TrippBio Presents at the World Vaccine Congress West Coast 2023 Meeting

PanCytoVir™ showed 100% protection against lethal H5N1 infection in mice, the complete elimination of infectious virus and a greater reduction of inflammation

TrippBio, Inc.

JACKSONVILLE, FL, UNITED STATES, November 29, 2023 / EINPresswire.com/ -- TrippBio, Inc. (TrippBio), a clinical development-stage biopharmaceutical company developing antiviral treatments, will be presenting at the World Vaccine Congress West Coast 2023 in Santa Clara, CA at 5pm PST on November 29, 2023. The presentation will review the available data with PanCytoVir™ as a treatment for COVID-19, influenza, and respiratory syncytial virus (RSV). Importantly, new data showing 100% protection against lethal H5N1 infection in mice will be presented.

> PanCytoVir™ demonstrates not only a potent antiviral effect in a mouse model of H5N1 infection but also significantly reduced levels of IL-6 and TNF-α, markers of inflammation, compared to Tamiflu®."
>
> *Dr. David E. Martin*

H5N1 Mouse Study

Groups of 5 BALB/c female mice (6–8 weeks old) were intranasally infected with a lethal dose of H5N1 (A/Vietnam/1203/04) virus and followed for up to 7 days. Immediately following infection, animals were assigned to one of five groups: 1) uninfected control, 2) infected, vehicle only [untreated control], 3) PanCytoVir™ 10 mg/kg, 4) PanCytoVir™ 100 mg/kg, or 5) Oseltamivir 10 mg/kg. All doses were given intraperitoneally twice daily for 3 days. Blood and lung tissue were collected at Days 3, 5, and 7.

All untreated control animals died by day 5 with one mouse (20%) in each of the oseltamivir and PanCytoVir™ 10mg/kg dosing groups dying before day 7. All mice treated with PanCytoVir™ 100mg/kg survived. When the amount of infectious virus in the lungs of the infected and treated mice were evaluated at Day 3 and Day 5, the mice in the PanCytoVir™ 100 mg/kg group completely eliminated all infectious virus. Mice treated with PanCytoVir™ 10 mg/kg reduced

infectious virus in the lung by 4 logs at day 3, and by 3 logs at day 5 while oseltamivir reduced infectious virus in the lung by 2 logs at day 3 and 1.5 logs at day 5. PanCytoVir™ treatment was also associated with a greater reduction in markers of inflammation (i.e., IL-6 and TNF-α) than oseltamivir treatment.

David E. Martin, PharmD, and CEO of TrippBio, Inc., stated, "We are pleased to be invited to present at the World Vaccine Congress West Coast 2023. The publication earlier this year of our phase 2 data in COVID-19 was an important milestone in demonstrating the clinical proof-of-concept for PanCytoVir™. This new data demonstrating the potent survival and virologic endpoints in our mouse study with the highly pathogenic H5N1 virus marks an important confirmation of the broad-spectrum antiviral and anti-inflammatory potential for PanCytoVir™. With the recent clearance of our IND for the treatment of influenza, we look forward to evaluating PanCytoVir™ suspension as a treatment for influenza in our upcoming Phase 2 program."

Ralph A. Tripp, PhD, Professor & Georgia Research Alliance Chair in Vaccine and Therapeutic Development, University of Georgia and co-founder commented, "This study demonstrates the potency of PanCytoVir™ against a highly pathogenic influenza A virus compared to a currently approved antiviral, i.e. oseltamivir. Although further investigations are required to clarify therapeutic effects in humans, the results show PanCytoVir™ is highly effective against a potential pandemic influenza virus."

PanCytoVir™

PanCytoVir™ suspension is based on probenecid which is approved by the FDA for the treatment of the hyperuricemia associated with gout and can be used as an adjuvant to therapy with penicillin-derived antibiotics for prolonging drug plasma levels. PanCytoVir™ is a favorable antiviral drug candidate as it is commercially available and has high plasma concentrations with a benign clinical safety profile. It has demonstrated potent activity against SARS-CoV-2 [1], influenza [2], and RSV [3] in vitro and in preclinical infection models. The antiviral activity of PanCytoVir™ against influenza is more potent, in vitro, than Tamiflu® (oseltamivir) against contemporary influenza A and B strains, H7N9 avian influenza A and H5N1, a highly pathogenic influenza A virus. The potency difference was also observed in vivo with both A and B strains. Recent data in patients with symptomatic, mild-to-moderate COVID-19 showed that PanCytoVir™ treatment significantly reduced SARS-CoV-2 viral load, and significantly more treated patients had complete resolution of COVID-19-related symptoms by Day 10 versus placebo [4]. This is important as the antiviral mechanism of action against SARS-CoV-2 is shared with influenza, suggesting an increased probability of success in clinical studies. PanCytoVir™ was granted a US patent (#11,116,737) on 14 September 2021 for "Methods of Using Probenecid for Treatment of Coronavirus Infections" with additional international filings ongoing. A Phase 3 clinical trial for COVID-19 is currently being developed, and the clinical program for influenza is expected to start in 3Q 2023, with planning underway for an IND filing for RSV soon. A novel oral suspension is being developed to enable flexible dosing across the different patient populations impacted by

these three respiratory viruses with a single product.

1. Murray J, Hogan RJ, Martin DE, et al. Probenecid potently inhibits SARS-CoV-2 replication in vivo and in vitro. Scientific Reports 2021:11;18085 (https://doi.org/10.1038/s41598-021-97658-w).
2. Perwitasari O, Yan X, Johnson S et al. Targeting organic anion transporter 3 with probenecid as a novel anti-influenza a virus strategy. Antimicrob Agents Chemother 57(1), 475-483 (2013). (https://doi.org/10.1128%2FAAC.01532-12)
3. Murray J, Bergeron H, Shepard J, et al. Probenecid Inhibits Respiratory Syncytial Virus (RSV) Replication. Viruses 2022, 14, 912. (https://doi.org/10.3390/v14050912)
4. Martin DE, Pandey N, Chavda P, Singh G, Sutariya R, Sancilio F, and Tripp RA. Oral Probenecid for Nonhospitalized Adults with Symptomatic, Mild-to-Moderate COVID-19. Viruses 2023:15;1508. (https://doi.org/10.3390/v15071508)

About TrippBio, Inc.

TrippBio, Inc. is a Jacksonville, Florida-based, clinical development-stage biopharmaceutical company dedicated to commercializing new applications of therapeutics to fight infectious diseases with an emphasis on viral respiratory diseases. TrippBio is founded on the scientific research of Ralph Tripp, Ph.D., Georgia Research Alliance Chair and Professor at the University of Georgia. The University of Georgia Research Foundation is a major shareholder of TrippBio, Inc.

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