

(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 2020/118056 A1

(51) International Patent Classification:
G01N 33/00 (2006.01) *A61K 47/00* (2006.01)
A61K 49/00 (2006.01)

(21) International Application Number:
PCT/US2019/064683

(22) International Filing Date:
05 December 2019 (05.12.2019)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
62/775,626 05 December 2018 (05.12.2018) US

(71) Applicant: WASHINGTON UNIVERSITY [US/US];
One Brookings Drive, St. Louis, Missouri 63130 (US).

(72) Inventors: SANDS, Mark S.; c/o Washington University,
One Brookings Drive, St. Louis, Missouri 63130 (US).
BENITEZ, Bruno A.; c/o Washington University, One
Brookings Drive, St. Louis, Missouri 63130 (US).

(74) Agent: CHAFFEE, Kathleen; Washington University, Of-
fice of Technology Management, 660 South Euclid Avenue,
St. Louis, Missouri 63110 (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, 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,

(54) Title: METHODS OF DETECTING, PREVENTING, REVERSING, AND TREATING NEUROLOGICAL DISEASES

FIG. 21E

Amyloid plaque load in PPT1 mice

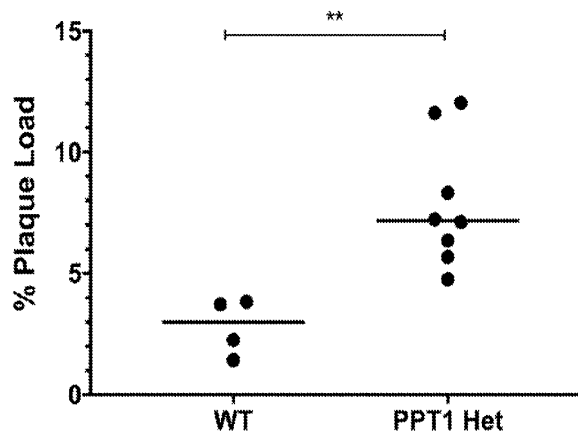


FIG. 21F

(57) Abstract: Among the various aspects of the present disclosure is the provision of a method of detecting, preventing, reversing, treating, or delaying the onset of a neurological disease (e.g., adult-onset neurological diseases, Alzheimers disease, Parkinsons disease, Frontotemporal dementia).

[Continued on next page]

WO 2020/118056 A1

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))*
- *before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments (Rule 48.2(h))*