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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
27 February 2003 (27.02.2003)

PCT

(10) International Publication Number
WO 03/015712 A2

(51) International Patent Classification[7]: A61K

(21) International Application Number: PCT/US02/26573

(22) International Filing Date: 20 August 2002 (20.08.2002)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/313,629 20 August 2001 (20.08.2001) US
60/337,222 6 December 2001 (06.12.2001) US

(71) Applicant *(for all designated States except US)*: **UNIVERSITY OF CONNECTICUT HEALTH CENTER** [US/US]; 263 Farmington Avenue, Farmington, CT 06030 (US).

(72) Inventor; and
(75) Inventor/Applicant *(for US only)*: **SRIVASTAVA, Pramod, K.** [IN/US]; 70 Pheasant Run, Avon, CT 06001 (US).

(74) Agents: **ANTLER, Adrian, M.** et al.; Pennie & Edmonds LLP, 1155 Avenue of the Americas, New York, NY 10036 (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:
— *without international search report and to be republished upon receipt of that report*

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 03/015712 A2

(54) Title: METHODS FOR PREPARING COMPOSITIONS COMPRISING HEAT SHOCK PROTEINS OR ALPHA-2-MACROGLOBULIN USEFUL FOR THE TREATMENT OF CANCER AND INFECTIOUS DISEASE

(57) Abstract: The present invention relates to methods and compositions for the prevention and treatment of infectious diseases, and cancers. The methods of the invention comprises complexing a population of antigenic proteins or antigenic peptides derived from antigenic cells or viral particles to one or more different heat shock proteins in vitro. The population or the protein preparation used to produce the antigenic peptides comprises at least 50% of the different proteins or at least 50 different proteins of the antigenic cells or viral particles. Methods for making antigenic peptides comprise digesting a protein preparation of antigenic cells, a cellular fraction thereof, or of viral particles with one or more proteases, or exposing the protein preparation to ATP, guanidium hydrochloride, and/or acidic conditions.