



Resverlogix Corp.

Q1 2017 - Corporate Update

February 14, 2017

New York, NY

TSX: RVX

1. **Corporate Overview**
2. **Technology Review**
3. **BETonRENAL Clinical Trial Update**
4. **BETonMACE Clinical Update**
5. **Financial Position & Opportunities**
6. **Market Opportunity**



This presentation 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 presentation includes forward looking information relating to the Company's clinical trials and the potential role of apabetalone in the treatment of CVD, DM, chronic kidney disease, Orphan diseases, and peripheral artery disease. 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 presentation 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.

Corporate Review – Financial Profile



Founded	2001
Ticker	TSE-RVX
Market Cap	~\$230 MM
Shares Outstanding	105.4MM ~120MM fully diluted
Cash Burn	~\$2.0 MM + per month

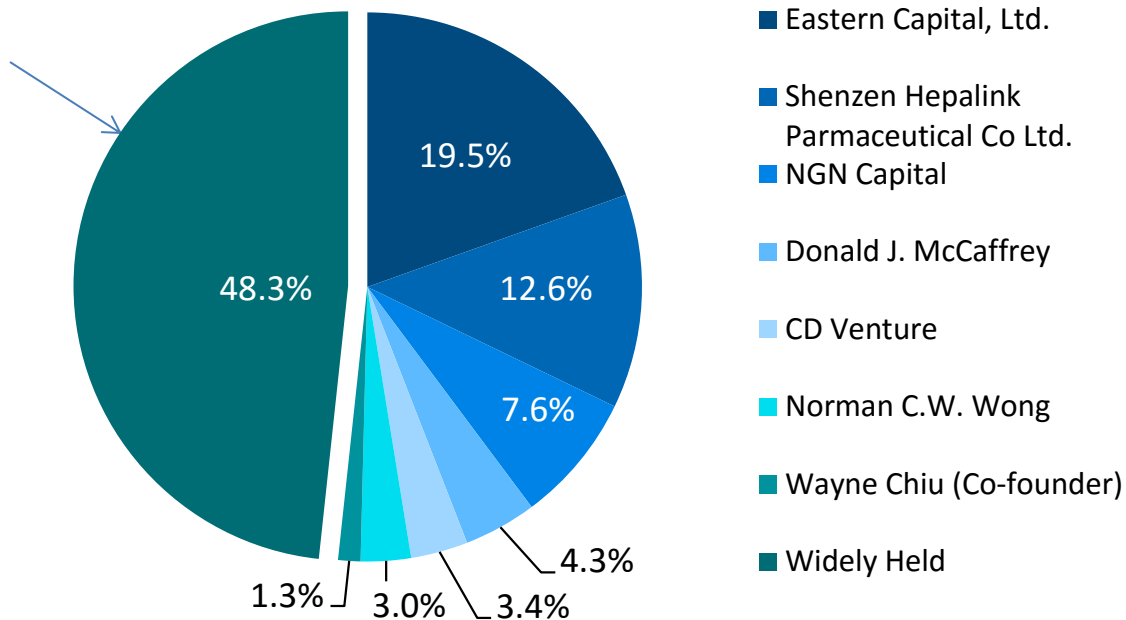
Resverlogix Corp. - 1 Year Historic Chart Price/Volume - TSX: (1/27/2017)



- RVX shareholder base is highly concentrated and relatively shallow
- Implies that the “float” (actual shares available for trading) is limited to ~51MM shares

RVX Top Shareholders

Floating Stock -
~51MM Shares



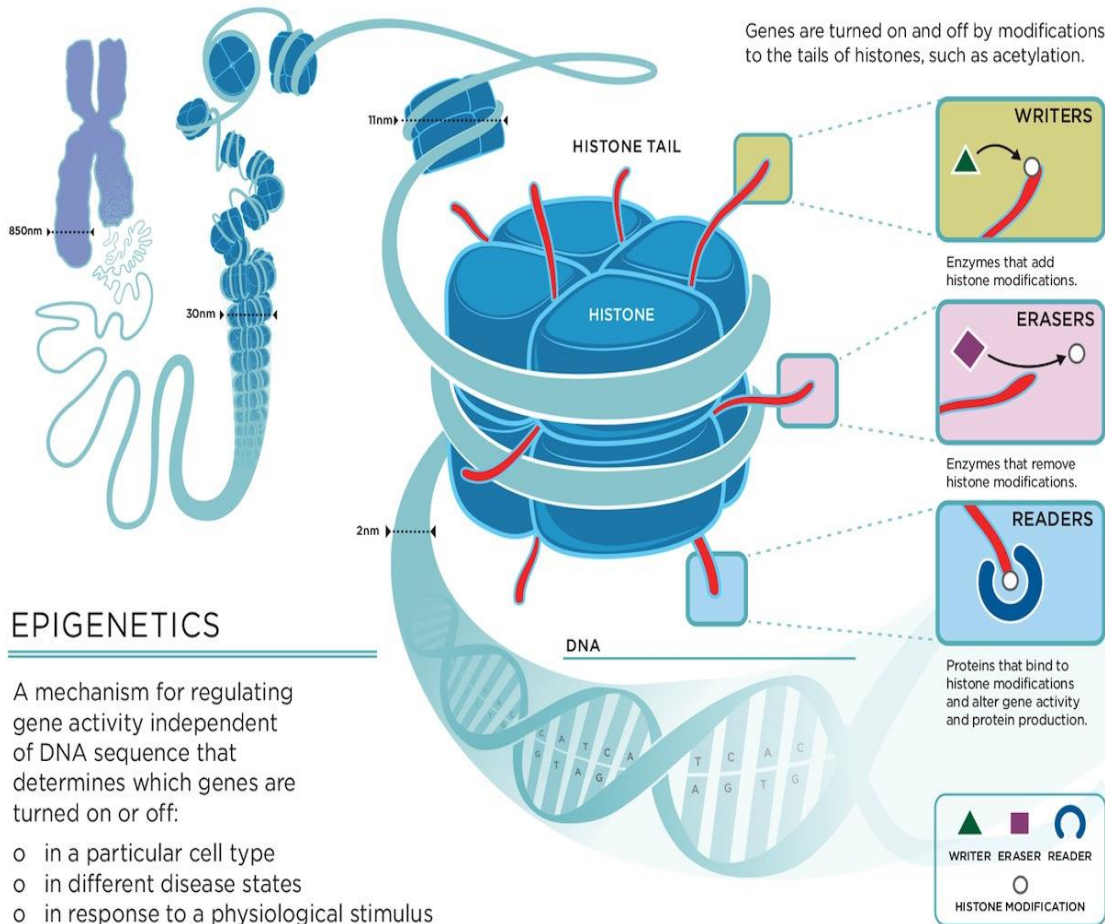


- Shenzhen Hepalink & Resverlogix announced a major licensing & milestone deal that could exceed USD \$450MM
- Largest single molecule deal in China history
- Apabetalone targets 140 MM China diabetes & CKD patients
- The market is 10% of the population and growing at 15% per year



Technology Review

CHROMOSOME CHROMATIN FIBRE NUCLEOSOME



EPIGENETICS

A mechanism for regulating gene activity independent of DNA sequence that determines which genes are turned on or off:

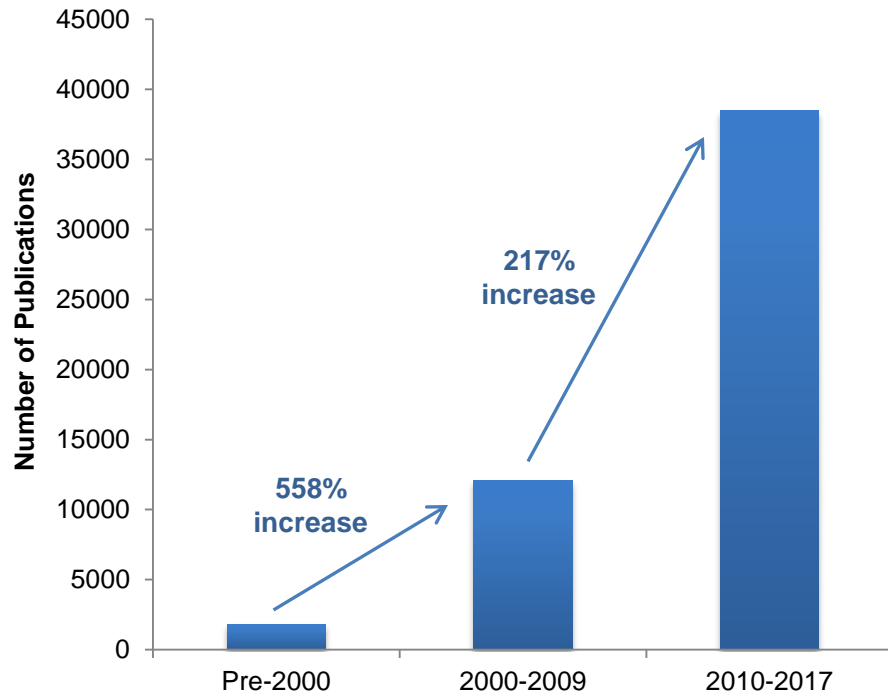
- o in a particular cell type
- o in different disease states
- o in response to a physiological stimulus

- The Epigenetic code refers to secondary modifications to chromatin components that regulate its activity
- Transcription is regulated by addition, removal or recognition of these modifications (writers, erasers, readers)
- Acetylation is associated with active transcriptional regions of chromatin
- BET (Bromodomain and Extraterminal Domain) proteins bind to acetylated lysines on histones and recruit additional transcription factors

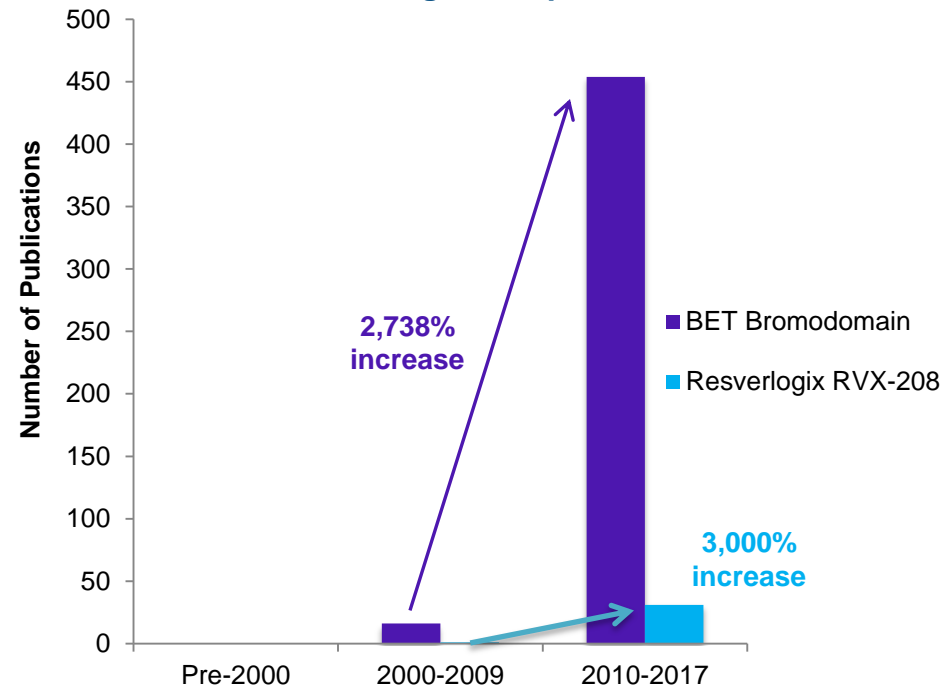
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Dramatic growth of publications over the past decade in Epigenetics and BET Inhibition

Publications on Epigenetics



Publications on BET Bromodomain and Resverlogix Compounds



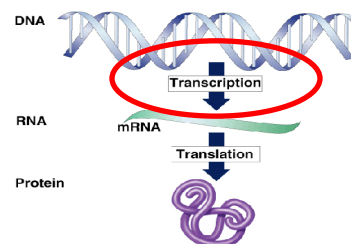
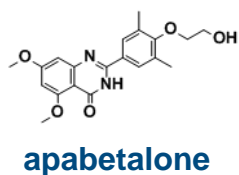
Source: PubMed Database: Historical Review Q1 2017

Studies in cells, animals and humans



Primary cells

+



microarray analysis

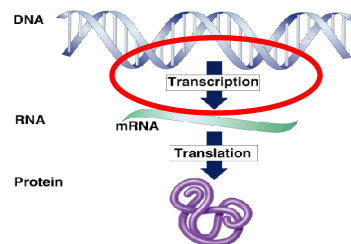
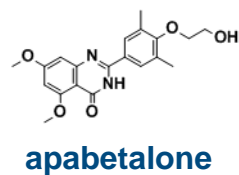
mRNA expression

protein expression



mouse

+



mRNA expression

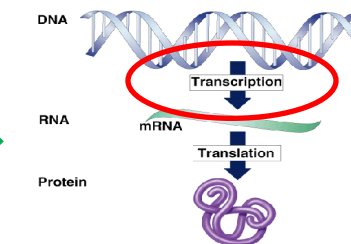
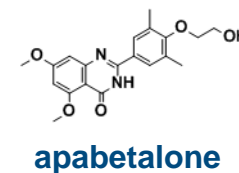
protein expression

plasma



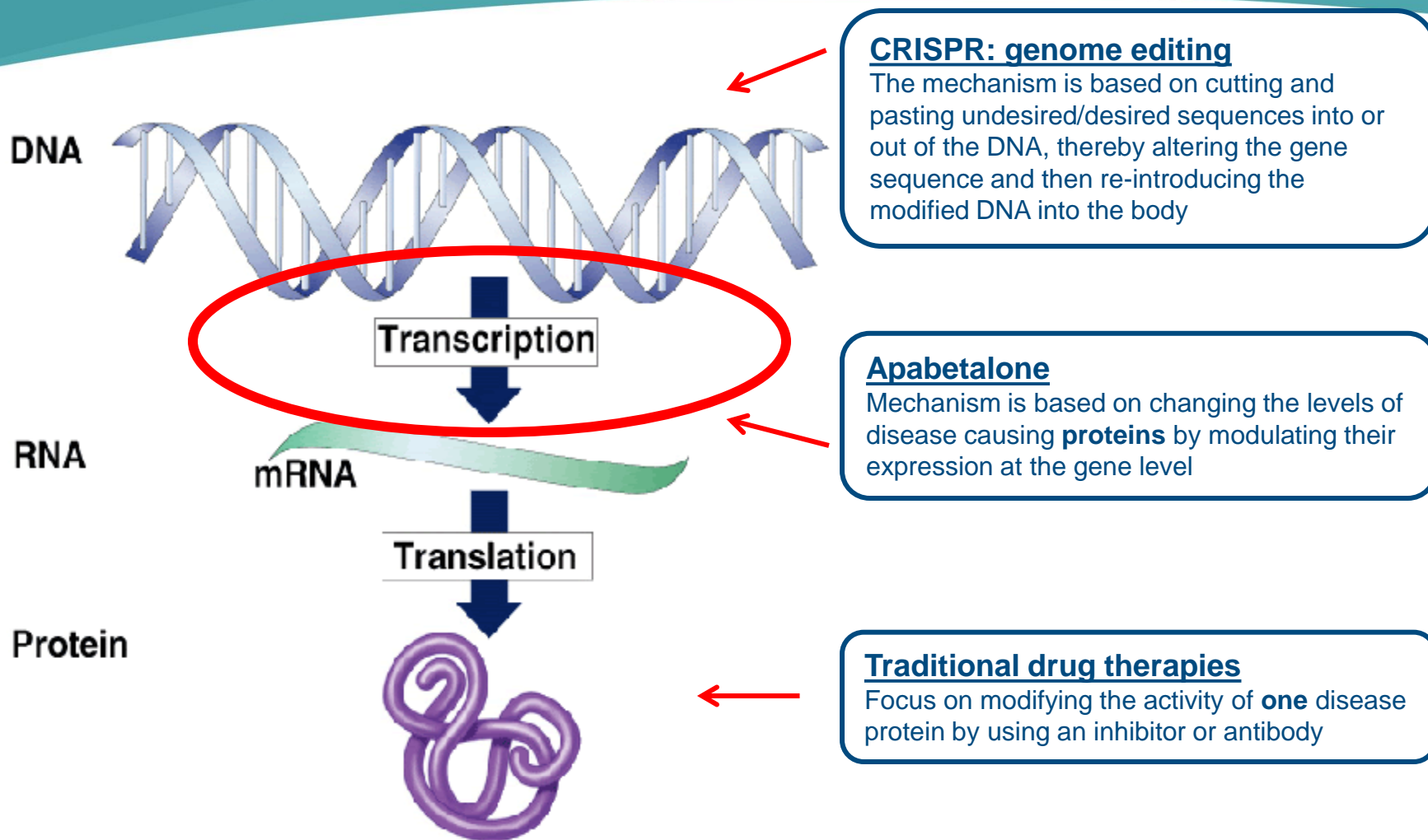
CVD patients

+

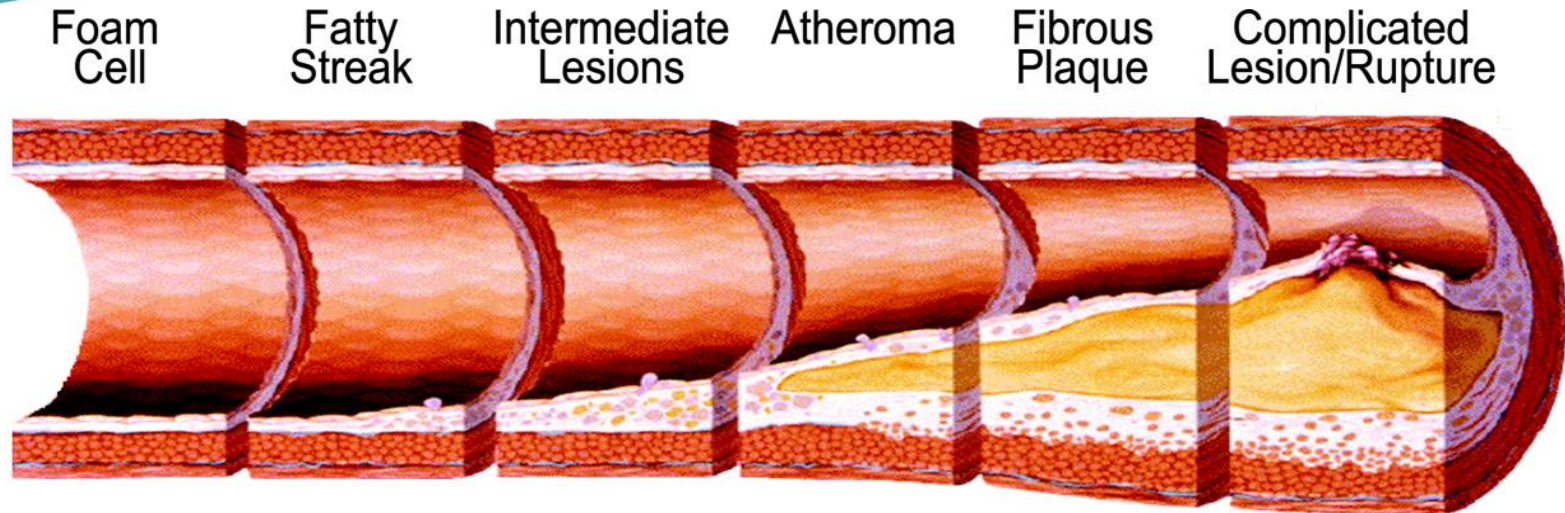


plasma proteome and
biomarkers of interest

Apabetalone's advanced mechanism



Inflammation in Cardiovascular Disease



1° & Messenger Inflamm.
Cyto/Chemokines

IL-1
TNF- α
IL-6*
IL-18*
MCP-1*

Cellular Adhesion
Molecules

sICAM
sVCAM
sSelectins

Plaque
Destabilization

IL-18*
oxLDL*
Lp-PLA₂*
GPx-1*
MPO*
MMPs*
MCP-1*
PIGF*

Plaque
Rupture

PAPP-A*
sCD40L*



Acute Phase Reactants

CRP*, sPLA₂*, SAA, Fibrinogen, WBCC

Source: Koenig, W. and Khuseyinova, N. (2007). "Biomarkers of Atherosclerotic Plaque Instability and Rupture." *Arterioscler Thromb Vasc Biol*; 27: 15-26

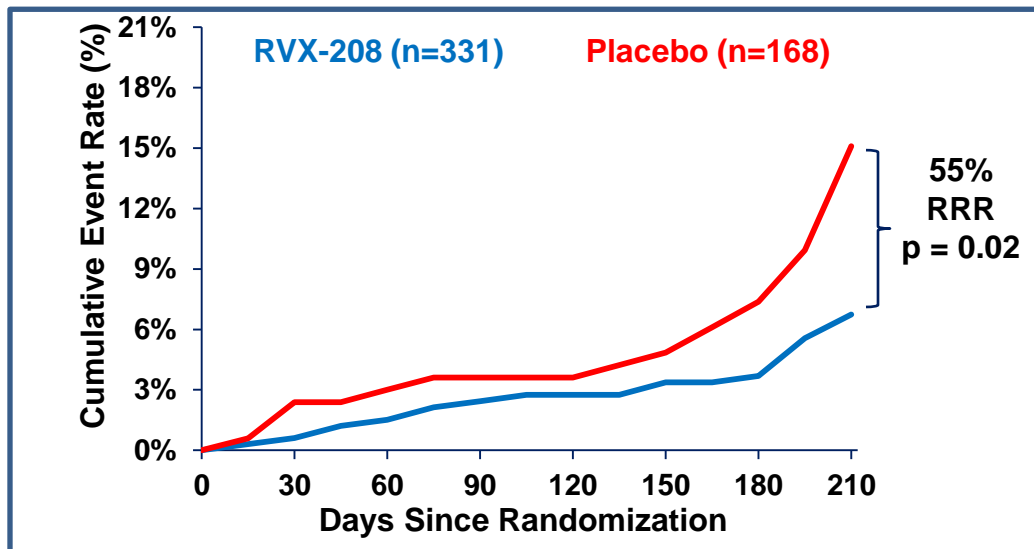


Examples of Detailed Science Compilation

Strong clinical trial data indicated a diverse mechanism of action

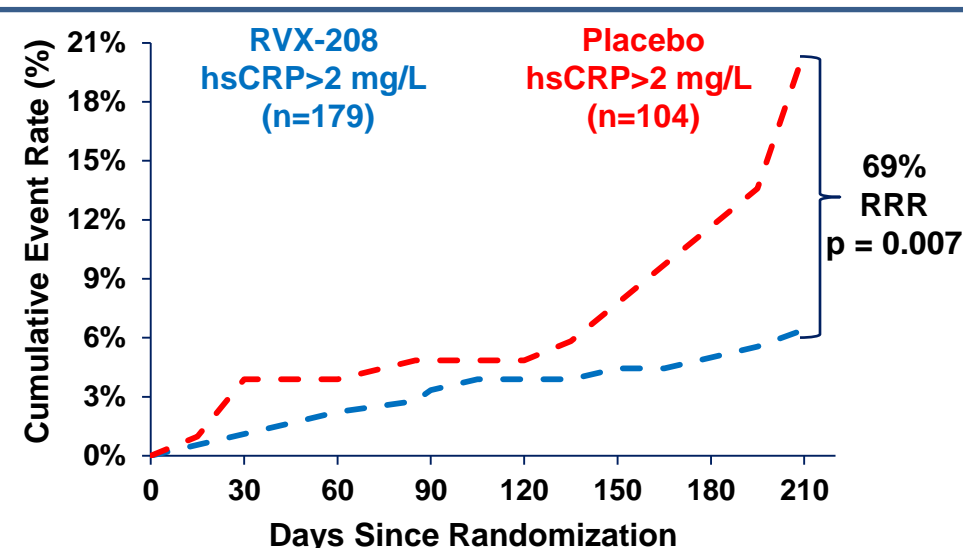
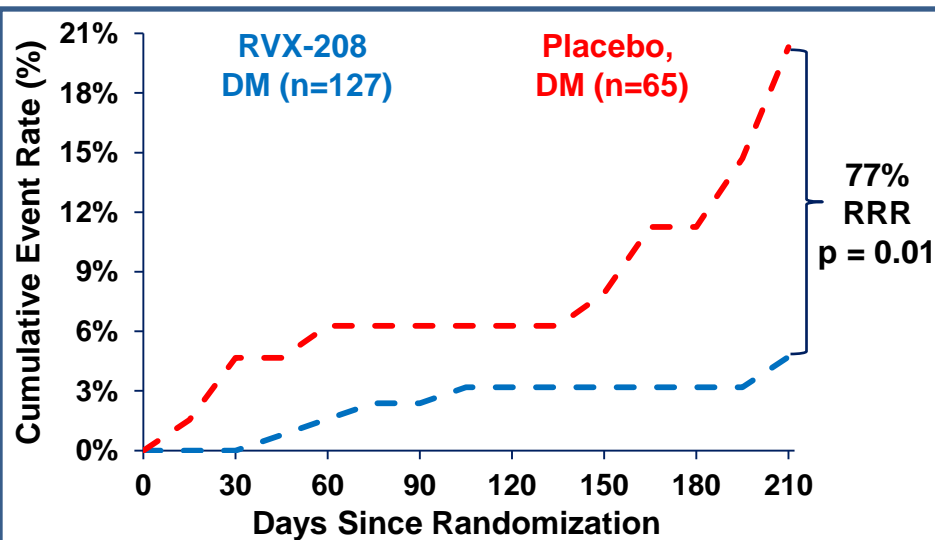


MACE: Major Adverse Cardiac Events including: death, myocardial infarction, stroke, coronary revascularization, hospitalization for acute coronary syndrome or heart failure



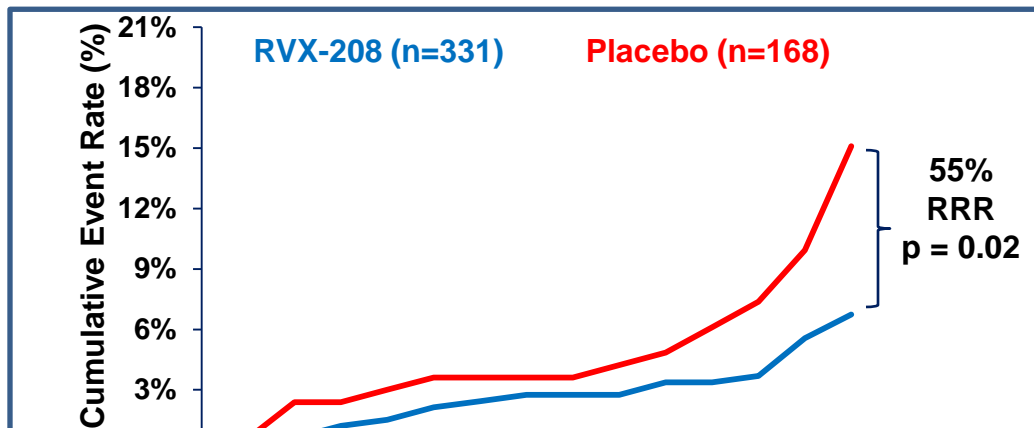
Note: Patients were censored at 30 days after the last dose of study medication.

Source: RVX data on file – ASSURE and SUSTAIN Safety Population. Log-Rank test for between group comparison



Strong clinical trial data indicated a diverse mechanism of action

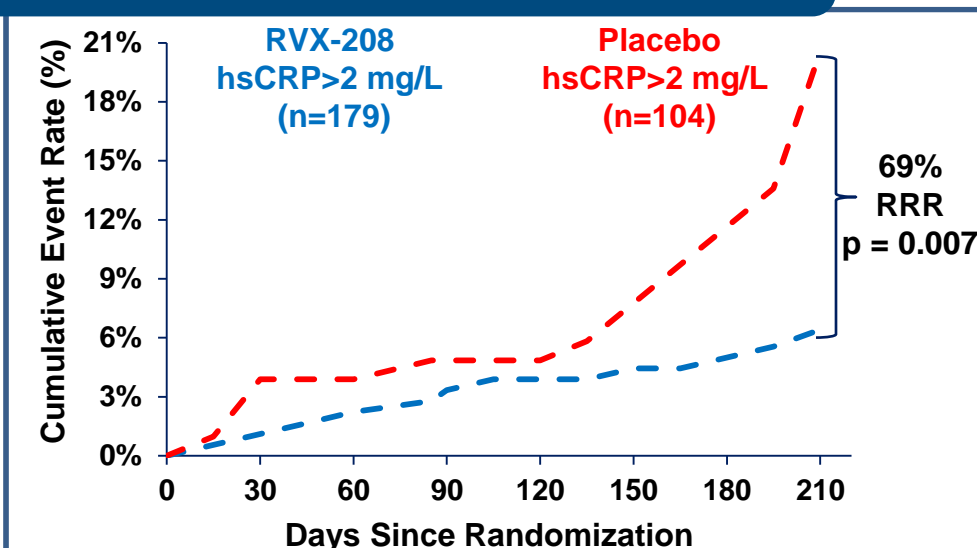
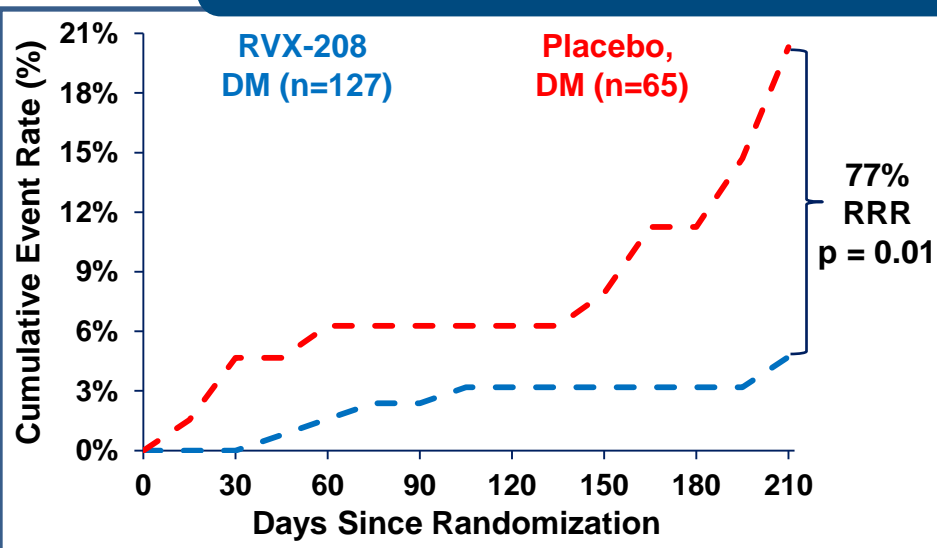
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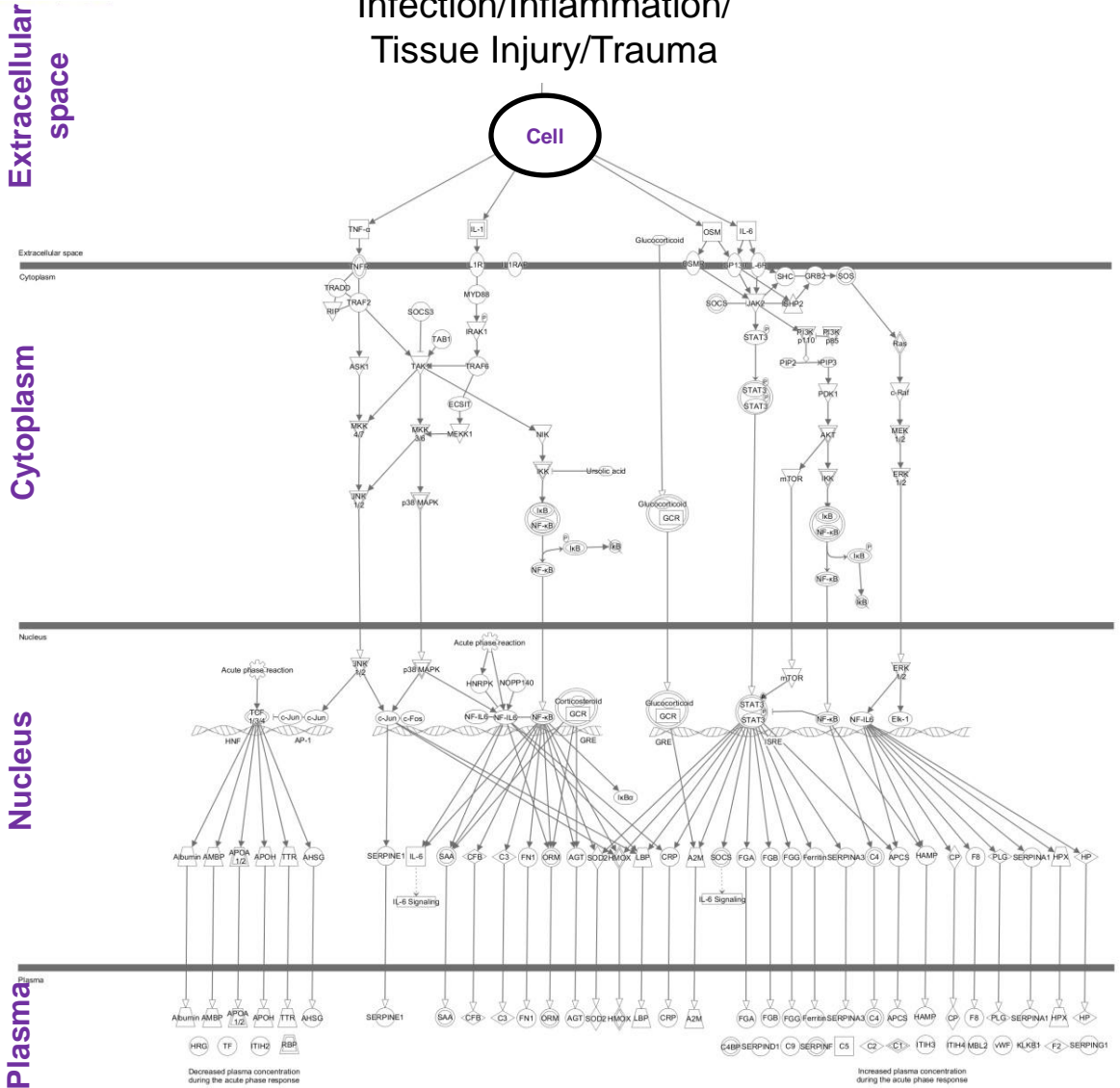
Decrease in MACE was most profound in patients who had a higher level of inflammation



Proteomic Analysis of Chronic Kidney Disease PK Study IPA: Acute Phase Response IPA

Infection/Inflammation/ Tissue Injury/Trauma

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



Decreased plasma concentration during the acute phase response

Increased plasma concentration during the acute phase response

TSX: RVX

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Proteomic Analysis of Chronic Kidney Disease PK Study IPA: Acute Phase Response IPA

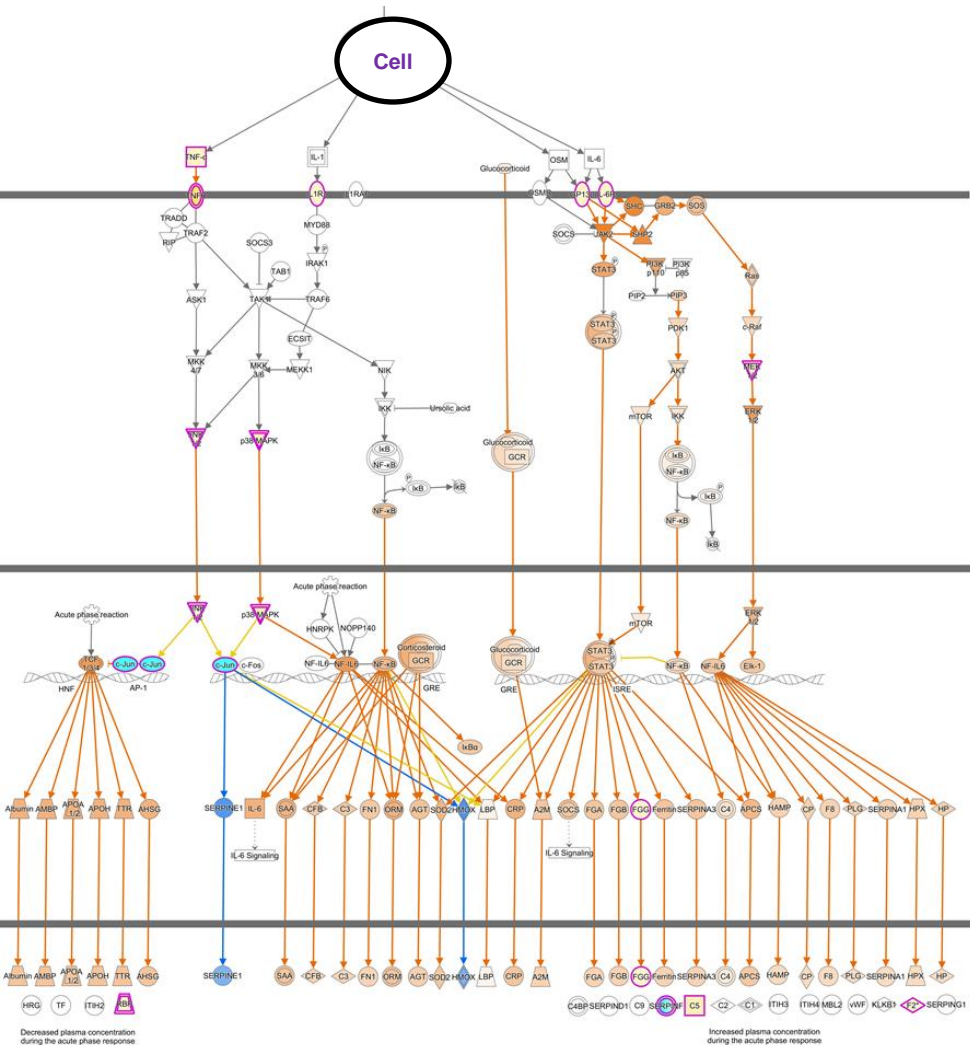
Extracellular space

Cytoplasm

Nucleus

Plasma

Infection/Inflammation/
Tissue Injury/Trauma



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

Multiple secreted APR proteins are **upregulated** in renal impaired patients at baseline

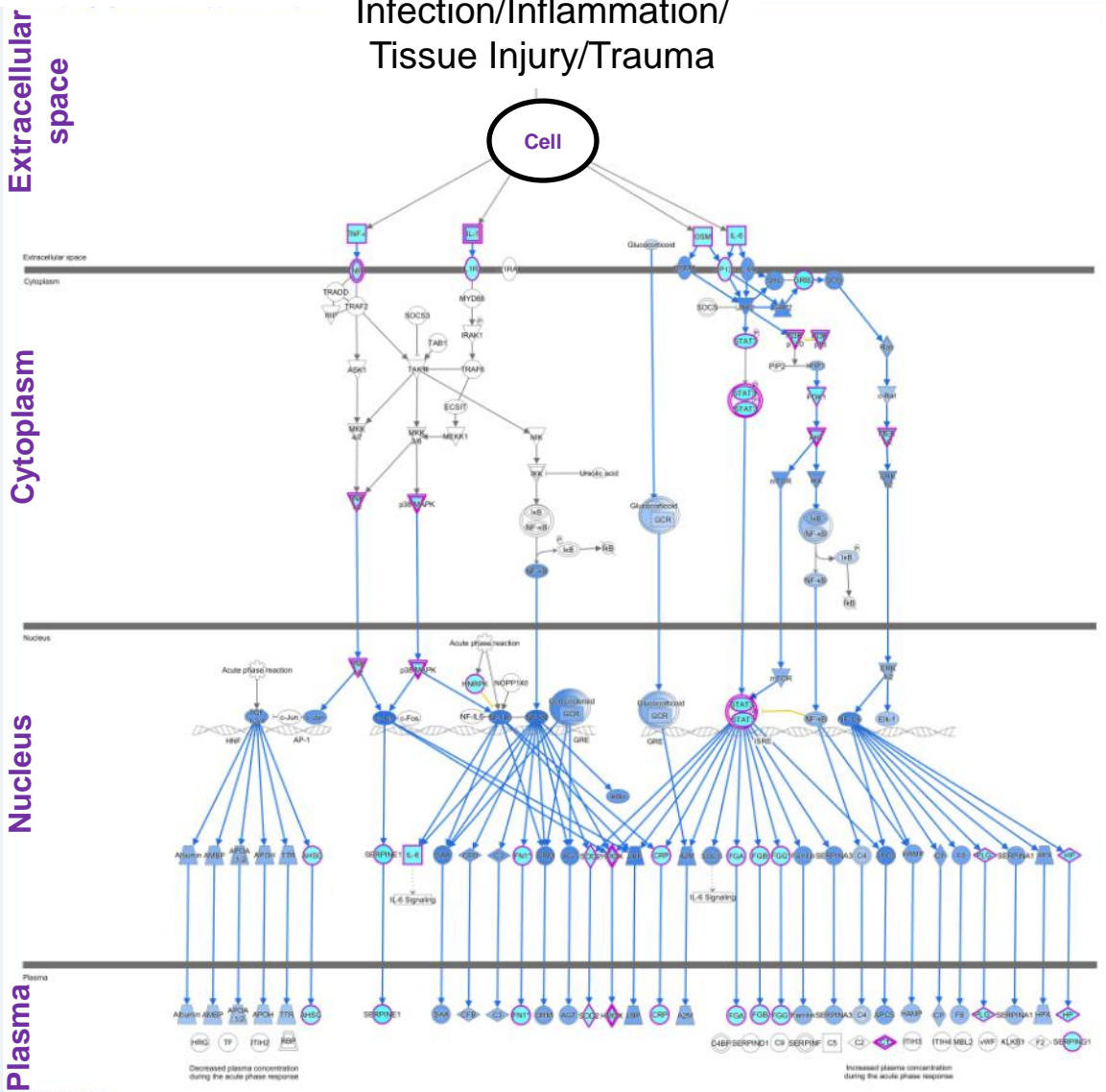
Acute Phase Response Pathway Analysis (IPA): **Predicted Upregulation of Pathway in Clinical Samples**

IPA MAP Analysis: p-value ≤0.1; Δ>5%, z-score predicts **net inhibition**: -5.488, p-value=1.58x10⁻²²

Prediction Legend		Experimental change
more extreme	less	
Yellow circle	Light yellow circle	Predicted change
Cyan circle	Light cyan circle	
more confidence	less	Relationships
Orange arrow	Light orange arrow	
Blue arrow	Light blue arrow	Relationships
Yellow arrow	Light yellow arrow	
Grey arrow	Light grey arrow	Effect not predicted

Decreased plasma concentration during the acute phase response (Albumin, AMBP, APOA1, APOA2, APOB, APOE, TTR, AHSG, SERPINE1, IL6, SAA, CFB, C3, FN1, ORM, AGT, SOCS1, HMOX1, LBP, CRP, AZM, SOCS2, FGA, FGB, FCG, FGG, SERPINA1, SERPINA2, SERPINA3, SERPINA4, SERPINA5, SERPINA6, SERPINA7, SERPINA8, SERPINA9, SERPINA10, SERPINA11, SERPINA12, SERPINA13, SERPINA14, SERPINA15, SERPINA16, SERPINA17, SERPINA18, SERPINA19, SERPINA20, SERPINA21, SERPINA22, SERPINA23, SERPINA24, SERPINA25, SERPINA26, SERPINA27, SERPINA28, SERPINA29, SERPINA30, SERPINA31, SERPINA32, SERPINA33, SERPINA34, SERPINA35, SERPINA36, SERPINA37, SERPINA38, SERPINA39, SERPINA40, SERPINA41, SERPINA42, SERPINA43, SERPINA44, SERPINA45, SERPINA46, SERPINA47, SERPINA48, SERPINA49, SERPINA50, SERPINA51, SERPINA52, SERPINA53, SERPINA54, SERPINA55, SERPINA56, SERPINA57, SERPINA58, SERPINA59, SERPINA60, SERPINA61, SERPINA62, SERPINA63, SERPINA64, SERPINA65, SERPINA66, SERPINA67, SERPINA68, SERPINA69, SERPINA70, SERPINA71, SERPINA72, SERPINA73, SERPINA74, SERPINA75, SERPINA76, SERPINA77, SERPINA78, SERPINA79, SERPINA80, SERPINA81, SERPINA82, SERPINA83, SERPINA84, SERPINA85, SERPINA86, SERPINA87, SERPINA88, SERPINA89, SERPINA90, SERPINA91, SERPINA92, SERPINA93, SERPINA94, SERPINA95, SERPINA96, SERPINA97, SERPINA98, SERPINA99, SERPINA100)

Proteomic Analysis of Chronic Kidney Disease PK Study IPA: Acute Phase Response IPA



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

Multiple secreted APR proteins are **downregulated** in renal impaired patients (vs baseline) following one dose of Apabetalone at 12 hours

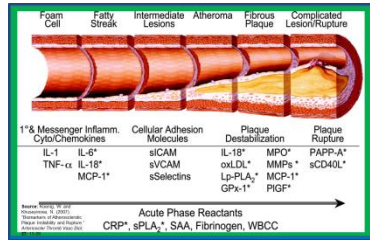
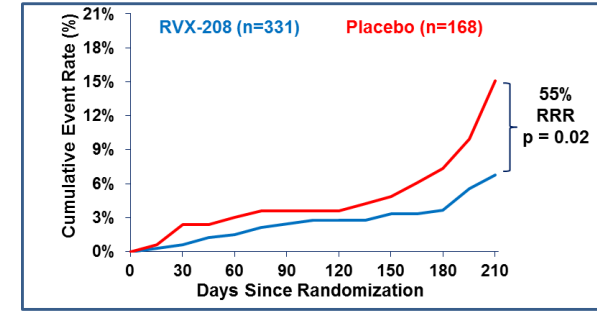
Acute Phase Response Pathway Analysis (IPA): **Predicted Downregulation of Pathway in Clinical Samples**

IPA MAP Analysis: p-value ≤ 0.1 ; $\Delta > 5\%$, z-score predicts **net inhibition**: -5.488, p-value = 1.58×10^{-22}

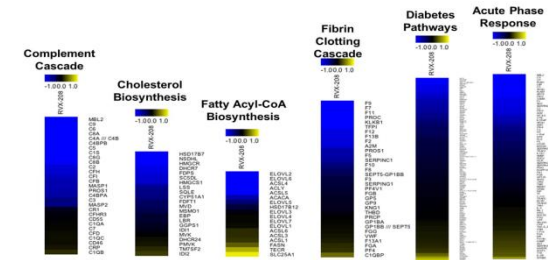
Prediction Legend		
more extreme	less	Experimental change
● Upregulated	● Downregulated	
more confidence	less	Predicted change
● Predicted activation	● Predicted inhibition	
<ul style="list-style-type: none"> Predicted Relationships Leads to activation Leads to inhibition Findings inconsistent with state of downstream molecule Effect not predicted 		Relationships

Apabetalone: BET Inhibition Targets Processes Driving CVD Disease Pathology

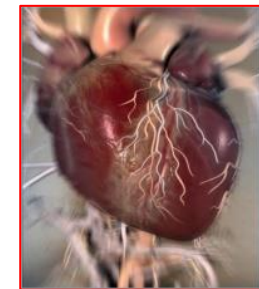
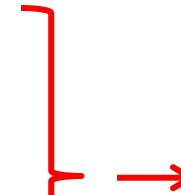
- Based on data generated in phase 2 studies, Apabetalone treatment resulted in a reduced incidence of MACE (Major Adverse Cardiac Events) in CVD patients (especially with Diabetes)
- Arrays from primary human hepatocytes and human whole blood demonstrated marked effects on numerous pathways that drive CVD



- BET epigenetic regulation and Apabetalone mediated inhibition of these pathways was confirmed in cellular, animal and human studies.



- complement and coagulation
- vascular inflammation
- acute phase response
- vascular calcification
- reverse cholesterol transport
- diabetes and glucose metabolism



Cardiovascular Disease

Apabetalone: BET Inhibition Targets Processes Driving CVD Disease Pathology

Atherosclerosis 247 (2016) 48–57

Contents lists available at ScienceDirect



Atherosclerosis



journal homepage: www.elsevier.com/locate/atherosclerosis

RVX-208, a BET-inhibitor for treating atherosclerotic cardiovascular disease, raises ApoA-I/HDL and represses pathways that contribute to cardiovascular disease




Dean Gilham^a, Sylwia Wasiak^a, Laura M. Tsujikawa^a, Christopher Halliday^a, Karen Norek^a, Reena G. Patel^a, Ewelina Kulikowski^a, Jan Johansson^b, Michael Sweeney^b, Norman C.W. Wong^{a,*}


^a Resverlogix Corp., Calgary, Canada
^b Resverlogix Corp., San Francisco, USA

Data in Brief 8 (2016) 1280–1288

Contents lists available at ScienceDirect




Data in Brief



journal homepage: www.elsevier.com/locate/dib

Data Article

Data on gene and protein expression changes induced by apabetalone (RVX-208) in ex vivo treated human whole blood and primary hepatocytes



Sylwia Wasiak^a, Dean Gilham^a, Laura M. Tsujikawa^a, Christopher Halliday^a, Karen Norek^a, Reena G. Patel^a, Kevin G. McLure^a, Peter R. Young^b, Allan Gordon^b, Ewelina Kulikowski^a, Jan Johansson^b, Michael Sweeney^b, Norman C. Wong^{a,*}

^a Resverlogix Corp., Calgary, Canada
^b Resverlogix Corp., San Francisco, USA

Current & Ongoing Studies Support Alternate Indications



- **Neurofibromatosis – Malignant Peripheral Nerve Sheath Tumors (MPNST)**: studies have examined the effect of apabetalone, in vitro and in vivo, on MPNST (potential orphan indication)
- **Pulmonary Arterial Hypertension**: studying the effects of apabetalone on primary lung SMCs was positive, animal study of the effect of apabetalone on top of standard of care
- **Muscular Dystrophy/Facio Scapulo Humeral Dystrophy**: We have tested apabetalone and ~20 alternate RVX compounds for target and biomarker engagement in muscle cells, we are also analyzing human muscle biopsies from patients treated with apabetalone
- **Calciophylaxis/Calcification**: due to positive in vitro data - animal studies of calcification are ongoing (also supports CVD)
- **Fabrys Disease**: arranging ex-vivo treatment of Fabry patient blood, to analyze the effect of apabetalone on inflammatory mediators to move into a safety/efficacy Phase 2 study
- **Neuroinflammation**: direct effects of apabetalone demonstrate reduced inflammation and microglial activation with drug treatment and no detrimental effects on neurons – animal study is ongoing
- **Paroxysmal Nocturnal Hemoglobinuria (PNH)**: due to positive data on the effect of apabetalone on the complement cascade, plans to start a safety/efficacy trial have been initiated
- **Chronic Kidney Disease (CKD)**: proteomic analysis of data from CKD PK study is ongoing
- **Characteristics of BET Inhibitors**: studies investigating PK/tissue distribution of apabetalone and other BET inhibitors are underway, new scientist hired to investigate distribution, formulation and route of administration of BETi for other indications and target organs



BETonRENAL Clinical Update

TSX: RVX

Phase 1 PK Study Design

Cohort 1
Previously diagnosed with ESRD and not on dialysis (eGFR <30 mL/min/1.73m²)

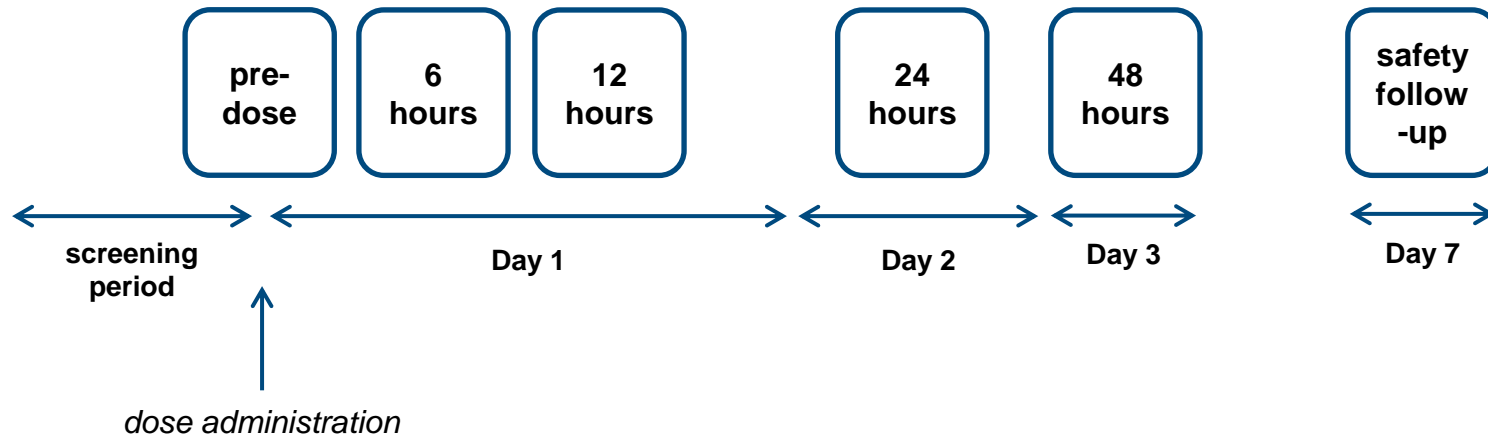


**apabetalone 100mg
single dose
N=8**

Cohort 2
Healthy volunteers matched for age (± 10 years), weight ($\pm 20\%$), and gender with the subjects in Cohort 1 (renal impaired subjects); eGFR ≥ 60 mL/min/1.73m²



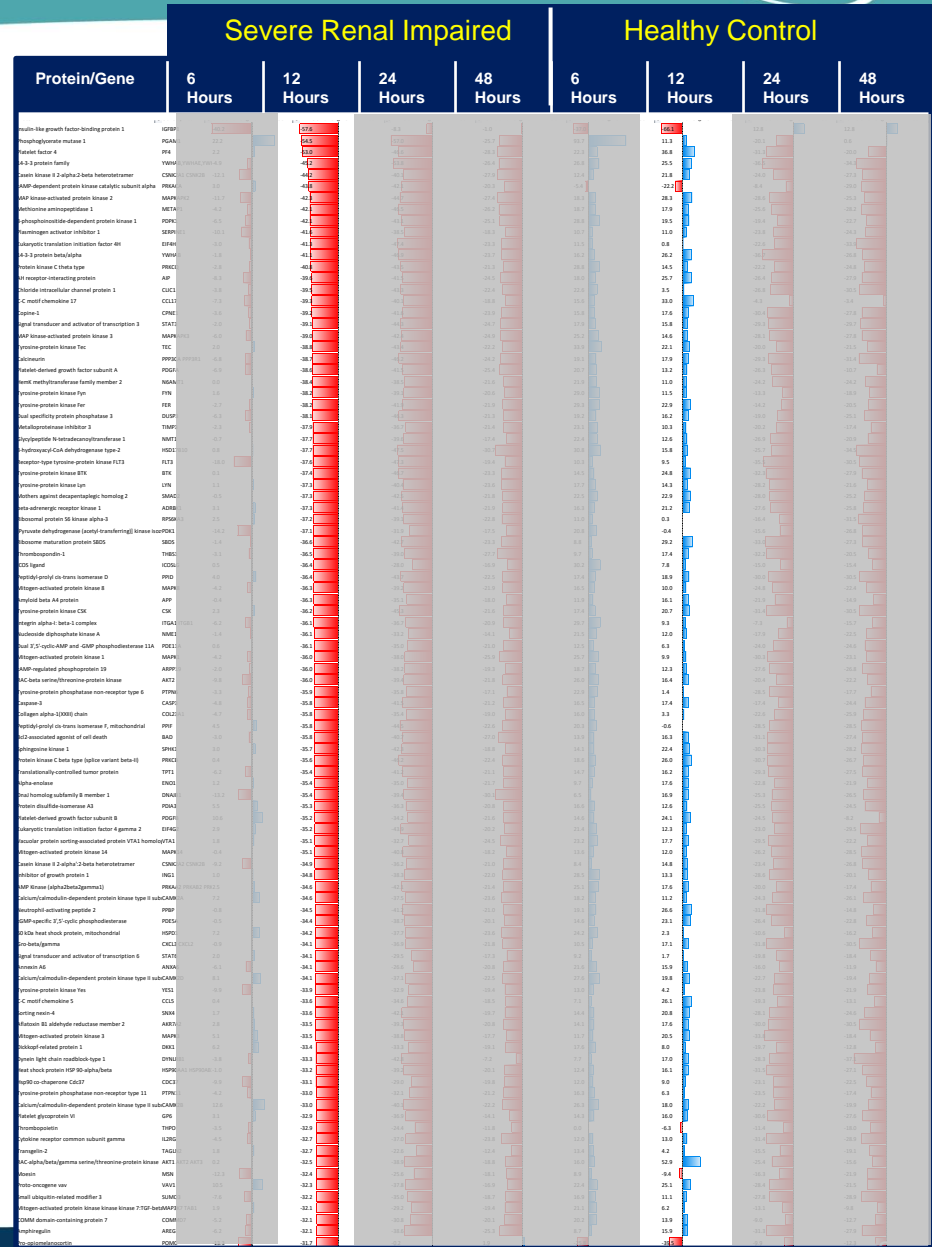
**apabetalone 100mg
single dose
N=8**



Proteomic Analysis of CKD PK Study



Top 100 proteins from Somalogic, ranked by magnitude of effect at 12 hours post dose vs baseline, compare biomarkers of severe renally impaired patients versus healthy controls



CKD/Dialysis



Dr. Kamyar Kalantar-Zadeh
Chair
UC Irvine Chief Nephrology



Prof. Vincent Brandenburg
Member
University Hospital RWTH Aachen



Dr. Carmine Zoccali
Member
University Pisa



Dr. Marcello Tonelli
Member
University of Calgary Chair Medical Research

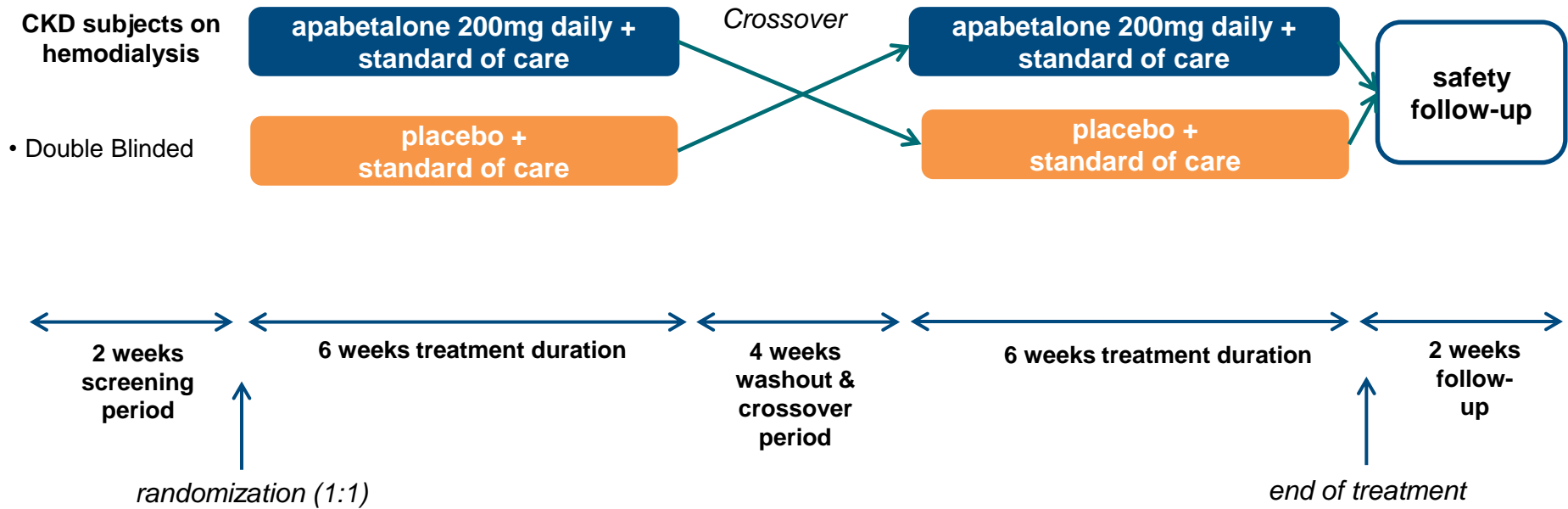


Dr. Srinivasan Beddhu
Member
University of Utah



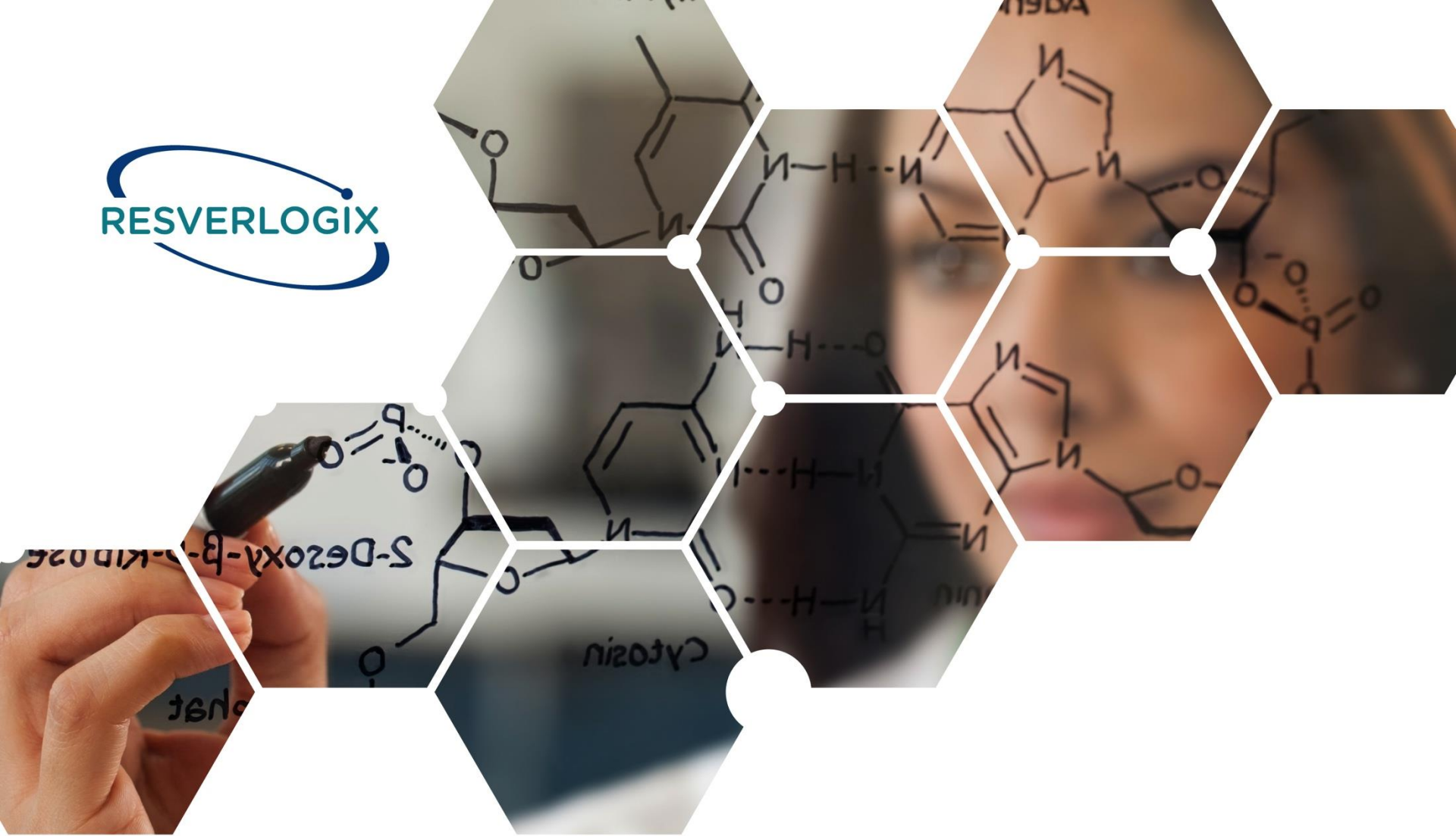
Dr. Mathias Haarhaus
Member
Karolinska University Hospital

Phase 2 Renal Study Design: Primary Endpoint Change in ALP



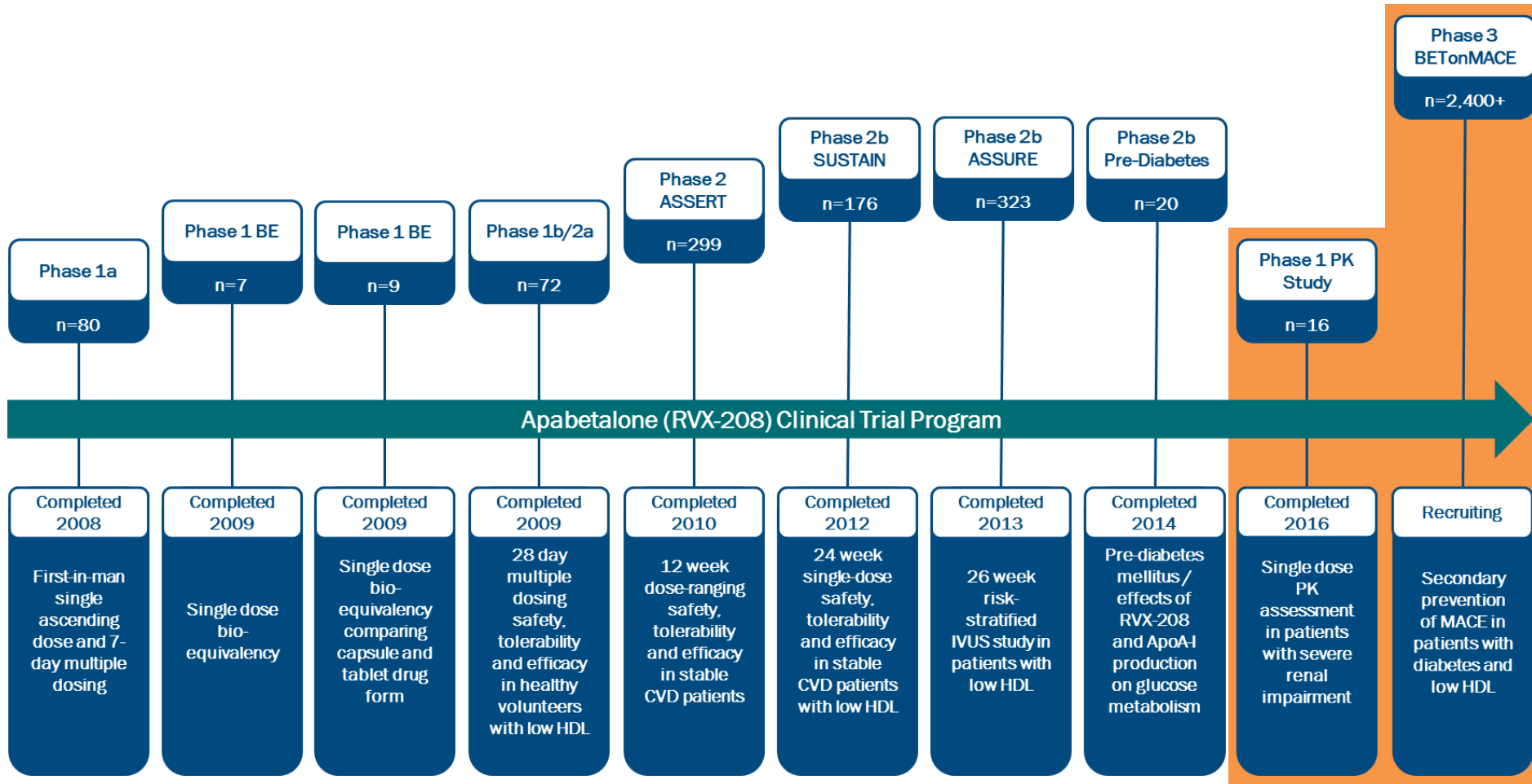
- The study is an sequential cross-over trial to evaluate the safety, tolerability, and efficacy of apabetalone in CKD patients on hemodialysis in addition to standard of care
- 30 CKD patients receiving standard regimens of hemodialysis three days per week

- Filed for a Type B Meeting early fall 2016
- Completed Type B Meeting late fall 2016, face to face in Washington
- Received positive feedback on trial design and positive instructions to enhance the program without affecting the IND filing timeline
- New Cardio/Renal IND on track for Q1 2017



BETonMACE Clinical Update

Apabetalone Clinical Trial History



BETonMACE Commenced November 2015



Apabetalone has already been tested in over 1,000 patients in 18 countries around the world.

Primary Objective

To evaluate if treatment with apabetalone as compared to placebo increases time to the first occurrence of triple MACE. Triple MACE is defined as a single composite endpoint of: 1) CV Death or 2) Non-Fatal MI or 3) Stroke.

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

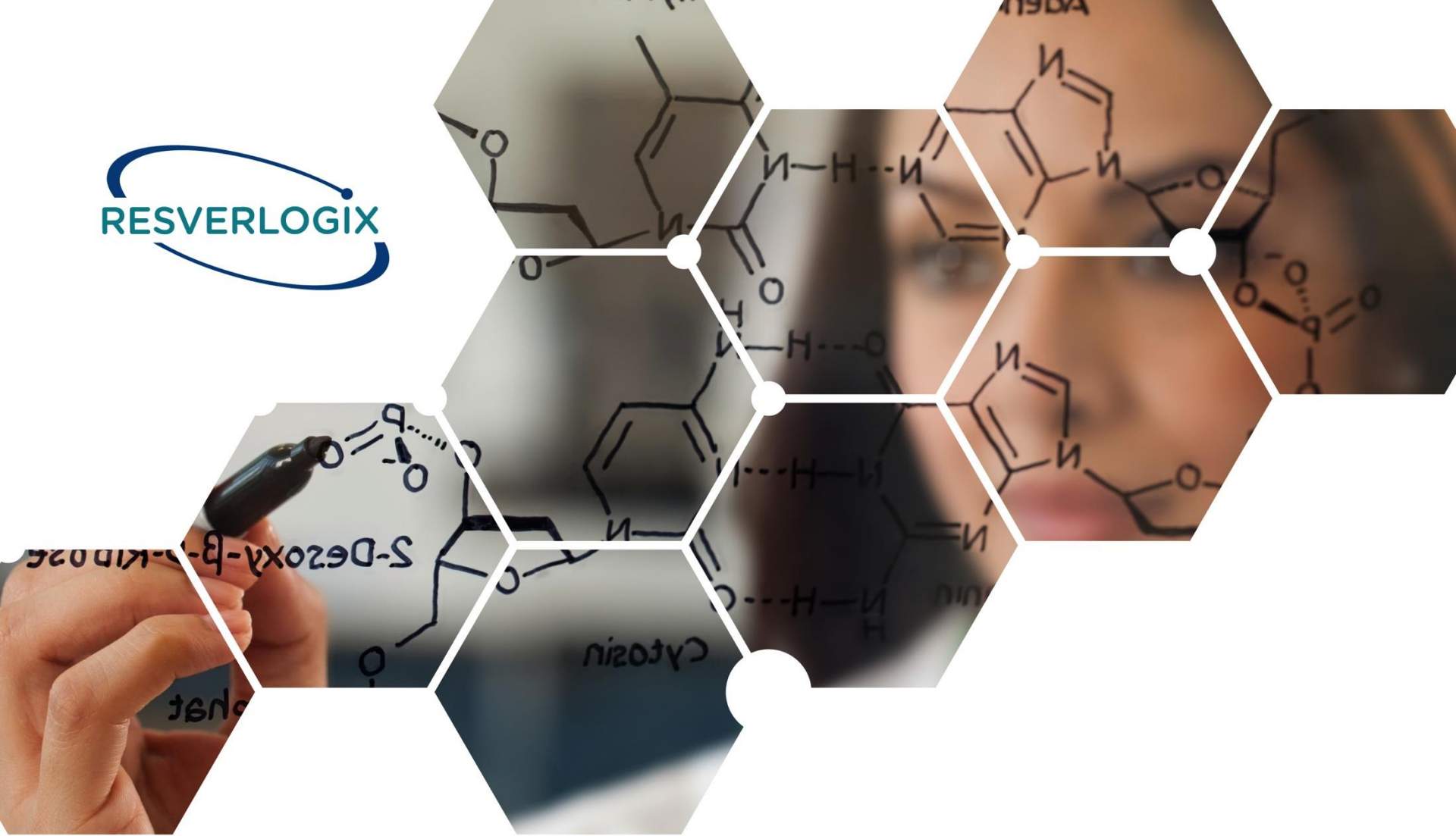
Primary Endpoint

Time from randomization to the first occurrence of adjudication-confirmed triple MACE defined as a single composite endpoint of: 1) CV Death or 2) Non-Fatal MI or 3) Stroke.

Secondary Endpoint

Time from randomization to the first occurrence of adjudication-confirmed MACE including:

- revascularization and unstable angina
- changes in apoA-I, apoB, LDL-C, HDL-C, and TG
- changes in HbA1c, fasting glucose, and fasting insulin
- changes in ALP and eGFR



Market Opportunity

Unmet Need Segment is Still 70%

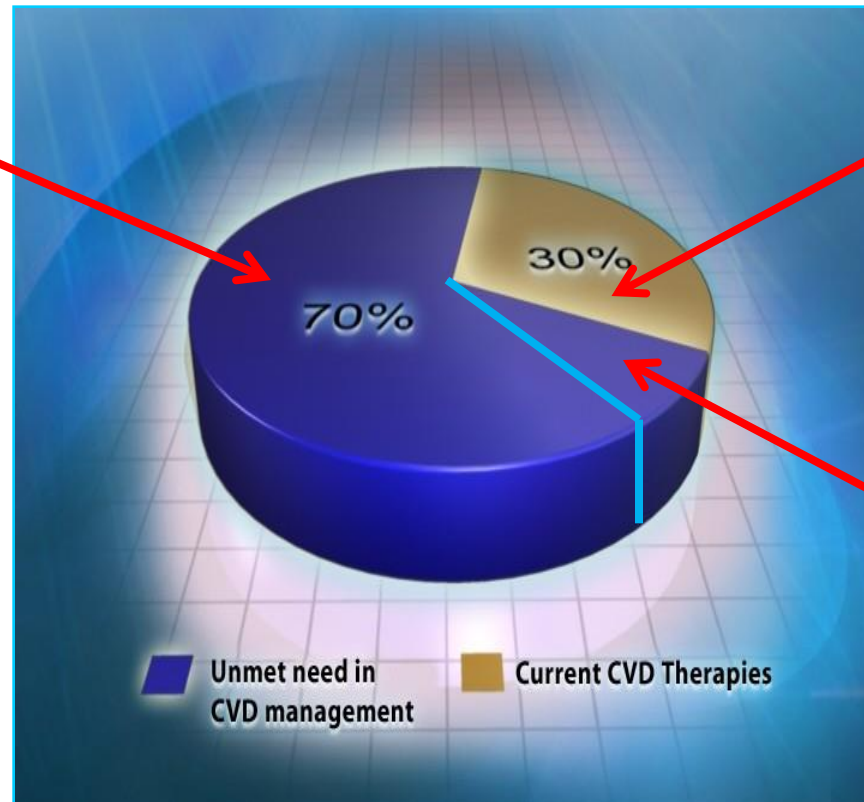
- Cardiovascular disease is still the number one killer of both males and females and costs the US healthcare system over \$500B per year

Current CVD Therapies

- Statins are the top medication used to treat CVD
- Despite maximized use, current therapies only manage about 30% of CVD events

New LDL Modulators

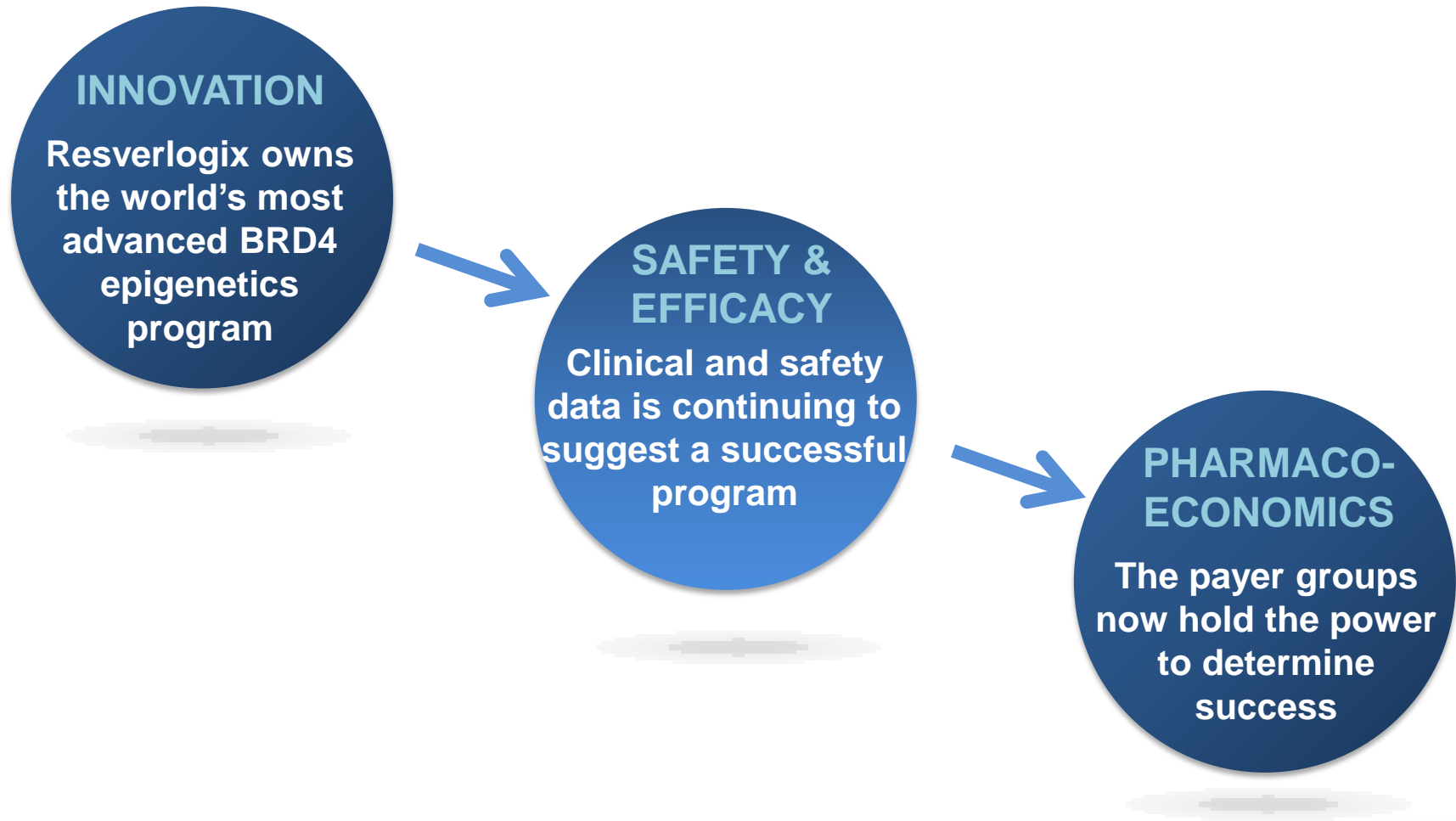
- Several new types of LDL modulators are in clinic. Leading are the very expensive PCSK9's



Opportunity

- Huge market potential resides in the remaining 70% unmet need in CVD management

THREE KEY DEVELOPMENT TARGETS ARE IN PLACE

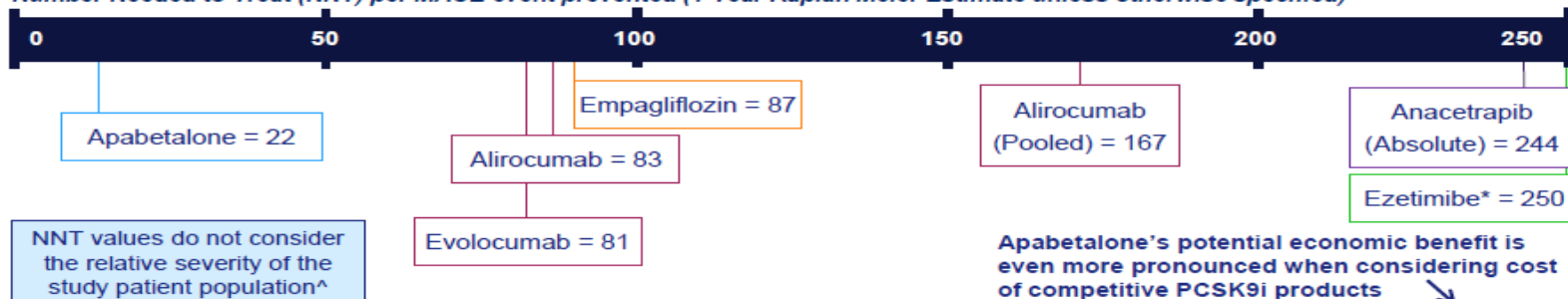


Reimbursement Third Party Support Review: Health Value Proposition Tier 2 Price Range Model



Based on SUSTAIN/ASSURE, NNT and cost/event prevented were favourable versus comparators in their respective patient populations

Number Needed to Treat (NNT) per MACE event prevented (1 Year Kaplan Meier Estimate unless otherwise specified)



Trial	Molecule	Trial Size	Treatment Duration (Years)	Absolute NNT/Yr	Kaplan Meier (KM) NNT/Yr	Annual Medication Cost/Patient	Annual Cost per Event Prevented (KM)
SUSTAIN/ASSURE	Apabetalone	497	0.4 – 0.5	23	22	\$2,400 - \$4,200	\$52,800 - \$92,400
ASSERT/SUSTAIN/ASSURE		798	0.25 – 0.5	11	22	\$2,400 - \$4,200	\$52,800 - \$92,400
ODYSSEY LONG-TERM	Alirocumab	2,338	1.6	97	83	\$14,560	\$1,208,480
POOLED ODYSSEY		3,459	1.6	NA	167	\$14,560	\$2,431,520
OSLER 1-2	Evolocumab	4,465	0.9	83	81	\$14,100	\$1,142,104
IMPROVE-IT	Ezetimibe	18,144	6.0	333	250*	\$2,844	~\$711,000
EMPA-REG OUTCOMES	Empagliflozin	7,042	3.1	194	87	\$4,126	\$358,769
DEFINE	Anacetrapib	1,612	1.5	244	NA	NA	NA

Note: Medication cost based on US WAC cost (PriceRx); Kaplan Meier estimates are based on digitized curves from publications

^No patient population standardization has been applied so additional population specific factors beyond severity can also influence NNT values

*1 year showed no benefit to calculate NNT; estimated by taking 5 year KM rate of 50 x 5 years

Apabetalone HEOR Evidence Benchmarking - Final Results v4.0 Oct 2015



Tier 3 Price Range Modeling underway: Higher Risk BETonMACE population

Tier 3 Price Band Report: Payer KOL Outreach



Organization	Lives Covered	MACE Reduction: Unmet need in Recent ACS and T2DM patients	MACE Reduction: Unmet need in CKD patients	ICER Threshold per annum
Payer 1	55 M	Moderate to High	Moderate to High	\$ < 100,000
Payer 2	65 M	Moderate to High	Moderate to High	\$ < 200,000
Payer 3	37 M	Moderate to High	Moderate to High	\$ < 100,000
Payer 4	40 M	Moderate to High	Moderate to High	\$ < 150,000
Payer 5	11 M	Moderate to High	Moderate to High	\$ < 150,000

- 5 Payers - **208 million** lives covered, Key C Suite executives contacts – President, Chief Medical Directors, COO, Executive VP Pharmacy
- Pricing bands support average ICER Target Threshold of approximately **\$140,000** USD
- Pricing bands support average price of **\$6,000 - \$12,000** based on new enriched high risk patients

Tier 2 Valuation Example: Acute Coronary Syndrome Indications Risk-Adjusted NPV Projections



Milestone Valuations	Scenario i >25% RRR			Scenario ii >30% RRR		
	ACS + Diabetes	ACS + CKD	Total	ACS + Diabetes	ACS + CKD	Total
Phase III EU	\$ 1,044	\$ 717	\$ 1,761	\$ 1,351	\$ 921	\$ 2,272
Phase III EU Completion	\$ 2,363	\$ 1,554	\$ 3,917	\$ 3,015	\$ 1,967	\$ 4,982
Market Approval EU + Phase III US	\$ 2,686	\$ 1,763	\$ 4,449	\$ 3,422	\$ 2,225	\$ 5,647
Market Approval EU + Phase III US Completion	\$ 3,458	\$ 2,243	\$ 5,701	\$ 4,394	\$ 2,831	\$ 7,225
Full Market Approval	\$ 3,828	\$ 2,474	\$ 6,302	\$ 4,862	\$ 3,121	\$ 7,983

Data Value Indications

- i. RRR >25% in BETonMACE; \$3,600/yr; market penetration 60%
- ii. RRR >30% in BETonMACE; \$4,200/yr; market penetration 64%

(in USD millions unless otherwise noted)

Assumptions

1. Ramp to peak 7 years
2. 2021 market entry in EU; 2023 market entry in US
3. Japan to follow EU registration path
4. NPV calculated on net operating income at a 15% discount rate
5. Patent life 2034/35

Why Invest in Resverlogix?



- **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 – Phase 2 clinical trials to commence in early 2017
- **Well established safety profile** - to date, over 1,200 patients treated with apabetalone with no significant safety issues
- **Proven track record** of funding development while minimizing shareholder dilution



Resverlogix Corp.
Q1 2017 - Corporate Update

February 14, 2017

New York, NY

TSX: RVX