(bicalutamide). CASODEX® is indicated for use in combination therapy with a luteinizing hormone-releasing hormone (LHRH) analogue for the treatment of advanced prostate cancer. Subsequent to this approval, the Patent and Trademark Office received a patent term restoration application for CASODEX® (U.S. Patent No. 4,636,505) from Zeneca Ltd., and the Patent and Trademark Office requested FDA's assistance in determining this patent's eligibility for patent term restoration. In a letter dated February 8, 1996, FDA advised the Patent and Trademark Office that this human drug product had undergone a regulatory review period and that the approval of CASODEX® represented the first permitted commercial marketing or use of the product. Shortly thereafter, the Patent and Trademark Office requested that FDA determine the product's regulatory review period.

FDA has determined that the applicable regulatory review period for CASODEX® is 3,059 days. Of this time, 2,673 days occurred during the testing phase of the regulatory review period, while 386 days occurred during the approval phase. These periods of time were derived from the following dates:

1. *The date an exemption under section 505(i) of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 355(i)) became effective*: May 22, 1987. FDA has verified the applicant's claim that the date that the investigational new drug application (IND) became effective was on May 22, 1987.

2. *The date the application was initially submitted with respect to the human drug product under section 505(b) of the Federal Food, Drug, and Cosmetic Act*: September 14, 1994. FDA has verified the applicant's claim that the new drug application (NDA) for CASODEX® (NDA 20–498) was initially submitted on September 14, 1994.

3. *The date the application was approved*: October 14, 1995. FDA has verified the applicant's claim that NDA 20–498 was approved on October 14, 1995.

This determination of the regulatory review period establishes the maximum potential length of a patent extension. However, the U.S. Patent and Trademark Office applies several statutory limitations in its calculations of the actual period for patent extension. In its application for patent extension, this applicant seeks 1,721 days of patent term extension.

Anyone with knowledge that any of the dates as published is incorrect may, on or before June 18, 1996, submit to the Dockets Management Branch (address above) written comments and ask for a redetermination. Furthermore, any interested person may petition FDA, on or before October 16, 1996, for a determination regarding whether the applicant for extension acted with due diligence during the regulatory review period. To meet its burden, the petition must contain sufficient facts to merit an FDA investigation. (See H. Rept. 857, part 1, 98th Cong., 2d sess., pp. 41–42, 1984.) Petitions should be in the format specified in 21 CFR 10.30.

Comments and petitions should be submitted to the Dockets Management Branch (address above) in three copies (except that individuals may submit single copies) and identified with the docket number found in brackets in the heading of this document. Comments and petitions may be seen in the Dockets Management Branch between 9 a.m. and 4 p.m., Monday through Friday.

Dated: April 5, 1996.

Stuart L. Nightingale,

Associate Commissioner for Health Affairs.

[FR Doc. 96–9671 Filed 4–18–96; 8:45 am]

BILLING CODE 4160–01–F

Health Resources and Services Administration

Agency Information Collection Activities: Submission for OMB Review; Comment Request

Periodically, the Health Resources and Services Administration (HRSA) publishes abstracts of information collection requests under review by the Office of Management and Budget, in compliance with the Paperwork Reduction Act of 1995 (44 U.S.C. Chapter 35). To request a copy of the clearance requests submitted to OMB for review, call the HRSA Reports Clearance Office on (301)–443–1129.

The following request has been submitted to the Office of Management and Budget for review under the Paperwork Reduction Act of 1995:

Annual Space Utilization Report (OMB No. 0915–0056)—Extension No Change—The Annual Space Utilization Report form is used to monitor recipients of constructions funds under the Health Professions and Nurse Training Facilities Grant Programs (Titles VII and VIII of the Public Health Service Act). Recipients report annually whether grant-supported space is being utilized according to the terms of the original grant. Average annual burden estimates are as follows:

Type of respondent	No. of respondents	Annual responses per respondent	Avg. burden/response (hour)	Total burden hours
Nursing and Health Professions Schools	98	1	1	98

Written comments and recommendations concerning the proposed information collection should be sent within 30 days of this notice to: Virginia Huth, Human Resources and Housing Branch, Office of Management and Budget, New Executive Office Building, Room 10235, Washington, D.C. 20503.

Dated: April 15, 1996.

J. Henry Montes,

Associate Administrator for Policy Coordination.

[FR Doc. 96–9675 Filed 4–18–96; 8:45 am]

BILLING CODE 4160–15–P

National Institutes of Health

Government-Owned Inventions; Availability for Licensing

AGENCY: National Institutes of Health, HHS.

ACTION: Notice.

The inventions listed below are owned by agencies 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

commercialization of results of federally funded research and development. Foreign patent applications are filed on selected inventions to extend market coverage for U.S. 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 contacting the indicated licensing specialist 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.

Test Of HIV-Specific T Lymphocyte Function That Detects Exposure to HIV Antigens and Possibly Early HIV Infection

Shearer, G.M., Berzofsky, J.A., Clerici, M. (NCI)
Filed 7 Jun 95
Serial No. 08/488,435 (CIP of 08/229,108)
Licensing Contact: George Keller, 301/496–7735 ext 246

This new diagnostic test is designed for early detection of exposure to HIV or HIV antigens. The test measures activation of peripheral blood mononuclear cells following incubation of those cells with one or more synthetic epitopes of HIV. The test can detect HIV exposure prior to seroconversion and is superior to standard HIV antibody tests and PCR amplification of viral DNA. The new test may be especially useful in screening the blood supply, and may also prove useful as a diagnostic capable of detecting exposure of individuals to HIV sooner after that exposure than current detection methods. (portfolio: Infectious Diseases—Diagnostics, viral, AIDS)

Oligomeric HIV–1 Envelope Glycoproteins

Earl, P.L., Broder, C.C., Doms, R.W., Moss,B. (NIAID)
Filed 10 Dec 93
Serial No. 08/165,314
Licensing Contact: Cindy K. Fuchs, 301/496–7735 ext 232

This invention embodies a method for generating antibodies to HIV–1 envelope glycoproteins, which could hold powerful implications toward both the diagnosis and the treatment of AIDS. Specifically, the method involves the expression of a soluble protein, gp140, and the generation of antibodies to this protein. gp140 is a recombinant version of gp160, a protein which normally is cleaved *in vivo* to generate two glycoprotein subunits which are expressed on the surface of the HIV–1 envelope. Unlike previously isolated versions of gp160, gp140 is purified in a manner which preserves the quaternary structural elements of the protein. Due to the conserved nature of these structural elements, antibodies generated against gp140 may be more broadly reactive against various forms of AIDS than other antibodies generated to date. (portfolio: Infectious Diseases—Vaccines, viral, AIDS)

Pre-Binding of Retroviral Vector Particles With Complement Components To Enable the Performance of Human Gene Therapy In Vivo

Mason, J.M., Safer, B., Anderson, W.F. (NHLBI)
Filed 28 Jul 93
Serial No. 08/098,944
Licensing Contact: Carol Lavrich, 301/496–7735 ext 287

This invention relates to an improvement in the use of retroviral vectors in gene therapy. The invention specifically relates to the use of C1 complement subcomponents and antibody fragments to protect retroviral vector particles produced in non-primate packaging lines from attack by primate complement systems *in vivo.* Pharmaceutical compositions containing retroviral vector particles prebound with C1 complement subcomponents, as well as gene therapy methods, are part of this invention. (portfolio: Gene-Based Therapies—Therapeutics, viral vectors)

Cosalane and Related Compounds Having Activity Against AIDS and AIDS-Related Infections

Cushman, M., Golebiewski, M., Haugwitz, R. (NCI)
Serial No. 08/029,415
Patent Issued 8 Aug 95
U.S. Patent No. 5,439,899
Licensing Contact: Cindy K. Fuchs, 301/496–7735 ext 232

A new series of potential anti-viral agents based upon the chemical cosalane and its related derivatives may be the basis of a new treatment for AIDS. Cosalane was developed by combining a fragment of aurintricarboxylic acid (ATA), a compound originally used in the Swiss dye industry, with cholestane, a steriod related to cholesterol. The cholestane fragment is used to direct the drug to the T cell membrane with the ATA fragment subsequently blocking binding of HIV gp120 to the CD4 receptor site on the cell surface. Laboratory tests of cosalane suggest it is effective in inhibiting both HIV–1 and HIV–2 infection and is very effective at concentrations too weak to harm the T cells. Other studies also suggest that cosalane may be able to suppress HIV virus reproduction in patients without the toxic side effects associated with current AIDS treatments. (portfolio: Infectious Diseases—Therapeutics, antivirals, AIDS)

Glycosides of Cyclodextrin, and Processes for Their Preparation

Pitha, J., Wimmer, T. (NIA)
Serial No. 08/016,449
U.S. Patent 5,426,184 issued 20 Jun 95
Licensing Contact: Carol Lavrich, 301/496–7735 ext 287

A novel method for preparing cyclodextrin glycosides is particularly useful for solubilizing substances that are sparingly soluble in water. Previous methods for preparing cyclodextrin derivatives have been hampered by the high reaction temperature used, which leads to unwanted by-products and makes working up and purification of the reaction products quite difficult. This new process employs an anhydrous acid medium with subsequent treatment of the reaction products with a mild base. The reaction takes place at relatively low temperatures (between 40°C and 80°C), providing a high yield of desired products. It also is much easier to prepare the reaction compared to previous processes, and purification of products is accomplished through standard methods. (portfolio: Internal Medicine—Miscellaneous)

Novel Serine Protease Inhibitors and Genes Encoding Same

Kotwal, G.J., Moss, B. (NIAID)
Serial No. 07/906,983
U.S. Patent 5,187,268 issued 16 Feb 93 (DIV of 07/285,510, U.S. Patent 5,151,509 issued 29 Sep 92; CIP of 07/239,208, U.S. Patent 5,257,110 issued 20 Oct 92)
Licensing Contact: Carol Lavrich, 301/496–7735 ext 287

Novel proteins having a substantial degree of homology to the serine protease inhibitor superfamily could be valuable for treating conditions such as emphysema, cirrhosis, and liver cancer. Serine protease activity has been associated with the accelerated failure of certain diseased organs and tissues. There have previously been no known synthetic or microbial proteins capable of specifically inhibiting serine proteases. (portfolio: Internal Medicine—Therapeutics, cardiology, antithrombotic)

Adenovirus Mediated Transfer of Genes to the Gastrointestinal Tract

Crystal, R.G. (NHLBI)
Filed 16 Oct 91
Serial No. 07/776,057
Licensing Contact: Larry Tiffany, 301/496–7056 ext 206

A novel method of producing a chosen protein in the gastrointestinal tract of a human has been invented by and is available for licensing from the Public Health Service. The technology allows for the systemic long-term administration of a therapeutic protein to a patient without the need for periodic injections or suppositories. In comparison to alternative delivery systems, such as retroviral vectors, this methodology allows the gene of interest to be directly transferred to targeted cells even if these cells are not actively dividing. The technology is the subject of a pending patent application. (portfolio: Gene-Based Therapies—Therapeutics, vectors, viral; Gene-Based Therapies—Therapeutics, therapeutic genes)

Cytosine Deaminase Negative Selection System for Gene Transfer Techniques and Therapies

Mullen, C.A., Blaese, R.M. (NCI)
Serial No. 07/725,076
U.S. Patent No. 5,358,866 issued 25 Nov 94
Licensing Contact: Larry Tiffany, 301/496–7056 ext 206

A DNA construct has been developed which permits efficient expression of a modified bacterial cytosine deaminase (CD) gene in mammalian cells. The presence and expression of the gene has no apparent deleterious effects upon the transfected cells unless they are exposed to 5-fluorocytosine (5FC). Because CD has the ability to convert 5FC to a toxic antimetabolite, 5-fluorouracil, cells which have been transformed with the DNA construct can be selectively killed by treating them with 5FC. By modifying the specifity or method of delivering the DNA construct to cells, or by modifying the vector carrying the DNA construct to correspond to a tissue-specific promoter, specific cell or tissue types may be selectively eliminated from a subject.

Potential uses of the CD negative selective system (CDNSS) include gene therapy, immunotherapy, and bone marrow transplant applications.

The CDNSS could be used to regulate the biological activity of a transformed cell type as a part of a gene therapy application. For example, the CDNSS might be incorporated within a transformed cell type which also expresses a gene of therapeutic interest. The transformed cell type could then be administered to a subject. The biological activity expressed by the transformed cell type might be regulated by administering a measured dose of 5FC to the subject such that a portion of the transformed cell type is eliminated. Alternately, the transformed cell type might be eliminated from the subject by administering to the subject a dose of 5FC that would be toxic to the transformed cell type.

The CDNSS could also be used to impart immunity against a virus or a specific cell type, including a bacterium, a protozoan, or a type of tumor cell. For example, a cell type or virus harboring the CDNSS might be introduced into a subject to elicit an immune response against that cell type or virus. The introduced cell type or cells harboring the virus might be selectively killed after an immune response was elicited by administering 5FC to the subject.

The CDNSS could be used in conjunction with bone marrow transplant procedures to eliminate a specific cell type or virus from the bone marrow. For example, bone marrow cells from a subject might be transduced with a vector which harbors the CDNSS and which is specific for a certain cell type or for cells harboring a specific virus. The transformed bone marrow cells might then be treated with 5FC to selectively eliminate (or purge) the transduced cells, after which the treated bone marrow could be introduced into a subject.

Other uses for the CDNSS are not fully described here, including its use as a double negative selection vector and its use as a diagnostic indicator of homologous recombination. Further information regarding these and other applications is available.

A corresponding group of divisional patent applications claiming different aspects of this technology (e.g. a vaccine for mammals against tumors) have also been filed and are available for licensing. (portfolio: Gene-Based Therapies—Therapeutics, vectors, control sequences/genes; Gene-Based Therapies—Therapeutics, vectors, viral)

Dominant Negative Transcription Regulatory Proteins Created by Acidic Amphipathic Alpha-Helical Extension of the Leucine Zipper

Vinson, C.R. (NCI)
Filed 31 Jul 95
Serial No. 60/001,654
Licensing Contact: Allan Kiang, 301/496–7735 ext 270

Members of the transcription factor family of molecules termed basic-region leucine zipper (bZIP) proteins are characterized by the fact that they contain two regions—a hepted repeat of leucine residues (the leucine zipper) and a region rich in basic amino acids. Dimerization with other protein molecules occurs by interactions with the leucine zipper domains allowing interaction of DNA regulatory sequences with the basic domain, thereby stabilizing the dimer. This invention embodies the creation of dominant negative (DN) transcription factors modified to increase the stability of the dimerization reaction between the leucine zipper regions of the bZIP proteins. This results in a DN factor that has the ability to inhibit DNA binding and then transactivation, thereby preventing the production of other proteins or the expression of genes that are detrimental. A transgenic animal model has been produced expressing a DN factor that interacts and inhibits a cellular factor indicating the utility of this approach. (portfolio: Gene-Based Therapies—Therapeutics, other)

Method of Identifying Inhibitors of the Jak-STAT Signal Transduction Pathway

Leonard, W.J. (NHLBI)
DHHS Reference No. E–176–95/0
Licensing Contact: Allan Kiang, 301/496–7735 ext 270

The invention provides identification methods for agents which inhibit the Jak–STAT signaling transduction pathway. Drugs identified by these methods are candidates for the treatment of proliferative disorders dependent on the Jak–STAT pathway, including those caused by HTLV–1. In addition, such agents may be potent immunosuppressive drugs with potential applications not only for organ transplantation but also for treatment of autoimmune diseases. (portfolio: Cancer—Therapeutics, miscellaneous; Internal Medicine—Miscellaneous)

Dated: April 11, 1996.

Barbara M. McGarey, J.D.,

Deputy Director, Office of Technology Transfer.

[FR Doc. 96–9614 Filed 4–18–96; 8:45 am]

BILLING CODE 4140–01–M

Government-Owned Inventions; Availability for Licensing

AGENCY: National Institutes of Health, HHS.

ACTION: Notice.

The inventions listed below are owned by agencies 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