SCAN QR CODE
FOR DIGITAL POSTER

POSTER AS-UEG-2026-02766

Barcelona 2026
ueg week

Madrigal

Fira Gran Via
October 17 – 20, 2026

Real-world assessment of comorbidities and treatment patterns in patients with metabolic dysfunction-associated steatohepatitis in France

Melinda J Daumont[1], Yestle Kim[1], Michele Intorcia[1], Paul Bardot[1], Hayley Wallinger[2], Jen Johnson[2]
[1]Madrigal Pharmaceuticals, West Conshohocken, PA, USA; [2]Adelphi Real World, Bollington, UK

Introduction: Metabolic dysfunction-associated steatohepatitis (MASH) is a chronic, progressive disease characterized by fatty liver, liver cell injury, and inflammation. MASH can progress from liver fibrosis to cirrhosis, as well as hepatocellular carcinoma. Global MASH prevalence is estimated to be 3-5% of the general population which has increased and is projected to continue to do so, with a prevalence in France of 4.04% for MASH as of 2021 to 4.50% in 2040, based on Markov projections[1, 2, 3]. Current data on the management of patients with MASH (PwM) and presence of cardiometabolic comorbidities, are limited.

Objective: To describe the overall disease burden and clinical management of PwM in France by physician-reported fibrosis (F)-stage and specific MASH related comorbidities such as obesity and type 2 diabetes mellitus (T2DM).

Methods:
Study design: Data were drawn from the Adelphi Real World MASH Disease Specific Programme (DSP)™, a cross-sectional survey, with retrospective data collection of physicians and their patients with MASH in France. Data collection occurred between January and May 2024. The DSP methodology has been described, validated, and demonstrated to be representative and consistent over time[4, 5, 6, 7].
Inclusion and exclusion criteria:
- Physicians were eligible to participate if they were a primary care physician or specialist* who was personally responsible for the clinical management of PwM and saw a minimum of five (primary care physicians) or ten (specialists) patients per month.
- Patients were eligible if they were ≥18 years old, were being managed for MASH, did not have another form of liver disease** and were not participating in a clinical trial for MASH at the time of data collection.
- Physicians reported patient demographics, clinical characteristics and treatments prescribed for their consulting PwM at the point of data collection.

Data analysis: Fibrosis severity was physician-stated based upon recent tests and assessments (e.g. lab tests [blood or urine], liver composite tests [LCTs], liver imaging scans and/or liver biopsy). Patients were grouped by physician-stated fibrosis severity at data collection into F0-F1, F2-F3 and F4.

* Hepato-gastroenterologists, internal medicine specialists or endocrinologists/diabetologists
** For example, alcohol-related liver disease, primary biliary cholangitis, viral hepatitis and autoimmune hepatitis, Wilson's disease, alpha-1- antitrypsin deficiency or hemochromatosis

ABBREVIATIONS:
BMI: body mass index; CCI: Charlson Comorbidity Index; DSP: Disease Specific Programme; GLP-1; Glucagon-like peptide-1 (GLP-1) receptor agonists: LCT: liver composite test; MASH: Metabolic dysfunction-associated steatohepatitis; PwM: Patients with MASH; SD: Standard Deviation; T2DM: Type 2 Diabetes Mellitus

DISCLOSURES AND ACKNOWLEDGEMENTS:
- HW and JJ are all employees of Adelphi Real World
- YK, MD, MI and PB are all employees of Madrigal Pharmaceuticals

REFERENCES:
1. Le P, et al. JAMA Netw Open. 2025;8(1):e2454707.; **2.** Mittal N, et al. Aliment Pharmacol Ther. 2024;59(12):1571-1578**; 3.** Younossi, ZM et al., Clin Gastroenterol Hepatol. 2026;24(4):1016-1034**; 4.** Anderson Pet al. Curr Med Res Opin. Nov 2008;24(11):3063-72. doi:10.1185/03007990802457040;**5.** Anderson, P et al. Curr Med Res Opin 2023:39(12);1707–1715; **6.** Babineaux, SM et al. BMJ Open 2016:6(8):e010352; **7.** Higgins, V et al. Diabetes Metab Syndr Obes 2016:9;371-380,

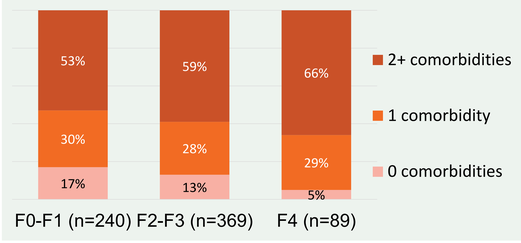
Results:
Survey population: Overall, data were collected from 74 physicians reporting data on 698 PwM. Patients were grouped by physician stated fibrosis severity at the time of data collection as F0-F1 (n=240), F2–F3 (n=369) and F4 (n=89).
Demographics: For F0-F1, F2-F3 and F4, respectively: the mean age (± standard deviation [SD]) was 54.6±11.1, 56.6±11.4 and 64.9±10.0 years. The proportions of females was 50.8%, 40.9%, and 41.6%. The mean body mass index (BMI) was 31.5±6.0 kg/m2, 32.0±4.8 kg/m2 and 33.9±7.6 kg/m2 – **Table 1.**

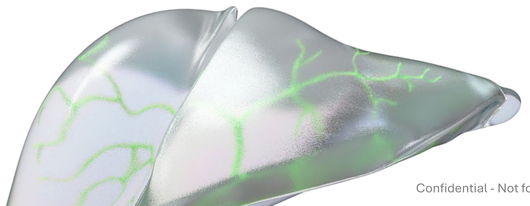
TABLE 1. Demographic and clinical characteristics of patients with F0-F1, F2-F3 and F4 MASH.

	F0-F1	F2-F3	F4
Overall, **n**	**240**	**369**	**89**
Patient age, years, mean±SD	54.6±11.1	56.6±11.4	64.9±10.0
Patient sex, male, n (%)	118 (49.2)	218 (59.1)	52 (58.4)
n,	**238**	**368**	**88**
Patient BMI, kg/m^2, mean±SD	31.5±6.0	32.0±4.8	33.9±7.6
n,	**198**	**289**	**67**
Number of days since MASH diagnosis, mean±SD	959.9± 1226.8	923.7± 1089.4	1363.2± 1140.1
Hospitalisations in last 12 months, **n**, mean±SD	**203** 0.1±0.5	**391** 0.3±0.7	**80** 0.8±2.0
n,	**190**	**298**	**75**
Number of comorbidities, mean±SD	3.6±2.6	4.1±2.7	5.0±3.6
Charlson Comorbidity Index (CCI), **n**, mean±SD	**230** 2.1±0.5	**362** 4.3±0.7	**87** 4.4±0.9
At data collection, Number of signs/symptoms present, **n**, mean±SD	**236** 1.6±1.8	**364** 2.2±2.3	**88** 3.7±3.4

MASH related comorbidities:
- Over half of PwM had two or more MASH related comorbidities (obesity, hypertension, T2DM and dyslipidemia) – **Figure 1.**

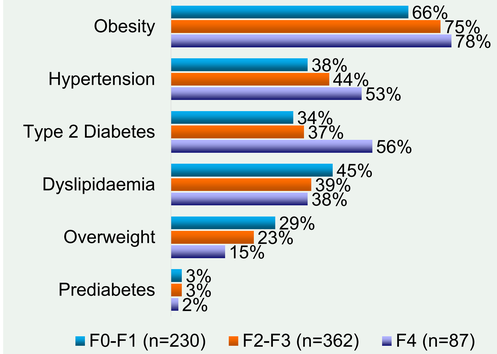
FIGURE 1. Number of MASH-related comorbidities in PwM.





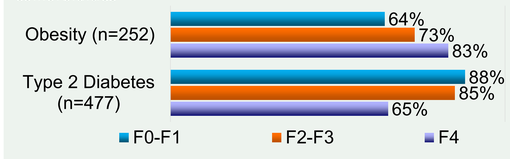
- Seven out of ten PwM had obesity, and over a third had T2DM – **Figure 2.**
- Around a third of patients had both obesity and T2DM (F0-1= 25%, F2-3=28%, F4=43%).

FIGURE 2. MASH related comorbidities in PwM



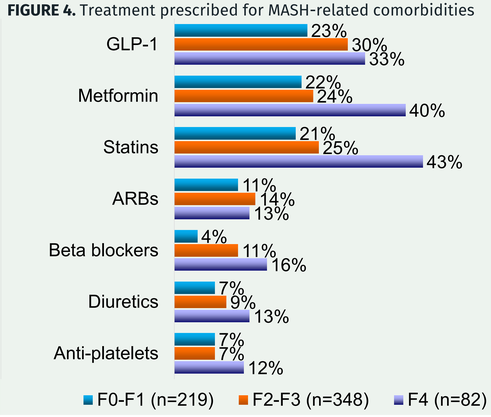
Treatment for MASH-related comorbidities:
- At the time of data collection, most patients were receiving prescribed treatment for their MASH-related comorbidities (F0-1= 63%, F2-3=70%, F4=83%).
- Over eight out of ten patients were on prescribed treatment for T2DM and seven out of ten were on a prescribed treatment for obesity – **Figure 3**.

FIGURE 3. Proportion of PwM on treatment for MASH-related comorbidities



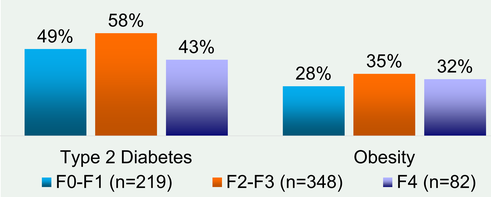
- GLP-1 receptor agonists (GLP-1s), metformin, statins and other cardiovascular medications were the most common treatments prescribed – **Figure 4.**

FIGURE 4. Treatment prescribed for MASH-related comorbidities



- At time of data collection, almost a third of patients received a GLP-1, with highest levels in F2-3 patients with T2DM (58%) **– Figure 5.**

FIGURE 5. Proportion of PwM on GLP-1s for related comorbidities



Conclusion:
- **Over half of patients with MASH in France have two or more MASH related comorbidities, with seven out of ten patients having obesity and four in ten having T2DM.**
- **These data highlight the need for novel treatments to manage MASH as MASH continues to persist in PwM despite being treated for their comorbidities.**

Limitations
- While minimal inclusion criteria governed selection of participating physicians, participation was influenced by willingness to complete the survey.
- Physicians provided data for a consecutive series of patients to avoid selection bias, however patients who visited their physician more frequently had a higher likelihood of being included in the survey which limits generalisability of the results to all PwM.
- Recall bias, a common limitation of surveys, may have affected physician responses. However, physicians had access to patient medical records reducing this risk.

Copyright © 2026 Madrigal Pharmaceuticals, Inc.

Confidential - Not for Public Consumption or Distribution