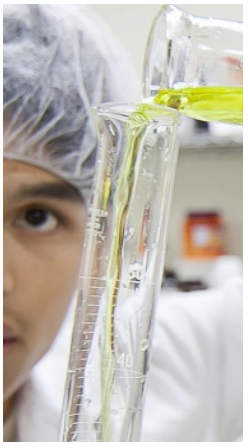

OAK THERAPEUTICS:
Health, Wealth and Dignity

Today, millions of people worldwide still do not have access to basic medicines and treatments needed to sustain life and well-being. From vitamin deficiencies to infectious diseases that are of global concern, emerging markets and developing nations around the world continue to struggle with health issues. It is often the must vulnerable members of society - children - who suffer needlessly from treatable conditions. The vision of **OAK THERAPEUTICS is to address such global health challenges through the use of cutting edge drug delivery technology and a matching, innovative business model built on fostering entrepreneurship.** We feel that there are two major reasons why the supply of underserved populations with micronutrients and essential medicines continues to be challenging: patient adherence and flawed models of supply and distribution. **OAK THERAPEUTICS** addresses both.

We have an **innovative approach** to improve patient adherence: Let's take **malaria** as an example. About 750,000 people annually die from malaria, most of them children under the age of five, woth many more children suffering from long-term effects. Existing therapies usually consist of Artemisinin-based Combination Therapy (ACT). Patient adherence with this treatment is less than ideal because patients and caretakers are often ill informed about the combination and its correct administration. Also, many patients, especially children have difficulties swallowing tablets. Using our proprietary technology, we apply encapsulated active ingredients to a carrier matrix. The resulting product, a **dual layer muco-adhesive oral thin film (OTF)** is applied to the lining of the cheek or the palate where it dissolves rapidly and is absorbed quickly. Flavor masking prevents the patient from tasting the bitterness of the anti-malarial compound, and there is also no need to drink liquids with the medication. **The result is increased patient adherence**. In short, the advantages of our technology – which can be applied to combat malaria, diarrhea, HIV, onchocerciasis, malnutrition and many other conditions are:

- **Easily dissolves in mouth**
- **No need for water or other liquids**
- **Faster acting and reduced first-pass metabolism**
- **Patients more likely to take because of flavor masking**
- **Easy to transport and difficult to counterfeit**
- **Attractiveness of novel delivery technology**

For the future, we are planning to implement an **innovative approach to improve the distribution** of micronutrients and essential pharmaceuticals. We follow a for-profit approach in the form of **hybrid pharmaceutical value chains**. We select entrepreneurs in affected regions to partner with in the production and distribution of OTF. Through this approach, we **foster entrepreneurship, create local employment and help to build a sense of responsibility for combatting local health challenges**. We provide our partners with design assistance, equipment and employee training for the decentralized, hybrid production facility. After initial set-up, we ship bulk-produced OTF to our partners who will then cut, package, label and commercially distribute the finished product. This model also helps us to cut cost, to protect intellectual property and it reduces the risk of counterfeiting.

In order to help us advance the good cause of bringing health, wealth, and dignity to the world, we are still in **need of strategic partners** – please contact us at: **Dr. Gerhard Apfelthaler, apfelthaler@oaktherapeutics.com, www.oaktherapeutics.com**