Annual Report: Cancer Mortality Continues Decline

The latest *Annual Report to the Nation on the Status of Cancer*, published on May 22 in *Cancer*, found that overall cancer death rates continue to decline in men, women, and children in the United States in all major racial and ethnic groups. The annual report is a collaborative effort between the National Cancer Institute (NCI), the Centers for Disease Control and Prevention, the American Cancer Society, and the North American Association of Central Cancer Registries.

The report includes mortality data through 2015. From 1999 to 2015, overall cancer death rates decreased by 1.8% per year among men and 1.4% per year among women. From 2011 to 2015, death rates decreased for 11 of the 18 most common cancer types in men and 14 of the 20 most common cancer types in women. Death rates for cancers of the liver, pancreas, and brain/nervous system increased in both men and women; death rates for cancer of the uterus increased in women; and death rates for cancers of the oral cavity, pharynx, and soft tissue increased in men.

In a companion study, researchers explored prostate cancer trends in more detail. They found that overall prostate cancer incidence rates declined an average of 6.5% each year between 2007 and 2014, from a rate of 163 new cases per 100,000 men in the population to 104 new cases per 100,000. However, incidence of distant disease increased from 7.8 new cases per 100,000 in 2010 to 9.2 new cases per 100,000 in 2014. After 2 decades of decline between 1993 and 2013, prostate cancer mortality leveled off between 2013 and 2015, with no increase in the rates of cases with aggressive histologic grade. This study also reports a decline in recent prostate-specific antigen screening between 2010 and 2013 for men between 50 and 74 years of age and, after the 2008 survey, for men aged 75 and older.

Findings in the first part of the annual report show that incidence and death rates for all types of cancer combined were higher in men than women in every racial and ethnic group. For all cancer sites combined, black men and white women had the highest incidence rates compared to other groups, and black men and black women had the highest death rates. Non-Hispanic men and women had higher incidence and death rates than those of Hispanic ethnicity.

To view the 2 full reports, see https://onlinelibrary.wiley.com/doi/abs/10.1002/cncr.31551 and https://onlinelibrary.wiley.com/doi/abs/10.1002/cncr.31549. For more about the reports, see: https://seer.cancer.gov/report_to_nation/.

National Cancer Institute

New Approvals for ^{131}I-Labeled Tx in Pediatric Cancer

Cellectar Biosciences (Madison, WI) announced in May that the U.S. Food and Drug Administration (FDA) had granted separate Rare Pediatric Disease Designation (RPDD) and Orphan Drug Designation for treatment of neuroblastoma and rhabdomyosarcoma, respectively, with the company's lead phospholipid drug conjugate (PDC), CLR 131. The approval followed FDA Orphan Drug designation for the treatment for neuroblastoma in March. "We look forward to working with the FDA to bring this potential therapy to pediatric patients and expect to begin a clinical study in neuroblastoma during the second half of 2018," said John Friend, MD, chief medical officer of Cellectar. CLR 131 is the first potential therapy that would use a PDC tumor-targeting platform to deliver ^{131}I directly to tumor cells.

In the RPDD for the treatment in neuroblastoma, evidence on targeted molecular radiotherapy of pediatric solid tumors, as originally published in *The Journal of Nuclear Medicine* (2018;59:244–250), was used as supporting information for the FDA decision. The FDA grants RPDDs for diseases that primarily affect children from birth to 18 years old and affect fewer than 200,000 individuals in the United States. The RPDD may enable Cellectar to receive a priority review voucher that would reduce future FDA review time.

The Orphan Drug Designation for use in rhabdomyosarcoma came only 1 week after the RPDD for use in neuroblastoma.

CLR 131 is an investigational radioiodinated PDC therapy that exploits the tumor-targeting properties of the Cellectar's proprietary phospholipid ether (PLE) and PLE analogs to selectively deliver radiation to tumor cells. CLR 131 is currently in a phase 2 clinical study in relapsed or refractory multiple myeloma and a range of B-cell malignancies, as well as a phase 1 clinical study in patients with relapsed or refractory multiple myeloma, exploring fractionated dosing. In the second half of 2018 the company plans to initiate at the University of Wisconsin Carbone Cancer Center (Madison) a phase 1 study with CLR 131 in pediatric solid tumors and lymphoma. The study will enroll patients with relapsed or refractory pediatric cancers, including 2 cohorts: one with non–brain-related cancers and a second with malignant brain tumors. All enrolled patients will receive a single 30-minute infusion of CLR 131 and will be followed for up to 85 days with safety and efficacy assessments. Cellectar plans another phase 1 study in combination with external-beam radiation for head and neck cancer.

Cellectar Biosciences