Methods for Inhibiting HIV and Other Viral Infections by Modulating Ceramide Metabolism

Robert Blumenthal, Catherine M. Finnegan (NCI).

U.S. Provisional Application No. 60/528,411 filed 09 Dec 2003 (DHHS Reference No. E–265–2003/0–US–01).

Licensing Contact: Sally Hu; (301) 435–5606; *hus@mail.nih.gov.*

This invention provides methods of inhibiting or preventing HIV–1 infections by inducing either the de novo biosynthesis of ceramide, or by activating enzymes (e.g., sphingomyelinase) involved in the generation of ceramide at the plasma membrane, or by direct incorporation of exogenous ceramide into target cell membranes. The invention describes methods for administration of a retinamide compound, particularly an N–(aryl) retinamide compound such as N–(4–hydroxyphenyl) retinamide (4–HPR) resulting in increased plasma membrane ceramide levels, which results in the inhibition of HIV–1 infection in monocyte/macrophages by perturbing membrane organization. In addition, because of its low toxicity in non-tumor cells, 4–HPR and related compounds are particularly suitable for long-term preventative or therapeutic administration to subjects suffering from an HIV infection or who are at risk of contracting an HIV infection. Thus, this invention provides a novel means of treating or inhibiting HIV and other viral infections by administering a retinamide compound to a patient suffering from or susceptible to such a viral infection.

ELISA Assay of Serum Soluble CD22 To Assess Tumor Burden/Relapse in Subjects With Leukemia and Lymphoma

Robert Kreitman *et al.* (NCI).

PCT Application No. PCT/US03/16298 filed 20 May 2003 (DHHS Reference No. E–065–2002/0–PCT–02), with priority to 20 May 2002.

Licensing Contact: Jesse Kindra; (301) 435–5559; *kindraj@mail.nih.gov.*

Disclosed are methods of using previously unknown soluble forms of CD22 (sCD22) present in the serum of subjects with B-cell leukemias and lymphomas to assess tumor burden in the subjects. Also disclosed are methods of diagnosing or prognosing development or progression of a B-cell lymphoma or leukemia in a subject, including detecting sCD22 in a body fluid sample taken or derived from the subject, for instance, serum. In some embodiments, soluble CD22 levels are quantified. By way of example, the B-cell lymphoma or leukemia can be hairy cell leukemia, chronic lymphocytic leukemia, or non-Hodgkin's lymphoma. Soluble CD22 in some embodiments is detected by a specific binding agent, and optionally, the specific binding agent can be detectably labeled.

Also disclosed are methods of selecting a B-cell lymphoma or leukemia therapy that include detecting an increase or decrease in sCD22 levels in a subject compared to a control, and, if such increase or decrease is identified, selecting a treatment to prevent or reduce B-cell lymphoma or leukemia or to delay the onset of B-cell lymphoma or leukemia.

Other embodiments are kits for measuring a soluble CD22 level, which kits include a specific binding molecule that selectively binds to the CD22, e.g. an antibody or antibody fragment that selectively binds CD22.

Further disclosed methods are methods for screening for a compound useful in treating, reducing, or preventing B-cell lymphomas or leukemias, or development or progression of B-cell lymphomas or leukemias, which methods include determining if application of a test compound lowers soluble CD22 levels in a subject, and selecting a compound that so lowers sCD22 levels.

C–C Chemokines That Inhibit Retrovirus Infection

Paolo Lusso, Robert C. Gallo, Fiorenza Cocchi, Anthony L. De Vico, Alfredo Garzino-Demo (NCI).

PCT Application No. PCT/US96/18993 filed 27 Nov 1996 (DHHS Reference No. E–008–1996/0–PCT–02); U.S. Patent Application No. 09/077,614 filed 29 May 1998 (DHHS Reference No. E–008–1996/0–US–04) (with priority to 30 Nov 1995).

Licensing Contact: Sally Hu; (301) 435–5606; *hus@mail.nih.gov.*

This invention concerns three members of the human C–C chemokine family, RANTES, macrophage inflammatory protein 1alpha (MIP–1alpha) and macrophage inflammatory protein 1beta (MIP–1beta), which are produced and secreted by several cell types, including CD8-positive T lymphocytes, and which act in vitro as HIV suppressive factors. These factors and their respective genes may be used in the diagnosis, prognosis, treatment and prevention of AIDS and other retrovirus-induced diseases. The invention provides a therapeutic preparation, methods for therapeutic and prophylactic treatment of retroviral infection, and a method of prognosis for retroviral infection. The technology was reported in Science 270(8):1560–1561 (December 8, 1995).

Dated: March 18, 2004.

Steven M. Ferguson,

Director, Division of Technology Development and Transfer, Office of Technology Transfer, National Institutes of Health.

[FR Doc. 04–6608 Filed 3–23–04; 8:45 am]

BILLING CODE 4140–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

National Institute of Diabetes and Digestive and Kidney Diseases; Notice of Closed Meeting

Pursuant to section 10(d) of the Federal Advisory Committee Act, as amended (5 U.S.C. appendix 2), notice is hereby given of the following meeting.

The meeting will be closed to the public in accordance with the provisions set forth in sections 552b(c)(4) and 552b(c)(6), Title 5 U.S.C., as amended. The grant applications and the discussions could disclose confidential trade secrets or commercial property such as patentable material, and personal information concerning individuals associated with the grant applications, the disclosure of which would constitute a clearly unwarranted invasion of personal privacy.

Name of Committee: National Institute of Diabetes and Digestive and Kidney Diseases Special Emphasis Panel, Extramural Loan Repayment Program.

Date: April 13, 2004.

Time: 2 p.m. to 4 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, Two Democracy Plaza, 6707 Democracy Boulevard, Bethesda, MD 20892 (Telephone Conference Call).

Contact Person: D.G. Patel, PhD, Scientific Review Administrator, Review Branch, DEA, NIDDK, National Institutes of Health, Room 747, 6707 Democracy Boulevard, Bethesda, MD 20892, (301) 594–7682, *pateldg@extra.niddk.nih.gov.*

This notice is being published less than 15 days prior to the meeting due to the timing limitations imposed by the review and funding cycle.

(Catalogue of Federal Domestic Assistance Program Nos. 93.847, Diabetes, Endocrinology and Metabolic Research; 93.848, Digestive Diseases and Nutrition Research; 93.849, Kidney Diseases, Urology and Hematology Research, National Institutes of Health, HHS)

Dated: March 18, 2004.

LaVerne Y. Stringfield,

Director, Office of Federal Advisory Committee Policy.

[FR Doc. 04–6607 Filed 3–23–04; 8:45 am]

BILLING CODE 4140–01–M

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

Prospective Grant of Exclusive License: Methods and Compositions for the Promotion of Hair Growth Utilizing Actin Binding Peptides

AGENCY: National Institutes of Health, Public Health Service, HHS.

ACTION: Notice.

SUMMARY: This is notice, in accordance with 35 U.S.C. 209(c)(1) and 37 CFR 404.7(a)(1)(i), that the National Institutes of Health, Department of Health and Human Services, is contemplating the grant of an exclusive patent license to practice the inventions embodied in U.S. Patent Application 60/351,386 (re-filed), PCT Patent Application No. PCT/US03/01973, filed January 22, 2003 [DHHS Ref. E–053–2002/0–PCT–02], entitled ''Methods and Compositions for the Promotion of Hair Growth Utilizing Actin Binding Peptides,'' to EGB Advisors, LLC, which is located in San Francisco, California. The patent rights in these inventions have been assigned to the United States of America.

The prospective exclusive license territory will be worldwide (with the exception of China, Hong Kong and Taiwan) and the field of use may be limited to the use of actin binding proteins for the development of a topical hydrogel treatment for alopecia to promote hair growth.

DATES: Only written comments and/or applications for a license which are received by the NIH Office of Technology Transfer on or before May 24, 2004, will be considered.

ADDRESSES: Requests for copies of the patent application, inquiries, comments, and other materials relating to the contemplated exclusive license should be directed to: Jesse S. Kindra, J.D., M.S., Technology Licensing Specialist, Office of Technology Transfer, National Institutes of Health, 6011 Executive Boulevard, Suite 325, Rockville, MD 20852–3804; Telephone: (301) 435–5559; Facsimile: (301) 402–0220; E-mail: *kindraj@mail.nih.gov*.

SUPPLEMENTARY INFORMATION: The technology describes methods and compositions for treating a subject (human or animal) suffering from hair loss. More specifically, the technology relates to the discovery that actin binding peptides promote hair growth. In one example, the technology describes the exogenous delivery of a seven amino acid peptide of Thymosin-4 to promote hair growth.

The prospective exclusive license will be royalty bearing and will comply with the terms and conditions of 35 U.S.C. 209 and 37 CFR 404.7. The prospective exclusive license may be granted unless within sixty (60) days from the date of this published notice, the NIH receives written evidence and argument that establishes that the grant of the license would not be consistent with the requirements of 35 U.S.C. 209 and 37 CFR 404.7.

Applications for a license in the field of use filed in response to this notice will be treated as objections to the grant of the contemplated exclusive license. Comments and objections submitted to this notice will not be made available for public inspection and, to the extent permitted by law, will not be released under the Freedom of Information Act, 5 U.S.C. 552.

Dated: March 7, 2004.

Steven M. Ferguson,

Director, Division of Technology Development and Transfer, Office of Technology Transfer, National Institutes of Health.

[FR Doc. 04–6609 Filed 3–23–04; 8:45 am]

BILLING CODE 4140–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Public Health Service

National Toxicology Program (NTP); National Institute of Environmental Health Sciences (NIEHS); National Institutes of Health (NIH); NTP Interagency Center for the Evaluation of Alternative Toxicological Methods (NICEATM); Request for Public Comment on the Nomination for Ocular Toxicity Test Methods and Related Activities and Request for Data on Chemicals Evaluated by *In Vitro* or *In Vivo* Ocular Irritancy Test Methods

SUMMARY: On behalf of the Interagency Coordinating Committee on the Validation of Alternative Methods (ICCVAM), NICEATM requests (1) public comment on four test methods for ocular toxicity and related activities nominated to the ICCVAM by the U.S. Environmental Protection Agency (EPA), (2) public comment on ICCVAM's recommended actions for the nomination, and (3) data from completed studies on chemicals and products tested for ocular irritancy using *in vitro* and/or *in vivo* test methods. This data will be used to (1) evaluate the validation status of existing *in vitro* test methods for ocular irritancy/corrosion and (2) develop a list of substances with high quality *in vivo* data that can be considered as reference chemicals for future validation studies.

NICEATM welcomes data generated using standardized *in vitro* test methods used to identify severe, moderate, mild, or non-irritating substances. Test methods for identifying severe (irreversible) ocular irritation/corrosion for which data are sought include, but are not limited to the four methods nominated by the EPA: (1) The Bovine Corneal Opacity and Permeability (BCOP) test, (2) the Isolated Rabbit Eye (IRE) test or the Rabbit Enucleated Eye Test (REET), (3) the Isolated Chicken Eye (ICE) test or the Chicken Enucleated Eye Test (CEET), and (4) the Hen's Egg Test—Chorion Allantoic Membrane (HET–CAM). In addition, high quality data from standardized ocular irritancy test methods using rabbits (*e.g.*, EPA 1998; UN 2003) and *in vivo* data generated from procedures/protocols that might alleviate or reduce pain and suffering (*e.g.*, topical and systemic analgesics) in test animals are requested.

Background Information

The Scientific Advisory Committee on Alternative Toxicological Methods (SACATM) unanimously recommended at its meeting in August 2003 that NICEATM focus efforts on test methods for ocular irritancy and possibly hold a workshop and/or develop a background document on available methods. In October 2003, the EPA nominated the following activities to ICCVAM: (1) Evaluate the validation status of four *in vitro* ocular toxicity test methods: the BCOP, IRE or the REET, ICE or CEET, and HET–CAM, (2) identify and develop *in vivo* ocular toxicity reference data to support the validation of *in vitro* test methods, (3) explore ways of alleviating pain and suffering from current *in vivo* ocular toxicity testing, and (4) review the state of the science and the availability of *in vitro* test methods for assessing mild or moderate ocular irritants. ICCVAM endorsed the review of the methods as a high priority and recommended that NICEATM develop Background Review Documents for BCOP, IRE, ICE, and HET–CAM. ICCVAM also recommended that NICEATM convene an expert panel to independently review the validation status of these four methods and propose standardized protocols for these test methods.