

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
21 January 2021 (21.01.2021)



(10) International Publication Number
WO 2021/011436 A1

(51) International Patent Classification:

B01D 15/16 (2006.01) **B01D 15/42** (2006.01)
B01D 15/36 (2006.01) **C12N 7/02** (2006.01)

(21) International Application Number:

PCT/US2020/041741

(22) International Filing Date:

12 July 2020 (12.07.2020)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

62/873,619 12 July 2019 (12.07.2019) US

(71) Applicant: **SANGAMO THERAPEUTICS, INC.**
[US/US]; 7000 Marina Boulevard, Brisbane, CA 94005
(US).

(72) Inventors: **KHATWANI, Santoshkumar**; c/o Sangamo
Therapeutics, Inc., 7000 Marina Boulevard, Brisbane, CA
94005 (US). **PIROT, Zhu**; c/o Sangamo Therapeutics, Inc.,
7000 Marina Boulevard, Brisbane, CA 94005 (US).

(74) Agent: **LI, Z. Ying** et al.; Steptoe & Johnson LLP, 1330
Connecticut Avenue, N.W., Washington, DC 20036 (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, IT, 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,
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: SEPARATION AND QUANTIFICATION OF EMPTY AND FULL VIRAL CAPSID PARTICLES

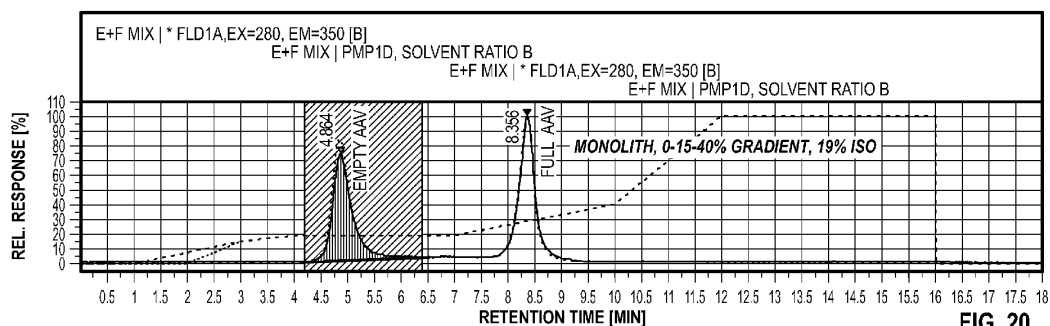


FIG. 20

(57) Abstract: The present disclosure provides methods for the separation and quantification of empty and full viral capsids (e.g., AAV capsids) within a viral preparation, such as a viral pharmaceutical composition or drug product.

WO 2021/011436 A1