

# Resverlogix Corp. Corporate Breakthroughs

February 4th, 2021 – Market Update



# Forward Looking Statement

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 may include forward looking information relating to the Phase 3 BETonMACE2 clinical trial, COVID-19 planned trial, vascular cognitive dementia, chronic kidney disease, fabry disease and pulmonary arterial hypertension clinical trials, and the potential role of apabetalone in the treatment of high-risk cardiovascular disease, diabetes mellitus, 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](http://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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# Resverlogix at a Glance

- Resverlogix Corp. is a Canadian public company developing an advanced **cardiovascular/CKD** drug called apabetalone. We are pioneering a technology that has the ability to turn multiple disease-causing genes on or off. No actual change to the human DNA occurs. Our exciting breakthrough technology places Resverlogix as a world leader in utilizing “**epigenetics**” to regulate disease-causing genes.

## Today’s Update Subjects Include:

- Finance update details of the previously announced private placement by Sheikh Abdulgader Aboud Baeshen, President and CEO of Baeshen Trade, Abdulgader Baeshen Co.,
- BETonMACE2 design upgrades and partnering options
- COVID-19 trial update and apabetalone’s confirmed strong antiviral effect

Stock Symbol	TSX: RVX
Market Cap	~\$230MM <sup>1</sup>
Shares Outstanding	234MM <sup>1</sup>

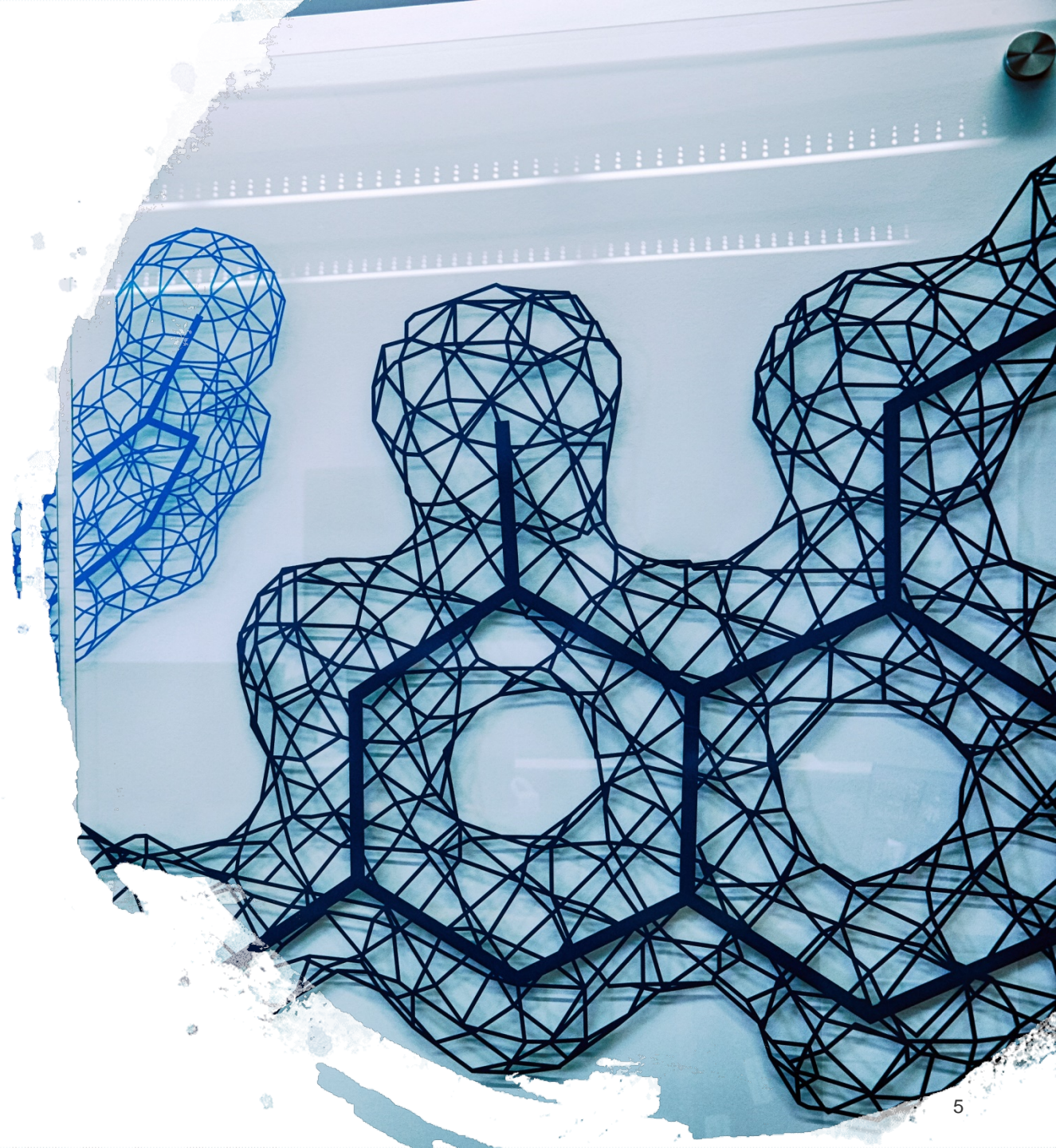
1. As at January, 2021

# Financing Details



- The pending investment transaction was **announced** on October 6<sup>th</sup> 2020 with an estimated closing date of January 15<sup>th</sup>, 2021.
- Subsequently on October 14<sup>th</sup> 2020 **ORI Capital converted** its full debt position of approximately \$17.5MM CDN or \$13.3MM USD.
- On December 3, 2020 Sheikh Abdulgader Aboud Baeshen received a very satisfactory **“Estimate of Fair Market Value”** that was commissioned by Resverlogix for the purpose of Deloitte providing a current valuation of just our core ACS program. The valuation does not include COVID-19, Pulmonary Arterial Hypertension or any other potential or ongoing programs. This 63 page report is confidential for his investment purpose only however its valuation ranges far exceed our current market cap.
- On December 22, 2020 the final Resverlogix review step took place with shareholders voting in favor of the transaction by **greater than 99%**.
- Since the AGM vote the Sheikh has been diligently working on the foreign exchange aspects of transferring funds from Saudi Arabia to Canada, a process that is expected to be completed within the month. His quote for today’s call is: ***“I am happy to join your esteemed company, Resverlogix. Upon the emergency circumstances of 2020 and for my complete belief that your work will serve all mankind I am participating in this initial investment.”*** Sheikh Abdulgader Aboud Baeshen.
- In addition, the Sheikh has requested an **upsized initial investment.**

# **BETonMACE2 & Designs and Timelines**



# FDA Approves Breakthrough Therapy Designation



“A breakthrough therapy designation is for a drug that treats a serious or life-threatening condition and preliminary clinical evidence indicates that the drug may demonstrate substantial improvement on a clinically significant endpoint(s) over available therapies.”

**FDA Website**



IND 76487

**GRANT –  
BREAKTHROUGH THERAPY DESIGNATION**

Resverlogix Corp.  
Attention: Barry Calvarese  
Consultant, Regulatory Affairs  
44 Montgomery Street, Suite 4010  
San Francisco, CA 94104

Dear Mr. Calvarese:

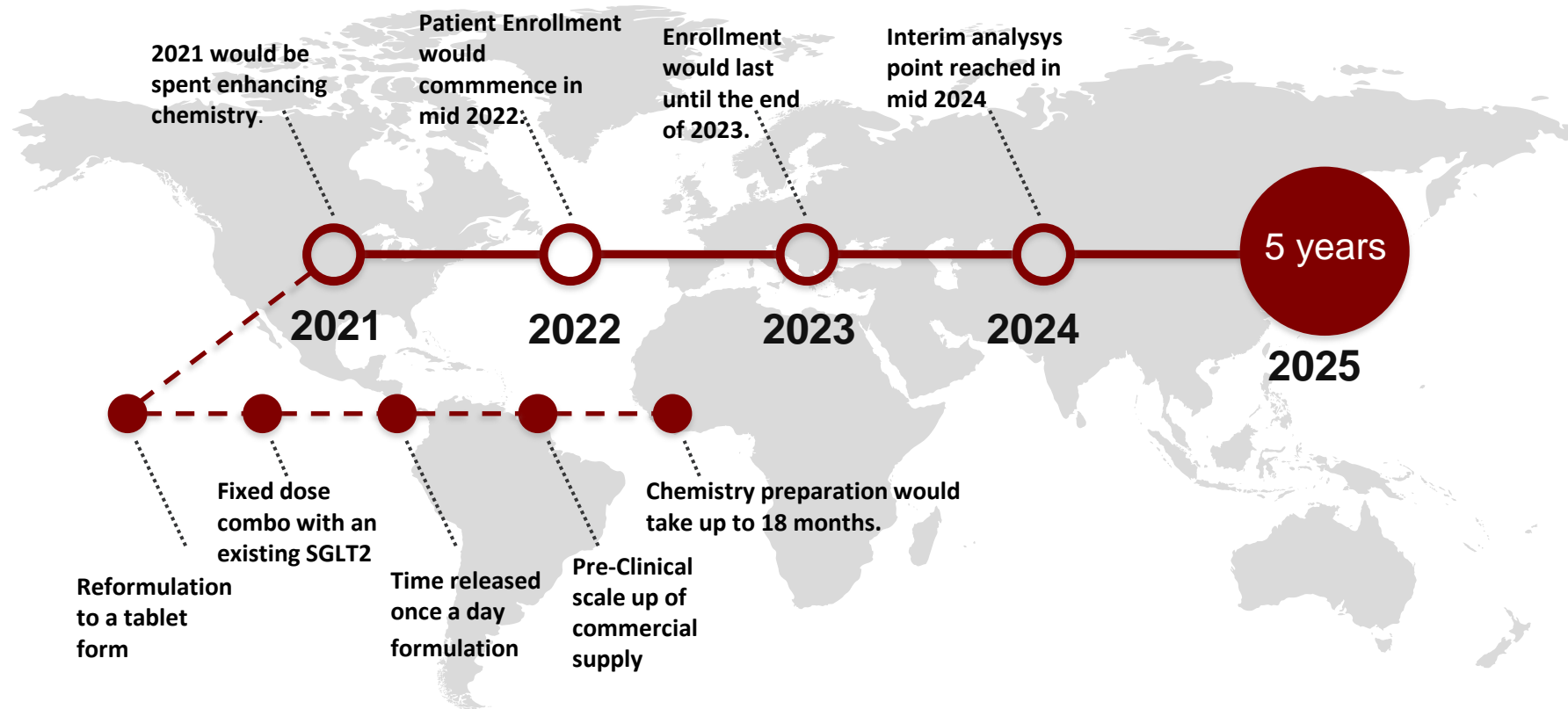
Please refer to your investigational new drug application (IND) submitted under section 505(i) of the Federal Food, Drug, and Cosmetic Act for apabetalone (RVX000222).

We also refer to your December 4, 2019, request for Breakthrough Therapy designation. We have reviewed your request and have determined that apabetalone, in

As the result of very safe and promising data the FDA granted Resverlogix the coveted **Breakthrough Therapy Designation**

# TIMELINE OPTION REVIEW - FIVE YEAR GLOBAL DEVELOPMENT PLAN

Details Options Presented by and Discussed with Major Pharma's



## Trial Size

**10,000 patients**



## Basic Trial Design

- Type 2 Diabetes patients post ACS 7-90 days
- Estimated glomerular filtration rate (eGFR) between 25 and 75 mL/min/1.73 m<sup>2</sup>
- SGLT2 inhibitor if clinically indicated mandated for all subjects
- Endpoint, time to the first occurrence of narrowly defined MACE (CV death and MI) or hospital admission for CHF



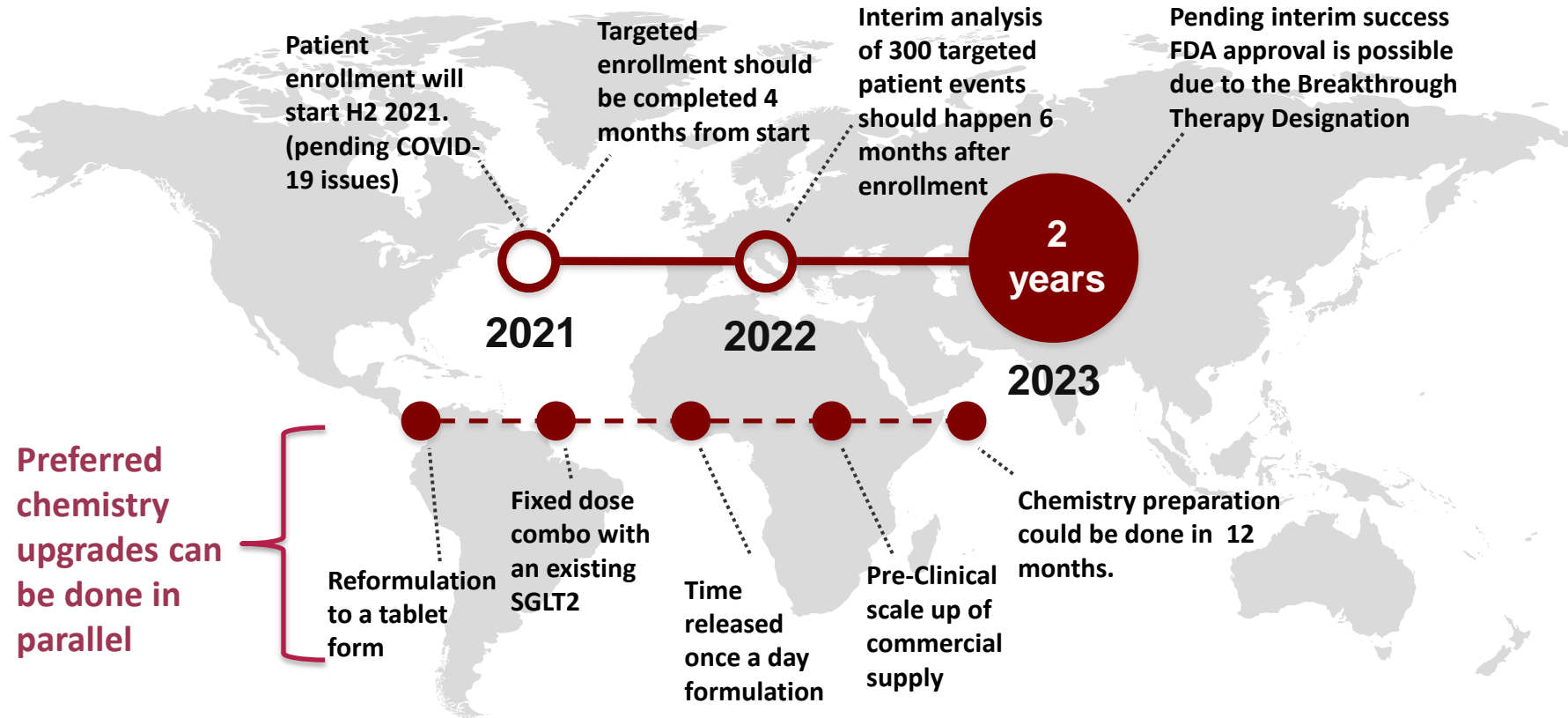
## Clinical Cost est.

**\$200,000,000 USD**

To be paid for by the Pharma side in a partnership agreement

# TARGETED - GLOBAL DEVELOPMENT PLAN

Planning details between Resverlogix and various potential partners



**Trial Size**

**3,600 patients**



**Basic Trial Design**

- Type 2 Diabetes patients post ACS 7-180 days
- Estimated glomerular filtration rate (eGFR) between 20 and 60 mL/min/1.73 m<sup>2</sup>
- SGLT2 inhibitor if clinically indicated mandated for all subjects
- Endpoint, time to the first occurrence of narrowly defined MACE (CV death and MI) or hospital admission for CHF



**Clinical Cost est.**

**\$60-70,000,000 USD**

To be paid for by the Pharma side in a partnership agreement



## Targeted focus on the renally impaired CV population

- T2DM 7-180 days post ACS (potentially longer than 180 days – FDA opinion required)
- Estimated glomerular filtration rate (eGFR) between 20 and 60 mL/min/1.73 m<sup>2</sup> and urinary albumin:creatinine ratio  $\geq 200$  mg/g
- SGLT2 inhibitor if clinically indicated mandated for all subjects

## Primary endpoint

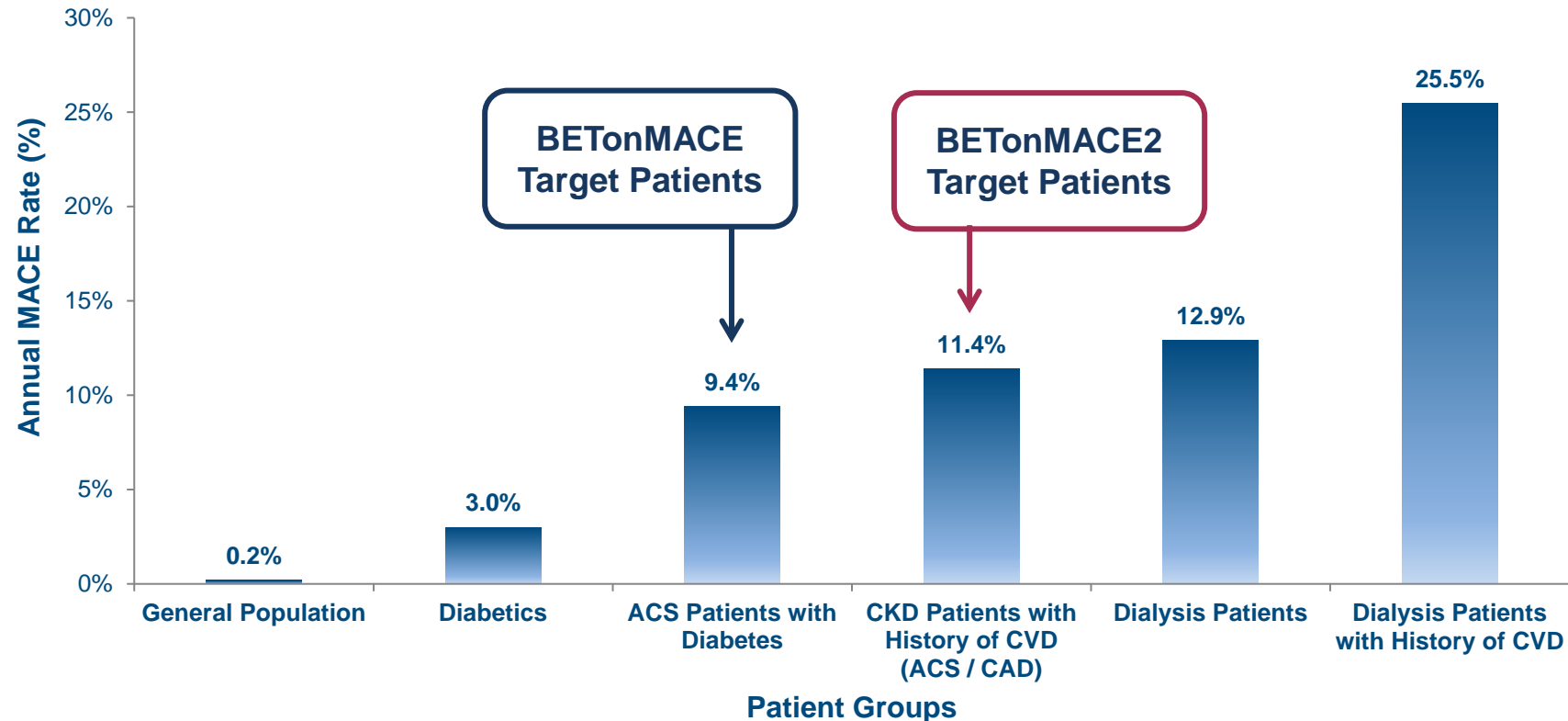
- Time to the first occurrence of narrowly defined MACE (CV death and MI) or hospital admission for CHF

## A sample size of approx. 3,600+ randomized subjects will yield approximately 90% power for HR=0.78

- Total number of events: 600-650
- Interim analysis and official trial success at mid point of 300 events

**The increased number of primary endpoints coupled with the strong signal on CHF in the first study will ensure adequate power and a high likelihood of patient benefit**

## Relative Annual of Major Adverse Cardiac Events (MACE) in Target Patient Groups



Calculated from:

General Population: CDC Heart Disease Facts;

Diabetics: ACCORD (2008); ADVANCE (2010); SAVOR-TIMI (2013); EXAMINE (2013); EMPA-REG (2015); LEADER (2016); SUSTAIN-6 (2016); CANVAS (2016); EXSCEL (2017);

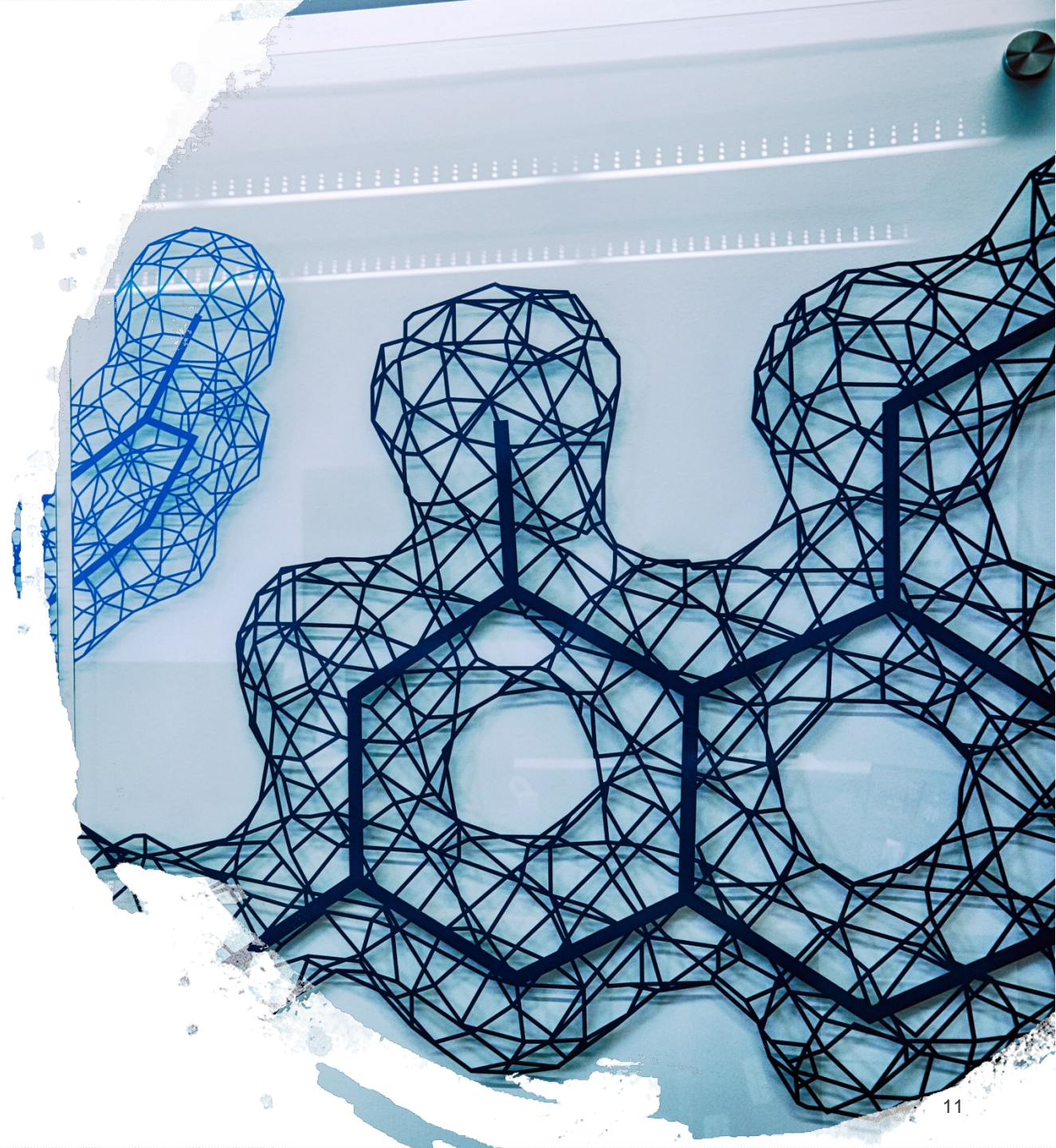
ACS – Diabetes: TRITON-TIMI 28 (2008); PLATO (2010); PROSPECT (2012); EXAMINE (2013); PEGASUS-TIMI 54 (2016); Taiwan ACS Registry(2017);

CKD – ACS / CVD: PPP (2004); VA-HIT (2004); CREDO (2008); Kang, YU. (2009); PLATO (2010); Liu, Y. (2014); Miller-Hodges, E. (2018);

Dialysis: 4D (2005); FOSIDIAL (2006); AURORA (2009); Eckardt, KU. (2015);

Dialysis – ACS: Liu, Y. (2014); Alushi, B. (2017)

# COVID - 19 Phase 2 Trial



# Apabetalone as A Potential Therapeutic for COVID-19



Since the initial publication demonstrating an interaction between SARS-CoV-2 proteins and BETs (Gordon et al., 2020) and our announcement in March 2020 that apabetalone reduces expression of host cell receptors, new findings from multiple labs support the potential utility of BET inhibition as a therapeutic for COVID infection.

RESVERLOGIX ANNOUNCES APABETALONE TREATMENT PRIOR TO SARS-COV-2 (COVID-19) EXPOSURE SIGNIFICANTLY REDUCES VIRAL INFECTION – CONFIRMS PLANS FOR COVID-19 CLINICAL TRIAL

December 22, 2020

Latest publication confirms BET inhibitors reduce the levels of critical receptors used by SARS-CoV-2 (COVID-19) to gain entry into cells, thereby reducing viral infection

CALGARY, Alberta, Dec. 22, 2020 (GLOBE NEWSWIRE) -- Resverlogix Corp. ("Resverlogix" or the "Company") (TSX:RVX) is pleased to announce recent published findings in the high-impact journal, Proceedings of the National Academy of Sciences (PNAS), that further supports other 2020 publications and provides new evidence for the therapeutic potential of BET inhibitors in the treatment of COVID-19. A publication titled: "Targeting transcriptional regulation of SARS-CoV-2 entry factors ACE2 and TMPRSS2", highlights the important role that host cell receptors play in enabling viral entry into cells, and presents direct evidence that BET inhibitors reduce SARS-CoV-2 (the scientific name for the virus responsible for COVID-19) infection by inhibiting the expression of these receptors. The publication also acknowledges Resverlogix and the Company's plans to confirm the hypothesis with a clinical trial utilizing its advanced BET inhibition technology.

## RESEARCH ARTICLE

### Targeting transcriptional regulation of SARS-CoV-2 entry factors ACE2 and TMPRSS2

Yuanqian Qiao, Xiao-Ming Wang, Rahul Mannan, Sethuramasundaram Pitchaiya, Yuping Zhang, Jesse W. Wotring, Lanbo Xiao, Dan R. Robinson, Yi-Mi Wu, Jean Ching-Yi Tien, Xuhong Cao, Stephanie A. Simko, Ingrid J. Apel, Pushpinder Bawa, Steven Kregel, Sathya P. Narayanan, Gregory Raskind, Stephanie J. Ellison, Abhijit Parolia, Sylvia Zelenka-Wang, Lisa McMurry, Fengyun Su, Rui Wang, Yunhui Cheng, Andrew D. Delotto, Zaijie Mei, Carla D. Pretto, Shaomeng Wang, Rohit Mehra, Chinnaiyan

118; first published December 11, 2020;

December 18, 2020 (sent for review October 16, 2020; reviewed by William L. Dahut

Medicine in Drug Discovery  
Volume 8, December 2020, 100069

### Protein-Driven Mechanism of Multiorgan Damage in COVID-19

Ernesto Estrada

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<https://doi.org/10.1016/j.medidd.2020.100069>

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## Article

### A SARS-CoV-2 protein interaction map reveals targets for drug repurposing

<https://doi.org/10.1038/s41586-020-2286-9>

Received: 23 March 2020

Accepted: 22 April 2020

Published online: 30 April 2020

A list of authors and affiliations appears at the end of the paper

A newly described coronavirus named severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), which is the causative agent of coronavirus disease 2019 (COVID-19), has infected over 2.3 million people, led to the death of more than

### BRD2 inhibition blocks SARS-CoV-2 infection in vitro by reducing transcription of the host cell receptor ACE2

Ruilin Tian<sup>\*1,2,3</sup>, Avi J. Samelson<sup>\*1,2</sup>, Veronica V. Rezelj<sup>4</sup>, Merissa Chen<sup>1,2</sup>, Gokul N. Ramadoss<sup>5,6</sup>, Xiaoyan Guo<sup>1,2</sup>, Alice Mac Kain<sup>4,7</sup>, Quang Dinh Tran<sup>4,7</sup>, Shion A. Lim<sup>8,9</sup>, Irene Lui<sup>8</sup>, James Nunez<sup>10,11</sup>, Sarah J. Rockwood<sup>5</sup>, Na Liu<sup>3</sup>, Jared Carlson-Stevemer<sup>12</sup>, Jennifer Oki<sup>12</sup>, Travis Maures<sup>12</sup>, Kevin Holden<sup>12</sup>, Jonathan S. Weissman<sup>10,11,13</sup>, James A. Wells<sup>2,8,10</sup>, Bruce Conklin<sup>5,15,16,17</sup>, Marco Vignuzzi<sup>4</sup>, Martin Kampmann<sup>1,2,18</sup>

\*Equal contribution

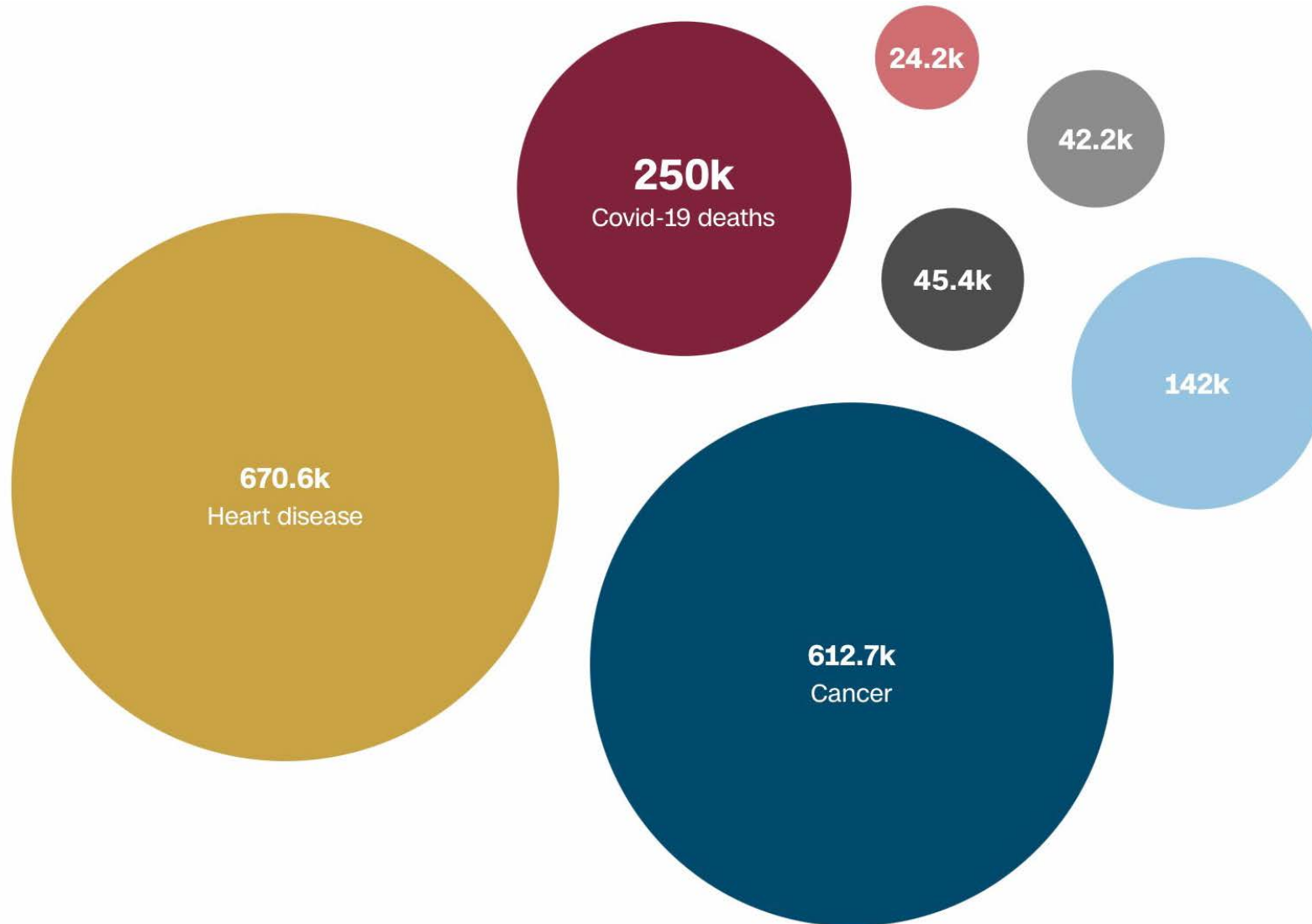
Affiliations:

<sup>1</sup>Institute for Neurodegenerative Diseases, Department of Biochemistry and Biophysics, University of

caused worldwide social and economic disruption<sup>12</sup>. There has been proven clinical efficacy for the treatment of COVID-19, nor can we prevent infection with SARS-CoV-2, and efforts to develop therapies are hampered by the limited knowledge of the molecular details of the virus. Here we cloned, tagged and expressed 26 of the 29 human cells and identified the human proteins that physically interact with the SARS-CoV-2 proteins using affinity-purification mass spectrometry. We identified 332 high-confidence protein-protein interactions between human proteins. Among these, we identify 66 druggable human proteins. 69 compounds (of which, 29 drugs are approved by the U.S. Food and Drug Administration, 12 are in clinical trials and 28 are preclinical) were identified as a subset of these in multiple viral assays and found two sets of these that displayed antiviral activity: inhibitors of mRNA translation and regulators of the sigma-1 and sigma-2 receptors. Further studies of these agents, including their combination with drugs and other targeting agents, could lead to a therapeutic regimen to treat

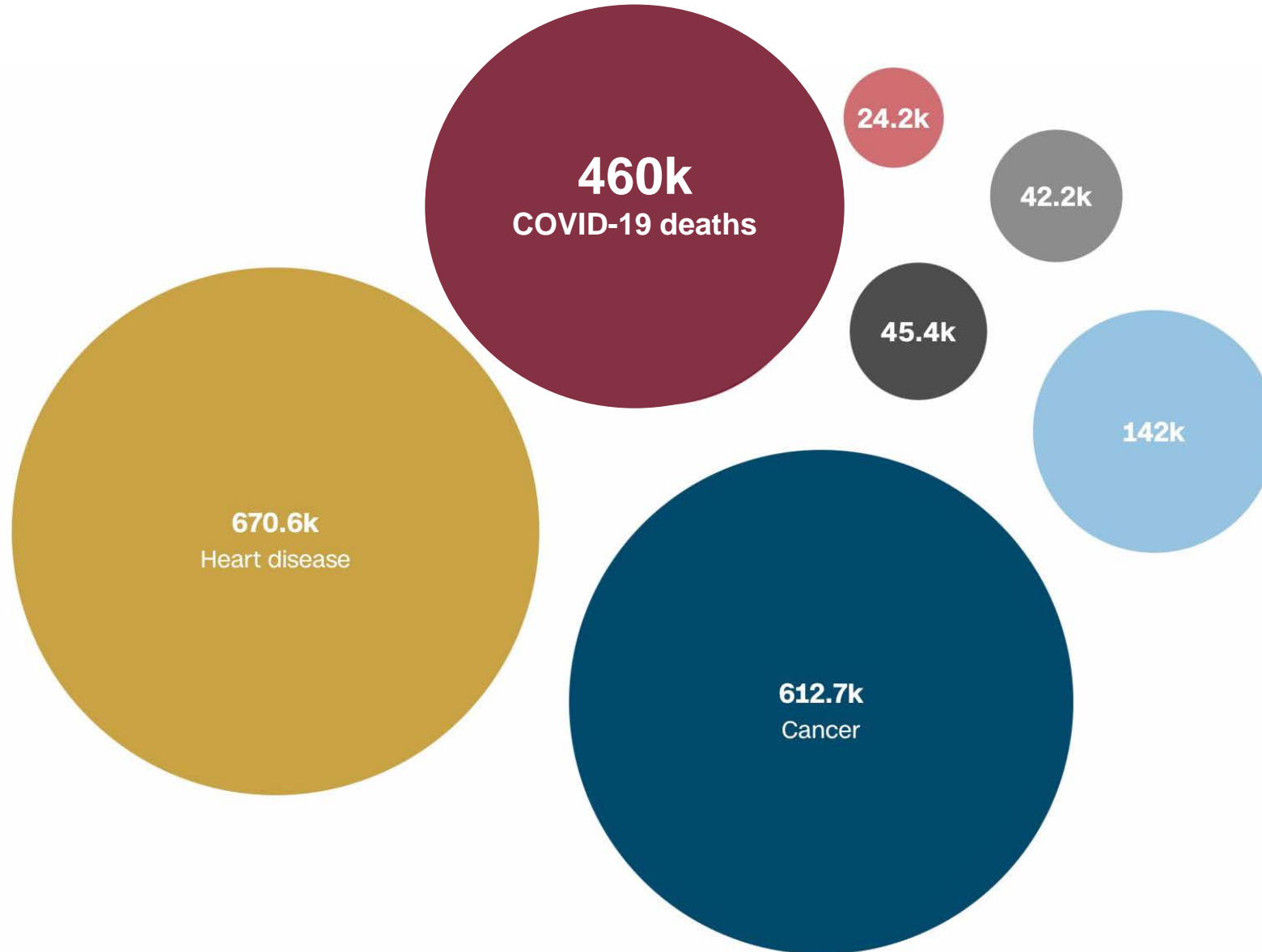
# Number of US Deaths Due to Current Diseases in 2020

Posted on CNN - Nov. 2020 – AGM Slide



# Number of US Deaths Due to Current Diseases in 2020

## COVID-19 Updated to February 2021



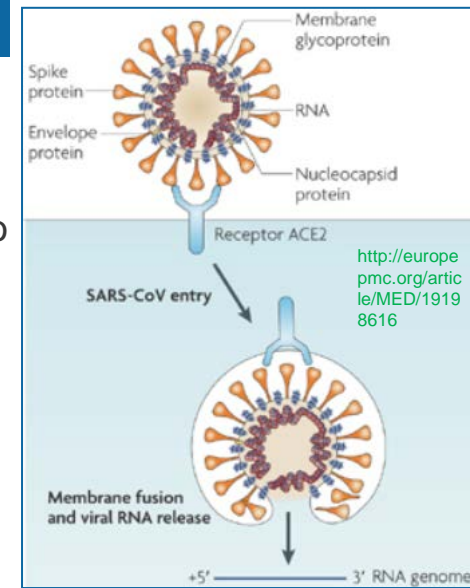
## Infection of human cells with SARS-CoV-2

The SARS-CoV-2 virus causes life threatening complications including acute coronary syndrome, venous thromboembolism and hyperinflammation in the lung

SARS-CoV-2 “Spike Protein” binds the human cell surface receptor **Angiotensin-Converting Enzyme 2 (ACE2)** for entry into host cells and initiation of infection; ACE2 expressing cells in the respiratory track are the first to be infected

Recombinant ACE2 or neutralizing ACE2 antibodies reduce viral infection and replication in host cells, establishing **ACE2** as a target for SARS-CoV-2 intervention

SARS-CoV-2 infection is associated with the **dysregulation of the inflammatory immune responses**. When inflammation is not modulated or resolved it develops into hyperinflammation or becomes chronic and can result in tissue damage, organ failure, cardiovascular and renal complications, etc.



**1 Lungs**  
A cross-section shows immune cells crowding an inflamed alveolus, whose walls break down during attack by the virus, diminishing oxygen uptake. Patients cough, fevers rise, and it takes more and more effort to breathe.

**2 Liver**  
Up to half of hospitalized patients have enzyme levels that signal a struggling liver. An immune system in overdrive and drugs given to fight the virus may be causing the damage.

**3 Kidneys**  
Kidney damage is common in severe cases and makes deaths more likely. The virus may attack the kidneys directly, or kidney failure may be part of whole-body events like plummeting blood pressure.

**4 Intestines**  
Patient reports and biopsy data suggest the virus can infect the lower gastrointestinal tract, which is rich in ACE2 receptors. Some 20% or more of patients have diarrhea.

**5 Brain**  
Some COVID-19 patients have strokes, seizures, mental confusion, and brain inflammation. Doctors are trying to understand which are directly caused by the virus.

**6 Eyes**  
Conjunctivitis, inflammation of the membrane that lines the front of the eye and inner eyelid, is more common in the sickest patients.

**7 Nose**  
Some patients lose their sense of smell. Scientists speculate that the virus may move up the nose's nerve endings and damage cells.

**8 Heart and blood vessels**  
The virus (green) enters cells, likely including those lining blood vessels, by binding to ACE2 receptors on the cell surface. Infection can also promote blood clots, heart attacks, and cardiac inflammation.

Other labels: SARS-CoV-2, Immune cells, Capillary, Windpipe, Bronchii, Bile duct, Endothelial cell, SARS-CoV2, Blood vessel, Diot.

Wadman, M., Couzin-Frankel, J., Kaiser, J., Maticic, C.: **How does coronavirus kill?** Clinicians trace a ferocious rampage through the body, from brain to toes. Science April 17, 2020.

## Dual Mechanism of Apabetalone for COVID-19 treatment

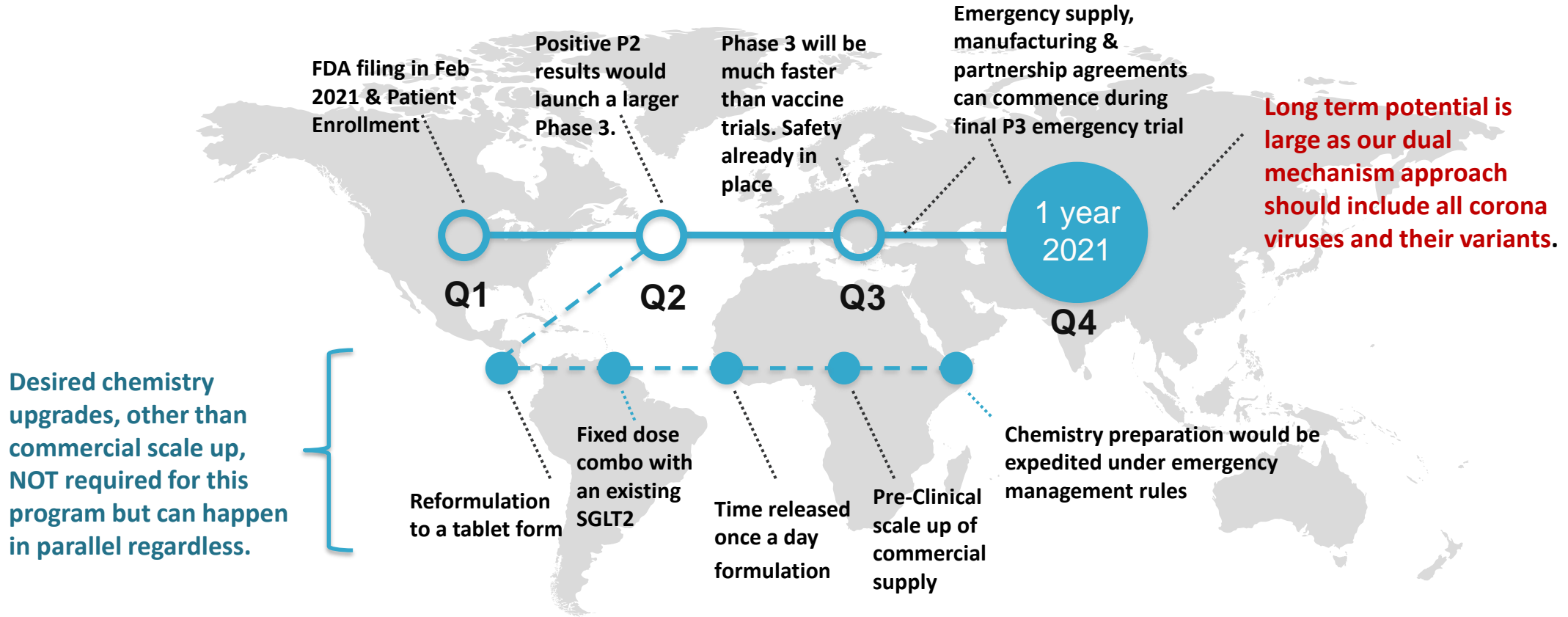
Apabetalone treatment **reduces ACE2 gene expression**, cell surface ACE2 protein levels and binding of SARS-CoV-2 spike protein (receptor binding domain) to human lung cells. ACE2 gene expression is downregulated by apabetalone in various cell types including **lung, kidney, and liver cells** with potential to reduce SARS-CoV-2 infection in multiple organs.

Preliminary results demonstrate that apabetalone treatment of human lung cells **blocks infection & replication of live SARS-CoV-2 virus**.

Apabetalone may **reduce the hyperinflammatory state** brought on by SARS-CoV-2 infection by reducing the hyperactivation of immune cells and the levels of circulating inflammatory mediators and risk factors that lead to sepsis and post-COVID syndromes.

# COVID-19 CLINICAL TRIAL LAUNCH IN Q1 - 2021

## Resverlogix' First Short Term Revenue Potential



Trial Size

**100 patients**



Basic Trial Design

- 4 week open label COVID-19 study for hospitalized patients
- Endpoints will be based on WHO and NIH guidelines
- Patients will have had symptoms for 7 days or less.



Clinical Cost est.

**\$3,000,000 USD**

To be paid for by either RVX or by various Government interests under application



- **This will be an open-label**, exploratory clinical study to assess the patient safety and effect of oral apabetalone for up to 4 weeks compared to standard of care in hospitalized subjects with COVID-19 Infection
- **Hospitalized patients** >18 years with NIH defined moderate illness
  - Individuals who show evidence of lower respiratory disease during clinical assessment or imaging and who have saturation of oxygen (SpO<sub>2</sub>) ≥94% on room air at sea level.
  - PCR confirmed Covid-19
  - Seven days or less since the onset of symptoms
- **Primary Endpoint**
  - Individuals who show evidence
  - Change in the WHO Ordinal Scale for Clinical Improvement
- **Secondary Endpoints**
  - Changes in the AUC of biomarkers of inflammation (IL-6, IL-8, TNF- $\alpha$ , CRP)
  - Change in components of 14-point symptom questionnaire completion
  - Change in viral load
- **Conducted in US centers**

# Questions & Answers

February 4<sup>th</sup>, 2021 – Market Update

