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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
6 October 2011 (06.10.2011)

PCT

(10) International Publication Number
WO 2011/120924 A1

(51) International Patent Classification:
A61K 47/48 (2006.01) *A61K 39/00* (2006.01)
A61P 25/28 (2006.01)

(21) International Application Number:
PCT/EP2011/054735

(22) International Filing Date:
28 March 2011 (28.03.2011)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
10158273.2 29 March 2010 (29.03.2010) EP
61/361,697 6 July 2010 (06.07.2010) US

(71) Applicant *(for all designated States except US)*: **NOVARTIS AG** [CH/CH]; Lichtstrasse 35, CH-4056 Basel (CH).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **ULRICH, Peter** [DE/CH]; Novartis Pharma AG, Postfach, CH-4002 Basel (CH). **BAER, Katja** [DE/CH]; Novartis Pharma AG, Postfach, CH-4002 Basel (CH). **IMBERT, Georges** [FR/CH]; Novartis Pharma AG, Postfach, CH-4002 Basel (CH). **HOELLINGER, Marie-Jose** [FR/CH]; Novartis Pharma AG, Postfach, CH-4002 Basel (CH). **RIVIERE, Marie-Emmanuelle** [FR/CH]; Novartis Pharma AG, Postfach, CH-4002 Basel (CH). **GRAF, Ana** [CH/CH]; Novartis Pharma AG, Postfach, CH-4002 Basel (CH).

(74) Agent: **SPINNER, David Richard**; Novartis Pharma AG, Patent Department, CH-4002 Basel (CH).

(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, RO, RS, RU, 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, 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).

Published:

— *with international search report (Art. 21(3))*

WO 2011/120924 A1

(54) **Title**: COMPOSITION COMPRISING THE AMYLOID BETA 1-6 PEPTIDE COUPLED TO A VIRUS-LIKE PARTICLE AND AN ADJUVANT

(57) **Abstract**: The present invention relates to compositions comprising a construct comprising the Aβ1-6 peptide and a pharmaceutically acceptable adjuvant, for the treatment of patients suffering from dementia, in particular dementia of the Alzheimer's type. In one embodiment, the construct containing the Aβ1-6 peptide consists of a virus-like particle (VLP) of the RNA bacteriophage Qβ chemically coupled to said Aβ1-6 peptide.