GHF-Golden Heart Flower Ltd. granted FDA Orphan Drug Designation for GHF-201 for the treatment of Glycogen Storage Diseases Type IV (GSD-IV), which includes the rare and incurable disease - APBD (Adult Polyglucosan Body Disease)

A significant achievement for the Israeli start-up company from Afula: GHF - Golden Heart Flower announces today (August 9, 2023) that the US Food and Drug Administration (FDA) has granted the treatment that the company has been developing for the past two years, the status of an "orphan drug designation", with the purpose of the drug being the treatment of the incurable disease Adult Polyglucosan Body Disease (APBD).

APBD is a genetic disease, which usually appears after the age of 40 and is more common among Jews of Ashkenazi descent. The disease is caused by a mutation in the gene responsible for the proper production of glycogen, a polysaccharide made of glucose, and is an available source of energy for the body's cell activity. As a result, a multi-systemic and progressive injury is created, which leads to disability and a significant impact on the quality of life of the patients and their environment. The disease is manifested by numbness, peripheral neuropathy, progressive muscle weakness, spasticity and paralysis of the limbs, neurogenic bladder, fatigue, and sometimes also cognitive impairment.

Today, over 300 APBD patients are diagnosed in the world, **most of whom are in Israel and the USA**. However, studies performed in recent years reveal that the incidence of the disease is much higher.

GHF, the Israeli company from Afula, named after the children's legend "Golden Heart Flower" (by Shlomo Zalman Ariel), was established in 2020 by the Schneider family, after the family's mother was diagnosed with the disease. The family aims to find a solution for people suffering from the disease, which is one of a group of diseases called glycogen storage diseases (GSDs), all are rare diseases.

At the beginning of 2021, GHF signed a global exclusivity agreement with Hadasit Medical Research Services & Development Ltd. and Ramot at Tel Aviv University, for the research and distribution of several compounds, including GHF-201, which are the result of a long study by researchers Dr. Or Kahlon from Hadassah Ein Kerem and Prof. Miguel Weil from Tel Aviv University.

In light of the unique mechanism of action of GHF-201 and encouraging results in laboratory studies, and animal models, the company is also expanding its activities while considering the development of solutions for lysosomal storage diseases, as well as for other indications with a higher prevalence in the overall population.

As mentioned, the company has been working on the development of the drug in recent years and has now reached a significant milestone: The FDA granted the treatment it developed (registered under the trade name GHF-201) an orphan drug designation, a status given to promote the development of drugs for rare diseases which prevalence is less than 200,000 patients in the US and which treatment options are limited. This status grants the company marketing exclusivity for 7 years from the date of receiving marketing approval for the drug.

For over two years now, "An Urgent Compassionate Use Program" with the drug GHF-201 has been conducted at the Hadassah Ein Kerem Medical Center, under the direction of Prof. Alexander Lossos and the research coordinator, Mrs. Anat Mordechai, and with exceptional approval from the Ministry of Health to treat 3 APBD patients. The results so far, both clinical and laboratory, have been encouraging.

"We are excited to win the FDA's recognition manifested in the granting of an orphan drug designation. This is an important milestone for the company in the development process of the GHF-201 drug that

offers hope for people living with this serious disease. We would like to express our gratitude to our partners Hadassah Ein Kerem Medical Center, Tel Aviv University, and the Lyotropic Delivery Systems (LDS) Ltd, who supported the submission of the application for orphan drug designation. To the US patient association - APBD-RF and the Israeli Association - MIFNEH, as well as to our investors, without whose support, none of this would have been possible," says Yaniv Glazer, CEO of GHF. "With the increasing understanding of the mechanism of action of the structure of our drug, we will continue the development process and at the same time also investigate its use in additional diseases."