



(51) International Patent Classification:

C07K 14/72 (2006.01) C12N 15/62 (2006.01)
A61K 38/00 (2006.01)

(21) International Application Number:

PCT/GB2024/052048

(22) International Filing Date:

01 August 2024 (01.08.2024)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

2311858.1 02 August 2023 (02.08.2023) GB

(71) Applicant: **XAP THERAPEUTICS LIMITED** [GB/GB];
Babraham Research Campus, Maia Building (B270), Cam-
bridge CB22 3AT (GB).

(72) Inventors: **PATTERSON, James**; 3rd Floor, 1 Ashley
Road, Altrincham Cheshire WA14 2DT (GB). **JESPER, S,**
Laurent; 3rd Floor, 1 Ashley Road, Altrincham Cheshire
WA14 2DT (GB).

(74) Agent: **HOLLAND, Sara Louise**; Potter Clarkson, Chapel
Quarter, Mount Street, Nottingham NG1 6HQ (GB).

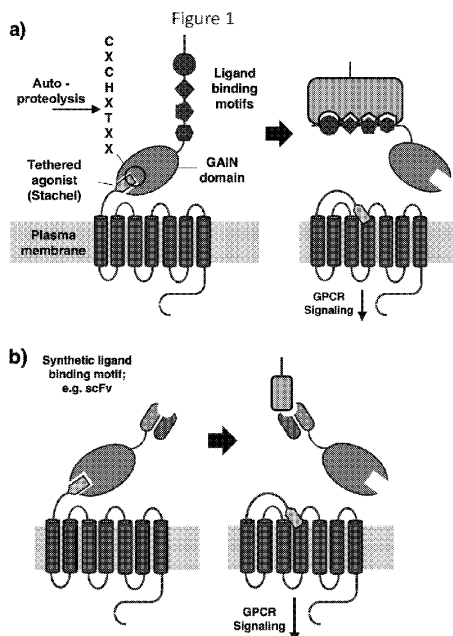
(81) Designated States (unless otherwise indicated, for every

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, 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).

(54) Title: COMPOSITIONS COMPRISING GPCR BASED CHIMERIC ANTIGEN RECEPTOR AND METHODS OF USE



(57) Abstract: The invention relates to chimeric aGPCRs and uses thereof. By redirecting the intracellular signalling response to desired targets, chimeric aGPCRs can be used in a similar way to chimeric antigen receptors. The chimeric aGPCRs can also be used, in conjunction with platelets or engineered non-thrombogenic platelets, for targeted drug delivery.

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*