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P.O. Box 2370 Reston, Virginia 22090 Telephone 703-620-4646

## Rosenberg's Latest Results: 22% Response Seen With LAK/IL-2, 13% With High Dose IL-2 Alone

Immunotherapy developed at NCI by Steven Rosenberg and his colleagues continues to achieve encouraging responses, particularly in patients with kidney cancer and melanoma. However, severe toxicities, although reversible most of the time, continue to be a problem, and four treatment related

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*In Brief*

## FCRF Contract Hopefuls Make Oral Presentations; Janet Rowley To Deliver Karnofsky Lecture

**ORGANIZATIONS** competing for one (or more) of the Frederick Cancer Research Facility contracts should know this week if they are still in the running. All of those considered by NCI's Source Evaluation Group to be in the "competitive range" were to have been called in for oral interviews by April 7. The recompetition is proceeding on schedule, with "best and final offers" due from proposers by April 24. The Source Evaluation Group, chaired by NCI Executive Officer Philip Amoruso, will make its recommendations May 4. The final selections are due to be made by May 21. Negotiations will probably continue through the first three weeks of June. NCI hopes to wrap up the NIH paperwork by July 20 and announce the awards by July 31. Neither NCI Director Vincent DeVita nor his deputy, Peter Fischinger, are members of the Source Evaluation Group. . . . **JANET ROWLEY**, Univ. of Chicago and former member of the National Cancer Advisory Board, will deliver the David A. Karnofsky Memorial Lecture at the annual meeting of the American Society of Clinical Oncology in May. . . . **CHARLES LEMAISTRE**, president of the Univ. of Texas System Cancer Center, will be honorary chairman of the 18th annual Rotary/Lombardi Award Dinner Dec. 3 in Houston. . . . **JAMES WALLACE**, chairman of the Green Mountain Oncology Group in Vermont and principal investigator for the Green Mountain Community Clinical Oncology Program, is looking for a hemotologist/oncologist to work as his associate chairman and PI. Those interested should contact Paul Judd, Personnel Director, Rutland Regional Medical Center, Rutland VT 05701. . . . **HOUSE HEALTH** Subcommittee unanimously approved an amendment to HR 1861, reauthorizing preventive health services for three more years, which would allow states to provide women with breast and uterine cancer screening. The amendment was offered by Congresswoman Cardiss Collins (D-IL).

## Nine Complete, 20 Partial Responses Seen In Latest Rosenberg Report

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deaths have now been seen in the NCI studies.

Rosenberg's latest report, published in the April 9 issue of the "New England Journal of Medicine," includes results on 108 patients who have received the combination of lymphokine activated killer cells and interleukin-2. These are the patients treated only at NCI, and do not include those enrolled in the NCI supported studies at six other institutions. The report also includes 49 patients who received high dose IL-2 alone.

All patients in this report were treated between December, 1984, and August, 1986, and their followup evaluated Oct. 1, 1986 (Rosenberg has indicated that his report to be presented at the May meeting of the American Society of Clinical Oncology will involve evaluation of about 200 patients).

The "NEJM" report states that:

<>Twenty three of 106 evaluable pataients (22 percent) taking LAK cells plus IL-2 and six of 46 evaluable patients (13 percent) taking high doses of IL-2 alone had more than 50 percent reduction in tumor size, including both complete and partial responses.

<>Nine patients had complete responses after a single course of treatment. Eight of these received LAK/IL-2 and remained in remission from a range of more than two months to more than 22 months, with a median duration of response of 10 months. These complete responses included four patients with kidney cancer, two with melanoma, one with colorectal cancer and one with lymphoma. One patient with kidney cancer and the patient with lymphoma had recurrences; both have responded to retreatment with LAK/IL-2.

<>One patient with kidney cancer who received high dose IL-2 alone had a complete response and has been in complete remission more than four months.

<>Twenty patients in these studies had partial responses. Fifteen received LAK/IL-2. These included eight patients with kidney cancer, four with melanoma, two with colorectal cancer, and one with non-Hodgkin's lymphoma. These patients have remained in remission for a median duration of six months.

The partial responses of five melanoma patients who received high dose IL-2 alone have lasted from two to more than 11 months.

<>Responses occurred most often among patients with kidney cancer or melanoma.

--Twelve of 33 patients with kidney cancer who received LAK/IL-2 therapy responded with four complete and eight partial responses.

--One of 21 patients with kidney cancer who received high dose IL-2 alone had a complete response.

--Six of 26 patients with melanoma who received LAK/IL-2 responded with two complete and four partial responses.

--Five of 16 melanoma patients who received high dose IL-2 alone had partial responses.

To determine if retreatment could prolong therapeutic benefit, Rosenberg and his colleagues recently began retreating every three months patients who had complete or partial responses (and no recurrences) after the first course of treatment.

Bruce Chabner, director of NCI's Div. of Cancer Treatment, commented that "any response at all in patients with the advanced cancers of the types treated in these studies is promising. Complete responses are unusual in such patients."

"These treatments are still in a developmental stage and considerable refinement is necessary before their role in cancer therapy can be established," Rosenberg pointed out in the article. "Like surgery, radiotherapy and chemotherapy, modalities which all required time and experience in the hands of therapists before they could contribute safely and significantly to the care of patients with cancer, this form of adoptive immunotherapy will need much further development and improvement before general clinical use is possible.

**"Until this occurs," Rosenberg continued, "this treatment should be considered an experimental approach to be applied carefully only in clinical research environments and only in patients for whom no effective therapy is available or in whom standard therapy has failed."**

The average treatment in the NCI studies lasted 16 days and most patients were discharged from the hospital within five days after the end of treatment.

Almost all of the toxicities in these studies were associated with IL-2, the report said. Infusion of LAK cells alone causes only minor side effects, as shown in earlier studies.

Because LAK cells are incubated in culture medium that is susceptible to viral and bacterial contamination, the LAK cell cultures also risk possible contamination.

Between May 5 and July 28, 1986, 15 patients received LAK cells grown in medium that apparently harbored hepatitis A virus. Five of these 15 patients developed clinical symptoms of hepatitis infection and they all completely recovered from the hepatitis within two weeks. These were minor infections and did not interfere with the patients' responses to treatment, Rosenberg said. Among the 15 exposed patients, there were five responders--two complete and three partial.

The six extramural trials were suspended last year because of hepatitis infection. They were resumed in January.

To avoid risk of contamination, as well as reduce costs, serum free media is being developed.

The toxicities associated with IL-2 treatment, although severe, were transient and were promptly corrected once treatment stopped, Rosenberg said. Toxicities included fever (preventable with the drugs acetaminophen and indomethacin); nausea, vomiting, diarrhea, liver abnormalities, low blood pressure, impaired kidney function in some patients that always returned to normal shortly after IL-2 was discontinued, breathing difficulties (resulting from fluid in the lungs), anemia (resolved by transfusions with red blood cells), and neuropsychiatric disorders (including sleeplessness and disorientation).

Four patients had heart attacks and minor heart rhythm disturbances occurred during 25 courses of treatment, but the condition was reversed once IL-2 treatment was discontuned.

Four patients died from treatment related problems, one receiving LAK/IL-2 and three receiving IL-2 alone. Two died of heart attacks and two of infections.

"The treatments have toxic side effects, but these patients are all in desperate situations and toxicities are seen with virtually all treatments used in patients with advanced cancer," Rosenberg said. He added that in these early studies, attempts are made to maximize the therapeutic benefit in advanced cancer patients as much as possible. Efforts to improve the potency and to lessen both toxicity and cost of treatment are continuing.

The rationale for the high dose IL-2 alone regimen is that since LAK cells are generated by incubating lymphocytes in the laboratory with IL-2, administration of IL-2 alone in sufficiently high doses might generate LAK cells within the body. Animal and preliminary human studies did suggest that IL-2 alone may have anticancer effects.

The awards Rosenberg is receiving in recognition of his efforts in developing these new therapies continues. In June, he will receive the Nils Alwall Award at the fifth annual meeting of the International Society of Blood Purification in Stockholm. He has received the 1985 Armand Hammer Prize, the 1985 Freidrich Sasse Award at the Univ. of Berlin, and the Meritorious Service Medical from the Public Health Service in 1986.

## Information Should Not Be Hostage To Fear Of How It's Perceived: Einhorn

Will the latest publication by Steven Rosenberg stir up again the critics who contended that the intense media interest in the previous LAK/IL-2 reports unnecessarily created false hope for cancer patients and that they played down the toxicities?

Chief among critics was Charles Moertel, Mayo Clinic, who wrote in an editorial in the "Journal of the American Medical Assn." that the Rosenberg regimen is too toxic, the trials should be discontinued, and that NCI was at fault for overhyping the issue (**The Cancer Letter**, March 13). NCI staff members and Armand Hammer, chairman of the President's Cancer Panel, responded by blaming the media for the overhype.

Some members of the Board of Scientific Counselors of the Div. of Cancer Treatment agreed with DCT Director Bruce Chabner that "media inflation of legitimate studies" poses the danger of "unfulfilled expectations." Other members, however, suggested that an overreaction to fears of media irresponsibility might be counterproductive.

Board member Robert Schimke suggested that NCI's Office of Cancer Communications should be encouraged to help restrain overly optimistic statements by NCI scientists and to play down its own reports on new developments.

(**Ed. note:** The NCI news release on the first Rosenberg report in 1985, and the one on which the above article was based, included the appropriate language on the experimental nature of the new regimen, the toxicities, the need for extensive further studies).

Chabner said that a "NEJM" news release to the press prior to the first publication had generated "a tremendous amount of interest"

and that OCC had arranged for interviews with Rosenberg, NCI Director Vincent DeVita and himself. "I think there is a certain degree of naivete or inexperience on our part in knowing what can happen during this process . . . I think we will be a little more cautious about who gets interviewed and by whom."

Chabner acknowledged that "there are a number of very responsible reporters that work for papers, the New York Times, the Wall Street Journal, the Washington Post, but they are not the only ones that pick up on the wire stories and change the headlines and delete things and exploit the information. There are science writers meetings. The American Cancer Society holds them and tries to do this to present both sides of the question. There are a lot of efforts to do this but you still have a lot of people writing science stories that don't understand what they are doing, or intentionally exploit these things."

(**Ed. note:** At the ACS Science Writers Seminar last month in San Diego, an informal poll by **The Cancer Letter** of scientists, journalists and ACS staff members found that almost all agreed that lay press coverage of the LAK/IL-2 studies was generally responsible and accurate. **The Cancer Letter** stands by its position that press interest was intensified by the obvious enthusiasm over Rosenberg's studies displayed on numerous occasions by Armand Hammer and, to a lesser extent, DeVita).

Board member Rodney Withers defended the writers. "I don't think we should pass the buck to the science writers in particular," he said. "I think they are a very responsible group. I think people sit around here and blame the hype regarding (LAK/IL-2) on the press, and that is not fair. Maybe the headline writers had a bit to do with it, but I think the science writers are very responsible."

Board Chairman Paul Calabresi agreed that headline writers sometimes distort otherwise accurate stories, but "it is very difficult to control what happens when it gets out into the press and I am not even sure that it is desirable. I think it is something that you have to live with in a free society."

Chabner agreed that "we need to be straightforward with the public when we make announcements like this."

Samuel Broder, director of NCI's Clinical Oncology Program (of which Rosenberg's Surgery Branch is a part), pointed out the dilemma facing scientists in discussing research developments with their advisors, such as the DCT board, which for the most part meets in open sessions, thus making those developments available to the press. "There was a time when I didn't want to discuss anything and I was so paranoid about it that I asked to go into closed session because of scientific information, but I don't think that is a good format, either."

Board member Lawrence Einhorn warned, "I just don't think information should be held hostage for fear of how the public should perceive it. We need to take the last 20 years and rate your own breakthroughs in cancer as you perceive them. Very few of them have been headlines. What has been headlines are things that haven't worked, and we are always going to have these types of headlines, legitimate or illegitimate.

"I think I am hearing something that I am a little uncomfortable with, which is maybe we shouldn't talk to the press, maybe we shouldn't publish information until we have five year followup on everything. I think the scientific community has to continue doing things with integrity the way they have always been doing it and not be worried about how it is going to be perceived by the press."

Chabner agreed that that was his position.

## Spartanburg CCOP Makes Funded List

Add one more to the list of CCOPs with priority scores well within the funding range, as presently estimated according to the budget allocated by NCI: the Community Clinical Oncology Program in Spartanburg, SC. John McCulloch is the principal investigator.

That brings to 43 the number of CCOPs with priority scores of 230 or better (see **The Cancer Letter**, April 3, for the other 42). If there are any others not yet turned up in **The Cancer Letter** survey, they are invited to contact the editor.

## WETA Relents, To Air Documentary

Public TV station WETA in Washington DC, which refused to run Harry Mantel's superb documentary on cancer program funding last year because it was considered "too political" has relented and will air it April 15 at 11 p.m. "Cancer: The Second and Final War" has been seen on more than half the 300 PBS stations in the U.S.

## AIDS Research Is Victor In "Franco-American War"

The long standing legal battle between French and U.S. investigators over who should hold the patent and receive royalties from AIDS antibody test kits has ended with an apparent victory for international AIDS research.

Under a joint agreement signed between the two governments last week, 80 percent of the royalties from AIDS antibody test kits received by each country will be contributed to support a new international AIDS research foundation.

The foundation, which will also raise private funds, will sponsor retroviral and AIDS related research, with 25 percent of funds received directed to fund AIDS education and research activities in less developed countries.

Royalties for U.S. licensees from worldwide sales of AIDS antibody tests are expected to be at least $5 million in 1987. Based on a very conservative estimate of $100 million in worldwide sales of the tests, that number is probably low, Robert Charrow, HHS deputy general counsel, told **The Cancer Letter.**

The foundation will be initially governed by a six member board of trustees, with the Pasteur Institute and HHS to appoint three members each.

The new foundation will be obligated to award in each calendar year, all funds that have been contributed to the foundation by Pasteur and HHS in the preceding calendar year. It will be allowed to retain a small percentage of contributed funds to defray administrative expenses.

Awards will require the written approval of at least four of the six trustees, and the trustees will designate a committee of distinguished scientists to assist in evaluating research grant proposals.

The foundation will be required to distribute award monies the year following the closing of the new patents agreed to by HHS and Pasteur, presumably in 1988. The agreement stipulates that 80 percent of royalties received on or after January 1 of this year, through May 27, 2002, will be contributed to the research foundation.

The agreement follows more than three years of dispute over who developed the first AIDS antibody test, and who should receive royalties from sales of the kit. The protracted battle, frequently referred to as "The Franco-American War" by observers, ended with a joint announcement of the agreement by President Reagan and French Prime Minister Jacques Chirac last week.

Under the agreement, the two parties will be joint owners of the Gallo et al patent and the Montagnier et al patents, and will maintain common ownership of the patents.

The agreement is contingent upon action by the U.S. Patent Office, which will need to issue amended patents that reflect joint ownership. After the Gallo and Montagnier patents are changed to reflect joint ownership, a patent interference proceeding initiated by the Pasteur Institute will be dissolved by the U.S. Patent Office.

Closing of the agreement by the Patent Office is expected to take between two to six months, Charrow said.

While the patents in question are in the name of Gallo et al, and Montagnier et al, Gallo has signed his patent rights over to HHS, as Montagnier has signed his over to the Pasteur Institute. Robert Gallo is chief of NCI's Laboratory of Tumor Cell Biology. Luc Montagnier is chief of the virology department at the Pasteur Institute in Paris.

Pasteur first filed an application with the U.S. Patent Office for an antibody test kit assay to detect the presence of antibodies to LAV on Sept. 15, 1983. It then abandoned the application a year later in favor of an application in the European patent office that contained the same disclosures, but had an effective filing date of Sept. 14, 1983. It later filed a divisional application Oct. 8, 1985, which is involved in the pending interference.

No patent has yet been issued on the European patent office application or on either U.S. patent application.

HHS filed its patent application on April 23, 1984 for an AIDS antibody test kit assay process that would enable the propagation of HTLV-3 in a permanent cell line, and would detect the presence of antibodies to HTLV-3. The U.S. patent was issued May 28, 1985.

After unsuccessful attempts to resolve the dispute between Pasteur and HHS, Pasteur instituted a suit against HHS on Dec. 12, 1985. It alleged that HHS had breached a contract it had allegedly entered into with Pasteur by filing a patent application and entering into license agreements on the antibody test kit.

Although the U.S. Claims Court dismissed

the case and entered judgement against Pasteur in July of 1986, the decision was reversed and the matter remanded to court by the federal circuit appeals court last month.

At the request of Pasteur, the U.S. Patent Office declared an interference between certain claims in the Pasteur application and the HHS patent on April 27, 1986. The interference does not include the portion of the Gallo patent that refers to the practice of the antibody detection method in the presence of a permanent cell line.

Pasteur had also filed a claim in April of 1986 that HHS employees had "tortiously misapprehended a specimen of LAV that had been transferred for research purposes" to NCI. The claim was denied by HHS, and no further action was instituted by Pasteur.

Pasteur has agreed to give HHS a set of dismissal documents to dismiss all proceedings or claims against HHS, and a document promising not to institute any proceeding of any nature against the U.S. involving the validity of the patent in any court "or other tribunal wheresoever situated."

HHS has agreed to give Pasteur a similar document promising not to institute any proceeding of any nature against Pasteur involving the validity of the patent.

According to the agreement, "the parties acknowledged that "protracted litigation and administrative proceedings will only serve 1) to erode the collegial atmosphere of trust that is essential to the free exchange of scientific information, so vital to effective scientific research, and 2) to distract the energies and resources of eminent scientists and their institutions from the task at hand, namely research into the dread disease AIDS."

**The agreement also establishes a binding official chronology of critical AIDS discoveries.**

Both parties "agree to be bound by such scientific history and further agree that they shall not make nor publish any statements which would or could be construed as contradicting or compromising the integrity of the" scientific history.

In addition, each party "and each individual accepting and agreeing to" the settlement agreement "disavows any statements, press releases, charges, allegations or other published or unpublished utterances that overtly or by inference indicated any improper, illegal, unethical or other such conduct or practice by any other party or individual or their agents or employees."

They also agree that the agreement "does not reflect any blame, fault, liability, or culpability on the part of any" party or individual and "fully releases" the other parties "from any claims or other liability that might arise from the circumstances that gave rise to the proceedings that are resolved or dismissed" by the agreement.

The "brief chronology" consists of seven pages of "some critical published facts on the discovery and demonstration of proof of the cause of AIDS as a retroviral disease." Accompanying references account for 14 pages. The history offers special thanks to Jonas Salk "for his help and guidance in completing this project."

**Official Scientific History**

In reading the "brief chronology" of AIDS discoveries that accompanies the settlement agreement, one of the most striking aspects of the document is the rapidity with which researchers throughout the world have unravelled many of the mysteries associated with retroviral diseases and AIDS.

The history starts with the discovery of reverse transcriptase by Baltimore and Mizutani in the early 1970s, and ends with a March 1985 description by Gallo and colleagues of heterosexual transmission of AIDS.

According to the part of the official chronology that deals with direct AIDS discoveries and findings, Gallo first proposed that AIDS was likely caused by a retrovirus, presumably a variant of HTLV-1 or 2, at the Cold Spring Harbor Workshop on AIDS.

For the sake of brevity, only those findings reported by either Gallo and colleagues at NCI (referred to as Gallo in this account) or Montagnier and colleagues at Pasteur (referred to as Pasteur in this account) are listed in this unofficial condensation of the official chronology.

The next reports of AIDS related findings occurred in May 1983.

**May 1983:**

Pasteur: 1) Isolation and identification of a nontransforming retrovirus (later called LAV), different from HTLV-1 and HTLV-2, in cultures of T lymphocytes derived from a patient with lymphadenopathy syndrome; 2) continuous passage of the virus by its transient growth in cultures of T lymphocytes of normal blood donors; 3) identification of a major protein associated with the virus, p25, not immunologically cross-reactive with the p24 of HTLV-1; and 4) detection by

immunoprecipitation of antibodies against this protein in two patients.

Gallo: Evidence for presence of the viral genome of HTLV-1 or an HTLV-1 variant in two of 33 AIDS patients.

**September 1983:**

Both groups report at the Cold Spring Harbor meeting on human T-cell leukemia-lymphoma viruses.

Pasteur: 1) Identification of LAV like viruses from five patients with lymphadenopathy and three AIDS patients; 2) selective selective affinity of LAV for T4 helper lymphocytes; 3) presence of antibodies (ELISA) against the main LAV antigens in patients with LAS (63%) and AIDS (20%); 4) LAV is morphologically similar to equine infectious anemia virus and different from HTLVs; and 5) antigenic cross-reactivity between core proteins of EIAV and LAV.

Gallo: Presence of HTLV-1 antibodies in 10% of AIDS patients and isolates of HTLV-1 or HTLV-2 or variants of it in less than 10% of such cases.

**March/April 1984:**

Pasteur: Confirmed cross reactivity of the core proteins of LAV with EIAV by using more sera of horses infected with EIAV; and identified a second viral protein, p18. Also confirmed previous isolation of a LAV-like virus from one hemophiliac and isolated another one from his asymptomatic brother.

**May 1984:**

Gallo: 1. Mass and continuous production in a clone of a permanent cell line (H9) of HTLV-3 from two AIDS patients and four additional isolates (SN, BK, CS, WT) also infectious for another clone (H4) derived from the same parental cell line.

2. Forty-eight virus isolations in 18 of 21 patients with pre AIDS, 3 of 4 clinically normal mothers of juveniles with AIDS; 26 of 72 juveniles and adults with AIDS, and 1 of 22 healthy male homosexuals, and 0 of 115 heterosexual subjects. The use of anti-p24 hyperimmune sera proved that the 48 isolates belong to the same kind of virus.

3. Introduction of the Western blot technique for clinical detection of antibodies in 88% of 48 AIDS patients, 79% of 14 homosexuals with pre AIDS, and less then 1% of hundreds of heterosexuals. A gp41 is identified as a major viral antigen, and later demonstrated to be the HTLV-3 viral transmembrane component of the envelope.

4. Partial characterization of the immunologically reactive proteins by the Western blot technique.

**June 1984:**

Gallo: 34 of 34 (100%) of AIDS patients are positive for HTLV-3 antibodies; 16 of 19 (84%) of LAS patients and 0 of 14 (0%) of controls.

Pasteur: Detection of antibodies against LAV proteins by ELISA in 74.5% of LAS patients, 37.5% of AIDS patients, 18% of healthy homosexuals, and 1% of blood donors.

**July 1984:**

Pasteur: Detection of anti-p25 (LAV) antibodies in 51 of 125 (41%) of AIDS patients, 81 of 113 (72%) of LAS patients, and 0 of 70 of healthy individuals; as well as the growth of LAV in continuous B cell lines, most of them transformed by Epstein-Barr virus.

Selective isolation of LAV from T4+ lymphocytes of a healthy carrier of the virus; the inhibition of T4 cell growth at the same time of in vitro virus production; and the simultaneous disappearance of the T4 antigen at the surface of the infected T4 lymphocytes.

**September 1984:**

Gallo: In a cohort of homosexual men at risk of AIDS, 53% were antibody positive for HTLV-3. In HTLV-3 antibody positive subjects, AIDS developed at a rate of 6.9% per year.

**October 1984:**

Pasteur: Presence of antibody to LAV in 35 of 37 Zairian patients with AIDS.

Gallo: Isolation of HTLV-3 from cells cultured from semen of two AIDS patients.

**November 1984:**

Gallo: Molecular cloning of the HTLV-3 virus. (Another U.S. group identified the viral external glycoprotein gp120, later confirmed by Montagnier and coworkers.)

**December 1984:**

Pasteur: Molecular cloning of LAV-1.

Gallo: Discovery of the genomic heterogeneity of HTLV-3; and publication of a series of T4 positive human neoplastic cell lines that are susceptible to and permissive for HTLV-3, including HUT78, Molt3 and CEM cell lines.

**January 1985:**

Nucleotide sequence of the AIDS virus genome established independently "at the Pasteur Institute, at the NCI/NIH, at Genentech, and at Chiron, revealing the similarity of the various isolates examined."

Gallo: Demonstrated transactivation of transcription in HTLV-3 infected cells; discovered presence of virus in the brain.

## New Publications

"To Cure Them All," a novel by Daniel Miller, director of the Preventive Medicine Institute of Strang Clinic and staff member of Memorial Sloan-Kettering Cancer Center. Miller was moved by the death of two close friends and colleagues to write this novel, his first, which is centered around the daily struggles of an oncologist in treating his patients and carrying on research. Stein & Day, Scarborough House, Briarcliff Manor, NY 10510, $17.95.

From Arbor House, 105 Madison Ave., New York 10016:

"Crusade: Official History of the American Cancer Society," by Walter Ross, an editor for "Readers Digest" and former editor of ACS publications. $18.95.

"Symptoms After 40," by Kenneth Anderson, medical and scientific writer. $19.95.

From Doubleday, 245 Park Ave., New York 10167:

"The American Cancer Society Cancer Book," by Arthur Holleb, ACS senior vice president for medical affairs who will retire this summer. Designed to be the "definitive resource" on cancer, covering "breakthroughs, failures, and enigmas of oncology while detailing the most promising areas of research. Twenty chapters are devoted to specific cancers and their treatments," the publisher said. $22.50

"Overcoming Breast Cancer," by Genell Subak-Sharpe. Up to date report on treatment of breast cancer. $15.95.

"Coping with Chemotherapy," by Nancy Bruning. $16.95.

"The Cancer Survivors, and How They Did It," by Judith Glassman. $19.95.

From Springer-Verlag, PO Box 19386, Newark, NJ 07195:

"Hepatocellular Carcinoma," by Nakashima et al, $216.50.

"Therapy of Malignant Brain Tumors," by Jellinger, $132.

"Endocrine Therapy of Breast Cancer," $23.10.

"Exocrine Pancreatic Cancer," by Baumel et al, $89.

"Chemical Carcinogens," by Castegnard et al, $15.

"Mechanisms of B-Cell Neoplasia, $70.

"Current Cancer Research," $13.50.

"Cancer of the Liver, Esophagus and Nasopharynx," $77.50.

From Raven Press, 1140 Ave. of the Americans, New York 10036:

"Radiation Oncology," by Theodore Phillips and William Wara, $64.50.

"Analysis of Multistep Scenarios in the Natural History of Human or Animal Cancer," by George Klein, $59.50.

"Monoclonals and DNA Probes in Diagnostic and Preventive Medicine," by Robert Gallo, Giuseppe Della Porta and Alberto Albertini, $38.

"Quality of Life of the Cancer Patient," by Neil Aaronson and Jorn Beckmann, $59.

Also:

"Nuclear Medicine Therapy, by John Harbert, Thieme Medical Publishers, $79.50.

"Carcinogenesis and Adducts in Animals and Humans," by Miriam Poirier and F.A. Beland, Karger, PO Box Postfach, CH-4009, Basil Switzerland, $66.25.

"Journal of Cancer Program Management," edited by Lee Mortenson, published by the Assn. of Community Cancer Centers, 11600 Nebel St., Suite 201, Rockville, MD 20852, $40 per year individuals, $60 per year institutions and libraries, no charged to ACCC delegate and general members.

Video:

Nutrition and cooking videotape specifically for cancer patients in treatment.Shows patients how to prepare calorie and protein dense foods, how to deal with side effects such as appetite loss, nausea and diarrhea, and the need for family support. National Health Video, 12021 Wilshire Blvd #550, Los Angeles 90025, $79.95 plus $4 shipping.

"Video Journal of Oncology," quarterly update for hematologists and oncologists. Among topics in the current issue are recommendations for treating breast cancer, selective treatment of hepatocellular cancer with radiolabeled polyclonal antibodies, and a new drug delivery system for intraperitoneal treatment of ovarian cancer, along with an update on fast neutron radiation therapy. Video Journal of Oncology, One Harmon Plaza, 7th Floor, Secaucus, NJ 07094.

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