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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
20 June 2019 (20.06.2019)

WIPO | PCT

(10) International Publication Number
WO 2019/115817 A2

(51) International Patent Classification:
Not classified

(21) International Application Number:
PCT/EP2018/085086

(22) International Filing Date:
14 December 2018 (14.12.2018)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
1721069.1 15 December 2017 (15.12.2017) GB

(71) Applicant: **GLAXOSMITHKLINE BIOLOGICALS SA** [BE/BE]; rue de l'Institut 89, B-1330 Rixensart (BE).

(72) Inventors: **AMMENDOLA, Virginia**; ReiThera Srl, Via di Castel Romano 100, 00128 Rome (IT). **BAYAT, Babak**; GlaxoSmithKline Biologicals SA, rue de l'Institut 89, B-1330 Rixensart (BE). **LORIN, Clarisse**; GlaxoSmithKline Biologicals SA, rue de l'Institut 89, B-1330 Rixensart (BE). **VASSILEV, Ventzislav Bojidarov**; GlaxoSmithKline, rue de l'Institut 89, B-1330 Rixensart (BE). **VITELLI, Alessandra**; ReiThera Srl, Via di Castel Romano 100, 00128 Rome (IT).

(74) Agent: **THORNLEY, Rachel Mary**; GlaxoSmithKline, Global Patents (CN925.1), 980 Great West Road, Brentford Middlesex TW8 9GS (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, 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, 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, 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, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

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))*

WO 2019/115817 A2

(54) Title: HEPATITIS B IMMUNISATION REGIMEN AND COMPOSITIONS

(57) Abstract: The present invention relates to immunogenic compositions and combinations thereof which may find use in immunisation regimens for the treatment of chronic hepatitis B. An immunogenic composition comprises a replication-defective chimpanzee adenoviral (ChAd) vector comprising polynucleotides encoding HBs, HBc human invariant chain (hli) fused to the HBc. Another immunogenic composition comprises a Modified Vaccinia Virus Ankara (MVA) vector comprising polynucleotides encoding HBs and HBc. Another immunogenic composition comprises recombinant HBs, C-terminal truncated recombinant HBc and an adjuvant containing MPL and QS-21.