

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

(19) World Intellectual Property
Organization
International Bureau



(10) International Publication Number
WO 2022/235796 A1

(43) International Publication Date
10 November 2022 (10.11.2022)

(51) International Patent Classification:

C07K 16/22 (2006.01) A61P 19/08 (2006.01)

Published:

- with international search report (Art. 21(3))
- with sequence listing part of description (Rule 5.2(a))

(21) International Application Number:

PCT/US2022/027666

(22) International Filing Date:

04 May 2022 (04.05.2022)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

63/185,967 07 May 2021 (07.05.2021) US

(71) Applicant: **BAYLOR COLLEGE OF MEDICINE**
[US/US]; One Baylor Plaza, Houston, Texas 77030 (US).

(72) Inventor: **LEE, Brendan**; c/o Baylor College of Medicine,
One Baylor Plaza, Houston, 77030 (US).

(74) Agent: **LI, Z. Ying** et al.; Steptoe & Johnson LLP, 1330
Connecticut Avenue, N.W., Washington, District of Colum-
bia 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, IQ, IR, IS, IT, JM, 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))
- as to the applicant's entitlement to claim the priority of the
earlier application (Rule 4.17(iii))

(54) Title: TREATMENT OF MODERATE-TO-SEVERE OSTEOGENESIS IMPERFECTA

(57) Abstract: The present disclosure provides methods for treating and improving moderate-to-severe osteogenesis imperfecta (OI) in a subject by administering to the subject a therapeutically effective amount of an agent that binds and neutralizes transforming growth factor beta (TGFβ).

