

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
06 October 2022 (06.10.2022)



(10) International Publication Number
WO 2022/207580 A2

(51) International Patent Classification:
Not classified

TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
KM, ML, MR, NE, SN, TD, TG).

(21) International Application Number:
PCT/EP2022/058180

Published:

— without international search report and to be republished
upon receipt of that report (Rule 48.2(g))

(22) International Filing Date:
28 March 2022 (28.03.2022)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
63/166,995 27 March 2021 (27.03.2021) US
63/269,330 14 March 2022 (14.03.2022) US

(71) Applicant: **TRX BIOSCIENCES LIMITED** [GB/GB];
The Walbrook Building, 25 Walbrook, London EC4N 8AF
(GB).

(72) Inventors: **GOODING, Daniel**; C/O TRx Biosciences
Limited, The Walbrook Building, 25 Walbrook, London
EC4N 8AF (GB). **BREW, John**; C/O TRx Biosciences
Limited, The Walbrook Building, 25 Walbrook, London
EC4N 8AF (GB). **BANNISTER, Robin M.**; C/O TRx Bio-
sciences Limited, The Walbrook Building, 25 Walbrook,
London EC4N 8AF (GB).

(74) Agent: **SCHLICH, George William**; 9 St. Catherine's
Road, Littlehampton West Sussex BN17 5HS (GB).

(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, CZ, DE, DJ, DK, DM, DO,
DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN,
HR, HU, ID, IL, IN, IR, IS, IT, JM, JO, JP, KE, KG, KH,
KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA,
MD, ME, MG, MK, MN, 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, UZ, VC, VN, WS, ZA, ZM,
ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LR, LS, MW, MZ, NA, RW, 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, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM,

(54) Title: COMPOSITIONS HAVING IMPROVED BIOAVAILABILITY OF THERAPEUTICS

(57) Abstract: The present specification discloses pharmaceutical composition disclosed herein comprises one or more therapeutic compounds, one or more glycerolipids, and one or more digestion enhancers. The disclosed glycerolipids comprise one or more hard fats and one or more liquid fats. The disclosed digestion enhancers comprise one or more bile acids, one or more phospholipids, one or more free C₁₄₋₂₄ fatty acids, one or more free C₁₄₋₂₄ fatty acid surfactants, or any combination thereof. The present specification also discloses methods and procedures to formulate the disclosed one or more therapeutic compounds into the disclosed pharmaceutical compositions.

WO 2022/207580 A2