Government and are available for licensing in the U.S. in accordance with 35 U.S.C. 207 to achieve expeditious commercialization of results of Federally-funded research and development. Foreign patent applications are filed on selected inventions to extend market coverage for companies and may also be available for licensing.

**ADDRESSES:** Licensing information and copies of the U.S. patent applications listed below may be obtained by writing to the indicated licensing contact at the Office of Technology Transfer, National Institutes of Health, 6011 Executive Boulevard, Suite 325, Rockville, Maryland 20852-3804; telephone: 301/496-7057; fax: 301/402-0220. A signed Confidential Disclosure Agreement will be required to receive copies of the patent applications.

**Amyloid Beta Is a Ligand for FPR Class Receptors**

**Description of Technology:** Alzheimer’s disease is the most important dementing illness in the United States because of its high prevalence. Five to ten percent of the United States population 65 years and older are afflicted with the disease. In 1990 there were approximately 4 million individuals with Alzheimer’s, and this number is expected to reach 14 million by the year 2050. It is the fourth leading cause of death for adults, resulting in more than 100,000 deaths annually. Amyloid beta has been identified as playing an important role in the neurodegeneration of Alzheimer’s disease. However, the mechanism by which this occurred was unknown, but has been postulated to be either direct or indirect through an induction of inflammatory responses.

The NIH announces the identification of the G-protein-coupled receptor, FPRL1, in the cellular uptake and fibrillar aggregation of amyloid (beta)42. The (beta)42 peptides use the FPRL1 receptor to attract and activate human monocytes and mouse microglial cells (publications referenced below), and have been identified as a principal component of the amyloid plaques associated with Alzheimer’s disease. In addition, the known anti-inflammatory drug, Colchicine, has been shown to inhibit the FPRL1 activation by amyloid (beta)42 and the internalization of FPRL1/amyloid beta complexes.

**Inventors:** Ji Ming Wang et al. (NCI).

**Publications:**


**Licensing Status:** Available for non-exclusive or exclusive licensing.

**Licensing Contact:** Bialozor at 301/846-5465 or bialozod@mail.nih.gov

**Collaborative Research Opportunity:** The National Cancer Institute, Laboratory of Molecular Immunoregulation, is seeking statements of capability or interest from parties interested in collaborative research to further develop, evaluate, or commercialized siRNA delivery development. Please contact Diana Bialozor at 301/846-5465 or bialozod@mail.nih.gov for more information.
DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

Government-Owned Inventions; Availability for Licensing

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

ACTION: Notice.

SUMMARY: The inventions listed below are owned by an agency of the U.S. Government and are available for licensing in the U.S. in accordance with 35 U.S.C. 207 to achieve expeditious licensing in the U.S. in accordance with Federal advisory committee acts. Inventions to extend market coverage applications are filed on selected inventions. Foreign patent applications are filed on selected inventions to extend market coverage for companies and may also be available for licensing.

ADDRESS: Licensing information and copies of the U.S. patent applications listed below may be obtained by writing to the indicated licensing contact at the Office of Technology Transfer, National Institutes of Health, 6011 Executive Boulevard, Suite 325, Rockville, Maryland 20852–3804; telephone: 301/496–7057; fax: 301/420–0220. A signed Confidential Disclosure Agreement will be required to receive copies of the patent applications.

Adoptive T-Cell Transfer After Lymphodepleting chemotherapy Promotes Tumor Regression

Description of Technology: Available for licensing is a method of adoptive cell transfer (ACT) immunotherapy. Since its first description, ACT is now being developed for the supportive treatment of a variety of infectious diseases and cancer.

Current ACT methods to treat cancer are based on the ex vivo selection of lymphocytes with high avidity for recognition of tumor antigens, and their activation and numerical expansion before re-infusion to the autologous tumor-bearing host. The current invention improves ACT by including a pre-treatment regimen to ensure permissive conditions in the host for in vivo proliferation of the transferred cells. Specifically, the immune system is suppressed by pre-treatment with lymphodepleting chemotherapy. Two separate clinical trials have demonstrated that using this approach, ACT can induce lasting tumor shrinkage.

Lymphodepleting chemotherapy followed by ACT resulted in tumor shrinkage of at least 50 percent in 6 out of 13 treated patients suffering from refractory melanoma. Several patients remained cancer free for more than a year after treatment. The usefulness of combined ACT and lymphodepleting therapy for cancer treatment was confirmed when this study was extended to include 35 melanoma patients. Eighteen of the 35 patients (51%) responded to the treatment, including 3 patients who experienced ongoing complete disappearance of cancer and 15 patients had tumor shrinkage of at least 50 percent with a mean duration of almost a year after treatment. In a recent clinical trial that is not yet published, using a modified protocol to treat 23 patients, a similar response rate (56%) was seen. This approach to ACT offers a potentially significant improvement in the treatment of many types of cancer. In addition, this method might be applicable in treating other diseases such as AIDS, immunodeficiency, or other autoimmunity for which immune effector cells can impact the clinical outcome.

Inventors: Mark E. Dudley, Steven A. Rosenberg, John R. Wunderlich (NCI) Publications:


Licensing Status: Available for exclusive and non-exclusive licensing.

Licensing Contact: Michelle A. Booden, Ph.D.; 301/451–7337; boodenm@mail.nih.gov

Collaborative Research Opportunity: The NCI Surgery Branch is seeking statements of capability or interest from parties interested in collaborative research to further develop, evaluate, or commercialize ACT therapy. Please contact Steven A. Rosenberg, M.D., Ph.D. at 301–496–4164 for more information.

Dated: August 1, 2006.

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

Dated: August 1, 2006.

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