

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
14 August 2025 (14.08.2025)



(10) International Publication Number
WO 2025/171032 A1

(51) International Patent Classification:
A61K 31/53 (2006.01) *A61P 1/16* (2006.01)

(21) International Application Number:
PCT/US2025/014625

(22) International Filing Date:
05 February 2025 (05.02.2025)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
63/550,201 06 February 2024 (06.02.2024) US
63/564,803 13 March 2024 (13.03.2024) US
63/655,870 04 June 2024 (04.06.2024) US
63/719,257 12 November 2024 (12.11.2024) US
63/720,725 14 November 2024 (14.11.2024) US
63/721,474 16 November 2024 (16.11.2024) US
19/045,070 04 February 2025 (04.02.2025) US

(71) Applicant: **MADRIGAL PHARMACEUTICALS, INC.**
[US/US]; Four Tower Bridge, 200 Barr Harbor Drive, Suite
200, West Conshohocken, Pennsylvania 19428 (US).

(72) Inventors: **TAUB, Rebecca**; 1218 Valley Road, Villanova,
Pennsylvania 19085 (US). **LABRIOLA, Dominic**; 8 Inlet
Terrace, Belmar, New Jersey 07719 (US).

(74) Agent: **KO, Yeon Jae** et al.; Venable LLP, 151 W. 42nd
Street, 49th Floor, New York, New York 10036 (US).

(81) Designated States (*unless otherwise indicated, for every
kind of national protection available*): AE, AG, AL, AM,
AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ,
CA, CH, CL, CN, CO, CR, CU, CV, CZ, DE, DJ, DK, DM,
DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT,
HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, JO, JP, KE, KG,
KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY,
MA, MD, MG, MK, MN, MU, MW, MX, MY, MZ, NA,
NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO,
RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, ST, SV, SY, TH,
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UY, UZ, VC, VN,
WS, ZA, ZM, ZW.

(84) Designated States (*unless otherwise indicated, for every
kind of regional protection available*): ARIPO (BW, CV,
GH, GM, KE, LR, LS, MW, MZ, NA, RW, SC, SD, SL, ST,
SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ,

RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ,
DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT,
LU, LV, MC, ME, MK, MT, NL, NO, PL, PT, RO, RS, SE,
SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN,
GQ, GW, KM, ML, MR, NE, SN, TD, TG).

Published:
— with international search report (Art. 21(3))



WO 2025/171032 A1

(54) Title: METHODS FOR TREATING A FATTY LIVER DISEASE

(57) Abstract: The present disclosure provides a method of treating a fatty liver disease (e.g., non-alcoholic steatohepatitis (NASH)) in a human subject (e.g., an adult human subject) in need of such treatment (e.g., NASH/improving liver fibrosis) with 2-(3,5-dichloro-4-((5-isopropyl-6-oxo-1,6-dihydropyridazin-3-yl)oxy)phenyl)-3,5-dioxo-2,3,4,5-tetrahydro-1,2,4-triazine-6-carbonitrile (resmetirom) or a pharmaceutically acceptable salt thereof. The present disclosure also provides a method of improving liver fibrosis in a human subject (e.g., an adult human subject) in need of such treatment (e.g., NASH/improving liver fibrosis) with 2-(3,5-dichloro-4-((5-isopropyl-6-oxo-1,6-dihydropyridazin-3-yl)oxy)phenyl)-3,5-dioxo-2,3,4,5-tetrahydro-1,2,4-triazine-6-carbonitrile (resmetirom) or a pharmaceutically acceptable salt thereof.