

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

(19) World Intellectual Property
Organization

International Bureau

(43) International Publication Date
07 October 2021 (07.10.2021)



(10) International Publication Number
WO 2021/199078 A3

(51) International Patent Classification:

C07K 14/165 (2006.01) C07K 16/10 (2006.01)

G01N 33/68 (2006.01)

(21) International Application Number:

PCT/IN2021/050325

(22) International Filing Date:

30 March 2021 (30.03.2021)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

202021013770 29 March 2020 (29.03.2020) IN

202021030633 18 July 2020 (18.07.2020) IN

202021054151 12 December 2020 (12.12.2020) IN

(71) Applicant: **AKSEERA PHARMA CORP.** [CA/CA]; 422 Richards St, Suite 170, Vancouver, British Columbia V6B 2Z4 (CA).

(72) Inventors; and

(71) Applicants: **DR. MERCHANT, Shreema** [IN/CA]; 15152, Unit 28, 62A Ave, Surrey, British Columbia V3S1V1 (CA). **PATEL, Manit** [IN/CA]; 15152, Unit 28, 62A Ave, Surrey, British Columbia V3S1V1 (CA).

(72) Inventors: **DUNCAN, Robin Elaine**; 532, Chancery Lane, Waterloo (CA). **DR. JADHAV, Vishal Anant**; B202, Vini Gardens 2 CHSL, L M Marg, Mandapeshwar, Borivali (W), Maharashtra, Mumbai 400103 (IN). **FERNANDES, Maria Fernanda de Andrade**; 21, 60 Elmsdale Drive, Kitchener, Ontario N2E 2G4 (CA).

(74) Agent: **KHARKAR, Pallavi** et al.; IPRAM Intellectual Property Services, 716, Swastik Disa Corporate Park, L.B.S Marg, Ghatkopar (W), Mumbai 400086 (IN).

(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).

Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- of inventorship (Rule 4.17(iv))

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))
- in black and white; the international application as filed contained color or greyscale and is available for download from PATENTSCOPE

(88) Date of publication of the international search report:

09 December 2021 (09.12.2021)

(54) Title: INTERACTION OF SARS-COV-2 PROTEINS WITH MOLECULAR AND CELLULAR MECHANISMS OF HOST CELLS AND FORMULATIONS TO TREAT COVID-19.

(57) Abstract: The present invention provides pharmaceutical compositions and methods of treating Covid-19 infectious disease. The present invention also provides pharmaceutical compositions and methods of prophylaxis or prophylactic treatment of Covid-19 infectious disease. The said methods involve administering compositions comprising therapeutically effective amount of Cannabidiol thereby causing enhancement / augmentation of innate immunity of the patient / mammal/human.



WO 2021/199078 A3