

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
08 October 2020 (08.10.2020)



(10) International Publication Number
WO 2020/206115 A2

(51) International Patent Classification:
C12N 15/113 (2010.01) C07K 14/515 (2006.01)

TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
KM, ML, MR, NE, SN, TD, TG).

(21) International Application Number:
PCT/US2020/026379

Declarations under Rule 4.17:

— of inventorship (Rule 4.17(iv))

(22) International Filing Date:
02 April 2020 (02.04.2020)

Published:

— without international search report and to be republished
upon receipt of that report (Rule 48.2(g))
— with sequence listing part of description (Rule 5.2(a))

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
62/828,864 03 April 2019 (03.04.2019) US

(71) Applicants: **BRISTOL-MYERS SQUIBB COMPANY**
[US/US]; Rt. 206 & Province Line Road, Princeton, New
Jersey 08543 (US). **ROCHE INNOVATION CENTER**
COPENHAGEN A/S [—/DK]; Fremtidsvej 3, DK2970
Horsholm (DK).

(72) Inventors: **ANDERSON, Brian R.**; Rt. 206 & Province
Line Road, Princeton, New Jersey 08543 (US). **OLSON,**
Richard E.; Rt. 206 & Province Line Road, Princeton, New
Jersey 08543 (US). **MCDONALD, Ivar M.**; Rt. 206 &
Province Line Road, Princeton, New Jersey 08543 (US).
MERCER, Stephen E.; Rt. 206 & Province Line Road,
Princeton, New Jersey 08543 (US). **HAGEDORN, Peter**;
Fremtidsvej 3, DK2970 Horsholm (DK). **JENSEN, Mari-**
anne Lerbech; Torsvej 7, 4600 Koge (DK).

(74) Agent: **KIM, Ji Eun** et al.; Sterne, Kessler, Goldstein &
Fox, 1100 New York Avenue, NW, Washington, District of
Columbia 20005 (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, IR, IS, 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,

(54) Title: ANGPTL2 ANTISENSE OLIGONUCLEOTIDES AND USES THEREOF

(57) Abstract: The present disclosure relates to antisense oligonucleotides, which target ANGPTL2 mRNA in a cell, leading to reduced expression of ANGPTL2 protein. Reduction of ANGPTL2 protein expression is beneficial for the treatment of certain medical disorders, such as those associated with abnormal ANGPTL2 expression and/or activity, e.g., cardiovascular-related diseases or disorders.

WO 2020/206115 A2