DECEMBER 31, 2019

INOVIO coronavirus experts learn about a novel coronavirus (SARS-CoV-2) which caused an outbreak of respiratory disease in Wuhan, China, now referred to as COVID-19

Chinese researchers share the

JANUARY 10, 2020

genetic sequence of the novel coronavirus INOVIO designs **DNA vaccine**

INO-4800 in three hours after receiving the genetic sequence using its proprietary **DNA** medicines platform technology

INO-4800 was designed to precisely match the DNA sequence of the virus

JANUARY 10 -JANUARY 23, 2020

manufacture INO-4800 and

INOVIO coronavirus experts race to

JANUARY 23, 2020

begin preclinical testing

Innovations (CEPI) to fund ongoing preclinical and initial clinical development of INO-4800 CEPI

> JANUARY 23 -FEBRUARY 29, 2020

Preclinical testing continues,

INOVIO receives a grant of up to \$9 million from the Coalition

for Epidemic Preparedness

generated in animal models; initial preclinical data submitted to peer-reviewed journal;

with immune responses

human clinical trial designs

developed and shared with

regulators **MARCH 2020** Ongoing preclinical studies, including challenge studies; initial preclinical data "under consideration" at

doses prepared for clinical trials in the U.S., China, and

peer-reviewed journal; human

finalized; 3,000 human trial

clinical trial designs

South Korea; large-scale manufacturing plans developed **MARCH 12, 2020** INOVIO announces \$5 million million grant from the Bill & Melinda Gates Foundation to continue advancing the development of INO-4800, specifically to

accelerate the testing and scale

up of INOVIO's proprietary smart

device CELLECTRA® 3PSP

(DOD) awarded Ology

INOVIO announces the **Department of Defense**

Bioservices an \$11.9 million

contract to work with INOVIO

on DNA technology transfer to

rapidly manufacture INO-4800

for the DOD for upcoming

clinical trials

MARCH 26, 2020

APRIL 6, 2020 INOVIO announces initiation of Phase 1 human clinical trial in the U.S. following authorization by the U.S. Food and Drug Administration of its Investigative **New Drug (IND) application** U.S. study to include up to 40 healthy volunteers; study sites are the University of

Pennsylvania and a clinic in

Preclinical studies,

including challenge

studies, continue

Kansas City, MO

summer

Phase 1/2 study

SPRING - SUMMER 2020 U.S. Phase 1 study initial immune responses and safety data expected by late

Human clinical trials expect-

South Korea;** CEPI provides

\$6.9 million to INOVIO, Interna-

National Institute of Health for

tional Vaccine Institute and Korea

ed to begin in China and

FALL 2020 Upon successful completion of Phase 1 study, Phase 2 trial to begin

1 million doses of INO-4800

END OF 2020

Human clinical trial results

presented/published

planned for production**

COVID-19 DNA vaccine

*No toxicology testing required per FDA latest

guidance; timelines are subject to change pending study results and regulatory guidance ** Pending appropriate regulatory guidance and external funding