

VICORE PHARMA AB

Webcast – CTA for the treatment of COVID-19 with C21, March 2020



C21 IN COVID-19

COVID-19

Started in China December 2019

Now spread to 199 countries

800,000 confirmed infected

More contagious than common flu and SARS

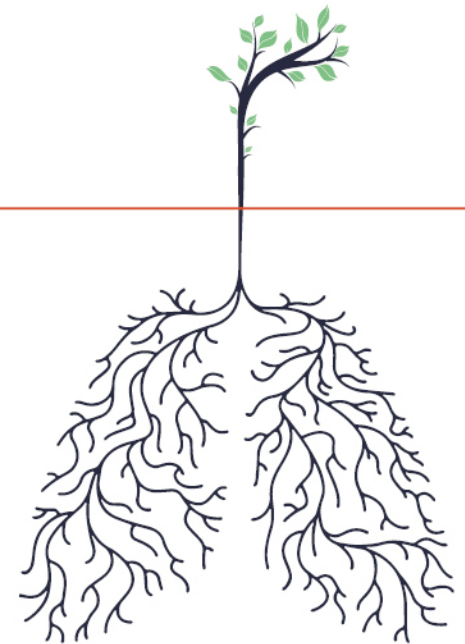
Mortality rate estimated to 2%

38,000 Deaths

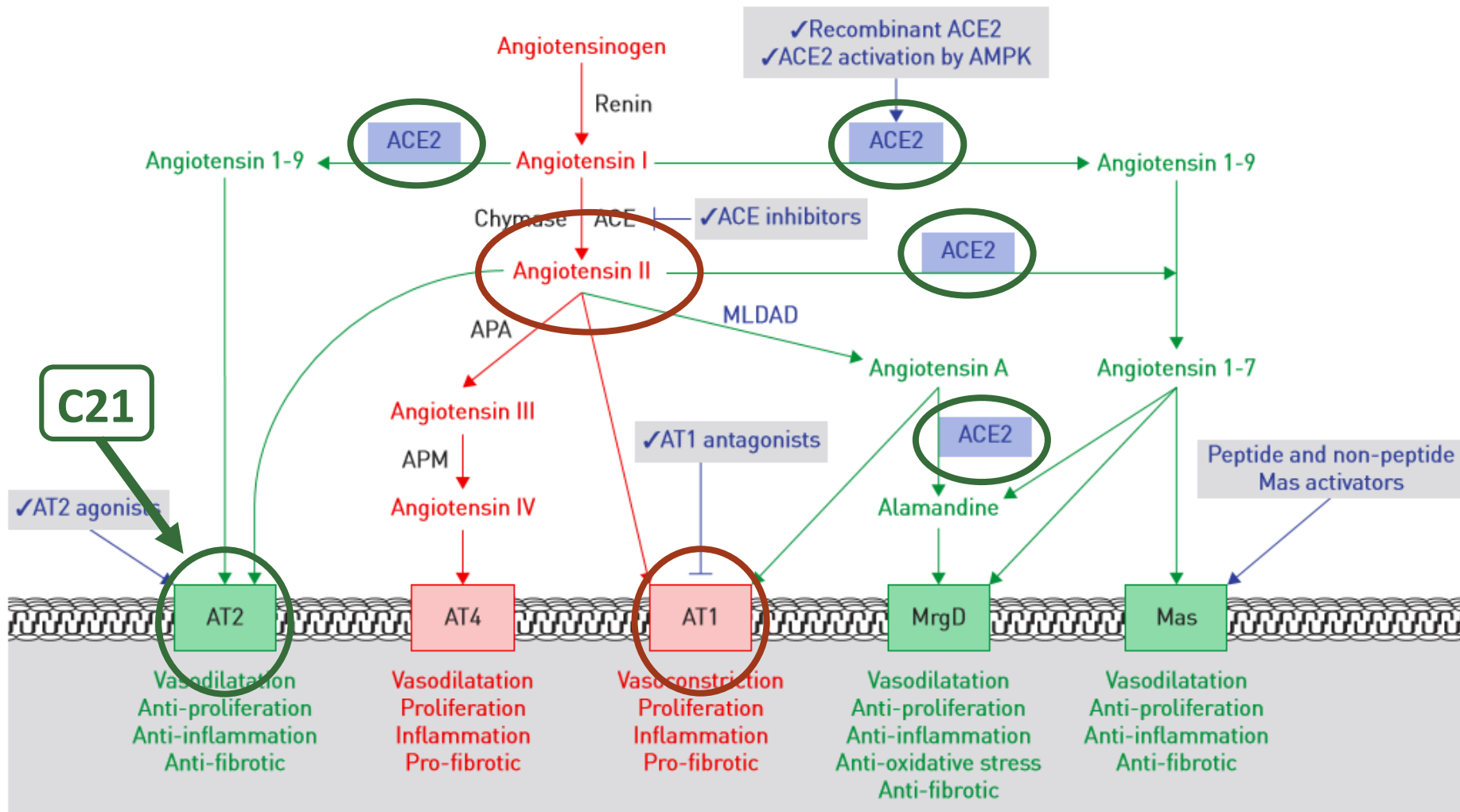
COVID-19 is an emerging pandemic for which we have no cure

C21 IN COVID-19

RAS in COVID-19 - Background



C21 IN COVID-19 - RENIN-ANGIOTENSIN SYSTEM (RAS)



There is a balance between pro-inflammatory AT1R and anti-inflammatory AT2R

C21 IN COVID-19 - THE CoV-2 CREATES AN IMBALANCE IN RAS

The virus hi-jacks ACE2 for cellular entry and triggers an imbalance in RAS leading to a cytokine storm in the lungs (ARDS)

Direct stimulation of AT2R may bypass the incapacitated ACE2 to counteract the inflammatory drive

Juan Gaertner/Science Photo Library

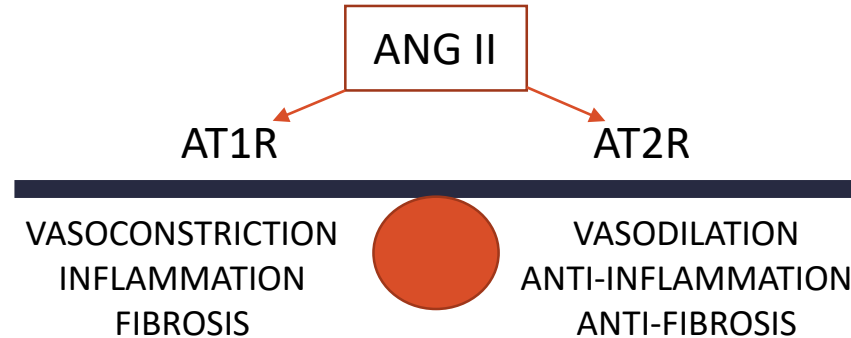
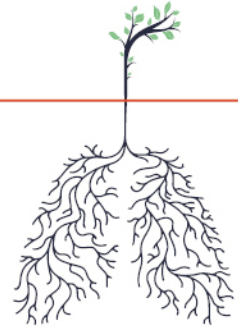
C21, an AT2R agonist, may bypass the RAS imbalance to prevent the cytokine storm



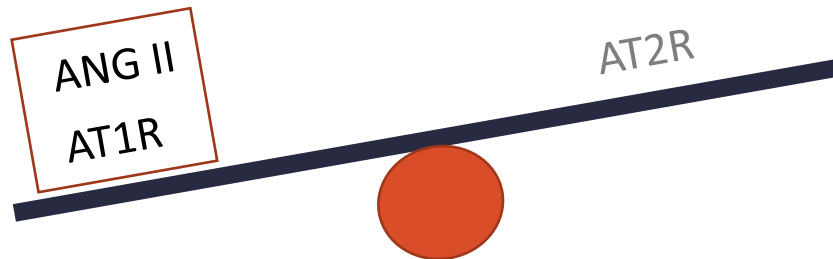
C21 IN COVID-19 - MODE OF ACTION

C21 is a first in class small molecule stimulating the angiotensin type 2 receptor (AT2R)

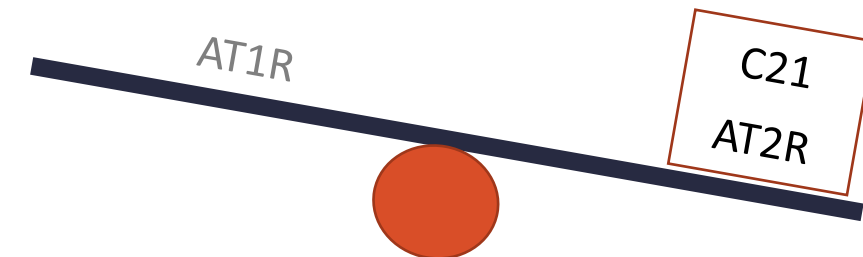
Angiotensin II has
2 receptors with
opposite actions



In COVID 19, ACE2 is
hi-jacked resulting in
increased AT1R activation



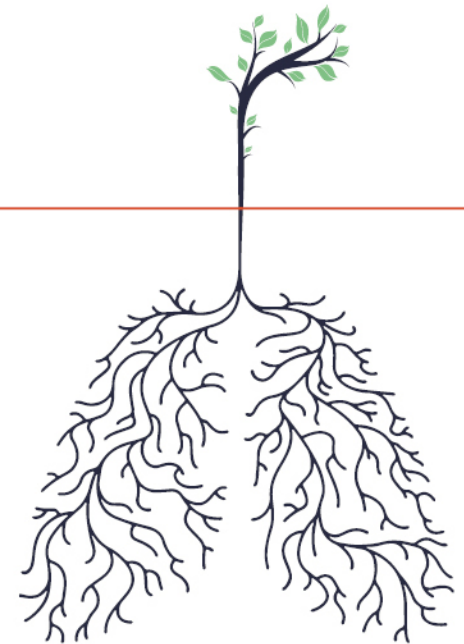
It is hoped that, by stimulating
AT2R directly, C21 will
counteract the ANG II effects



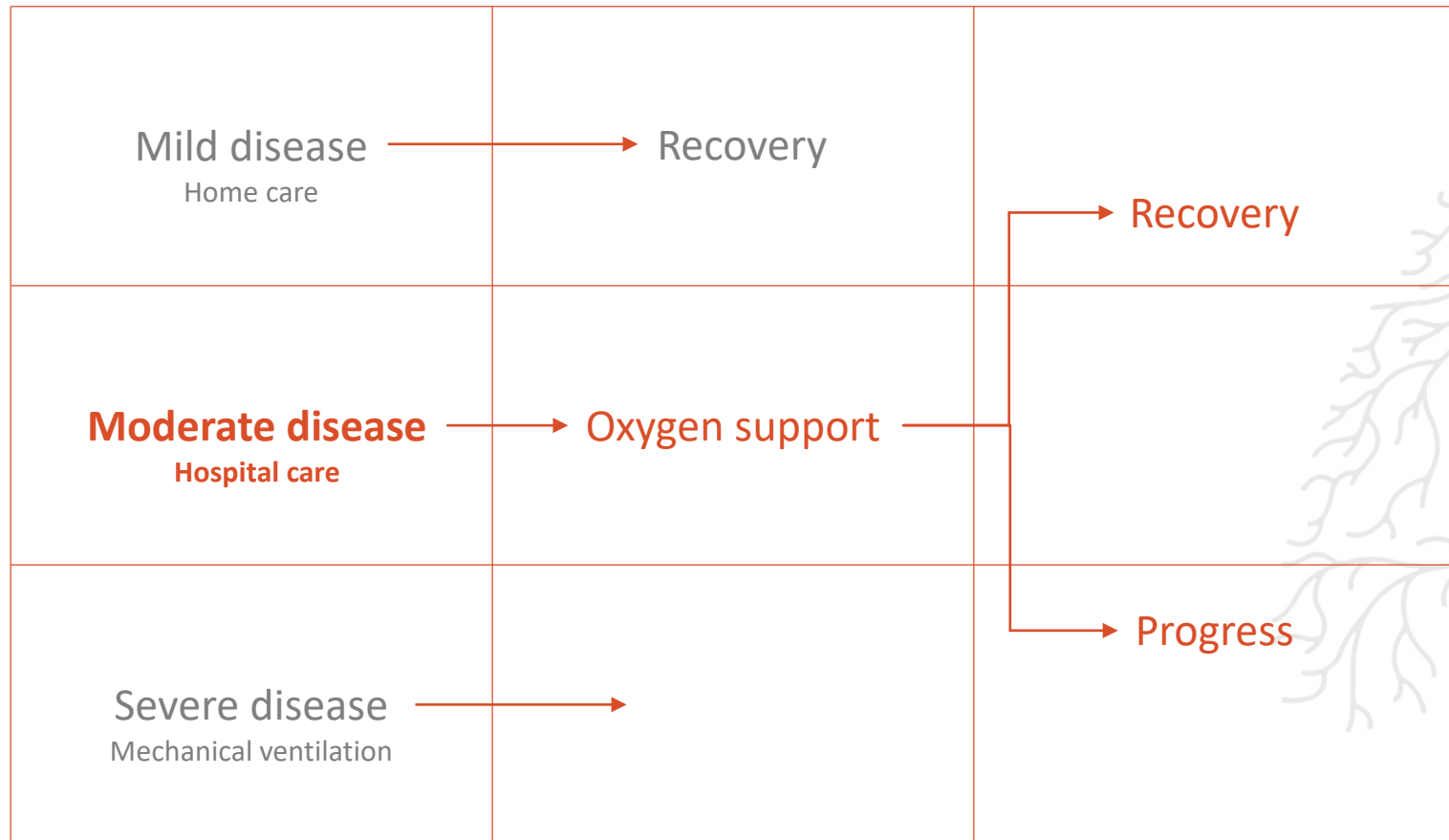
C21 may bypass ACE2 and be directly anti-inflammatory through AT2R

C21 IN COVID-19

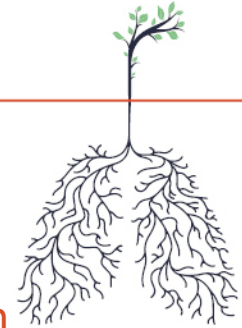
Phase II PoC study



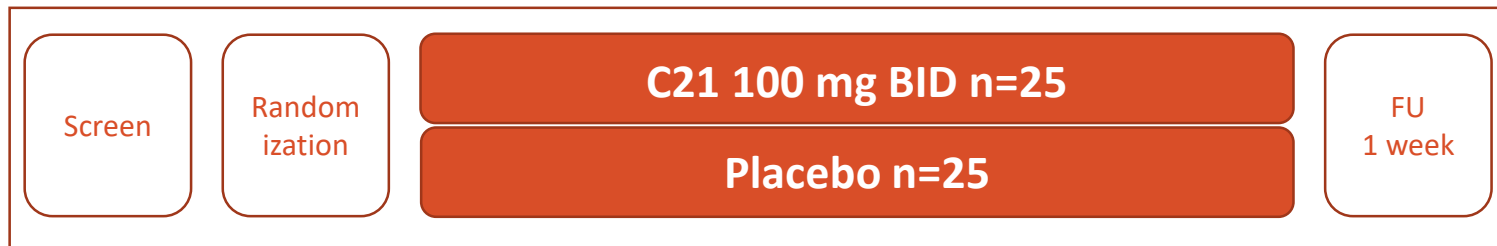
C21 IN COVID-19 - SELECTION OF PATIENT POPULATION



C21 IN COVID-19 - STUDY DESIGN



A randomized, double-blind, placebo-controlled phase II trial investigating the efficacy of C21 on oxygen saturation and outcome in subjects with moderate COVID-19 treated with oxygen supply

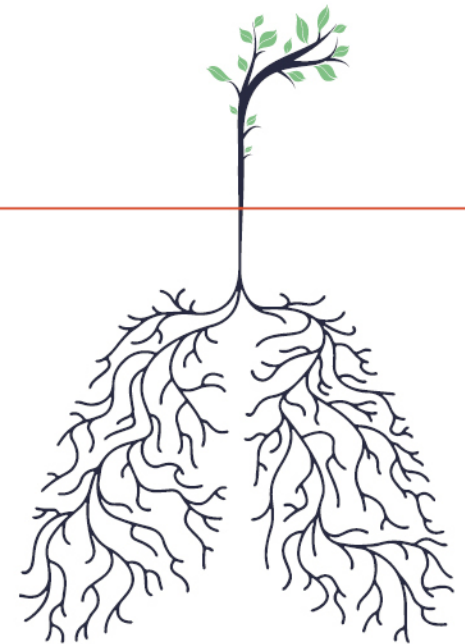


- Patients will be monitored for oxygen saturation, which determines outcome – recovery or disease progression with need for assisted ventilation
- The study will also measure infection parameters and biomarkers
- We will initially have one site and anticipate to start in approximately 4 weeks with completion of the clinical part in 3 months

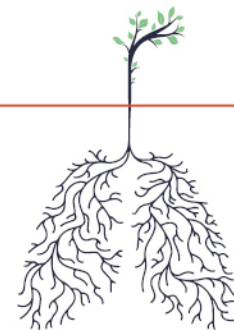
The primary endpoint is to prevent disease progression

C21 IN COVID19

Summary



C21 IN COVID-19 – SUMMARY



- The COVID-19 is an emerging pandemic for which there is currently no cure
- The virus hi-jacks the enzyme ACE2 to infect the alveolar cells
- ACE2 normally brakes down pro-inflammatory ANGII to molecules that are protective via AT2R
- Binding of virus incapacitates ACE2 leading to an imbalance in the RAS system, promoting inflammation and development of ARDS
- C21, an AT2R agonist, is independent of ACE2 and may therefore prevent the lung damaging inflammation in COVID-19
- The company has generated preclinical data to support the concept
- A rolling CTA submission has been initiated today and Vicore anticipates to start enrolling patients in 4 weeks