Statements from the President's Cancer Panel

President's Cancer Panel Translating Research to Reduce the Burden of Cancer January 24, 2005

The President's Cancer Panel held its fourth and final meeting on Translating Research to Reduce the Burden of Cancer at Memorial Sloan-Kettering Cancer Center in New York City. A call was issued to make financing for all aspects of translational research—discovery, development, and delivery—a top national priority in order to reduce death and suffering due to cancer. It was emphasized that if we could deliver everything we currently know to the American people, this would have an immediate impact on cancer survival.

To help narrow the gap between discovery and delivery, it was recommended that geographic areas of excess mortality be targeted. "There are hundreds of 'silent tsunamis' across the United States at any given time, where people are dying at high rates," remarked one speaker. Statistics show that cancer continues to take 1,500 lives each day. While funding for scientific discovery remains strong, additional financial support is needed to "commercialize" and move discoveries from the laboratories to physicians and patients. "Discoveries are rendered useless if they do not reach the people who need them," reflected Panel member Dr. Margaret Kripke.

Strategies for improving our current system of translational research were discussed at length. Participants touched on many issues similar to those discussed at prior meetings, but with different emphases. The need for "team science," review of unintended consequences of current regulations (e.g., the Health Insurance Portability and Accountability Act), examination of intellectual property and patent barriers, and better integration of communities into research and dissemination efforts are some of the major themes that surfaced throughout this series of meetings and will be addressed by the Panel in its final report to the President.

The importance of advancing health information technology was also highlighted. Improved collection of patient information (e.g., standardized electronic health records), increased sharing of relevant data among physicians and researchers, and better linkage of existing data systems such as the linkage of Medicare with Surveillance Epidemiology and End Results could greatly improve translational research efforts. Abundant data exist that could yield critical information on patterns of care and cancer care outcomes; these should be better linked to benefit science.

The Panel heard again about the need to systematically develop validated biomarkers to measure clinical efficacy of potential cancer therapies, as well as markers that can serve as diagnostic tools to identify patients who will most likely benefit from particular therapies. In addition to encouraging development of molecular biomarkers, it was

suggested that a human cancer genome project be vigorously pursued to identify "genetic modifiers" (i.e., genes responsible for individual cancer development) that could lead to new pathways and individualized therapeutic targets. Approaches to integrating validated markers into clinical practice must also be undertaken.

As the field of cancer biology becomes increasingly complex, so will cancer treatment. The Panel recognized the need to be cognizant of this complexity in making recommendations for the future. For example, as the "individualization" of cancer evolves and scientific advances enable cancer therapies to be stratified into smaller subsets and targeted groups of patients, it may become more difficult to bring costly new therapies to the resulting smaller "markets." It was suggested that cancer could become an "orphan disease" and that protection be explored through either the Orphan Drug Act or another small-market drug plan.

This group of presenters viewed training and education for young, talented physician/researchers as a critical component in translating research to the community. It was noted that the role of academic medical centers will become increasingly important as the complexity of research increases and disparate specialists are required to collaborate. The need for more human-based studies was another recurring theme, generating the suggestion that more research funds be devoted to study sections on human and clinical research.

The Panel will be reporting to the President and Congress later this year on key issues and recommendations for better translating research to reduce the burden of cancer.

The President's Cancer Panel, an advisory group established by Congress to monitor the Nation's efforts to reduce the burden of cancer, reports directly to the President on delays or blockages in that effort. For more information, visit the Panel's web site at http://deainfo.nci.nih.gov/ADVISORY/pcp/pcp.htm, call 301-451-9399, or e-mail to pcp-r@mail.nih.gov.