

OyaGen Presents a Novel Treatment Candidate for Ebola

- OyaGen, Inc is an upstate NY biotech company that has in developed Oya1, a highly potent and cost effective antiviral therapeutic for Ebola with intended use in the treatment for patients with an active Ebola infection.
- Oya1 will address the unmet need for an effective countermeasure to fill the gaps where vaccines do not have an immediate benefit for patients who are already infected or are immune-compromised.
- Combined treatments of Oya1 and remdesivir or monoclonal antibodies are anticipated to markedly enhance therapeutic efficacy while mitigating the emergence of drug resistant Ebola.
 - Oya1 low nanomolar antiviral efficacy has been third party validated by NIH/NIAID.
 - NIH/NIAID has shown that Oya1 blocks the virus from making copies of itself. It does so at low and high virus levels and even when added before or after the virus enters cells.
 - o Oya1 has a selectivity index ≥ 10 when tested in different cell types.
 - NIH/NCI has shown that Oya1 can be safely administered across a range of doses and dose intervals when tested in humans enrolled in prior cancer clinical trials.
 - o Maximum tolerated doses are known for rodents, dogs and African green monkeys.
- Ebola therapeutics that include Oya1 will be a game changer.
 - Oya1 <u>></u>30-times more effective against live than Gilead Science's remdesivir in laboratory tests.
 - Oya1 and remdesivir have additive antiviral effects and together reduced the amount of total drug necessary to kill the virus.
 - Combined modality therapeutics will suppress emergence of drug resistant Ebola strains.
- > There is an immediate and long-term demand for Oya1 regardless of the availability of vaccines or monoclonal antibody (Mab) therapies.
 - Vaccines are not therapeutic; they alone are not effective in reducing active disease in people who already have Ebola because of the time it takes to mount an immune response. All vaccines could be given to 'sick' people in combination with a fast acting therapeutics such as Oya1 that do not depend on an immune response.
 - While Mab treatments are intended for treating infected patients, like vaccines, they may only be effective for the current strain of Ebola (e.g. Flu vaccines).
 - Mab require specialized lab resources for their production. They are biologics that are very expensive to produce and may require special storage conditions.
 - Oya1 has an inexpensive five step synthesis, has a long shelf-life, and does not require special considerations for storage or shipment.
- Pre-IND discussions with the FDA have confirmed studies that will gate the entry of Oya1 for human Phase I clinical trials.
- The company seeks to partner or license Oya1 or obtain a tranched capital raise enabling OyaGen to complete remaining preclinical studies required by the FDA for approval of an IND and Phase I clinical safety and pharmacokinetic studies.