

Semaglutide in Metabolic Dysfunction–Associated Steatohepatitis



New research published in the *New England Journal of Medicine* reveals that semaglutide effectively treats liver disease in nearly two-thirds of patients, offering new hope for those with metabolic dysfunction-associated steatohepatitis (MASH), a severe form of liver disease.

MASH is a progressive form of Metabolic dysfunction-associated steatotic liver disease (MASLD), previously known as non-alcoholic fatty liver disease (NAFLD). MASLD affects around one in five people in the UK and is closely linked to obesity, type 2 diabetes, and cardiovascular conditions. There are currently no licensed medications specifically approved to treat the disease.

The results come from the ESSENCE phase 3 clinical trial—a placebo-controlled, international study conducted at 253 sites across 37 countries. This is the first regulatory-level trial demonstrating semaglutide's benefit in treating MASH.

The trial enrolled 800 participants between May 2021 and April 2023, randomly assigning them to receive a weekly 2.4 mg injection of semaglutide or placebo alongside lifestyle counselling. The majority of participants were living with obesity, and over half had type 2 diabetes.

After 72 weeks of treatment, 62.9% of patients receiving semaglutide showed resolution of steatohepatitis compared to 34.3% in the placebo group. Additionally, 36.8% of the semaglutide group showed improvement in liver fibrosis versus 22.4% in the placebo group. Participants also experienced a 10.5% average weight loss and improvements in liver enzyme levels and blood markers of fibrosis. Gastrointestinal side effects, such as nausea, diarrhoea, constipation, and vomiting, were more frequent in the semaglutide group.

Study researchers note that these results are quite promising. MASLD is a growing global problem, and this trial offers real hope to patients with MASH. While it is important to remain cautious, the data strongly support [semaglutide](#) as a promising therapeutic option.

The research team will continue following up to 1,200 participants over five years to assess semaglutide's long-term impact on liver-related complications.

Source: [King's College London](#)

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