

# What Can We Learn From Cancer Disparities?

The term *disparities*, or differences across a population, is frequently used to describe the variations in health associated with race, ethnicity, age, sex, education, or other social/cultural determinants. In cancer, disparities exist for the vast majority of tumor types and have been well documented in epidemiologic and population studies. In regard to the cancer disparities associated with race, some of the greatest differences in incidence and mortality are seen in prostate cancer. In this month's issue, we spotlight an interview with Dr Steve Patierno, a world-renowned researcher in prostate cancer disparities at the Duke Cancer Institute, who shares his insights into racial disparities in prostate cancer and what we have recently learned that has changed our thinking about this disease.

We have known for decades that the incidence of prostate cancer, and the mortality rate, are higher in African American men than in their white counterparts. As Dr Patierno points out, this disparity is driven by many factors, including differences in income and access to care, diet and other aspects of lifestyle, comorbidities and other health-related issues, and culture and education. Interestingly, buried under all of these influences and perhaps least recognized of all are the biological differences associated with race. As he points out, African American men with prostate cancer have an onset of disease at an earlier age, present with a more advanced stage of disease, and progress to metastasis and death faster than white men with prostate cancer. However, recent retrospective analyses suggest that African American men in clinical trials actually derive greater benefit than white men from systemic therapies, including hormonal therapy, immunologic therapy, and chemotherapy. Furthermore, a recent meta-analysis of cooperative group trials of radiation therapy suggests that African American men may derive a greater survival benefit than white men. Sadly, African American men are woefully underrepresented in these studies.

The next area to explore is the biological determinants that underlie racial differences in outcomes. Why is understanding the biology associated with racial disparities in care important? Because in this era of precision oncology, genetic and other biological determinants of outcome possibly affect how we treat specific patients. Realizing who might be more sensitive to a given therapy could affect how and when we use it. These determinants

are likely to be present in all races, just at different rates, so the information could benefit a majority of African Americans as well as a minority of white and Asian Americans.

To understand these biological determinants of outcome, we need to include a greater number of African American men in prostate cancer studies. However, saying this and doing it are two different steps. To meet this objective, we need to increase access to trials at clinics where African American men are treated. We need to build infrastructure and sponsor champions for clinical research at these centers. We need to design trials so that they include patients with comorbidities that might otherwise be a reason for exclusion. And finally, we need transparency and education around the goals of clinical research, so that we can build the trust needed for patients to participate.

In keeping with the goal of conducting optimal clinical research, this issue features a discussion with Dr Alda Lui Tam of MD Anderson Cancer Center on the use of biopsies in clinical trials of oncology drugs. An interview with Dr Manali Kamdar of the University of Colorado Cancer Center follows, with a discussion of how disease stage affects the rate of second primary malignancies in patients with diffuse large B-cell lymphoma. We provide summaries of some of the most exciting highlights from the 2019 San Antonio Breast Cancer Symposium, selected by Dr Hope S. Rugo of the UCSF Helen Diller Family Comprehensive Cancer Center. In our new series on exiting from practice, Dr Michael Boxer of Arizona Oncology in Tucson reflects on the wisdom he acquired during 45 years as a clinical hematologist. Finally, we present a review article by Drs Gordon T. Moffat and Eileen M. O'Reilly of Memorial Sloan Kettering Cancer Center, "The Role of PARP Inhibitors in Germline *BRCA*-Associated Pancreatic Ductal Adenocarcinoma."

I hope that you enjoy the issue and that you find it valuable whether you are planning research or seeing patients.

Sincerely,



Daniel J. George, MD

