Disparities and Access to Care: 2021 ASCO Annual Meeting Highlights for the Advanced Practitioner

Amy Pierre, MSN, ANP-BC, of Flatiron Health and Memorial Sloan Kettering Cancer Center, considers takeaways from a program targeting minority accrual to oncology trials and a study evaluating minority representation in precision oncology trials.

Abstract 100

Community-Based Engagement Initiative Improves Accrual of Black Participants in Clinical Trials

By The ASCO Post Staff

Visit https://meetinglibrary.asco.org/record/196644/abstract to read the full abstract and view author disclosures.

A 5-year community outreach and engagement effort by the Abramson Cancer Center at the University of Pennsylvania to increase enrollment of Black patients into cancer clinical trials more than doubled the percentage of participants, improving access and treatment for a group of patients with historically low representation in cancer research. The percentage of patients enrolled into a treatment clinical trial, for example, increased from 12% to 24%. A significant increase was also observed in nontherapeutic interventional and non-interventional trials, reported Carmen E. Guerra, MD, MSCE, FACP, and colleagues during the 2021 ASCO Annual Meeting (Abstract 100).

“An important goal of the Abramson Cancer Center is to serve and engage our community—and that includes improving access to clinical trials for all patients,” said senior author Robert H. Vonderheide, MD, DPhil, Director of the Abramson Cancer Center and Vice President for Cancer Programs in the University of Pennsylvania Health System. “Aligning the number of Black patients with cancer we care for with the number enrolled in our trials is how we can help bring more equitable care to the community, close gaps in disparities, and sustain trust. There’s more work to be done to improve access and inclusion of minority groups, and the impact of this outreach and engagement effort is an important step forward.”

Lack of Representation in Trials

Despite making up 13.4% of the U.S. population, only 5% of Black patients with cancer are enrolled in clinical trials. Of 8,700 patients who participated in trials nationwide related to the 28 oncology drugs approved by the U.S. Food and Drug Administration in 2018 and 2019, only 4% were Black, according to FDA Drug Trial Snapshot reports.

In 2014, Black residents comprised 19% of the population and 16.5% of cancer cases in the 12-county catchment area surrounding Philadelphia, but only 11.1% of Abramson Cancer Center patients were Black. The percentages of Black
participants accrued into treatment, nontherapeutic interventional, and noninterventional trials at Abramson Cancer Center were 12.2%, 8.3%, and 13.0%, respectively.

**Establishment of a Community Initiative**
To address these gaps, the Abramson Cancer Center established a center-wide program with community guidance and engagement that included:

- Culturally tailored marketing strategies
- New partnerships with faith-based organizations serving Black communities to conduct educational events
- Establishment of an Abramson Cancer Center community advisory board and community educational forums
- Pilot programs with Lyft and Ride Health to address transportation barriers
- Patient education by nurse navigators regarding cancer and clinical trials.

The efforts reached more than 10,000 individuals in churches, neighborhoods, community parks and centers, and health centers with formats ranging from educational forums to wellness fairs. In addition, Abramson Cancer Center promoted clinical trials that address the cancer burden in Black residents of the catchment area, required that each protocol have a minority accrual plan to obtain approval, and increased access to language-tailored consent forms and translation services for patients.

**Increase in Accrual**
By 2018, the researchers found that the percentage of Black patients seen at Abramson Cancer Center had increased to 16.2%. The percentages of Black participants accrued onto treatment, nontherapeutic interventional, and noninterventional trials were 23.9%, 33.1%, and 22.5%, respectively—a 1.7- to 4.0-fold increase and higher than the percentage of Black patients seen at Abramson Cancer Center.

As part of its long-term strategy to improve access, the Abramson Cancer Center has also collaborated with the Lazarex Cancer Foundation to implement its IMPACT program (Improving Patient Access to Cancer Clinical Trials), a first-of-its-kind effort at the Abramson Cancer Center combining financial reimbursement for travel-related expenses, outreach, and educational programs to help patients with cancer learn about and access advanced treatment in clinical trials. Reimbursement covers plane tickets, hotels, gas, tolls, cabs, and parking for the patient and a companion.

“We’ve shown here that a multifaceted, community-based engagement initiative works to improve access to cancer clinical trials by Black patients with cancer,” said first author Dr. Guerra, Associate Professor of Medicine and Associate Director for Diversity and Outreach in the Abramson Cancer Center. “We will continue to work with collaborators such as Lazarex that share in our vision to increase participation of underrepresented patients in trials, while at the same time, engaging with the community to develop strategies that address needs and barriers, from different social determinants of health to solidifying their trust.”

**The Advanced Practitioner Perspective**
Amy Pierre, MSN, ANP-BC
Flatiron Health and Memorial Sloan Kettering Cancer Center

Black patients comprising 4% to 5% of oncology clinical trials is a true medical crisis in cancer care: How can we truly extrapolate findings of randomized controlled trials to such underrepresented racial groups? The Abramson Cancer Center (ACC) has taken the initiative to tackle these unfortunate statistics despite, at baseline, having twice the number of Black oncology patients enrolled in clinical trials compared to the national average. The fact that they still appreciated the need to improve accrual numbers is applaudable.

The issue of low accrual rates of Black oncology patients is multifaceted; however, the ACC tackled one main issue: access. They recognized that access to care and access to trials should be the foundation of their community outreach plan and overall intervention. They were able to reach more than 10,000 individuals in venues that included churches, neighborhood blocks, community parks, and local community centers, highlighting that the key to this initiative was meeting patients where the patients were. This was a 5-year process, which
Precision medicine has opened the door to more individualized care for each patient with cancer. However, it is critical that the makeup of clinical trials reflects the population that the therapy is intended to treat. A study led by Christopher M. Aldrichetti, of Massachusetts General Hospital in Boston, reported an underrepresentation of minority racial groups and an overrepresentation of Whites in precision oncology studies for four common cancer types (breast, lung, prostate, colorectal cancers).

The group identified completed US clinical studies with precision medicine objectives from Clinicaltrials.gov and reviewed these trials for inclusion of race/ethnicity reporting in the analysis. They used the Surveillance, Epidemiology, and End Results (SEER) database to determine incidence of race/ethnicity in the US cancer population, correlated with disease site and median year of enrollment for each trial.

The difference in incidence (D-I) was calculated as the median absolute difference in study racial enrollment and SEER incidence, with a negative value corresponding to underrepresentation. Overall, 156 studies were identified, and 40.3% and 27.5% studies enrolling from 2000 through 2020 met the inclusion criteria for racial and ethnic subgroups reporting, respectively.

The D-I was +2.2% for Whites (interquartile range [IQR] = -43.7% to 25.4%; \(P < 0.013\), -0.74%
American Indian/Alaskan Native (IQR = -0.8% to +5.9%; $P < 0.001$), -2.5% Asians (IQR = -4.1% to 30.4%; $P < 0.152$), -4.6% Blacks (IQR = -20.1% to +45.0%; $P < 0.001$), and -8.1% Hispanics (IQR = -14.8% to +29.6%; $P < 0.001$).

By disease site, Blacks were significantly underrepresented proportional to their cancer incidence among prostate (D-I of -11.8%, $P = 0.009$) and lung studies (D-I of -5.9%, $P = 0.013$), while prostate studies significantly overrepresented Whites (D-I +14.0%, $P = 0.005$). Lung studies overrepresented Asians (D-I +0.49%) consistent with the prominent role of targetable oncogene drivers in this population.

### The Advanced Practitioner Perspective

Amy Pierre, MSN, ANP-BC
Flatiron Health and Memorial Sloan Kettering Cancer Center

It has been well established that minorities have historically and presently been underrepresented in clinical trials in oncology, but it was unclear if this disparity extended to precision medicine. This abstract shone a much-needed light on this disparity in precision medicine as well as inadequate race and ethnicity reporting.

In the 156 studies that were identified in this 20-year time span, less than half of these studies met the inclusion criteria for racial and ethnic subgroup reporting, proving that a large percentage of precision medicine trials may not fit the criteria for robust racial exploration of their data. As an advanced practitioner, it would be enlightening to know if over this 20-year time span we have improved our ability to adequately capture and report the race and ethnicity of our oncology patients for research and understanding of precision medicine.

The difference in incidence (defined as the median absolute difference in study racial enrollment and SEER incidence) was highest among Hispanics, followed by Black patients. When analyzing disease sites, Black patients were significantly underrepresented proportional to their cancer incidence in prostate and lung while Whites were significantly overrepresented in prostate cancer studies. There were also several disease groups that had participants who were of Asian, Native Hawaiian or Pacific Islander descent as well as American Indian or Alaskan Native descent that totaled in the single digits. These racial and ethnic groups may comprise a smaller population in America compared to other minority groups; however, we must do our part to be inclusive in precision medicine in oncology and better serve all populations.

For all cancers combined, black men have the highest rate of new cancer diagnoses, and prostate cancer is more commonly found in Blacks than Whites. The significant underrepresentation of Blacks in prostate precision medicine trials and overrepresentation of Whites is concerning: As medical professionals, we have to ask ourselves why this is occurring. Is this an issue of lack of access or lack of discussions regarding the relevance and importance of precision medicine for minorities by health-care providers?

Authors of this abstract concluded that a continued lack of diversity among enrollees may further leave behind vulnerable minority populations in the era of precision oncology. It is imperative for us to recognize this as advanced practitioners in order to change the future for underrepresented minorities.

**Disclosure:** Ms. Pierre has served as a consultant for Bristol Myers Squibb.