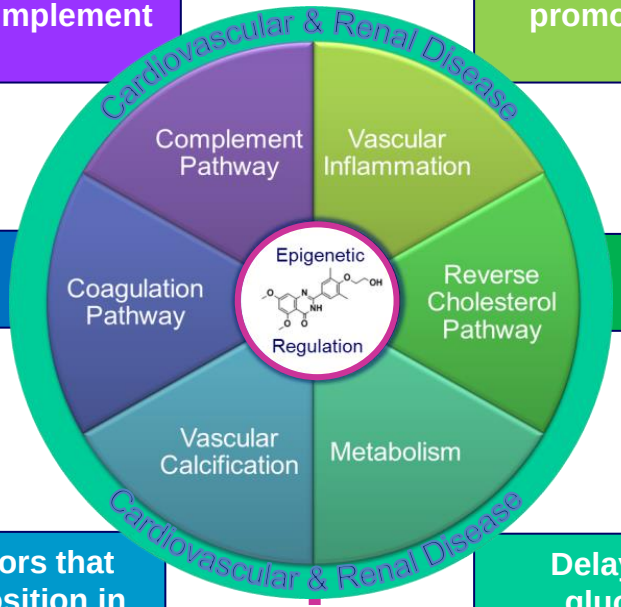
BET Inhibition Impacts the Pathways that Drive Cardiovascular Disease and Kidney Diseases

Apabetalone, a bromodomain extra-terminal (BET) protein inhibitor, regulates the expression of genes and restores the function of pathways underlying the pathogenesis of CVD and kidney disease



Reductions in the components and function of the complement cascade

Reductions in mediators that promote inflammation of the vasculature



Reductions in components of the coagulation cascade

Increased ApoA-I, positive effects on lipid content of HDL

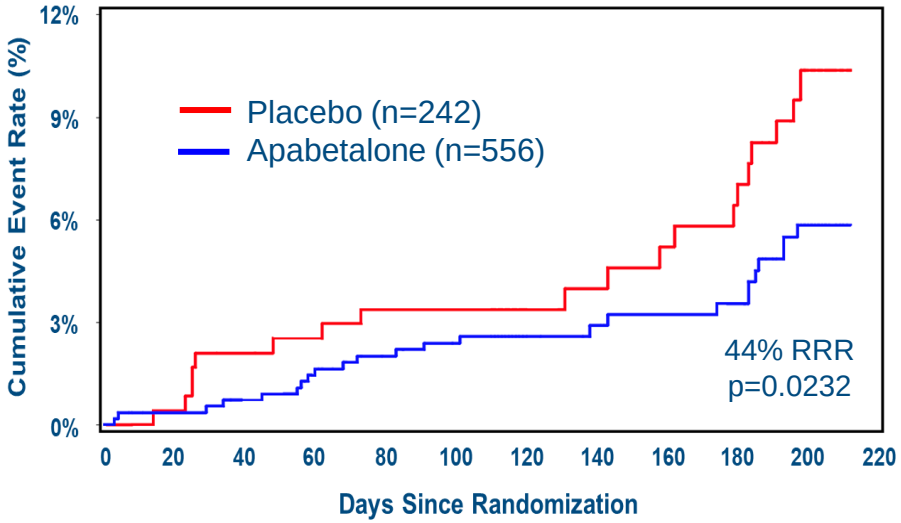
Reductions in mediators that promote calcium deposition in the vasculature

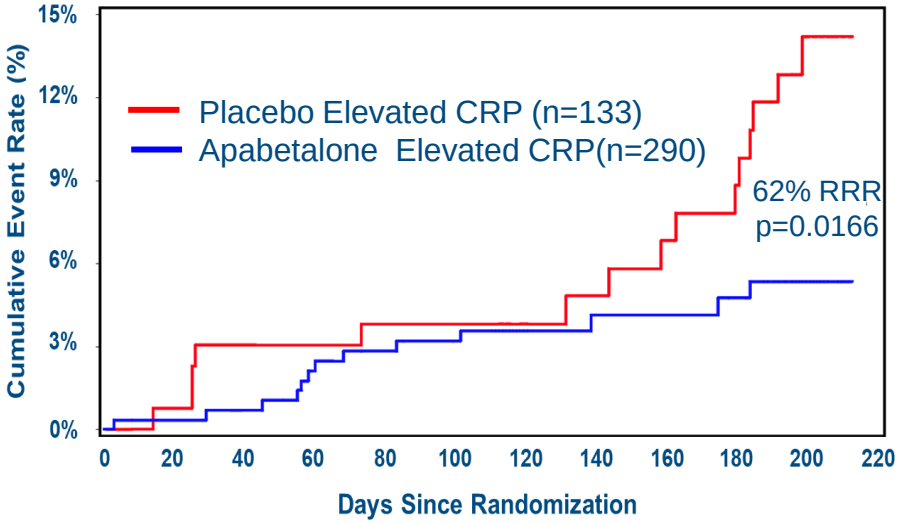
Delayed and reduced oral glucose absorption and endogenous production

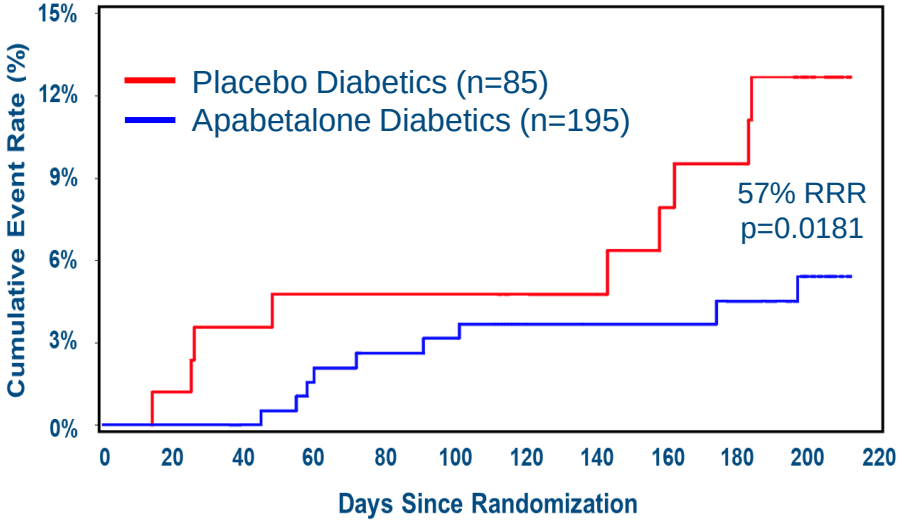
Reduced incidence of MACE

BETonMACE Clinical Program Overview

Nicholls et al. 2017 American Journal of Cardiovascular Drugs







MACE: Major Adverse Cardiac Events including: death, myocardial infarction, stroke, coronary revascularization, hospitalization for acute coronary syndrome or heart failure

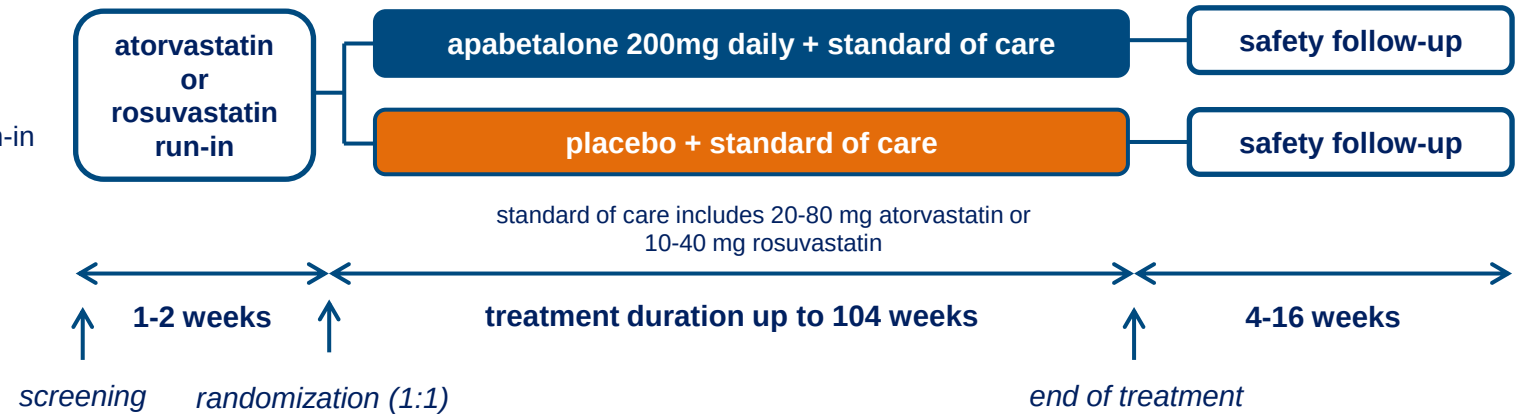
Decrease in MACE was most profound in patients who had a higher level of inflammation such as patients with diabetes

CVD Program Moving Forward
BETonMACE CV Outcomes Study

BETonMACE
A CARDIOVASCULAR STUDY FOR PEOPLE WITH TYPE 2 DIABETES

2,400 + subjects

- double blinded
- 1-2 week statin run-in



The study is an event-based trial and continues until 250 narrowly defined MACE events have occurred

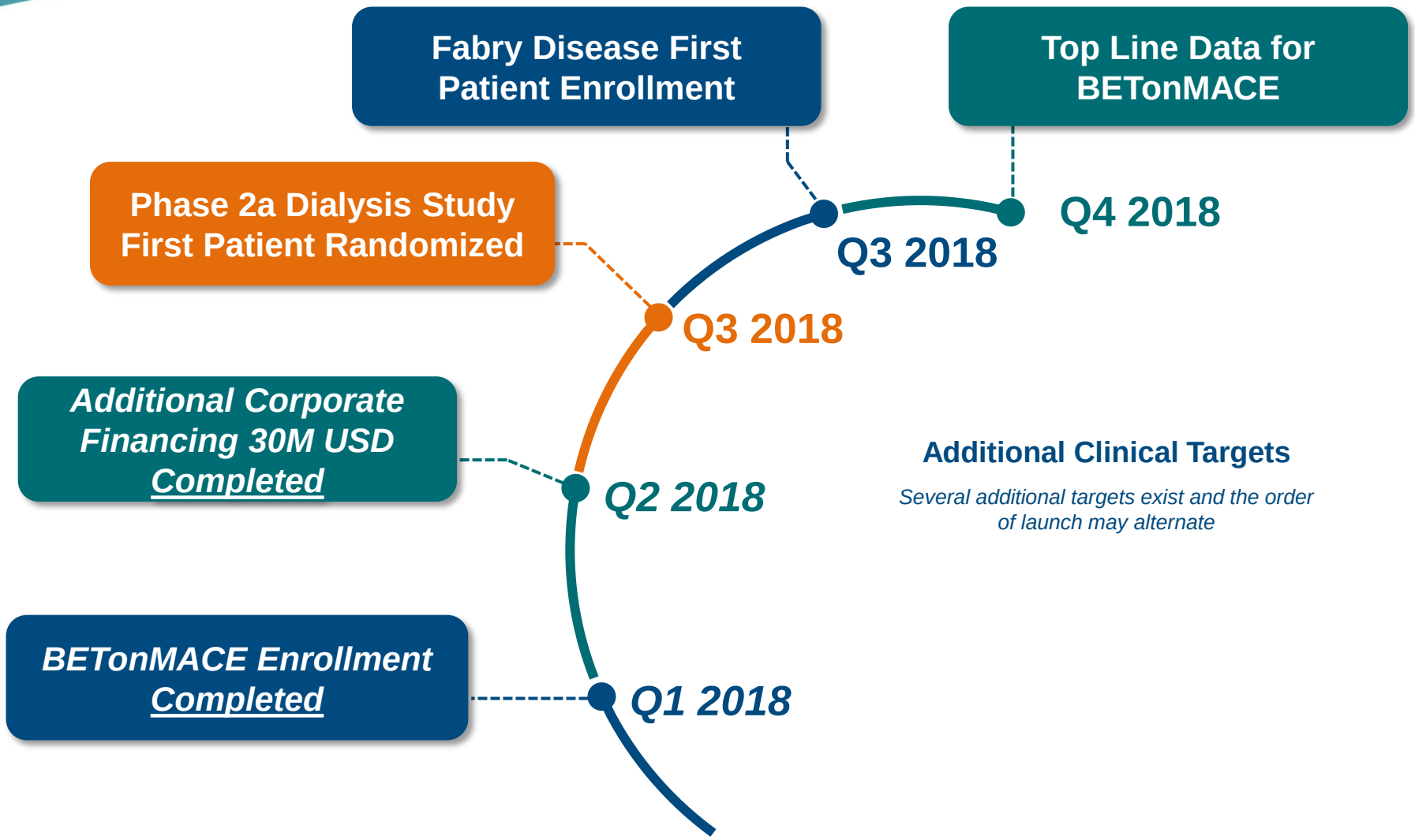
Key inclusion criteria

- Type II Diabetes Mellitus
  - HbA1c > 6.5% or history of diabetes medications
- CAD event 7 days - 90 days prior to screening
  - Myocardial infarction (MI), unstable angina or percutaneous coronary intervention
- HDL < 1.04 for males and < 1.17 for females

BETonMACE Commenced November 2015

Apabetalone has already been tested in over 1,900 patients in 18 countries around the world.

2018 Milestone Targets



Additional Clinical Targets

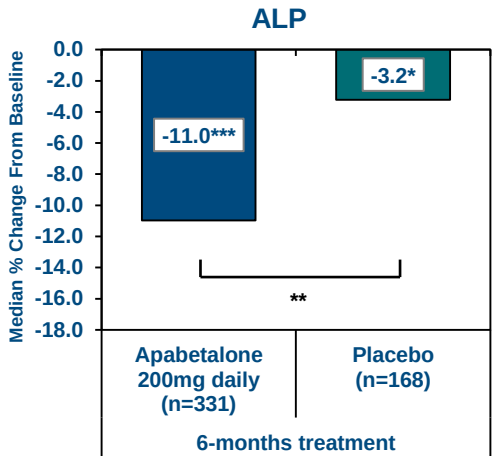
Several additional targets exist and the order of launch may alternate

Chronic Kidney Disease Clinical Program Overview

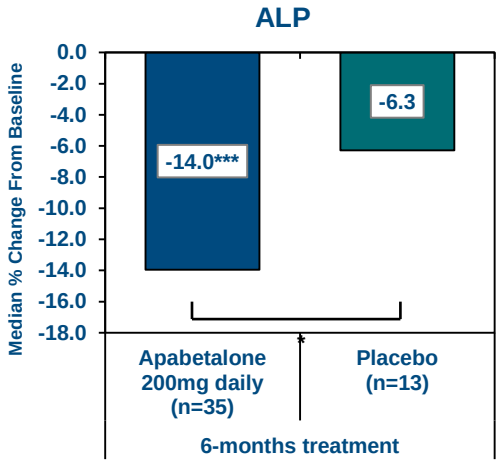
Rationale for Kidney Disease Program

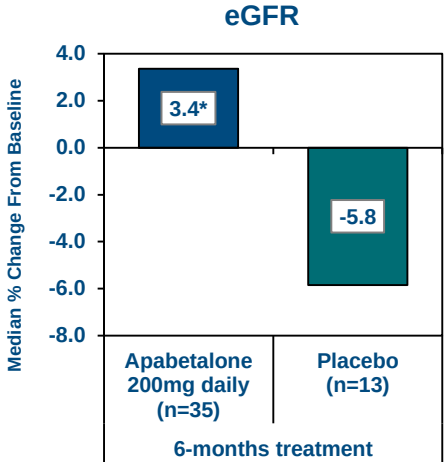
- Apabetalone has demonstrated reductions in alkaline phosphatase (a strong marker of CKD risk) and improvements in eGFR in CKD patients (eGFR < 60 mL/min/1.73m^2) with CVD in the phase 2 ASSURE and SUSTAIN trials

All Patients



Patients With Baseline eGFR<60 mL/min/1.73m^2





Data Presented in Keynote Address at the 2015 American Society of Nephrology Conference, San Diego

- Resverlogix believes that BET inhibition and apabetalone may have the potential to improve kidney function, as measured by eGFR, in patients suffering from various stages of kidney disease
- Resverlogix is currently investigating the potential for expansion into specific kidney indications:
  - CKD (Stages 3a and 3b) patients, with a history of CVD (Phase 3 BETonMACE subgroup)
  - High Risk CKD Patients on Dialysis (Phase 2a BETonRenal study)

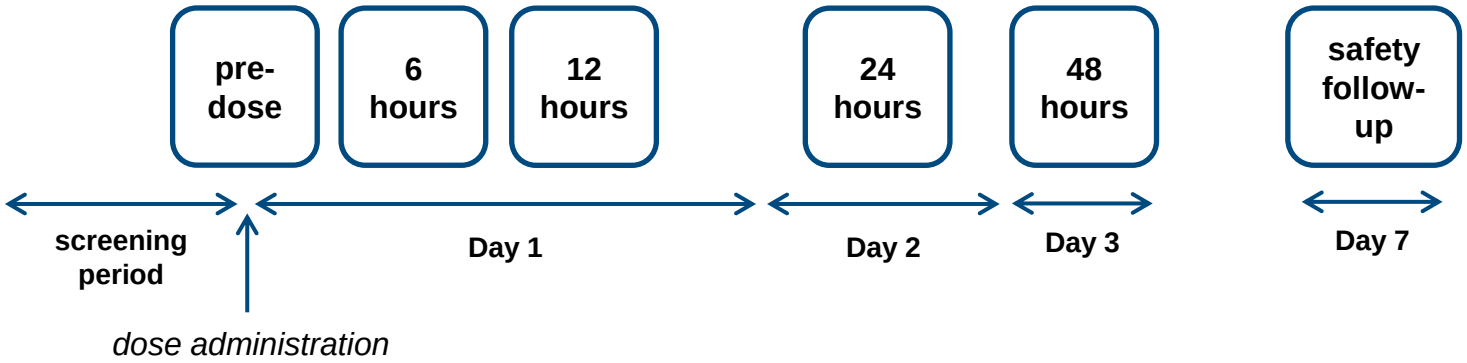
Kidney Disease Phase I Study

A Phase I, Open-Label, Parallel Group Study to Evaluate the Safety and Pharmacokinetics of a Single Oral Dose of Apabetalone in Subjects with Severe Renal Impairment

Cohort 1
Previously diagnosed with CKD (stage IV) and not on dialysis (eGFR <30 mL/min/1.73m^2) N=8

Cohort 2
Volunteers matched for age (±10 years), weight (±20%), and gender with the subjects in Cohort 1 (renal impaired subjects); eGFR ≥60 mL/min/1.73m^2 N=8

apabetalone 100mg single dose



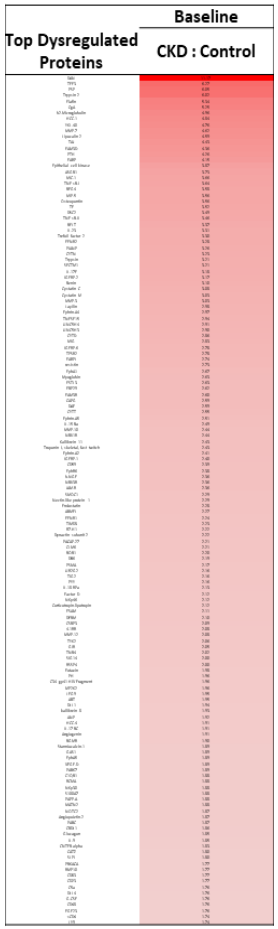
Trial demonstrated that apabetalone has a highly differential effect on protein levels based on disease status, healthy vs sick, reducing a variety of plasma proteins and downregulating pathways activated in the CKD cohort

CKD Program - Phase 1 Data

Effect of Apabetalone on Differentially Expressed Proteins

288 proteins were different between the plasma of CKD patients and matched controls (red indicates higher protein levels in CKD/control)

CKD = Subjects with stage 4 Chronic Kidney Disease



Blue = downregulated;
white = no change;
Red = upregulated

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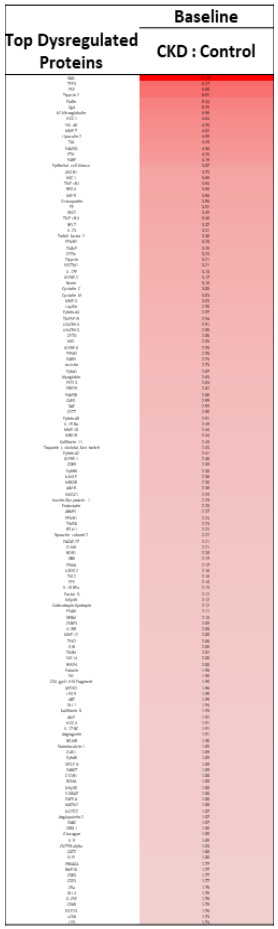
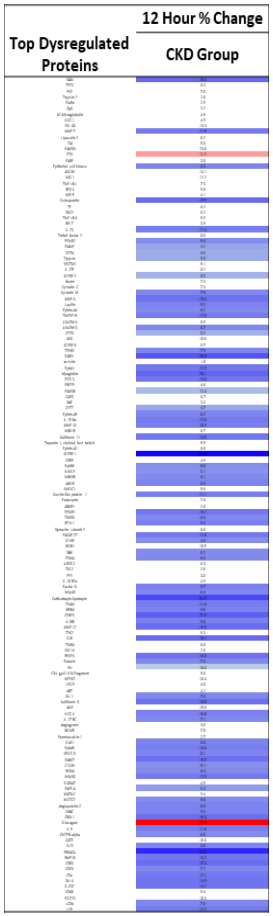


100mg Dose Apabetalone

Blue = downregulated;
white = no change;
Red = upregulated



CKD Program - Phase 1 Data

Effect of Apabetalone on Differentially Expressed Proteins

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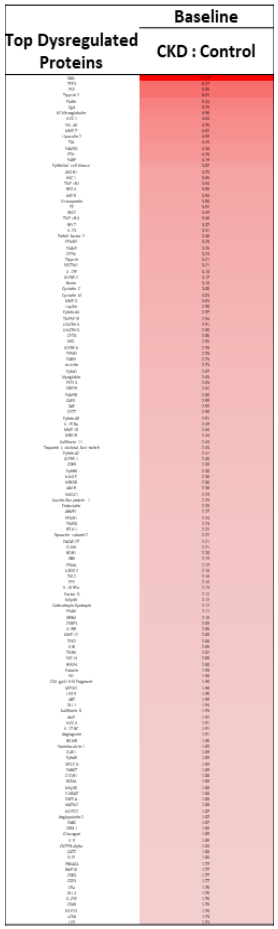
CKD = Subjects with stage 4 Chronic Kidney Disease

152 of the 288 differentially expressed proteins in the CKD patients were downregulated at 12 hours following one dose of apabetalone



100mg Dose Apabetalone

Blue = downregulated;
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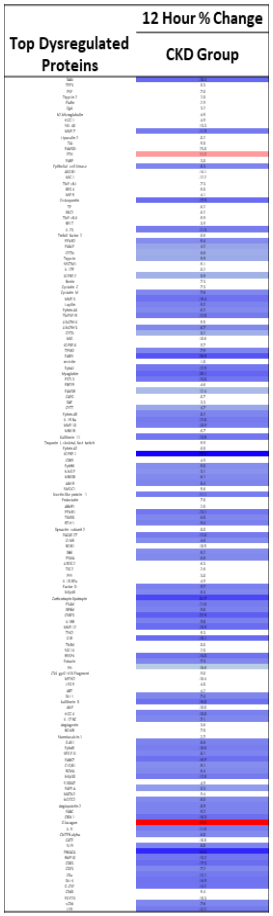
In CKD patients, one dose of apabetalone reduced CKD and CVD biomarkers that were dysregulated at baseline



SOMAscan® Analysis of Plasma Proteome – Phase 1 Trial

Apabetalone Reduces CVD and CKD Biomarkers

	Protein Name	Gene Symbol	Subjects with CKD (stage IV) (n=8) treated with 100 mg Apabetalone		Matched Control Subjects (n=8) treated with 100 mg Apabetalone	
			% Δ from baseline at 12h	p-value	% Δ from baseline at 12h	p-value
Inflammation	Interleukin-6	IL6		0.05	NS	
	Interleukin-1 alpha	IL1A		0.01	NS	
	Interferon gamma	IFNG		0.04	NS	
	TNF receptor superfamily member 1A	TNFRSF1A		0.05	NS	
	C-reactive protein	CRP		0.04	NS	
	Tumor necrosis factor	TNF		0.02	NS	
Cell Adhesion	P-selectin	SELP		0.04	NS	
	E-selectin	SELE		0.01		0.02
	Intercellular adhesion molecule 1	ICAM1		0.05		0.04
	Vascular cell adhesion protein 1	VCAM1		0.01	NS	
Matrix Remodeling Calcification	Fibronectin	FN1		0.02	NS	
	Stromelysin-1	MMP3		0.02	NS	
	Stromelysin-2	MMP10		0.02	NS	
	Osteopontin	SPP1		0.01		0.04
Thrombosis	Plasminogen activator inhibitor 1	SERPINE1		0.04	NS	
	Tissue-type plasminogen activator	PLAT		0.01	NS	
	Urokinase-type plasminogen activator	PLAU		0.01	NS	
	D-dimer	FGA/B/C		0.05	NS	
	Urokinase plasminogen activator surface receptor	PLAUR		0.02	NS	

Apabetalone reduces markers of inflammation, cell adhesion, matrix remodeling, calcification and thrombosis in the CKD cohort after one dose and 12 hours

Kidney Disease Program Clinical Advisory Board

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Karolinska University Hospital

Investment Opportunity

- **Phase 3 company** focused on significant unmet need in high-risk CVD patient population with lead therapeutic - **apabetalone**
- **Market leader with significant potential** – targeting high-risk unmet need in several patient groups – Over 10MM patients in top 7 markets
- **Advancing development** of apabetalone in high-risk (dialysis) CKD patients – New phase 2 clinical trials to commence in early 2018
- **Well established safety profile** - to date, over 1,900 patients treated with apabetalone with no significant safety issues
- **Proven track record** of funding development while minimizing shareholder dilution

Resverlogix Corp.

BIO International Convention

June, 2018 Boston, MA