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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
04 August 2022 (04.08.2022)

WIPO | PCT

(10) International Publication Number
WO 2022/164806 A1

(51) International Patent Classification:
A61K 35/74 (2015.01) *A61P 37/00* (2006.01)
A61K 9/28 (2006.01)

(21) International Application Number:
PCT/US2022/013716

(22) International Filing Date:
25 January 2022 (25.01.2022)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

63/141,693	26 January 2021 (26.01.2021)	US
63/175,855	16 April 2021 (16.04.2021)	US
63/196,984	04 June 2021 (04.06.2021)	US
63/289,348	14 December 2021 (14.12.2021)	US

(71) Applicant: **EVELO BIOSCIENCES, INC.** [US/US]; 620 Memorial Drive, Cambridge, MA 02139 (US).

(72) Inventors: **ARGUETA, Shannon**; c/o Evelo Biosciences, Inc., 620 Memorial Drive, Cambridge, MA 02139 (US). **CARTWRIGHT, Adam**; c/o Evelo Biosciences, Inc., 620 Memorial Drive, Cambridge, MA 02139 (US). **DORMAN, Derek**; c/o Evelo Biosciences, Inc., 620 Memorial Drive, Cambridge, MA 02139 (US). **GANGULY, Tanmoy**; c/o Evelo Biosciences, Inc., 620 Memorial Drive, Cambridge, MA 02139 (US). **ITANO, Andrea**; c/o Evelo Biosciences, Inc., 620 Memorial Drive, Cambridge, MA 02139 (US). **MCKENNA, Collin**; c/o Evelo Biosciences, Inc., 620 Memorial Drive, Cambridge, MA 02139 (US). **RAGHUNATHAN, Divya**; c/o Evelo Biosciences, Inc., 620 Memorial Drive, Cambridge, MA 02139 (US). **WANG, Bill**; c/o Evelo Biosciences, Inc., 620 Memorial Drive, Cambridge, MA 02139 (US).

(74) Agent: **JONES, Brendan, T.** et al.; Foley Hoag LLP, 155 Seaport Boulevard, Boston, MA 02210-2600 (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).

Declarations under Rule 4.17:
— *of inventorship (Rule 4.17(iv))*

Published:
— *with international search report (Art. 21(3))*

WO 2022/164806 A1

(54) Title: PREVOTELLA EXTRACELLULAR VESICLE PREPARATIONS

(57) Abstract: Provided herein are *Prevotella histicola* extracellular vesicles (EVs), solutions, and dried forms (and therapeutic compositions thereof) of *Prevotella histicola* extracellular vesicles (EVs) that can be useful as therapeutic agents, and methods of use thereof.