

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
07 August 2025 (07.08.2025)



(10) International Publication Number
WO 2025/163008 A1

(51) International Patent Classification:

A61K 9/19 (2006.01) *A61K 47/26* (2006.01)
A61K 39/00 (2006.01) *A61K 47/12* (2006.01)
A61K 47/18 (2017.01) *A61K 47/22* (2006.01)

(21) International Application Number:

PCT/EP2025/052281

(22) International Filing Date:

29 January 2025 (29.01.2025)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

63/626,381 29 January 2024 (29.01.2024) US

(71) Applicant: **ASTRAZENECA AB** [SE/SE]; SE-151 85, SÖDERTÄLJE (SE).

(72) Inventors: **DOFFMAN, Sarah**; 1 Francis Crick Avenue, Cambridge Biomedical Campus, Cambridge CB2 0AA (GB). **SORHEDE WINZELL, Maria**; 1800 Concord Pike, PO Box 15437, Wilmington, Delaware 19850-5437 (US). **MANETZ, Scott T.**; One MedImmune Way, Gaithersburg, Maryland 20878 (US). **SADIQ, Muhammad Waqas**; SE-151 85, SÖDERTÄLJE (SE). **CARTER, Simon**; SE-151 85, SÖDERTÄLJE (SE). **ASIMUS, Sara**; SE-151 85, SÖDERTÄLJE (SE). **LECHUGA, David**; 1800 Concord Pike, PO Box 15437, Wilmington, Delaware 19850-5437 (US). **LAMPA, Charina**; 1800 Concord Pike, PO Box 15437, Wilmington, Delaware 19850-5437 (US). **DAMADZADEH, Behzad**; 1800 Concord Pike, PO Box 15437, Wilmington, Delaware 19850-5437 (US). **CARRIGY, Nicholas**; 1800 Concord Pike, PO Box 15437, Wilmington, Delaware 19850-5437 (US). **TAN, Penny Lim**; 1800 Concord Pike, PO Box 15437, Wilmington, Delaware 19850-5437 (US). **PANDYA, Hitesh Champaklal**; 1 Francis Crick Avenue, Cambridge Biomedical Campus, Cambridge CB2 0AA (GB). **IBRAHIM, Mariam**; One MedImmune Way, Gaithersburg, Maryland 20878 (US). **PATEL, Sajal Manubhai**; One MedImmune Way, Gaithersburg, Maryland 20878 (US).

(74) Agent: **MEWBURN ELLIS LLP**; Aurora Building, Counterslip, Bristol BS1 6BX (GB).

(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, 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).

Published:

- with international search report (Art. 21(3))
- with sequence listing part of description (Rule 5.2(a))
- in black and white; the international application as filed contained color or greyscale and is available for download from PATENTSCOPE

(54) Title: COMPOSITIONS OF THYMIC STROMAL LYMPHOPOIETIN (TSLP) BINDING FRAGMENTS AND METHODS OF USE THEREOF

(57) Abstract: The present disclosure relates to pharmaceutical compositions comprising antigen binding fragments specific for thymic stromal lymphopoietin (TSLP) suitable for inhalation, as well as a process for preparing a pharmaceutical composition for inhalation comprising said antigen binding fragment specific for TSLP. The present disclosure further relates to methods of treating TSLP-related conditions, such as asthma and COPD, using the pharmaceutical compositions. The pharmaceutical compositions include a mixture of leucine, trileucine, and histidine that results in a formulation that is suitable for delivering antigen binding fragments derived from anti-TSLP antibodies via inhalation.



WO 2025/163008 A1