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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
1 May 2003 (01.05.2003)

PCT

(10) International Publication Number
WO 03/035010 A3

(51) International Patent Classification[7]: A61K 38/16, 45/00, 39/29

(21) International Application Number: PCT/US02/34535

(22) International Filing Date: 28 October 2002 (28.10.2002)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/330,638 26 October 2001 (26.10.2001) US

(71) Applicant *(for all designated States except US)*: **RHODE ISLAND HOSPITAL** [US/US]; 593 Eddy Street, Providence, RI 02903 (US).

(72) Inventor; and

(75) Inventor/Applicant *(for US only)*: **WANDS, Jack, R.** [US/US]; 210 Varick Road, Waban, MA 02168 (US).

(74) Agents: **REPPER, George, R.** et al.; Rothwell, Figg, Ernst & Manbeck, P.C., 1425 K Street, Suite 800, Washington, DC 20005 (US).

(81) Designated States *(national)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, 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, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW.

(84) Designated States *(regional)*: ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
— *with international search report*

(88) Date of publication of the international search report:
4 December 2003

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.

WO 03/035010 A3

(54) Title: THYMOSIN AUGMENTATION OF GENETIC IMMUNIZATION

(57) Abstract: This invention describes the use of thymosin to augment cellular immune responses to hepatitis C virus. Methods for immunizing a subject susceptable to hepatitis C virus infection against such infection, comprising administering to the subject one or more polynucleotides encoding one or more hepatitis C virus peptides, in combination with one or more thymosins, are disclosed. Compositions suitable for immunizing against hepatitis C virus, comprising one or more polynucleotides encoding one or more hepatitis C virus peptides, and one or more thymosins, are also disclosed.