September

The concept of immune surveillance against tumors is the subject of a guest editorial by Joachim (College of Physicians and Surgeons, Columbia University, and Lenox Hill Hospital, New York, New York). Although the effectiveness of the immune surveillance system is difficult to assess, since the failures are evident while the successes remain inapparent, the theory is judged to be useful and productive. One of the strongest lines of evidence in its support is the stromal reaction of tumors: Infiltration of lymphocytes accompanies proliferation of tumor cells. This accumulation of lymphocytes appears to be a response to a specific antigenic stimulation.

Using files of the Animal Neoplasm Registry in Alameda and Contra Costa Counties, California, Dorn and co-workers (College of Veterinary Medicine, Ohio State University, Columbus, Ohio) compare the degree of inbreeding in the ancestry of dogs with mammary cancer, dogs with other neoplasms and dogs without neoplasms. The group with mammary cancer and those having other neoplasms had inbreeding coefficients approximately twice as high as that of the tumor-free dogs.

Inheritance of linked genes governing cancer risk may be affected by breeding programs. Such use of the dog as an animal model for studies of the genetic basis for risk of developing breast cancer in humans may provide additional information about genetic factors in the etiology of human breast cancer.

In Phase I-II trials of the interferon-inducer polyribosinic-polyribocytidylic acid (poly I•poly C), Robinson et al. (National Cancer Institute, Bethesda, Maryland) administered multiple doses to 26 patients with a variety of solid tumors, nine with acute leukemia and two with chronic myelogenous leukemia in blast crisis. Toxic reactions included fever, transient elevation of liver enzymes, coagulation abnormalities and hypersensitivity reactions. No patients in this study had an objective tumor response to poly I•poly C, and most experienced progression of their disease. Other studies have suggested that poly I•poly C may be marginally useful for patients with low tumor burdens.

Finger Kantor and associates (Connecticut Cancer Epidemiology Unit, New Haven, Connecticut) describe the epidemiology of renal cell carcinoma in a study of 3,700 patients reported to the Connecticut Tumor Registry from 1935 through 1973. They report that incidence rates for males in the 15-39-year age group was three times that for females, whereas renal cell carcinoma in men over 40 years of age was diagnosed twice as often as in women. Age-adjusted rates revealed a rise in incidence with increase in population
density; trends according to socioeconomic levels were not consistent.

A Symposium on Advances in Neuroblastoma Research was held at Children's Hospital of Philadelphia on May 30, 1975. Proceedings of the Symposium, published in the September issue of the Journal of the National Cancer Institute, include papers on genetic aspects of the disease, the finding of glycoproteins on the surfaces of neuroblastoma cells, chemotherapy, catecholamine metabolism and the potential implication of the immune response as a means of controlling human neuroblastoma.

October

In a guest editorial, Cutler (Michigan Cancer Foundation, Detroit, Michigan) discusses the opportunities and responsibilities of cancer registries. These centers for collection of data for defined population groups have provided information on important changes in the cancer picture in the United States during the past three decades. By collection of information sufficiently detailed to aid in the review of diagnosis and treatment, registries can more fully contribute to the continuing improvement of the quality of care given to cancer patients and, at the same time, promote the assessment of end results.

In a study on the relationship of age and incidence of breast cancer, Lee et al. (University of Washington, Seattle, Washington) compare registration data from Connecticut, Denmark, England, Wales and Japan. The decline in the rate of increase of breast cancer with age during the reproductive years is similar in all of these countries. This similarity suggests that such a change is not related to observed differences in hormone balance between Japanese and Western women. Evidence indicates that the menopause reduces the incidence of breast cancer. However, the decline in the rate of change of breast cancer incidence in young women cannot yet be explained. One theory proposes that breast cancer is derived from a precursor abnormality established early in life.