

AACR Cancer Progress Report 2016: Improving Lives Through Research

Marlowe S. Tessmer, Executive Editor, and Kenneth C. Anderson, Editor-in-Chief

Clinical Cancer Research (CCR) is once again proud to announce the publication of the journal's annual online supplement, the *American Association for Cancer Research (AACR) Cancer Progress Report 2016*. This year's content focuses on the research that contributed to advances in cancer prevention, detection, diagnosis, and treatment made between August 1, 2015, and July 31, 2016. The full report can be accessed on the journal website at <http://clincancerres.aacrjournals.org/>. All prior installments of the report, first launched in 2011, are also freely available to the public at <http://cancerprogressreport.org>.

The annual *AACR Cancer Progress Report* is a cornerstone of efforts made by the AACR to enhance public understanding of the many ways cancer research profoundly improves and saves lives, while advocating Congress for increased and sustained funding for the NIH, NCI, and FDA to advance all aspects of cancer investigation and development of new treatments. The AACR appreciates the continued bipartisan commitment and priority given to cancer research. We applaud the leadership of Vice President Joe Biden to prevent cancer and accelerate innovative research discovery through the "National Cancer Moonshot Initiative."

The report begins with "Cancer 2016," a summary of the current statistics on cancer incidence, deaths, and the progress being made against cancer. Research has led to an overall decrease in cancer deaths with increased numbers of cancer survivors in the United States. However, 595,650 people are expected to die from some type of cancer in 2016, and unfortunately, not all populations of the United States will benefit equally from research advances due to health disparities. Thus, continued investment in cancer research to make precision medicine—the right medicine for the right patient at the right time—available to more patients is of vital importance.

In the section entitled "Developing Cancer," the reader is provided with a detailed biology of cancer, including the influence of a cancer cell's surroundings, and the stages, from early to late detection, that provide time points for different medical interventions. Cancer is the leading cause of death worldwide, and numbers are expected to rise in the coming years due to longer life expectancy. More than 50% of global cancer cases are preventable, and the section "Preventing Cancer" delineates many common cancer risk factors, potential emerging risk factors, and some of the methods and policy initiatives directed at prevention. Education on adoption of healthy habits, including regular personalized screenings with health care professionals, can dramatically reduce the risk of developing certain types of cancer.

Although many occurrences of cancer are attributed to preventable causes, many others are not. The section "Finding Cancer" explains five types of cancer screening tests that are used for cancer prevention and early detection before an individual may show signs or symptoms of disease. These screening methods can reduce cancer incidence and mortality in certain individuals. In addition, understanding an individual's unique cancer profile can indicate who will, and who will not, benefit from a screening test and thus avoid its potential risks or side effects.

The main section of the report, "Improving Lives Through Research," details the processes for FDA approval of 13 new anticancer therapeutics, one new cancer screening test, one new diagnostic test, two new diagnostic imaging agents, and a new medical device developed for treating different forms of cancer between August 1, 2015, and July 31, 2016. In addition, the FDA approved new uses for 11 previously approved anticancer therapeutics during the same period. An exciting development is the approval of several immunotherapy approaches that utilize the patient's own immune system to attack cancer cells. Furthermore, genomic research is poised to accelerate precision therapeutics for cancer treatment.

The remarkable narratives of 15 inspirational individuals who share their personal challenges with cancer are presented throughout the report. Their journeys remind us of the importance of having an open dialogue about cancer, to assess all of the treatment options available, and how their incredible bravery to join clinical trials and donate tissues, along with the support and care of their physicians, can accelerate the pace of research advances to help others. They illustrate real life examples of how these scientific advances impact the lives of patients and their families. The report also goes beyond the disease itself to shine a spotlight on areas of care that improve the quality of life of the patient, caregiver, loved ones, and cancer survivors.

As our knowledge of cancer expands, "precision medicine" directed at an individual's cancer will enhance the spectrum of cancer prevention, diagnosis, treatment, and care. "Anticipating Future Progress" and "Building Blocks to Further Progress Against Cancer" highlight the importance of ongoing research and sustained funding to expand our ability to find, treat, and cure cancer.

The *AACR Cancer Progress Report 2016* presents promising developments in cancer research and how many lives have been improved. At the same time, the report emphasizes that there is much more that needs to be done. It concludes with a call for continued action for robust, sustained, and foreseeable budget increases for the NIH, NCI, and FDA and for the fervent support of the National Cancer Moonshot Initiative. The more we learn about the biology of cancer and the unique factors that affect the disease in different individuals, the more we can develop effective, less invasive treatments with fewer side effects that are affordable for all.

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Request PDF | On Oct 1, 2016, Nancy E Davidson and others published AACR Cancer Progress Report 2016 | Find, read and cite all the research you need on ResearchGate.Â transformation can rapidly induce novel cancer incidence on an epidemic scale, thereby simultaneously informing human and wildlife cancer research 2,5 . Molecular characterization of a marine turtle tumor epizootic, profiling external, internal and postsurgical regrowth tumors. Article.Â Environmental exposures seem key to inducing tumor development, possibly through weakening host immune systems to the point of enabling pathogen-induced tumor formation. Research Powers Progress Against Cancer The AACR Cancer Progress Report 2016 details how federally funded research is fueling the development of new ways to prevent, detect, diagnose, and treat cancer that are improving lives around the world, including the lives of the 15 individuals featured in the report who have shared their experiences facing cancer. Progress highlighted in the AACR Cancer Progress Report 2016 includes the following: The number of cancer survivors living in the United States rose by 1 million from 2014 to 2016, reaching an estimated record 15.5 million. Between Aug. 1, 2015, and July 31, 2016, the FDA approved 13 new anticancer therapeutics and new uses for 11 previously approved anticancer therapeutics. Clinical Cancer Research (CCR) is once again proud to announce the publication of the journal's annual online supplement, the American Association for Cancer Research (AACR) Cancer Progress Report 2016. This year's content focuses on the research that contributed to advances in cancer prevention, detection, diagnosis, and treatment made between August 1, 2015, and July 31, 2016. The full report can be accessed on the journal website at http://clincancerres.aacrjournals.org/content/22/19_Supplement/S1. All prior installments of the report, first launched in 2011, are also freely available to the public at <http://cancerprogressreport.org>. AACR CEO Dr. Margaret Foti (left) and President-Elect Nancy E. Davidson (right) join Sloan Kettering Institute Director Dr. Joan MassaguÃ© (center), who received the Pezcoller Foundation-AACR International Award for Cancer Research and was also named an AACR fellow. Summary.Â This weekend marked the start of the 2016 annual meeting of the American Association for Cancer Research (AACR), held in New Orleans.Â The results unveiled today show that, indeed, the combination is extending life for people with advanced melanoma. According to Dr. Postow, 69% of patients receiving both drugs were still alive two years later, compared with 54% for ipilimumab alone.