3. The ability to collaborate with NCI on further research and development of this technology. This ability will be demonstrated through expertise and expertise in this or related areas of technology indicating the ability to contribute intellectually to ongoing research and development.

4. The demonstration of adequate resources to perform the research and development of this technology (e.g., facilities, personnel and expertise) and to accomplish objectives according to an appropriate timetable to be outlined in the CRADA Collaborator's proposal.

5. The willingness to commit best effort and demonstrated resources to the research and development of this technology, as outlined in the CRADA Collaborator's proposal.

6. The demonstration of expertise in the commercial development and production of products related to this area of technology.

7. The Level of financial support the CRADA Collaborator will provide for CRADA-related Government activities.

8. The willingness to cooperate with the National Cancer Institute in the timely publication of research results.

9. The agreement to be bound by the appropriate DHHS regulations relating to human subjects, and all PHS policies relating to the use and care of laboratory animals.

10. The willingness to accept the legal provisions and language of the CRADA with only minor modifications, if any. These provisions govern the distribution of future patent rights to CRADA inventions. Generally, the rights of ownership are retained by the organization that is the employer of the inventor, with (1) the grant of a license for research and other Government purposes to the Government when the CRADA Collaborator's employee is the sole inventor, or (2) the grant of an option to elect an exclusive or nonexclusive license to the CRADA Collaborator when the Government employee is the sole inventor.

Dated: April 30, 1999.

Kathleen Sybert,

Chief, Technology Development and Commercialization Branch, National Cancer Institute, National Institutes of Health.

[FR Doc. 99–11658 Filed 5–7–99; 8:45 am]

BILLING CODE 4140–01–M

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

Government-Owned Inventions; Availability for Licensing

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

ACTION: Notice.

SUMMARY: The invention listed below is owned by an agency of the U.S. Government and is 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.

ADDRESSES: Licensing information and a copy of the U.S. patent application referenced below may be obtained by contacting J.R. Dixon, Ph.D., at the Office of Technology Transfer, National Institutes of Health, 6011 Executive Boulevard, Suite 325, Rockville, Maryland 20852–3804 (telephone 301/496–7056 ext 206; fax 301/402–0220; E-Mail: jd212g@NIH.GOV). A signed Confidential Disclosure Agreement is required to receive a copy of any patent application.

SUPPLEMENTARY INFORMATION: .

Title: "Monoclonal Antibodies Specific for Human Thymidylate Synthase"—Prognosticator of Breast and Colorectal Cancer Survival

Inventors: Drs. Patrick G. Johnston (NCI), Carmen J. Allegra (NCI), Bruce A. Chabner (NCI) and Chi-Ming Liang (NCI).

DHHS Ref. No.: E–137–90/0 [= USPA SN: 07/690,841—Filed April 24, 1991].

The fluoropyrimidines are an important group of antineoplastic agents that are widely used in the treatment of gastrointestinal tumors, breast tumors, and epithelial tumors of the upper aerodigestive tract. Thymidylate synthase (''TS'') catalyzes the methylation of deoxyurdine monophasphate (''dUMP'') to deoxythymidine monphosphate (''dTMP''). The de novo synthesis of dTMP is an essential step in the synthesis of pyrimidine nucleotides and DNA biosynthesis. Thymidylate synthase (''TS'') enzyme inhibition is one of the main biochemical events underlying the antineoplastic action of the fluropyrimidines 5-fluorouracil (''5-FU'') and fluorodeoxyuridine (''FudR'').

The clinical importance of Thymidylate synthase (''TS'') has been noted by several investigators who have demonstrated *in vivo* as well as *in vitro* that TS enzyme levels in neoplastic cells rise rapidly when cells are exposed to 5-fluorouracil. Thus, the ability of a tumor to acutely over express the TS enzyme may play a key role in the development of tumor resistance and may represent an important protective mechanism in response to this drug.

The quantitation and detection of TS in human tissues has traditionally been performed by enzymatic biochemical assays that either measure catalytic activity or measure the amount of radiolabeled FdUMP binding to TS following extraction of the enzyme from cells and tissue. These assays have several limitations when applied to the measurement of TS activity in human tissue samples. While the assays have the required sensitivity for quantitating enzyme *in vitro* malignant cells in culture, they lack adequate sensitivity to measure the lower levels of enzyme activity in human tumors. Recently, monoclonal antibodies have been developed to human thymidylate synthase that have the required sensitivity and specificity to detect and quantitate thymidylate synthase enzyme in formalin-fixed tissue sections. These monoclonal antibodies to TS provide a method for determining the prognosis of a patient afflicted with breast cancer or with primary colorectal cancer by measuring the level of TS expression in biopsy tissue samples by using these antibodies specific to thymidylate synthase.

These monoclonal antibodies further provide a method for predicting the benefit of chemotherapy for a patient afflicted with breast cancer. The aforementioned methodology is derived from the discovery that high thymidylate synthase expression is associated with a poor prognosis in node-positive, but not in node-negative breast cancer patients. Further, with some 2,500 patients, thymidylate synthase expression was not found to be correlated with other prognostic factors including tumor size, ER status, PR Status, tumor grade, vessel invasion, and histology.

The expression of TS is also an important independent prognosticator of disease-free survival and overall survival in patients with colorectal cancer. In a study of the prognostic importance of the level of thymidylate synthase (''TS'') expression in patients with primary colorectal cancer, the level of TS expression in the primary rectal cancers of 294 of 801 patients was immunohistochemically assessed with the TS–106 monoclonal antibodies. Forty-nine percent of patients whose tumors had low TS levels were disease free at 5 years compared with 27% of patients with high levels of TS. Moreover, 60% of patients with low TS

levels were alive after 5 years compared with 40% of patients with high TS levels. The level of TS expression remained prognostic for both disease-free survival and survival independent of the stage of disease and other pathologic characteristics evaluated.

The present invention relates to monoclonal antibodies that are specific for the protein thymidylate synthase, and TS–106 hybridoma producing these monoclonal antibodies. The invention further relates to methods of detection and diagnostic kits to test for the presence of thymidylate synthase.

The above mentioned invention is available for licensing, including any foreign intellectual property rights, on an exclusive or non-exclusive basis.

Dated: April 29, 1999.

Jack Spiegel,

Director, Division of Technology Development and Transfer, Office of Technology Transfer.

[FR Doc. 99–11659 Filed 5–7–99; 8:45 am]

BILLING CODE 4140–01–M

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

Center for Scientific Review; Notice of Closed Meetings

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 meetings.

The meetings will be closed to the public in accordance with the provisions set forth in sections 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: Center for Scientific Review Special Emphasis Panel.

Date: May 11, 1999.

Time: 4:00 p.m. to 6:00 p.m.

Agenda: To review and evaluate grant applications.

Place: NIH, Rockledge 2, Bethesda, MD 20892, (Telephone Conference Call).

Contact Person: Philip Perkins, Scientific Review Administrator, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 4148, MSC 7804, Bethesda, MD 20892, (301) 435–1718.

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.

Name of Committee: Center for Scientific Review Special Emphasis Panel.

Date: May 14, 1999.

Time: 11:00 a.m. to 1:00 p.m.

Agenda: To review and evaluate grant applications.

Place: NIH, Rockledge 2, Bethesda, MD 20892, (Telephone Conference Call).

Contact Person: J. Terrell Hoffeld, Scientific Review Administrator, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 4116, MSC 7816, Bethesda, MD 20892, (301) 435–1781.

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.

Name of Committee: Center for Scientific Review Special Emphasis Panel.

Date: May 14, 1999.

Time: 3:00 p.m. to 4:00 p.m.

Agenda: To review and evaluate grant applications.

Place: NIH, Rockledge 2, Bethesda, MD 20892, (Telephone Conference Call).

Contact Person: J. Terrell Hoffeld, Scientific Review Administrator, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 4116, MSC 7816, Bethesda, MD 20892, (301) 435–1781.

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.

Name of Committee: Center for Scientific Review Special Emphasis Panel.

Date: May 14, 1999.

Time: 12:00 p.m. to 2:00 p.m.

Agenda: To review and evaluate grant applications.

Place: NIH, Rockledge 2, Bethesda, MD 20892, (Telephone Conference Call).

Contact Person: J. Terrell Hoffeld, Scientific Review Administrator, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 4116, MSC 7816, Bethesda, MD 20892, (301) 435–1781.

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. 93.306, Comparative Medicine, 93.306; 93.333, Clinical Research, 93.333, 93.337, 93.393–93.396, 93.837–93,844, 93.846–93.878, 93.892, 93.893, National Institutes of Health, HHS)

Dated May 4, 1999.

LaVerne Y. Stringfield,

Committee Management Officer, NIH.

[FR Doc. 99–11650 Filed 5–7–99; 8:45 am]

BILLING CODE 4140–01–M

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

Clinical Center; Notice of 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 a meeting of the Board of Governors of the Warren Grant Magnuson Clinical Center.

The meeting will be open to the public as indicated below, with attendance limited to space available. Individuals who plan to attend and need special assistance, such as sign language interpretation or other reasonable accommodations, should notify the Contact Person listed below in advance of the meeting.

The meeting will be closed to the public in accordance with the provisions set forth in section 552b(b)(6), Title 5 U.S.C., as amended for discussion of personnel qualifications and performance, the disclosure of which, would constitute a clearly unwarranted invasion of personal privacy.

Name of Committee: Board of Governors of the Warren Grant Magnuson Clincal Center.

Date: June 4, 1999.

Open: 9:00 a.m. to 12:00 p.m.

Agenda: Discussion of the Clinical Center budget, organizational planning, and operations.

Place: National Institute of Health, Clinical Center Medical Board Room, 2C116, 9000 Rockville Pike, Bethesda, MD 20892.

Closed: 12:00 p.m. to 1:00 p.m.

Agenda: To review and evaluate the self assessment survey of the Board.

Place: National Institutes of Health, Clinical Center Medical Board Room, 2C116, 9000 Rockville Pike, Bethesda, MD 20892.

Contact Person: Maggi Stakem, Office of the Director, National Institutes of Health, Warren Grant Magnuson Clinical Center, Building 10, Room 2C146, 9000 Rockville Pike, Bethesda, MD 20892, 301/496–4114.

Dated: May 4, 1999.

LaVerne Y. Stringfield,

Committee Management Officer, NIH.

[FR Doc. 99–11655 Filed 5–7–99; 8:45 am]

BILLING CODE 4140–01–M

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

National Cancer Institute; Notice of Meeting

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