



**The Vice-President's Cancer Moonshot
Blue Ribbon Panel 2016**
www.cancer.gov/brp

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Blue Ribbon Panel

- “The Blue Ribbon Panel ... will provide expert advice on the vision, proposed scientific goals, and implementation of the National Cancer Moonshot. ..The panel may also recommend other cancer research activities to enhance this effort.
- “The Panel will provide an intensive examination of the opportunities and impediments in cancer research... Findings and recommendations of the Panel will be reported to the NCAB.
- “The NCAB will use the Panel’s findings and recommendations to provide final recommendations to the NCI Director.”

(Presidential Memo 2016)

Overview of Blue Ribbon Panel Report

- Seven Working Groups submitted a total of 14 recommendations
- All 14 were discussed at the July 20 meeting of the Blue Ribbon Panel
 - Thirteen were approved as “Moonshot recommendations”
 - One recommendation was converted to a demonstration project
- The Report summarizes these recommendations of exceptional research opportunities that could lead to powerful advances in our understanding of cancer
- The online Report includes all recommendations in their entirety at www.cancer.gov.brp

Cross-Cutting Themes

- National network of patient biological and clinical data
- Prevention
- Health disparities research
- Development of biomarkers, technology and preclinical models
- Data sharing, analytics and predictive computational modeling
- Collaboration; public-private partnerships

Summary of the Recommendations

A. Network for direct patient engagement:

- Enlist patients in federated network that includes patient tumor profiling data and “pre-registers” patients for clinical trials.

B. Cancer immunotherapy translational science network.

- Organize networks to discover and evaluate novel immune-based approaches for pediatric and adult cancers, and eventually develop vaccines.

C. Therapeutic target identification to overcome drug resistance.

- Launch interdisciplinary studies to delineate mechanisms that lead cancer cells to become resistant to previously effective treatments.

D. Creation of a national cancer data ecosystem.

- Create an ecosystem to collect, share, and interconnect datasets.

Summary of the Recommendations (continued)

E. Fusion oncoproteins in pediatric cancer.

- Improve understanding of the abnormal fusion proteins that result from chromosomal translocations and drive many pediatric cancers.

F. Symptom management research.

- Support research to accelerate development of guidelines for management of patient-reported symptoms to improve quality of life and adherence to treatment regimens.

G. Precision prevention and early detection:

- Implementation of evidence-based approaches. Conduct implementation science research to encourage broader adoption of HPV vaccination, colorectal cancer screening, and tobacco cessation.

Summary of the Recommendations (continued)

- H. Retrospective analysis of biospecimens from patients treated with standard of care.
 - Analyze biopsies to learn which features predict outcome to better plan treatment for future patients.
-  I. Creation of human tumor atlas.
 - Catalog the evolution of genetic lesions and cellular interactions in tumor/immune/other cells in tumor microenvironment from the earliest detected lesions to metastasis
- J. Development of new enabling technologies.
 - Support development of technologies to accelerate testing of therapies and tumor characterization.

Next Steps

- NCI is now considering approaches for implementation of the recommendations
 - Identify those recommendations that are most feasible to implement in FY17
 - NCI will look to its advisory boards and the Blue Ribbon Panel for advice in the implementation
- Establish public-private partnerships and partnerships with other agencies
- Extent and rate of implementation will depend on Congressional appropriations
- Policy issues identified by the BRP as barriers (e.g. coverage and reimbursement; uniform informed consent) were also forwarded to the Task Force for consideration.
- Continued investment in investigator-initiated research and research areas beyond the scope of the Blue Ribbon Panel remains a high priority



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