Summary of The Liver Meeting® Medical Affairs–sponsored scientific symposium

# FGF21 analogs in focus: From pathways to clinical evidence in MASH

Held at the American Association for the Study of Liver Diseases (AASLD), The Liver Meeting® 2026
Denver, Colorado, USA
November 5–9, 2026




November 2026

# Disclaimer

Dr Arun Sanyal and Dr Kris Kowdley took part in Novo's The Liver Meeting® Medical Affairs–sponsored scientific symposium titled "FGF21 analogs in focus: From pathways to clinical evidence in MASH".

This summary is provided as part of Novo's commitment to enhancing educational content and learning experience to support scientific exchange with the medical community.

This summary is not meant to guide treatment decisions and does not make any claim(s) for any medicine. For the indications and proper use of the mentioned pharmacotherapies, please refer to the product's approved label for your country.

# FGF21 analogs in focus: From pathways to clinical evidence in MASH

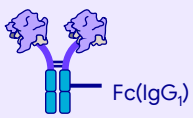
**Speakers:** Arun Sanyal and Kris Kowdley

While there are 2 approved therapies for F2–F3 MASH (**resmetirom** and **semaglutide 2.4 mg**),[1–6] there are no approved therapies for compensated cirrhosis (F4c). **FGF21 analogs may bridge this treatment gap in advanced disease**

**FGF21 is a key metabolic regulator that targets fibrosis and multiple drivers of MASH**, including glucose and lipid metabolism and inflammation[7–17]

## FGF21 analogs have been investigated in phase 2 trials:

### Efruxifermin[10,11,18–20]



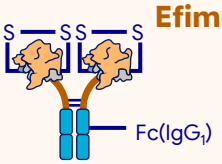

L98R, P171G, A180E

*Bivalent, evidence of balanced affinity for FGF21 receptors FGFR1c, FGFR2c, and FGFR3c*

**HARMONY**
(N=128; F2/F3 MASH)
Efruxifermin 50 mg significantly improved liver fibrosis in 41% versus 20% of patients in the placebo group ($p$=0.036) at week 24, and 75% versus 24% at week 96 ($p$<0.0001)

**SYMMETRY**
(N=181; F4c MASH)
Efruxifermin 50 mg improved liver fibrosis in 19% versus 13% of patients in the placebo group at week 36. At week 96, Efruxifermin significantly improved fibrosis in 39% of histology completers versus 15% in the placebo group ($p$=0.009)

### Efimosfermin[12,18,21,22]




Q27C, G120C

*FGF21 domain stabilization, plus 6 additional amino acid substitutions*

**NCT04880031**
(N=84; F2/F3 MASH)
Efimosfermin significantly improved liver fibrosis in 45% versus 21% of patients in the placebo group at week 24 ($p$=0.038)

### Pegozafermin[14,18,23–26]




1insM, S173T, R176A

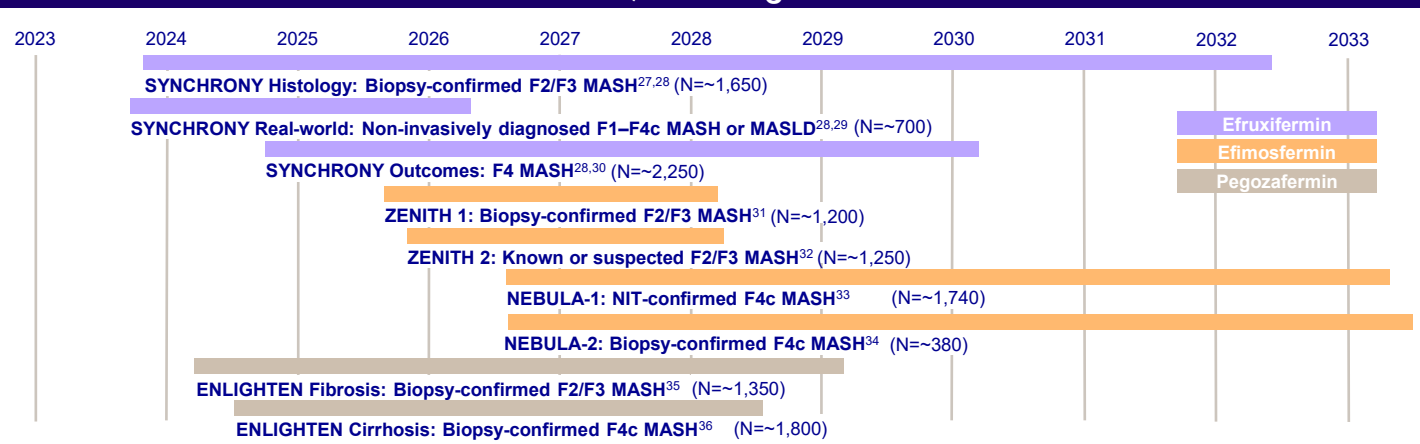
*GlycoPEGylated analog*

**ENLIVEN**
(N=219; F2/F3 MASH)
Pegozafermin 30/44 mg significantly improved fibrosis in 26% ($p$=0.009) and 27% ($p$=0.008) versus 7% of patients in the placebo group at week 24

FGF21 analogs have also been shown to improve insulin sensitivity measures and lipid profiles in MASH[10–12,14]

FGF21 analogs have generally been well-tolerated. The most common AEs were GI-related. Injection site reactions have also been reported[10,12,14]

## Ongoing phase 3 programs highlight the potential of FGF21 analogs across the full spectrum of MASH, including F4c[27–36]




*The molecules under discussion are not approved for the treatment or for prevention of MASH and its related comorbidities. Safety and efficacy are not established. There is no guarantee that these molecules will become commercially available for the use(s) under investigation*

*AE, adverse event; F, fibrosis stage; FGF21, fibroblast growth factor 21; GI, gastrointestinal; MASH, metabolic dysfunction-associated steatohepatitis; MASLD, metabolic dysfunction-associated steatotic liver disease; NIT, non-invasive test*
*1. FDA. Rezdiffra®. Prescribing information. Available at: https://www.accessdata.fda.gov/drugsatfda_docs/label/2025/217785s002s004s005lbl.pdf (accessed October 2026); 2. EMA. Rezdiffra®. Summary of product characteristics. Available at: https://www.ema.europa.eu/en/documents/product-information/rezdiffra-epar-product-information_en.pdf (accessed October 2026); 3. FDA. Wegovy®. Prescribing information. Available at: https://www.accessdata.fda.gov/drugsatfda_docs/label/2026/215256s033lbl.pdf (accessed October 2026); 4. EMA. Kayshild®. Summary of product characteristics. Available at: https://www.ema.europa.eu/en/documents/product-information/kayshild-epar-product-information_en.pdf (accessed October 2026); 5. Health Canada. Wegovy® Product Monograph. Available at: https://pdf.hres.ca/dpd_pm/00082777.PDF (accessed October 2026); 6. ANVISA Brazil. Wegovy® Professional package insert. Available at: https://www.novonordisk.com.br/content/dam/nncorp/br/pt/pdfs/bulas/hcp/Wegovy_Bula_Profissional.pdf (accessed October 2026); 7. Yang C et al. Nutr Metab (Lond) 2012;9:94; 8. Owen BM et al. Trends Endocrinol Metab 2015;26:22–29; 9. Harrison SA et al. J Hepatol 2024;81:562–576; 10. Noureddin M et al. Lancet 2025;406:719–730; 11. Noureddin M et al. N Engl J Med 2025;392:2413–2424; 12. Noureddin M et al. Lancet 2026;407:794–804;13. Noureddin M et al. Presented at AASLD 2025 (late-breaking abstract no. 5011); 14. Loomba R et al. N Engl J Med 2023;389:998–1008; 15. Liu X et al. Am J Cancer Res 2016;6:1011–1025; 16. Rinella ME et al. Presented at AASLD 2025 (poster 5024); 17. Henriksson E, Andersen B. Front Endocrinol 2020;11:601349; 18. Chui ZSW et al. Trends Endocrinol Metab 2024;35:371–384; 19. Harrison SA et al. Lancet Gastroenterol Hepatol 2023;8:1080–1093; 20. Tillman EJ et al. Poster presentation at Keystone Symposia: Metabolic and Molecular Mechanisms of NAFLD/NASH 2023; 21. Loomba R et al. Lancet Gastroenterol Hepatol 2025;10:734–745; 22. Global Substance Registration System (GSRS). Efimosfermin. Available at: https://gsrs.ncats.nih.gov/ginas/app/ui/substances/0021f992-f406-4e06-972f-d95d10fc8e00 (accessed October 2026); 23. Rosenstock M et al. Poster presentation at Liver Meeting Digital Experience AASLD 2020; 24. Alkhouri N et al. Poster presentation at EASL International Liver Congress 2022; 25. 89bio. NCT05022693. Available at: https://clinicaltrials.gov/study/NCT05022693 (accessed October 2026); 26. 89bio. 89bio Initiates Phase 3 ENLIGHTEN-Fibrosis Trial of Pegozafermin in Non-Cirrhotic Metabolic Dysfunction-Associated Steatohepatitis (MASH) Patients with Fibrosis. Available at: https://ir.89bio.com/news-releases/news-release-details/89bio-initiates-phase-3-enlighten-fibrosis-trial-pegozafermin (accessed October 2026); 27. Akero Therapeutics. NCT06215716. Available at: https://clinicaltrials.gov/study/NCT06215716 (accessed October 2026); 28. Akero Therapeutics. Clinical trials. Available at: https://akerotx.com/clinical-trials/ (accessed October 2026); Novo data on file. 29. Akero Therapeutics. NCT06161571. Available at: https://clinicaltrials.gov/study/NCT06161571 (accessed October 2026); 30. Akero Therapeutics. NCT06528314. Available at: https://clinicaltrials.gov/study/NCT06528314 (accessed October 2026); 31. GlaxoSmithKline. NCT07221227. Available at: https://clinicaltrials.gov/study/NCT07221227 (accessed October 2026); 32. GlaxoSmithKline. NCT07221188. Available at: https://clinicaltrials.gov/study/NCT07221188 (accessed October 2026); 33. GlaxoSmithKline. NCT07701993. Available at: https://clinicaltrials.gov/study/NCT07701993 (accessed October 2026); 34. GlaxoSmithKline. NCT07704892. Available at: https://clinicaltrials.gov/study/NCT07704892 (accessed October 2026); 35. 89bio, Inc. NCT06318169. Available at: https://clinicaltrials.gov/study/NCT06318169 (accessed October 2026); 36. 89bio, Inc. NCT06419374. Available at: https://clinicaltrials.gov/study/NCT06419374 (accessed October 2026)*