

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

CORRECTED VERSION

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
29 November 2007 (29.11.2007)

(10) International Publication Number  
**WO 2007/136988 A8**

(51) International Patent Classification:  
*A61K 31/70* (2006.01)    *C12N 5/00* (2006.01)  
*C07H 21/04* (2006.01)

(74) Agent: **KURLANDSKY, David, R.**; Butzel Long, 350 S. Main Street, Ste. 300, Ann Arbor, MI 48140 (US).

(21) International Application Number:  
PCT/US2007/068410

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, 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, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(22) International Filing Date:  
7 May 2007 (07.05.2007)

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(25) Filing Language: English  
(26) Publication Language: English  
(30) Priority Data:  
60/746,631                5 May 2006 (05.05.2006)    US  
60/747,059                11 May 2006 (11.05.2006)    US  
60/805,660                23 June 2006 (23.06.2006)    US  
60/864,554                6 November 2006 (06.11.2006)    US  
PCT/US2007/061183                27 January 2007 (27.01.2007)    US

Published:

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

(88) Date of publication of the international search report:  
7 May 2009

(48) Date of publication of this corrected version:  
24 September 2009

(15) Information about Correction:  
see Notice of 24 September 2009



WO 2007/136988 A8

(54) Title: COMPOUNDS AND METHODS FOR MODULATING EXPRESSION OF GCCR

(57) Abstract: The present disclosure describes short antisense compounds, including such compounds comprising chemically-modified high-affinity monomers 8-16 monomers in length. Certain such short antisense compound are useful for the reduction of target nucleic acids and/or proteins in cells, tissues, and animals with increased potency and improved therapeutic index. Thus, provided herein are short antisense compounds comprising high-affinity nucleotide modifications useful for reducing a target RNA in vivo. Such short antisense compounds are effective at lower doses than previously described antisense compounds, allowing for a reduction in toxicity and cost of treatment. In addition, the described short antisense compounds have greater potential for oral dosing.