# Weight loss drug Wegovy shows promise in treating severe liver disease



A major clinical trial has demonstrated that the weight loss drug Wegovy, containing the active ingredient semaglutide, effectively treated a severe form of liver disease in approximately two-thirds of patients. The findings, published in the New England Journal of Medicine, represent a significant advancement for patients with metabolic dysfunction-associated steatohepatitis (MASH), a progressive liver condition linked to excess fat accumulation and inflammation in the liver.

Metabolic dysfunction-associated steatotic liver disease (MASLD), formerly known as nonalcoholic fatty liver disease, affects roughly one-third of adults in the United States, with 5% to 7% experiencing the more serious form, MASH. This condition can lead to liver scarring (fibrosis), liver failure, and liver cancer if untreated. It is notably prevalent among individuals with obesity or Type 2 diabetes, with an estimated 75% of overweight individuals and over 90% of those with obesity affected.

The trial was conducted across 37 countries and involved 800 patients diagnosed with MASH who had moderate to severe liver fibrosis (stage 2 or 3). Participants received a weekly injection of 2.4 milligrams of semaglutide or a placebo over 72 weeks. Results showed that 63% of those treated with semaglutide experienced a reduction in liver inflammation, compared to 34.3% in the placebo group. Additionally, 37% of the semaglutide group showed improvement in liver fibrosis, versus 22.4% in those receiving placebo. The semaglutide group also achieved an average weight loss of 10.5%.

Dr Sobia Laique, director of the Multidisciplinary MASLD Clinic at Cleveland Clinic, highlighted the significance of these findings, saying, "This is fairly monumental and really is going to be paradigm-changing because, at least in the pharmacotherapy space, you don’t have a comparable drug yet." Laique noted that currently the only FDA-approved medication for MASH, resmetirom, helps only about a quarter of patients and does not address the underlying metabolic causes of the disease. Bariatric surgery remains a treatment recommendation for patients unable to manage the condition through lifestyle changes.

Dr Susan Spratt, an endocrinologist at Duke Health in North Carolina, also expressed optimism about the results, stating, "It’s incredibly good news that semaglutide not only reduced inflammation but also that fibrosis regressed." She pointed out the difficulty of reversing fibrosis once it develops.

Dr Christopher McGowan, a gastroenterologist and weight loss clinic director in Cary, North Carolina, described the findings as a "very promising step forward in the fight against a common, progressive, and often silent disease." However, he urged caution, emphasising the need for long-term data to determine whether the improvements translate into reduced liver complications and mortality.

The trial expands the therapeutic potential of GLP-1 receptor agonists—a drug class that includes semaglutide and others like Eli Lilly’s Mounjaro and Zepbound—beyond diabetes and weight management. The US Food and Drug Administration (FDA) has previously approved Wegovy for reducing cardiovascular risk in patients with obesity and has authorised other GLP-1 drugs for conditions such as obstructive sleep apnea and chronic kidney disease associated with Type 2 diabetes. Research is ongoing into their effectiveness against Alzheimer's disease and alcohol addiction.

Novo Nordisk, the manufacturer of Wegovy, has announced that the FDA could decide on approving the drug for MASH treatment by the end of the year. The agency has granted Wegovy priority review status, which shortens the review period from nine to six months.

The trial reported that Wegovy was generally well tolerated. The most common side effects were gastrointestinal, including nausea, diarrhoea, constipation, and vomiting. Withdrawal rates due to adverse effects were low and comparable between the semaglutide (2.6%) and placebo (3.3%) groups.

Dr Laique raised questions about the long-term sustainability of the benefits, noting the possibility that MASH symptoms might return if the medication is discontinued. “It’s significant weight loss, but then is it also durable weight loss? And I think that’s the part people often forget about obesity management, it’s two battles," she said.

The NBC News is reporting the study and its implications for expanding treatment options for a liver disease that has hitherto seen limited pharmacological success.

Source: [Noah Wire Services](https://www.noahwire.com)

## Bibliography

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