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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
21 August 2025 (21.08.2025)

WIPO | PCT

(10) International Publication Number
WO 2025/175250 A1

(51) International Patent Classification:
C07K 7/64 (2006.01) *A61P 13/12* (2006.01)
C07K 14/665 (2006.01) *A61P 29/00* (2006.01)
A61K 38/12 (2006.01) *A61P 3/04* (2006.01)
A61K 38/33 (2006.01) *A61P 3/10* (2006.01)

(21) International Application Number:
PCT/US2025/016151

(22) International Filing Date:
14 February 2025 (14.02.2025)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

63/554,944	16 February 2024 (16.02.2024)	US
63/557,409	23 February 2024 (23.02.2024)	US
63/572,896	01 April 2024 (01.04.2024)	US
63/573,433	02 April 2024 (02.04.2024)	US
63/632,496	10 April 2024 (10.04.2024)	US
63/637,285	22 April 2024 (22.04.2024)	US
63/640,864	30 April 2024 (30.04.2024)	US
63/647,545	14 May 2024 (14.05.2024)	US
63/650,368	21 May 2024 (21.05.2024)	US
63/654,876	31 May 2024 (31.05.2024)	US
63/656,579	05 June 2024 (05.06.2024)	US
63/663,689	24 June 2024 (24.06.2024)	US
63/675,219	24 July 2024 (24.07.2024)	US
63/681,055	08 August 2024 (08.08.2024)	US
63/692,605	09 September 2024 (09.09.2024)	US

(71) Applicant: **ENDEVICA BIO, INC.** [US/US]; 1935 Techny Road, Suite 14, Northbrook, Illinois 60062 (US).

(72) Inventors: **POTTERFIELD, Russell**; 1212 Westmoor Rd, Winnetka, Illinois 60093 (US). **DELEV, Jordan**; 1935 Techny Road, Suite 14, Northbrook, Illinois 60062 (US). **MARKS, Daniel**; 1935 Techny Road, Suite 14, Northbrook, IL 60062 (US).

(74) Agent: **GLASUNOW, Allison M.** et al.; Perkins Coie LLP, P.O. Box 1247, Seattle, Washington 98111-1247 (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,

(54) Title: ORALLY DELIVERABLE NON-NATURALLY OCCURRING MELANOCORTIN ANALOGS AND USES THEREOF FOR MODULATING WEIGHT LOSS

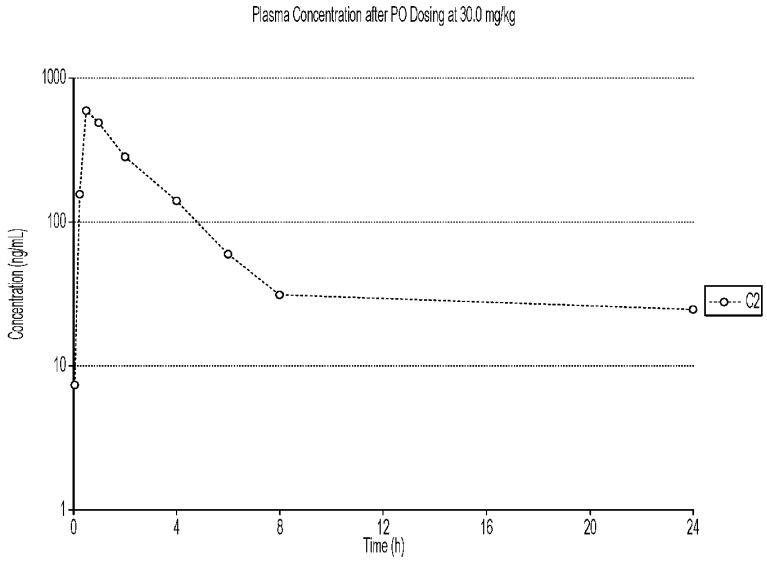

FIG. 1

(57) Abstract: Provided herein are methods of treating, preventing, or reducing one or more symptoms or conditions associated with metabolic dysfunction, such as obesity, in a subject in need thereof using a non-naturally occurring melanocortin analog. In some embodiments, the non-naturally occurring melanocortin analog is administered orally. In some embodiments, the method comprises suppressing appetite in a subject in need thereof using a non-naturally occurring melanocortin analog in accordance with the present technology.

[Continued on next page]

WO 2025/175250 A1

CA, CH, CL, CN, CO, CR, CU, CV, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, MG, MK, MN, MU, 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, UY, UZ, VC, VN, WS, ZA, ZM, ZW.

(84) **Designated States** *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, CV, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SC, 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, ME, 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))*

Published:

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

— *with sequence listing part of description (Rule 5.2(a))*