January 1 to December 31, 1988

President's Cancer Panel

Report of the Chairman

U.S. Department of Health and Human Services

Public Health Service

National Institutes of Health

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NIH Publication
No. 89-2609
November 1989

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President's Cancer Panel

National Cancer Program National Cancer Institute

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November 1, 1989

The Honorable George Bush
The President
The White House
Washington, DC 20500

Dear Mr. President:

As mandated by the Health Omnibus Extension Act of 1988, I am pleased to submit, as Chairman of the President's Cancer Panel, my report on the National Cancer Program for 1988.

My colleagues on the Panel, Dr. William P. Longmire and Dr. John A. Montgomery, agree with me that the National Cancer Program as operated by the National Cancer Institute is extremely well managed and has produced tangible benefits for cancer victims throughout the country. We feel the continued progress in research and the advances in treatment obtained in the past year have come about as a result of a well-balanced program and the effective use of funding.

Some of the highlights of my report cover a successful new treatment that overcomes previous resistance to chemotherapeutic drugs; development of immunotoxins to seek and destroy target cells in cancer patients; a significant advance in adjuvant therapy for breast cancer patients utilizing hormone therapy or chemotherapy following surgery; the discovery of a new group of genes that suppress the development of cancer cells; and the development of promising approaches to the prevention of cancer.

But perhaps the most promising development involves the work of Dr. Steven A. Rosenberg, Chief of the Surgical Branch of the National Cancer Institute. Dr. Rosenberg has developed the technique of adoptive immunotherapy in which the body's own defense mechanism — the immune system — is utilized to kill cancer cells. White blood cells, called lymphocytes, taken from the patients are treated with the biological growth factor known as interleukin-2 (IL-2) and converted into lymphokine-activated killer cells (LAK cells). These LAK cells, when injected back into the patients, can kill cancer cells. Patients with advanced melanoma and renal cancer, who did not respond to any other known therapy, have been treated effectively with this technique, which is now available at some 39 cancer centers throughout the country.

Dr. Rosenberg and his colleagues have continued their research with adoptive immunotherapy and this year made an extraordinary advance by isolating and culturing tumor-infiltrating lymphocytes (TILs) from patients' own tumors. TIL cells are grown with IL-2 in laboratory cultures and then are reinjected into the patients. In laboratory tests this therapy appeared almost 100 times more effective in destroying cancer cells than the LAK/IL-2 protocol. In addition the TIL/IL-2 procedures incorporated the anticancer drug cyclophosphamide. The initial study, as reported in the December 22, 1988, issue of the *New England Journal of Medicine*, resulted in at least a 50-percent reduction of tumors in 60 percent of patients with malignant melanoma which had metastasized to other parts of the body. This remarkable response rate is the highest ever reported for treatment of advanced melanomas. The development of LAK cells, TILs, colony-stimulating factors, and other biological response modifiers has now added a fourth form of cancer therapy to the traditional three previously in existence; surgery, chemotherapy, and radiation. This new biological therapy will have a dramatic effect in reducing cancer fatalities in the future in my opinion.

Dr. Rosenberg and his colleagues have just recently taken an additional significant step in immunotherapy. They have inserted an altered gene into the TILs and transferred this gene into patients suffering from advanced cancers. It will take several months to complete all the tests and evaluations on the patients so treated, but the results to date have been very encouraging, and it is clear this is a major advancement that would be of great benefit to cancer victims in the future. Dr. Rosenberg has told me that work such as his could not have been undertaken so successfully at any institution other than the National Cancer Institute.

I would also like you to note that the two recipients of the 1989 Nobel Prize for Medicine, Dr. Michael Bishop and Dr. Harold Varmus, have been supported in their work for many years by grants from the National Cancer Institute. As you are aware, their pioneering work in the discovery of cancer-causing genes present in the body (known as oncogenes) is one of the most significant developments in cancer research in the last few decades, and offers great promise for discovering the basic causes of cancer. Both Dr. Bishop and Dr. Varmus received their early training at the National Cancer Institute, which is a tribute to the caliber of research and training provided at the NCI. In addition, Dr. Bishop and Dr. Varmus were two of the first recipients of the grants known as the Outstanding Investigator Grants, a mechanism developed by your Cancer Panel to stimulate research by investigators with a proven record of accomplishment in cancer research. I was personally very pleased by the selection of these two outstanding scientists as recipients of the Nobel Prize for Medicine since I was able to recognize the caliber of their work in 1982 when I gave them one of the very first Hammer Cancer Prize awards.

However, while we have made major achievements in cancer therapy, hundreds of thousands of people die each year from cancer. Furthermore, despite rapid progress in cancer research and more effective efforts at prevention, cancer — largely because of the aging of the American population — will soon become the number one killer in the United States. We cannot be complacent about this dreadful probability.

The Panel is very concerned that recent budget increases for cancer research and training have not been sufficient even to sustain existing activities. Only 25 percent of approved grants will be funded by the National Cancer Institute this year due to budget restraints. This means that 75 percent of very good research is not being pursued, research that could possibly lead to the final solution of the cancer problem.

I recognize, of course, that this is a time when government spending must be restrained, but we are in danger of losing the momentum that has been built up with so much effort over the past several years.

In an effort to prevent this from happening, I have established the STOP CANCER campaign, of which you are aware. I want to put all of our best scientific minds to work on finding a cure for cancer, not just a small percent of them. As you know, I hope to raise $500 million in private funds over the next 4 years for the National Cancer Institute. The campaign is going well, and we have to date raised $12.5 million with only one major fundraising event.

Mr. President, it is a great privilege to serve as Chairman of your Cancer Panel. I hope this report will prove useful to you and others in your Administration. I wish you great success in the awesome responsibility you have assumed and have every confidence in your ability to lead this great country toward a future of peace and prosperity for all.

With warmest regards,

Respectfully,

Armand Hammer

Chairman

Attachment

cc: Dr. William P. Longmire
Dr. John A. Montgomery

1988 CHAIRMAN'S REPORT TO THE PRESIDENT

In 1988 the President's Cancer Panel witnessed significant and remarkable progress in cancer research in this country. These advances were made in the laboratories and hospital rooms of the National Cancer Institute (NCI) in Bethesda, and also in hospitals and laboratories nationwide, in research programs supported by the NCI.

Maintaining the successful approach initiated in 1981, when I was first appointed Chairman of the President's Cancer Panel, my colleagues and I visited three important NCI-designated cancer centers in the Nation this year. Panel meetings were held at Columbia University's College of Physicians and Surgeons in New York City, at the Clinical Science Center of the University of Wisconsin in Madison, and at the College of Medicine of the University of Arizona in Tucson. The fourth Panel meeting was held in Bethesda, Maryland, at the National Institutes of Health, to obtain direct reports from the Executive Committee of the NCI.

Together with my comembers on the Panel, Dr. William P. Longmire, Jr., and Dr. John A. Montgomery, I observed and learned of the progress, accomplishments, and problems at the centers. These hearings focused on the most significant and innovative developments in cancer therapy. At each meeting, we learned about progress being made as a direct result of financial support obtained from the National Cancer Program. The reports concerned new developments in radiation treatments, the use of antiviral therapy for AIDS, the therapeutic uses of immunologic stimulative factors, hyperthermia, monoclonal immunotoxins, growth factor antagonists, and successful new approaches to the reversal of drug resistance in human tumors.

In addition to these hearings at NCI-supported cancer centers, the members of your Cancer Panel participate in all meetings of the National Cancer Advisory Board (NCAB), where we are continually apprised of all ongoing and planned programs at the NCI and the organizations and individuals it supports.

In response to your request in June 1988, as head of the Presidential Task Force on Regulatory Relief, the Panel established the National Committee to Review Current Procedures for Approval of New Drugs for Cancer and AIDS. This committee is organized to undertake a systematic study of drug regulation as it affects progress in developing and making available therapies for cancer and for AIDS. The committee consists of nine distinguished individuals selected following a nationwide search and is chaired by Dr. Louis Lasagna, dean of the Sackler School of Biomedical Sciences at Tufts University. It is expected that the committee will complete its task and submit its recommendations within 1 year.

Cancer Treatment

The emphasis that is placed on the support of basic or fundamental research by the National Cancer Institute has again proven itself to be the correct policy. Multiple examples of translation of new basic discoveries into applied effective treatments for patients with cancer were reported to the Panel at each of the hearings this year.

Following extensive laboratory and clinical study and development by Dr. Steven A. Rosenberg at the NCI, the technique of adoptive immunotherapy is now being successfully applied to many patients. This therapy was made possible through the cooperation of industry with government research, in providing an adequate supply of pure recombinant interleukin-2 (IL-2). In 1984, prior to this scientific partnership, only 16 patients could be treated with available material. With the new productivity resulting from recombinant DNA technology, it now is possible to effectively treat hundreds of patients.

Patients with advanced melanoma and renal cancer who were not responsive to any other therapy have been treated effectively with the newly available IL-2. White blood cells, called lymphocytes, taken from the patients, are treated with IL-2 in the laboratory and converted into lymphokine-activated killer cells (LAK cells), which can kill cancer cells in patients. Since IL-2/LAK was approved for special use by the FDA last year, 11 cancer centers have treated 122 patients with the therapy.

This year Dr. Rosenberg and his colleagues at the NCI have made an extraordinary advance by isolating and culturing tumor-infiltrating lymphocytes (TILs) from the patients' own tumors. TIL cells are grown with IL-2 in laboratory cultures, and then are reinjected into the patients' bloodstreams. This therapy appears to be almost 100 times more effective *in vitro* in destroying cancer cells than the earlier IL-2/LAK procedure.

This new immunotherapy protocol incorporates the anticancer drug cyclophosphamide, which is thought to enhance the response to the treatment. The initial clinical study, with a small group of patients, resulted in at least a 50-percent reduction of the tumors in 60 percent of the patients. This remarkable response rate is the highest ever reported for the treatment of advanced melanomas.

Following these excellent results, TIL/IL-2 immunotherapy is undergoing clinical trials for other advanced cancers in both children and adults.

Basic research has additionally led to the formulation of a successful new treatment that overcomes the

previous resistance to chemotherapeutic drugs. Quinidine, amiodarone, and verapamil, previously used only for heart disease, have now been found to be effective in reversing the drug resistance of certain cancers and enabling effective drug therapy. The use of of these drugs came about within 1 year of the elucidation of the fundamental blocking mechanism employed by cancer cells.

New basic studies in molecular engineering and recombinant technology have enabled the structuring of molecules capable of seeking and destroying target cells in patients. The new techniques permit monoclonal antibodies to be chemically joined with molecules of potent toxins and to kill specific disease cells in AIDS and cancer patients. Clinical trials with such immunotoxins are being vigorously pursued.

A major effort by the National Cancer Institute is the program for clinical drug development. Phase I clinical trials consist of dose tolerance studies in human patients, and phase II trials are designed to determine the responses of different cancers to the test compounds. In 1988, the NCI entered 24 new drugs and biologicals into phase I clinical trials and supported the evaluation of 97 new medicinals in phase II trials.

Promising compounds that are being studied include trimetrexate, deazaaminopterin, taxol, and a number of colony-stimulating factors, examined alone and in various combinations with other therapeutics.

The phase II trials included tests of fludarabine, which has been very effective for chronic lymphocytic leukemia; two new tumor cell radiation sensitizers, SR-2508 and RO-038799; batracylin, which has shown activity against solid tumors in the laboratory; carboplatin, which is active in humans and less toxic than cis-platin; as well as further studies of IL-2 and TIL cells combined with cyclophosphamide and interferon-alpha. There have been excellent initial responses thus far with these compounds in patients with malignant melanomas or renal cell cancers.

A significant advance in adjuvant therapy has been added to the treatment of breast cancer. A 5-year study involving three separate clinical trials by the National Surgical Adjuvant Breast and Bowel Project (NSABP) headed by Dr. Bernard Fisher, and the Eastern Cooperative Oncology Group (study chaired by Dr. Douglas Tormey), determined that adjuvant hormone therapy or chemotherapy, following surgery, will significantly prolong the disease-free survival rates for women with early breast cancer.

In response to this dramatic finding, the NCI mailed a clinical alert to 13,000 physicians and to professional organizations to enable them to immediately implement these findings as warranted. It is believed that this rapid information transfer will prolong the lives of 10,000 women of the 60,000 diagnosed cases this year alone. Additional technical information was disseminated through the Physicians Data Query (PDQ) system, a computerized, up-to-the-minute NCI information system available to all physicians.

The Panel reconfirmed that in 1988 cancer treatments used in the United States are more effective and less difficult for the patients than ever before. Drugs, biologicals, and irradiation, in combinations and with surgery, have improved the survival results for breast cancer, colon cancer, rectal cancer, prostate cancer, head and neck cancer, and bone and soft tissue sarcomas, as well as the leukemias, lymphomas, and other blood cancers. The advances in cancer treatments have resulted in life-prolonging procedures, accompanied by methods that obviate the need for colostomies, that preserve breasts, that avoid impotence, that preserve limbs, and thus have enhanced the quality of life significantly for cancer patients. During 1988, over 385,000 cancer patients benefitted from the new, less debilitating, successful treatments that have been developed since the National Cancer Act was passed in 1971.

However, the Panel is concerned that the NCI budget for clinical trials has not increased significantly over the past 5 years. Since many exciting new therapies are ready to be tested, the resources are not adequate for the necessary studies.

Molecular Genetics and Oncogenes

The discovery that certain genes, oncogenes, are consistently associated with the development of tumors revolutionized the approach to molecular genetic studies of cancer in the 1980's. Oncogenes are small pieces of genetic material originally isolated from viruses which infect animal cells and produce tumors. Further research revealed that viral oncogenes are identical to certain normal genes in healthy cells. These genes, through messenger RNA, direct the synthesis of proteins that cause neoplastic growth. This gene expression can be suppressed by complementary or "antisense" RNA, which binds to the message, preventing its function and leading to its enzymic destruction, which may result in cell differentiation or death. Antisense messages also have been found to inhibit the growth of the AIDS virus. This research is being vigorously pursued at present.

Research during the last few years has led to the discovery that proto-oncogenes are important in the normal functioning of the cell and are crucial factors in all cell proliferation and organ growth. The oncogenes code for proteins that stimulate cells to divide.

A new group of genes was discovered this year that suppresses the development of cancer cells. These suppressor genes have been identified as anti-oncogenes. Cancer can arise when suppressor genes are lost or inactivated. Certain cancers, such as familial colon cancer, hereditary retinoblastoma, and familial bladder carcinoma have now been recognized as caused by mutations of the suppressor genes in the afflicted patients.

There are currently over 40 known oncogenes. Intensive research is presently being conducted to develop molecular structures capable of thwarting the oncogene messages in proliferating cancer cells without impairing normal cells.

Prevention and Control of Cancer

Research on the prevention of cancer is closely interwoven with research on the causation of cancer. Just as the knowledge of genetic defects enables research scientists to design curative treatments, knowledge of the development of cancer will enable researchers to design additional preventive strategies. Cancer causation research and epidemiologic research have identified a wide variety of materials that cause cancers in humans. Cigarettes, chewing tobacco, occupational chemicals, asbestos, viruses, and certain dietary substances have been shown to induce cancers in animals and are associated with higher cancer incidence in humans.

The single most effective way to reduce cancer is to reduce tobacco use. This year the NCI initiated a new strong antismoking program that will reach 10 million people in 25 states. The decrease in lung cancer incidence for adult white males over the past 2 years indicates that educational programs have been effective in this population. A 40-percent reduction in the prevalence of adult male smokers in the United States over the past 20 years is believed to be the reason for the reduction in lung cancer for that population.

Other promising prevention approaches include modifications in the diet since dietary factors may contribute as much as 30 percent to the incidence of certain cancers in the United States. The NCI is studying a number of chemopreventive effects, including additions to food of such items as folic acid/vitamin B_{12}, retinol, 13-cis retinoic acid, beta-carotene, and vitamin E. Certain fruits and vegetables, especially those high in beta-carotene, are believed to have protective effects. Intensive dietary studies are being conducted in Linxian, China, and among special U.S. populations in New Jersey, Louisiana, and Texas.

The NCI, with the concurrence of its scientific advisors, has decided to form a laboratory of human nutrition to learn more about the relationship between the foods we eat and the development and prevention of cancer. The Panel is concerned that the constraints of personnel ceilings and construction funds are preventing the NCI from moving forward with this important initiative.

Information Dissemination

When new methods for cancer prevention become evident, the next crucial step is the dissemination of the research results to health professionals and to the general population. The NCI has built a network for information dissemination over the past decade, which now includes 60 cancer centers throughout the nation. Also included in this network is the International Cancer Research Data Bank, the PDQ computer system, the Community Outreach Program, and the Cancer Information Service (CIS). Both PDQ and CIS can be accessed by anyone in the United States without cost via the 1-800-4-CANCER telephone line. In 1988, the CIS staff responded to over 400,000 telephone inquiries. The Panel notes that the NCI requires additional funds to cover the costs of this valuable service to cancer patients, their families, and the public.

Advances in cancer treatment have enabled the 5-year relative survival rates for all forms of cancer in the U.S. white population to increase from 30 percent to the current level of 50 percent over the past 20 years. However, the 5-year relative survival rate for all cancers in the black population is currently 38 percent. The factors involved in this survival differential are complex, but it is crucial that this information can be disseminated to the black community.

To enhance the dissemination of cancer prevention information and to highlight issues of significance to the public, the NCI and members of the National Cancer Advisory Board developed the National Black Leadership Initiative on Cancer, chaired by Dr. Louis Sullivan. This past year, successful meetings were held in Atlanta, Los Angeles, Chicago, New York, Washington, D.C., and Houston to educate, stimulate, and organize leaders of the black community. The NCI will now support followup activities in cities with large black populations. To further explore the research priorities that could lead to improvement in black cancer survival rates, the NCI has funded 10 programs for $26 million to examine the scientific reasons for the differentials in the black population regarding tobacco use, alcohol, diet, occupation, availability of medical services, use of available health programs, and other cultural or behavioral barriers to improvement in their survival statistics.

Acquired Immunodeficiency Syndrome (AIDS)

The National Cancer Institute has been significantly involved in AIDS research for the past 7 years. The NCI's viral oncology research program included productive efforts in retrovirology and led to the codiscovery of the AIDS virus, HIV-1, by Dr. Robert Gallo. AIDS pathogenesis research continues and NCI scientists now have cloned the genes from the HIV virus and are currently developing systems to interfere

with HIV replication in infected cells.

Recent research has discovered the existence of other human immunodeficiency viruses. An AIDS patient may simultaneously be infected with HIV and another human B-lymphotropic virus (HBLV), which attacks and kills crucial cells of the patient's immune system. These viruses also infect retinal tissue and brain cells, which severely complicates treatment of the disease.

Dr. Samuel Broder first demonstrated the utility of azidothymidine (AZT) for the treatment of AIDS patients at the NCI in 1985. AZT even today remains the only drug licensed for the treatment of AIDS. Since 1985, considerable and increasing efforts have been applied in this area. The drug development program at the NCI currently has three major components to identify and develop effective treatments for AIDS: 1) Large-scale drug screening and development, 2) laboratory-based research in drug design and discovery, and 3) early clinical trials for new agents.

The Office of the Assistant Secretary for Health and the Public Health Service, recognizing the NCI's expertise and established programs for screening and developing anticancer drugs, requested the Institute to create and operate a program for the discovery and development of agents that would be effective against the AIDS virus.

The AIDS Preclinical Drug Screening Program has now been established and is the only one of its kind in the United States. Compounds are accepted for screening from industry, university laboratories, and other government laboratories. The Preclinical Drug Screening Program at the NCI has been mobilized this past year to perform 10,000 tests of new agents, and the staff is improving the techniques to achieve 30,000 assays per year. These tests will involve approximately 15,000 synthetic or naturally occurring compounds at various concentrations, to determine their ability to interfere with viral infection and multiplication in human cells.

During the past year, Dr. Broder and his staff developed a new treatment regimen, alternating AZT with dideoxycytidine (DDC) in patients with severe HIV infections. Alternate weekly treatments with these two drugs have provided sustained suppression of the AIDS viruses, while avoiding the development of major toxicities from either drug.

AIDS can be transmitted from an infected mother to her infant *in utero,* and the NCI is studying the progression of the disease during pregnancy. Pediatric AIDS is an increasing problem in the United States and elsewhere throughout the world. Dr. Philip Pizzo of the NCI's Pediatric Branch has shown that AZT provides a very significant beneficial effect on the neurologic problems which are a major feature of childhood AIDS.

Since AZT remains the most successful drug available for AIDS patients, it has been investigated as cotherapy with a number of other compounds. Promising results are being obtained in NCI-supported studies incorporating colony-stimulating factors, acyclovir, dideoxyadenosine, dideoxyinosine, D-penicillamine, amphotericin B, carbovir, cyclosporin A, castanospermine, foscarnet, and dextran sulfate. These current studies are being vigorously pursued in coordination with the National Institute of Allergy and Infectious Diseases, the coordination center for AIDS research at the National Institutes of Health.

In a special situation, the Panel notes that since President Nixon gave the Cancer Institute the former biological warfare facilities at Fort Detrick in Frederick, Maryland, the NCI has developed an exceptional facility for research on cancer and on AIDS. It houses the Biologic Response Modifier Program, the screening programs for AIDS and cancer drugs, a number of basic science laboratories, the NCI supercomputer, and the AIDS vaccine research program. The Panel is concerned that construction funds needed to maintain this facility, prevent its deterioration, and provide the protection needed to work with the AIDS virus have not been provided in recent years. The investment in this scientific center of excellence, the Frederick Cancer Research Facility, must be protected and maintained.

Conclusions

My colleagues and I on the President's Cancer Panel are more enthusiastic and optimistic in our support of the ongoing programs of the National Cancer Institute than ever before. The continued progress in research and the remarkable advances in treatment obtained in the past year have come about as a result of a well-balanced program and the effective use of funding.

Dr. Vincent T. DeVita, Jr., who had been the Director of the National Cancer Institute for the past 8 years, is to be praised and credited for his extraordinary leadership, which made possible the outstanding progress in cancer research we have witnessed. We feel confident that Dr. Samuel Broder, the newly appointed Director of the NCI, will establish initiatives and provide the leadership to continue and expand the new opportunities for progress of the National Cancer Program.

There are many reasons to take pride in the important achievements of the National Cancer Program. These range from new insights into the biological processes at the molecular level of the cell, to the establishment of a network of medical centers and community oncology groups which stretch across the Nation. However, I still feel a terrible sense of urgency. Despite many major achievements, hundreds of thousands of people die each year of cancer. Furthermore, despite rapid progress in cancer research, and reasonably effective efforts at its prevention, because of the aging of the American population, cancer will soon become the number one killer in the United States.

In 1971 only 35 percent of patients were cured of cancer. Today half of all cancer patients can be cured. Since 1971, when the National Cancer Act

was passed, numerous wise decisions have been made to invest in both basic research efforts and in specific programs to apply the results of that basic research. The Congress and the American people made a correct, farsighted investment in cancer research, which now saves 150,000 more lives each year than was possible a decade ago.

The Panel must register its concern that recent budget increases for cancer research and training have not been sufficient even to sustain existing activities. In addition, the number of full-time-equivalent positions for cancer research in the Institute has been reduced by 382 since 1984. This impairs the ability of the Institute to exploit new scientific opportunities in cancer as rapidly and as fully as it should, and impedes the progress of the National Cancer Program.

Scientists have vastly increased the knowledge we have about the development of cancer. In the past 2 years the appreciation of the functions of oncogenes and anti-oncogenes has moved us closer to the potential for specific interventions, and eventual total suppression of the diseases called cancer.

The investment in basic research in cancer biology also provided improvements in diagnosis and treatment. Sensitive new diagnostic procedures detect and identify tumors at early stages of development, which increasingly allows physicians to treat patients successfully on effective protocols. The development of biological response modifiers, the incorporation of lymphokines, colony-stimulating factors, and other immunologic factors, have now added a fourth modality to the traditional three used in cancer therapy. Physicians may use surgery, radiation, chemotherapy, and, now, immunotherapy to treat cancer. These innovations in treatment are providing a higher quality of life to individuals for whom there had been no alternatives and no hope just 5 years ago.

It is now crucial to maintain this momentum. Science and medicine can succeed in removing cancer from the list of fearful consequences of life. It requires continued foresight and dedication, as has been demonstrated by this Nation's leaders in the past. Together with my colleagues on the Panel, I urge the Nation to continue this battle to a successful victory.

Armand Hammer

Chairman

Concur: William P. Longmire, Jr.

William P. Longmire, Jr., M.D.

Concur: John A. Montgomery

John A. Montgomery, Ph.D.

President's Cancer Panel

National Cancer Program National Cancer Institute

Executive Secretary:
Dr. Elliott H. Stonehill
National Cancer Institute
Bethesda, MD 20892
Phone: 301-496-1148

November 1, 1989

The Honorable Dan Quayle
President of the Senate
S-212 Capitol Building
Washington, DC 20510

Dear Mr. President:

As Chairman of the President's Cancer Panel, I am pleased to enclose a copy of the report which I have prepared on the status of the National Cancer Program as operated by the National Cancer Institute. Section 415(3)(b) of the Health Omnibus Extension Act of 1988 requires that the report be made available to the Congress in addition to the President.

My colleagues on the Panel and I agree that the National Cancer Program is extremely well managed and has produced tangible benefits for cancer victims throughout the country. We feel the continued progress in research and the advances in treatment obtained in the past year have come about as a result of a well-balanced program and the effective use of funding.

However, while we have made major achievements in cancer therapy, hundreds of thousands of people die each year from cancer. Furthermore, despite rapid progress in cancer research and more effective efforts at prevention, cancer — largely because of the aging of the American population — will soon become the number one killer in the United States. We cannot be complacent about this dreadful probability.

The Panel is very concerned that recent budget increases for cancer research and training have not been sufficient to sustain existing activities. Only approximately 25 percent of approved grants will be funded by the National Cancer Institute this year due to budget restraints. This means that almost 75 percent of very good research is not being pursued, research that could possibly lead to the final solution to the cancer problem.

I recognize, of course, that this is a time when government spending must be restrained, but we are in danger of losing the momentum that has been built up with so much effort over the past several years.

In an effort to prevent this from happening, I have established the STOP CANCER campaign, concerning which I have written you previously. I want to put all of our best scientific minds to work on finding a cure for cancer, not just a small percent of them. As you know, I hope to raise $500 million in private funds over the next 4 years for the National Cancer Institute in the hope that matching funds will be provided by the Congress. The campaign is going well, and we have to date raised $12.5 million with only one major fundraising event. I plan to stay in touch with the Congress concerning this campaign.

I hope you will find the attached report of interest.

With best wishes,

Sincerely,

Armand Hammer

Chairman

Attachment

President's Cancer Panel

National Cancer Program National Cancer Institute

November 1, 1989

The Honorable George J. Mitchell
Majority Leader
United States Senate
S-221 Capitol Building
Washington, DC 20510

Dear Senator Mitchell:

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I hope you will find the attached report of interest in light of the important role you play in health-related matters in the Congress.

With best wishes,

Sincerely,

Armand Hammer

Chairman

Attachment

President's Cancer Panel

National Cancer Program National Cancer Institute

Executive Secretary:
Dr. Elliott H. Stonehill
National Cancer Institute
Bethesda, MD 20892
Phone: 301-496-1148

November 1, 1989

The Honorable Louis W. Sullivan
Secretary
Department of Health and Human Services
200 Independence Avenue, SW
Washington, DC 20201

Dear Mr. Secretary:

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The Panel is very concerned that recent budget increases for cancer research and training have not been sufficient to sustain existing activities. Only approximately 25 percent of approved grants will be funded by the National Cancer Institute this year due to budget restraints. This means that almost 75 percent of very good research is not being pursued, research that could possibly lead to the final solution to the cancer problem.

I recognize, of course, that this is a time when government spending must be restrained, but we are in danger of losing the momentum that has been built up with so much effort over the past several years.

In an effort to prevent this from happening, I have established the STOP CANCER campaign, concerning which I have written you previously. I want to put all of our best scientific minds to work on finding a cure for cancer, not just a small percent of them. As you know, I hope to raise $500 million in private funds over the next 4 years for the National Cancer Institute in the hope that matching funds will be provided by the Congress. The campaign is going well, and we have to date raised $12.5 million with only one major fundraising event. I plan to stay in touch with the Congress concerning this campaign.

I hope you will find the attached report of interest.

With best wishes,

Sincerely,

Armand Hammer

Chairman

Attachment

President's Cancer Panel

National Cancer Program National Cancer Institute

Executive Secretary:
Dr. Elliott H. Stonehill
National Cancer Institute
Bethesda, MD 20892
Phone: 301-496-1148

November 1, 1989

The Honorable Tom Foley
Speaker of the House of Representatives
Capitol Building H-204
Washington, DC 20515

Dear Mr. Speaker:

As Chairman of the President's Cancer Panel, I am pleased to enclose a copy of the report which I have prepared on the status of the National Cancer Program as operated by the National Cancer Institute. Section 415(3)(b) of the Health Omnibus Extension Act of 1988 requires that the report be made available to the Congress in addition to the President.

My colleagues on the Panel and I agree that the National Cancer Program is extremely well managed and has produced tangible benefits for cancer victims throughout the country. We feel the continued progress in research and the advances in treatment obtained in the past year have come about as a result of a well-balanced program and the effective use of funding.

However, while we have made major achievements in cancer therapy, hundreds of thousands of people die each year from cancer. Furthermore, despite rapid progress in cancer research and more effective efforts at prevention, cancer — largely because of the aging of the American population — will soon become the number one killer in the United States. We cannot be complacent about this dreadful probability.

The Panel is very concerned that recent budget increases for cancer research and training have not been sufficient to sustain existing activities. Only approximately 25 percent of approved grants will be funded by the National Cancer Institute this year due to budget restraints. This means that almost 75 percent of very good research is not being pursued, research that could possibly lead to the final solution to the cancer problem.

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NIH Publication No. 89-2609
November 1989