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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
4 November 2004 (04.11.2004)

PCT

(10) International Publication Number
WO 2004/093897 A1

(51) International Patent Classification[7]: A61K 38/06, 38/07, 38/24, A61P 37/00, 37/06, 29/00, 19/02, 3/10

(21) International Application Number: PCT/EP2004/003747

(22) International Filing Date: 8 April 2004 (08.04.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

| | | |
|---|---|---|
| 03076028.4 | 8 April 2003 (08.04.2003) | EP |
| 03076029.2 | 8 April 2003 (08.04.2003) | EP |
| 03076027.6 | 8 April 2003 (08.04.2003) | EP |
| 03076026.8 | 8 April 2003 (08.04.2003) | EP |
| 03076022.7 | 8 April 2003 (08.04.2003) | EP |
| 03076021.9 | 8 April 2003 (08.04.2003) | EP |
| 03076025.0 | 8 April 2003 (08.04.2003) | EP |
| 03076024.3 | 8 April 2003 (08.04.2003) | EP |
| 03076030.0 | 8 April 2003 (08.04.2003) | EP |
| 03076023.5 | 8 April 2003 (08.04.2003) | EP |
| 10/409,671 | 8 April 2003 (08.04.2003) | US |
| 03131227.6 | 30 April 2003 (30.04.2003) | CN |

(71) Applicant *(for all designated States except US)*: **BIOTEMPT, B.V.** [NL/NL]; Hoge Linthorst 1, NL-7958 NZ Koekange (NL).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **KHAN, Nisar, Ahmed** [NL/NL]; Groene Hilledijk 256-A, NL-3074 AD Rotterdam (NL). **BENNER, Robbert** [NL/NL]; Middeldijk 25, NL-2992 SH Barendrecht (NL). **WENSVOORT, Gert** [NL/NL]; Hoge Linthorst 1, NL-7958 NZ Koekange (NL).

(74) Agents: **BOND, Laurence, B.** et al.; Laurance Bond Solicitors, Francis House, 112 Hill Road, Cambridge CB2 1PH (GB).

(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, 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, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LS, MW, MZ, 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, IT, LU, MC, 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).

**Published:**

— *with international search report*

— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: COMPOSITIONS FOR MUCOSAL AND ORAL ADMINISTRATION COMPRISING HCG FRAGMENTS

(57) Abstract: The invention relates to the field of immunology, more specifically to the field of immune-mediated disorders such as allergies, auto-immune disease, transplantationrelated disease and other inflammatory diseases. The invention in particular relates to the systemic treatment of inflammatory disease by oral or mucosal administration of a pharmaceutical composition with a gene-regulatory peptide. The invention provides a pharmaceutical composition in a form for mucosal application for the treatment of a subject suffering from disease, said pharmaceutical composition comprising a pharmacologically effective amount of a gene-regulatory peptide or a functional analogue thereof together with a pharmaceutically acceptable diluent.

WO 2004/093897 A1