

ABSTRACT TEMPLATE for Company Presentations

Questions for categories: **Bio Food** Investment Rational

- **Business Strategy**

To balance the need for protein enriched nutrition with minimizing climate change and avoiding unnecessary animal sacrifice, developing a novel method to produce meat is necessary. Meat produced from animal cells in cultures, permits the production, in an optimized manner, of only the edible parts of the animal while minimizing water and land use and greenhouse gas emissions.

- **Core Technology**

Cultured meat promises long term food security and enhancement of human health. To meet the meat market demands, it is essential to guarantee a reliable source of bovine cells that will allow an efficient and reproducible production process and accordingly Aleph Farms developed cell banks of pluripotent stem cells.

- **Product Profile/Pipeline**

We further developed In-house animal component free medium and optimized cell growth and differentiation conditions in 2D and 3D cultures without feeder cells. Cells grown in these conditions are robust and achieve average population doubling times of 24 hours. Cell lines that we derived from Holstein and Angus cow breeds, showed similar growth characteristics.

- **What's Next?**

- Cell growth and pluripotency were maintained during extended culture over many passages, implying that the cells are stable throughout the production process. To facilitate robust cell expansion, we developed a process to grow the cells in suspension in bioreactors, where they form aggregates and reach large quantities. The cell lines demonstrated the capacity to differentiate into mesoderm, as shown by decrease in pluripotent markers and increase in mesoderm markers. To summarize, we have established bovine pluripotent cells lines which can be a source for a robust and efficient commercial cultured meat production. Aleph Farms released the world's first cultivated steak in December 2018 and the world's first cultivated ribeye steak in 2021. The company's vision is to provide unconditional nutrition for anyone, anytime, anywhere