A Snapshot of **Breast Cancer**

Incidence and Mortality Rate Trends

In the United States, breast cancer is the most common non-skin cancer and the second leading cause of cancer-related death in women. Each vear, a small number of men also are diagnosed with or die from breast cancer. Although the breast cancer diagnosis rate has increased, there has been a steady drop in the overall breast cancer death rate since the early 1990s.

While the incidence rate is lower for African Americans than Whites, the mortality rate is higher. Women of other racial and ethnic groups have lower incidence and mortality rates.

It is estimated that approximately \$6.2 billion* is spent in the United States each year on treatment of breast cancer.

*In 1996 dollars, as determined by Brown, Riley, Schussler, and Etzioni and reported in the National Cancer Institute's Cancer Progress Report - 2003 Update at: http://progressreport.cancer.gov

Source for incidence and mortality data: Surveillance, Epidemiology, and End Results (SEER) Program and the National Center for Health Statistics. Additional statistics and charts are available at:

http://seer.cancer.gov/faststats/html/inc_breast.html http://seer.cancer.gov/faststats/html/mor_breast.html

ncidence per 100,000 Women 70 50 30 10 1984 1980 1988 1992 **U.S. Breast Cancer Mortality** Mortality per 100,000 Women 50 40 30 20 10 0 1980 1984 1988 1992 Whites Hispanics* African Americans Asians or Pacific Islanders* American Indians/Alaskan Natives *Incidence and mortality data not available for earlier years

150

130

110

90

Trends in NCI Funding for Breast Cancer Research

The National Cancer Institute's (NCI's) investment in breast cancer research has increased from \$348.6 million in fiscal year 1998 to \$548.7 million in fiscal year 2003.

Source: NCI Financial Management Branch http://www3.cancer.gov/admin/fmb



NCI Breast Cancer Research Investment

U.S. Breast Cancer Incidence

1996

1996

2000

2000



* A description of the relevant research projects can be found at the NCI Cancer Research Portfolio website at http://researchportfolio.cancer.gov.

Examples of NCI Research Initiatives Relevant to Breast Cancer



- Ten breast cancer-specific Specialized Programs of Research Excellence (SPOREs) are moving results from the laboratory to the clinical setting. http://spores.nci.nih.gov/breast/breast.html
- Through NCI's Program for the Assessment of Clinical Cancer Tests (PACCT), investigators are developing a clinical trial to assess whether molecular profiling of women with various types of breast cancer can identify those who are cured by initial surgery and therefore do not require chemotherapy follow-up. http://www.cancerdiagnosis.nci.nih.gov/assessment
- The Study of Tamoxifen and Raloxifene (STAR) Trial is determining whether the osteoporosis drug raloxifene is as effective as tamoxifen at preventing breast cancer in postmenopausal women who are at high risk for breast cancer. http://www.cancer.gov/star
- The Southern Community Cohort Study (SCCS) is a large population-based research study that is examining the reasons why African Americans are more likely to be affected by many cancers, including breast cancer. http://www.southerncommunitystudy.org
- Centers for Excellence in Cancer Communication Research support research and outreach aimed at increasing knowledge, access, and use of cancer communication tools by the public, patients, survivors, and health professionals. Projects include the development of decision aids concerning tamoxifen use among women at high risk for breast cancer as well as promotion of fruit and vegetable intake among African Americans. http://dccps.nci.nih.gov/eocc/ceccrs_index.html
- The Cooperative Breast Cancer Tissue Resource (CBCTR) and the Cancer Family Registry for Breast **Cancer Studies (Breast CFRs)** are programs that maintain and make available human tissue resources for researchers. These programs collect clinical and epidemiological data associated with specific tissue specimens. http://www.cancerdiagnosis.nci.nih.gov/specimens/finding.html
- The Breast Cancer PRG, a panel of prominent scientists and patient advocates, assessed the state of the science and identified future research priorities for breast cancer. http://prg.cancer.gov
- The Breast Cancer Home Page directs visitors to up-to-date information on breast cancer treatment, prevention, genetics, causes, screening, testing, and other topics. http://www.cancer.gov/breast

NCI Breast Cancer Research Portfolio

The pie chart shows the distribution of NCI breast cancer research dollars by scientific area for fiscal year 2002. Such portfolio analyses along with the recommendations of the Progress Review Groups (PRGs) are used to (1) identify research gaps, (2) develop strategic plans that will address future research needs, and (3) track and assess progress.

Early Detection, Diagnosis, and

-Treatment

/ Prognosis

15%

Prevention

7%