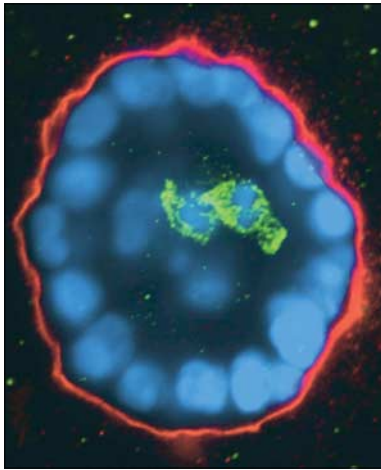


Medical News & Perspectives



New insights into the genetic changes that drive the cancer process are emerging from studies with three-dimensional cell cultures, which allow cells to develop and form structures similar to those in living animals.

[SEE PAGE 1977](#)

Caring for a Dying Doctor

Perspectives on Care at the Close of Life

Excerpts of interviews from physicians who cared for Dr B during his terminal illness and from his son, also a physician, illustrate issues unique to end-of-life care of patients who are physicians.

[SEE PAGE 2048](#)

CLINICIAN'S CORNER Contempo Updates

Causes of visual impairment.

[SEE PAGE 2057](#)

JAMA Patient Page

For your patients: Information about causes of visual impairment.

[SEE PAGE 2088](#)

Race/Ethnicity and Survival of Children With ALL

Overall survival of children with acute lymphoblastic leukemia (ALL) has improved during the past several decades, but evidence on the role of race and ethnicity in survival of children with ALL has been inconsistent. Pui and colleagues, in an analysis of data from children with ALL enrolled in successive clinical trials at a single pediatric cancer center during the 1990s, found no significant difference in survival between black and white children. In contrast, in an analysis of data from Surveillance, Epidemiology, and End Results (SEER) population-based registries from children diagnosed with ALL in the period 1973-1999, Kaden-Lottick and colleagues found that black, Hispanic, and American Indian/Alaskan Native children with ALL had worse survival than did white and Asian/Pacific Islander children. In an editorial, Carroll discusses factors that may explain the discrepancies in survival outcomes across racial and ethnic groups in these 2 studies.

[SEE PAGES 2001 AND 2008 AND EDITORIAL ON PAGE 2061](#)

Exercise, Behavioral Management for Alzheimer Disease

Alzheimer disease is associated with physical deterioration as well as with declines in cognitive, emotional, and behavioral functioning. In this randomized trial among community-dwelling patients with Alzheimer disease, Teri and colleagues found that patients in the group that received a home-based exercise program combined with caregiver training in behavioral management techniques had improved physical role function and depression, whereas physical function and affective status declined among patients in the routine medical care group.

[SEE PAGE 2015](#)

Poverty and Child Mental Health

During a study of the development of mental illness in a sample of rural children, one quarter of which was American Indian, a casino opened on the Indian reservation that provided an income supplement to every tribal member. Costello and colleagues compared the results of annual psychiatric assessments of the children from the 4 years before the casino opened with those from the 4 years after the casino opened. Children of Indian families whose income increased from below to above the federal poverty line after the casino opened had a significant decrease in symptoms of conduct and oppositional defiant disorders, but symptoms of anxiety and depression were not affected. In an editorial, Rutter discusses the social causation theory of mental illness as an explanation for these findings.

[SEE PAGE 2023 AND EDITORIAL ON PAGE 2063](#)

Lipoprotein Particle Size and Exceptional Longevity

Barzilai and colleagues conducted a case-control study to identify specific biological and genetic factors associated with exceptional longevity. Long-lived probands from Ashkenazi Jewish families and their offspring had significantly larger high-density lipoprotein and low-density lipoprotein particle sizes than did age-matched control participants, independent of lipoprotein and apolipoprotein levels. This phenotype was associated with lower prevalence of hypertension, cardiovascular disease, and the metabolic syndrome and with increased frequency of homozygosity for the I405V variant in the cholesterol ester transfer protein (*CETP*) gene.

[SEE PAGE 2030](#)

Glucose Control and Mortality in Critically Ill Patients

In a recent study, intensive care unit (ICU) and hospital mortalities were reduced in critically ill patients who received aggressive glycemic control, but the mortality benefit may have been attributable to blood glucose level, quantity of exogenous insulin administration, or both. In this prospective study of adults admitted to an ICU, Finney and colleagues found that increased administration of insulin was positively associated with ICU mortality regardless of blood glucose level, suggesting that control of blood glucose levels rather than absolute levels of exogenous insulin account for the mortality benefit observed with intensive insulin therapy.

[SEE PAGE 2041](#)