



(51) International Patent Classification:

C07D 213/82 (2006.01) A61K 31/44 (2006.01)
 C07D 239/42 (2006.01) A61K 31/4427 (2006.01)
 C07D 241/28 (2006.01) A61K 31/4965 (2006.01)
 C07D 401/12 (2006.01) A61K 31/505 (2006.01)
 C07D 403/12 (2006.01) A61P 3/10 (2006.01)
 C07D 405/12 (2006.01)

(21) International Application Number:

PCT/IB2011/055588

(22) International Filing Date:

9 December 2011 (09.12.2011)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

61/426,600 23 December 2010 (23.12.2010) US
 61/562,008 21 November 2011 (21.11.2011) US

(71) Applicant (for all designated States except US): PFIZER INC. [US/US]; 235 East 42nd Street, New York, New York 10017 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): ASPNES, Gary, Erik [US/US]; Pfizer Global Research & Development, Eastern Point Road, Groton, Connecticut 06340 (US). DIDIUK, Mary, Theresa [UA/US]; 61 Hickory Lane, Madison, CT 06443 (US). FILIPSKI, Kevin, James [US/US]; 620 Memorial Drive, Cambridge, MA 02139 (US). GUZMAN-PEREZ, Angel [MX/US]; 20 Gilmore Road, Belmont, Massachusetts 02478 (US). PFEFFERKORN, Jeffrey, Allen [US/US]; 620 Memorial Drive, Cambridge, Massachusetts 02139 (US). STEVENS, Benjamin, Dawson [US/US]; 620 Memorial Drive, Cambridge, Massachusetts 02139 (US). TU, Meihua, Mike [US/US]; 620 Memorial Drive, Cambridge, Massachusetts 02139 (US).

(74) Agent: BENSON, Gregg, C.; Pfizer Inc. C/o Eastern Point Road, Groton, Connecticut 06340 (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, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, 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, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, 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, ML, MR, NE, SN, TD, TG).

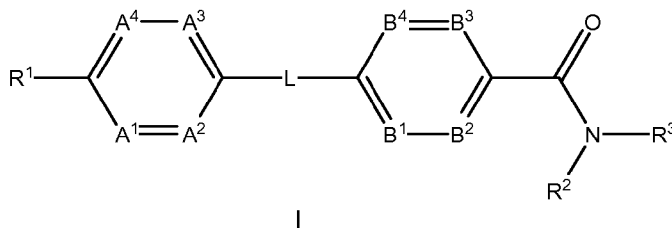
Declarations under Rule 4.17:

- as to the identity of the inventor (Rule 4.17(i))
- 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))

Published:

- with international search report (Art. 21(3))
- with amended claims (Art. 19(1))

(54) Title: GLUCAGON RECEPTOR MODULATORS



(57) Abstract: The present invention provides a compound of Formula (I) or a pharmaceutically acceptable salt thereof wherein R¹, R², R³, A¹, A², A³, A⁴, L, B¹, B², B³ and B⁴ are as defined herein. The compounds of Formula I have been found to act as glucagon antagonists or inverse agonists. Consequently, the compounds of Formula I and the pharmaceutical compositions thereof are useful for the treatment of diseases, disorders, or conditions mediated by glucagon.