MEDICAL BREAKTHROUGHS
RESEARCH SUMMARY

TOPIC: UPAMOSTAT: POP A PILL TO KEEP COVID SYMPTOMS AT BAY
REPORT: **MB #4883**

BACKGROUND: Upamostat, or RHB-107 (formerly known as MESUPRON) is a proprietary, first-in-class orally administered potent inhibitor of serine proteases targeting multiple indications, including COVID-19. Upamostat was originally intended for treatment of cancers but now is being evaluated as a possible treatment for those afflicted by the COVID-19 virus. RHB-107 has undergone several Phase 1 studies and two Phase 2 studies, in locally advanced non-metastatic pancreatic cancer and in metastatic breast cancer. In these trials, Upamostat proved its clinical safety and tolerability profile in approximately 200 patients. The Phase 2 studies with RHB-107 also proved effective in both scenarios for both tumor response rate and overall survival of patients when administered in combination with first-line chemotherapeutic agents. (Source: https://www.redhillbio.com/rhb-107)

DIAGNOSING: In a U.S. clinical trial that is currently in phase 2/3 of study for treatment of patients with symptomatic COVID-19 who do not require inpatient care, RHB-107 has a combined antiviral and potential tissue-protective action that targets human cell factors involved in developing the spike protein responsible for viral entry into target cells. This potentially minimizes the likelihood for resistance due to emerging viral variants with mutations in the spike protein. In previous preclinical work, RHB-107 also demonstrated potential tissue-protective action as well as strong inhibition of SARS-CoV-2 viral replication in an in vitro human bronchial epithelial cell model.
(Source: https://clinicaltrials.gov/ct2/show/NCT04723537)

NEW TECHNOLOGY: Grace McComsey, MD of University Hospital Clinical Research Center in Cleveland shared in regard to the COVID-19 trial currently in phase 2/3, **"**So people to qualify for the study, they have to be COVID positive, but they have to be early in the illness. Like we learned with Tamiflu and flu, you know, typical antiviral effect is seen as soon as possible after the infection. So, we want people to be within three days, ideally, of having COVID symptoms. We even brought in machines so we can test people on the spot. So, if somebody has symptoms, they come and say, 'you know, probably COVID , I was exposed to somebody but I don't know yet', we can check them on the spot and, if they are COVID positive, enroll them in the study. So, they have to be within three days of symptoms. It is narrow. But, you know, if you want to try a drug, I will say you want to try it the right way first. Yes, it makes it a little harder to enroll. Instead of enrolling 10 a day, you may be able to enroll one a day. But you want to do it right. We don't want to end up with no effect while we're missing an effect if people were early. So, we want to make sure that we know if it works or not." Participants can find more information on enrolling in the trial here:
https://www.uhhospitals.org/research-and-education/covid-19-research/upamostat
(Source: Grace McComsey, MD, University Hospital Clinical Research Center, Cleveland)

FOR MORE INFORMATION ON THIS REPORT, PLEASE CONTACT:

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If this story or any other Ivanhoe story has impacted your life or prompted you or someone you know to seek or change treatments, please let us know by contacting Marjorie Bekaert Thomas at mthomas@ivanhoe.com