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GENFIT: NEW DATA SUPPORT THE EFFICACY OF GFT505 FOR THE TREATMENT OF NAFLD/NASH

- **GFT505 oral treatment strongly reduces liver steatosis, inflammation and fibrosis in all tested animal models of NAFLD/NASH.**
- **The liver is the main target organ of GFT505.**

Lille (France), Cambridge (Massachusetts, United States), September 12, 2011 – GENFIT (Alternext: ALGFT; ISIN: FR0004163111), a biopharmaceutical company at the forefront of drug discovery and development, focusing on the early diagnosis and preventive treatment of cardiometabolic and associated disorders, today announces important pre-clinical results supporting the development of GFT505 for the treatment of NAFLD/NASH.

In parallel with the epidemic prevalence of diabetes and obesity, there is currently a sharp increase in the incidence of non-alcoholic fatty liver disease (NAFLD). Indeed, NAFLD occurs in 80-100% of diabetic patients, and can progress to chronic liver disease (NASH) in 20-50% of cases. Subsequently, NASH can progress to cirrhosis and even liver cancer.

Mortality linked to liver disease is thus 2-3 times higher in a diabetic population compared to a non-diabetic population. There is currently no approved treatment for NASH, and the late stage development pipeline for this disease is very weak.

Thus, considering this unmet medical need and its increasing worldwide prevalence, a recent *GlobalData* analysis stated that any drug with proven efficacy on NAFLD/NASH (reduction in liver steatosis, inflammation, and fibrosis) which has a favorable safety profile could rapidly become a blockbuster.

In this context, a series of studies recently performed by GENFIT have demonstrated the efficacy of GFT505 in various pre-clinical models of NAFLD/NASH:

- In a recognized model of NAFLD/NASH (Methionine-Choline Deficient Diet for 6 weeks in normal or diabetic mice), microscopic examination of the liver showed that GFT505 oral treatment prevented the inflammation and accumulation of fat (steatosis) induced by the diet. GFT505 treatment also strongly reduced plasma concentrations of ALAT, a marker of liver dysfunction. Furthermore, the diet-induced increased liver expression of pro-inflammatory and pro-fibrotic genes (IL-1 β , TNF α , TGF β , collagens) was totally blocked by GFT505.
- Another study highlights the role of activation of the nuclear receptor PPAR δ in the protective effect of GFT505 (GFT505 is a dual PPAR α/δ agonist). In dyslipidemic mice with the gene for the nuclear receptor PPAR α inactivated (PPAR α -KO) that were fed a high-fat diet to induce liver dysfunction, GFT505 treatment prevented intra-hepatic triglyceride accumulation and reduced plasma levels of ALAT. Accordingly, microscopic examination of the liver revealed the absence of steatosis and inflammation in GFT505-treated mice. Once again, the expression of pro-inflammatory and pro-fibrotic genes was strongly reduced by GFT505 treatment.

- In a rat model of hepatic fibrosis (ip injections of CCl₄), GFT505 totally prevented the development of liver fibrosis as determined by histological examination. This correlated with reduced expression of pro-inflammatory and pro-fibrotic genes.

Finally, the different studies performed to date demonstrate that after oral administration of GFT505, this drug candidate mainly targets the liver.

These data further confirm the conclusions of a committee of independent international experts that recently examined the clinical results of GFT505, and that already strongly recommended pursuing its development on cardiovascular protection in high-risk patients, and particularly for NAFLD/NASH.

Furthermore, upon reviewing the pre-clinical and clinical data, an internationally recognized NAFLD/NASH specialist, **Prof. Vlad Ratziu (MD-PhD, Hôpital Pitié-Salpêtrière, Pierre et Marie Curie University, Paris, France)** commented: "A drug like GFT505, which systematically improves insulin resistance and lipid flux through the liver (by reducing free fatty acid delivery and increasing free fatty acid oxidation), that reduces the expression of inflammatory mediators, and reduces fibrogenesis in the liver would be, indeed, an ideal molecule for treating NAFLD/NASH".

About GENFIT:

GENFIT is a biopharmaceutical company focused on the Discovery and Development of drug candidates in therapeutic fields linked to cardiometabolic disorders (prediabetes/diabetes, atherosclerosis, dyslipidemia, inflammatory diseases...). GENFIT uses a multi-pronged approach based on early diagnosis, preventive solutions, and therapeutic treatments and advances therapeutic research programs, either independently or in partnership with leading pharmaceutical companies (SANOFI, SERVIER, ...), to address these major public health concerns and their unmet medical needs.

GENFIT's research programs have resulted in the creation of a rich and diversified pipeline of drug candidates at different stages of development, including GENFIT's lead proprietary compound, GFT505, that is currently in Phase II.

With facilities in Lille, France, and Cambridge, MA (USA), the Company has approximately 100 employees. GENFIT is a public company listed on the Alternext trading market by Euronext™ Paris (Alternext: ALGFT; ISIN: FR0004163111). www.genfit.com

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