

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

(19) World Intellectual Property
Organization

International Bureau

(43) International Publication Date
11 June 2020 (11.06.2020)



(10) International Publication Number
WO 2020/115500 A1

(51) International Patent Classification:

A61K 31/4545 (2006.01) A61P 3/04 (2006.01)
A61K 31/496 (2006.01) A61P 5/48 (2006.01)
A61K 31/513 (2006.01) A61P 21/00 (2006.01)
A61K 31/5377 (2006.01) A61P 35/00 (2006.01)

(21) International Application Number:

PCT/GB2019/053456

(22) International Filing Date:

06 December 2019 (06.12.2019)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

1819936.4 06 December 2018 (06.12.2018) GB
1904341.3 28 March 2019 (28.03.2019) GB

(71) Applicant: **ALMAC DISCOVERY LIMITED** [GB/GB];
Almac House, 20 Seagoe Industrial Estate, Craigavon BT63
5QD (GB).

(72) Inventors: **ROUNTREE, James Samuel Shane**; Almac
Discovery Limited, Almac House, 20 Seagoe Industrial Es-
tate, Craigavon BT63 5QD (GB). **HEWITT, Peter**; Al-
mac Discovery Limited, Almac House, 20 Seagoe Indus-
trial Estate, Craigavon BT63 5QD (GB). **MCFARLAND,
Mary Melissa**; Almac Discovery Limited, Almac House,
20 Seagoe Industrial Estate, Craigavon BT63 5QD (GB).
BURKAMP, Frank; Almac Discovery Limited, Almac
House, 20 Seagoe Industrial Estate, Craigavon BT63 5QD
(GB). **BELL, Christina**; Almac Discovery Limited, Al-
mac House, 20 Seagoe Industrial Estate, Craigavon BT63
5QD (GB). **O'DOWD, Colin**; Almac Discovery Limited,
Almac House, 20 Seagoe Industrial Estate, Craigavon BT63
5QD (GB). **HARRISON, Timothy**; Almac Discovery Lim-
ited, Almac House, 20 Seagoe Industrial Estate, Craigavon
BT63 5QD (GB). **HELM, Matthew Duncan**; Almac Dis-
covery Limited, Almac House, 20 Seagoe Industrial Estate,
Craigavon BT63 5QD (GB). **ROZYKA, Ewelina**; Almac
Discovery Limited, Almac House, 20 Seagoe Industrial Es-
tate, Craigavon BT63 5QD (GB). **CRANSTON, Aaron**;
Almac Discovery Limited, Almac House, 20 Seagoe Indus-
trial Estate, Craigavon BT63 5QD (GB). **JACQ, Xavier**;
Almac Discovery Limited, Almac House, 20 Seagoe Indus-
trial Estate, Craigavon BT63 5QD (GB). **PROCTOR, Lau-
ren**; Almac Discovery Limited, Almac House, 20 Seagoe
Industrial Estate, Craigavon BT63 5QD (GB).

(74) Agent: **BOULT WADE TENNANT LLP**; Salisbury
Square House, 8 Salisbury Square, London, Greater London
EC4Y 8AP (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, 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, SM, ST, SV, SY, TH, TJ, TM, TN,
TR, TT, TZ, UA, UG, US, UZ, VC, VN, 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,
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))

(54) Title: USP19 INHIBITORS FOR USE IN THERAPY

(57) Abstract: Provided are USP19 inhibitors, methods of treating obesity, metabolic syndrome and/or diabetes using the USP19 inhibitor compounds, as well as those compounds for use in methods of treating obesity, metabolic syndrome and/or diabetes. Also provided are methods of treating muscular atrophy, for example cachexia or sarcopenia with USP19 inhibitor compounds, plus those compounds for use in methods of treating muscular atrophy.



WO 2020/115500 A1