

Trust and Equity

June, 2023

Black Women and Breast Cancer

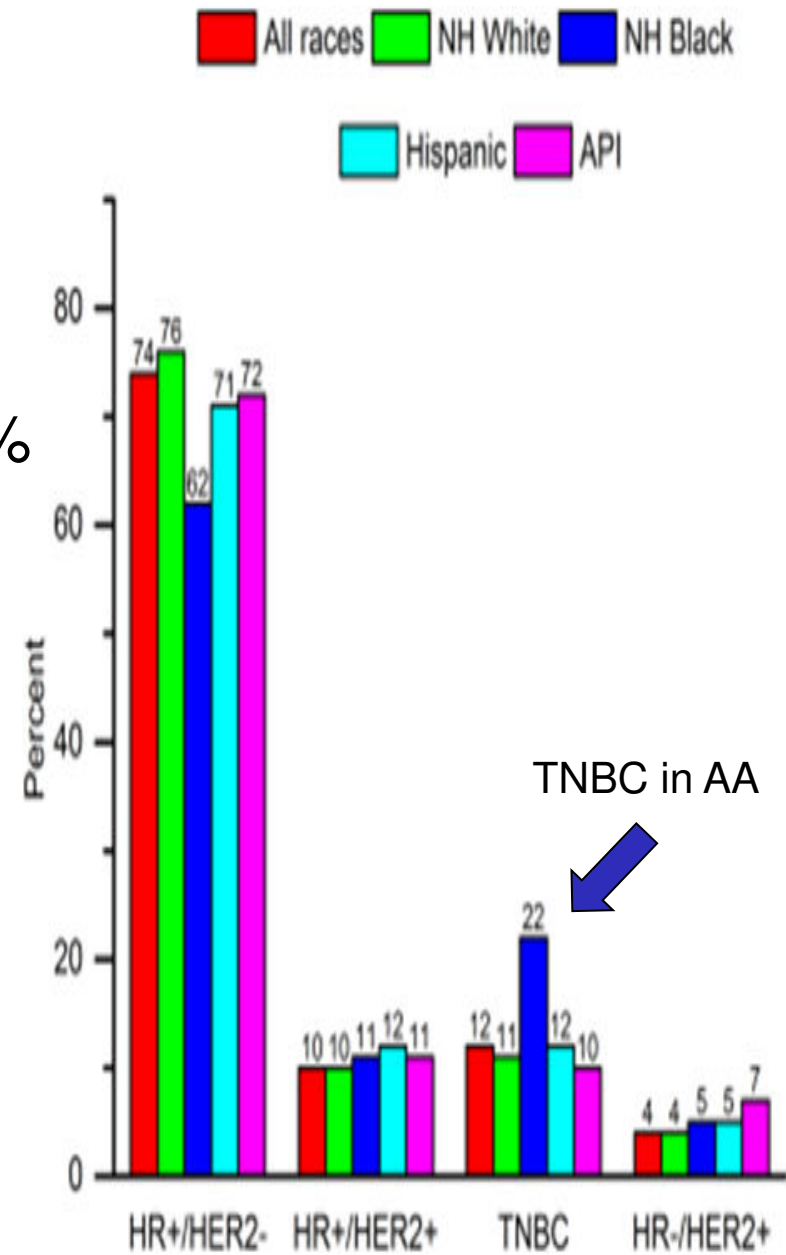
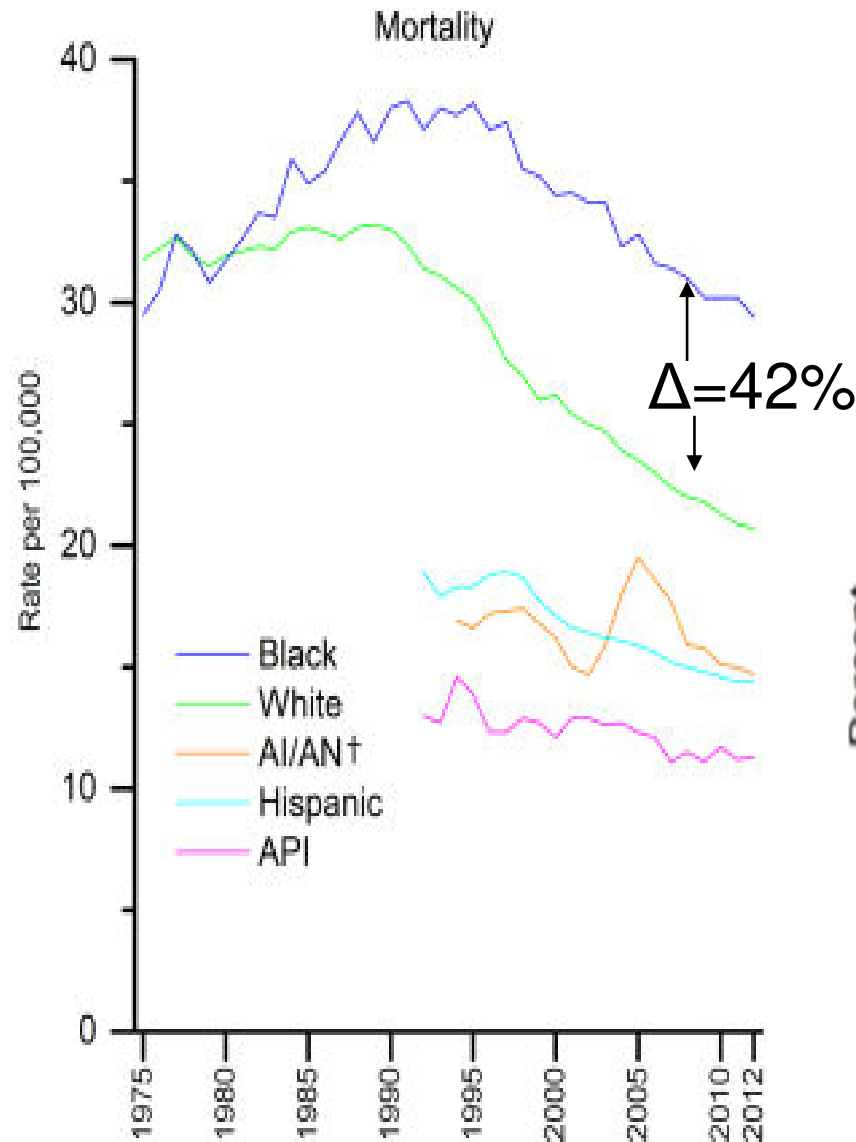
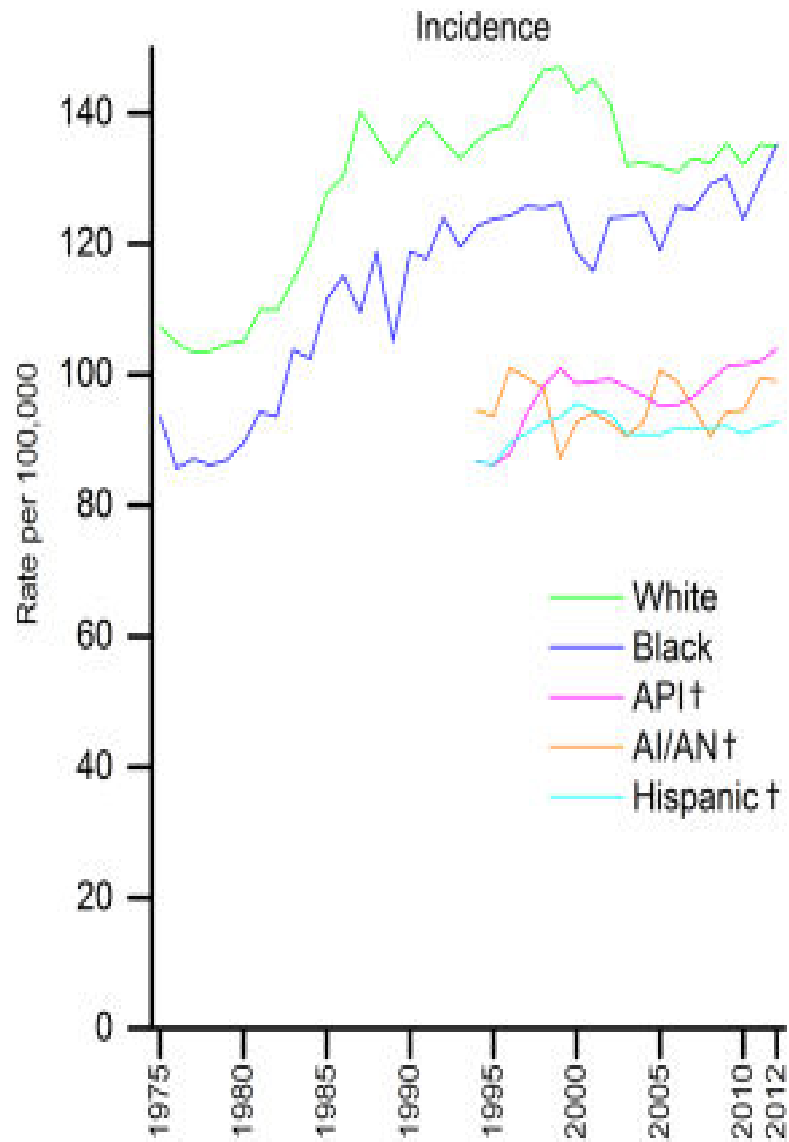
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I have no relevant disclosures





CANCER CLINICAL TRIALS

Importance

The only established mechanism for
safely improving the standard of care
and outcome for cancer patients



- Clinical trials *should* be an optimal strategy for disentangling the confounding effects of racial-ethnic identity, geographically-defined ancestral hereditary factors, and socioeconomic status on cancer burden
- Clinical trial participation should also offer racial-ethnic minorities protection from discriminatory practices and biases in delivery of care



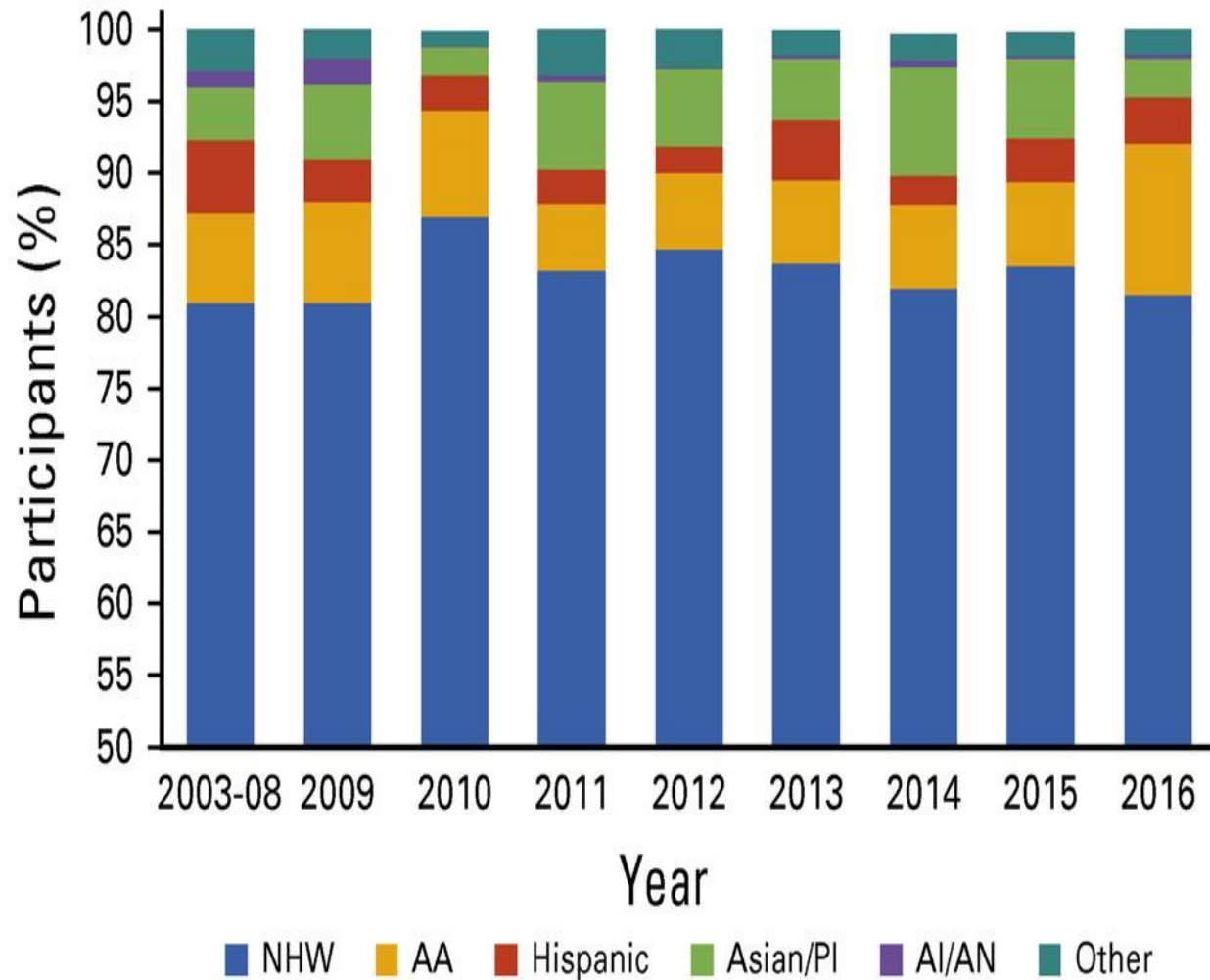
CLINICAL TRIALS

Challenges and Potential Pitfalls

- Quality of clinical trial results completely dependent on study design and implementation
- Trial must have representative accrual
- Trial must be *accessible* to all communities
- Trial must offer a therapy that is *accessible* and affordable
- *Trial results cannot be generalized to entire population unless the trial participants reflected the socioeconomic, genetic, and cultural features of the general population*



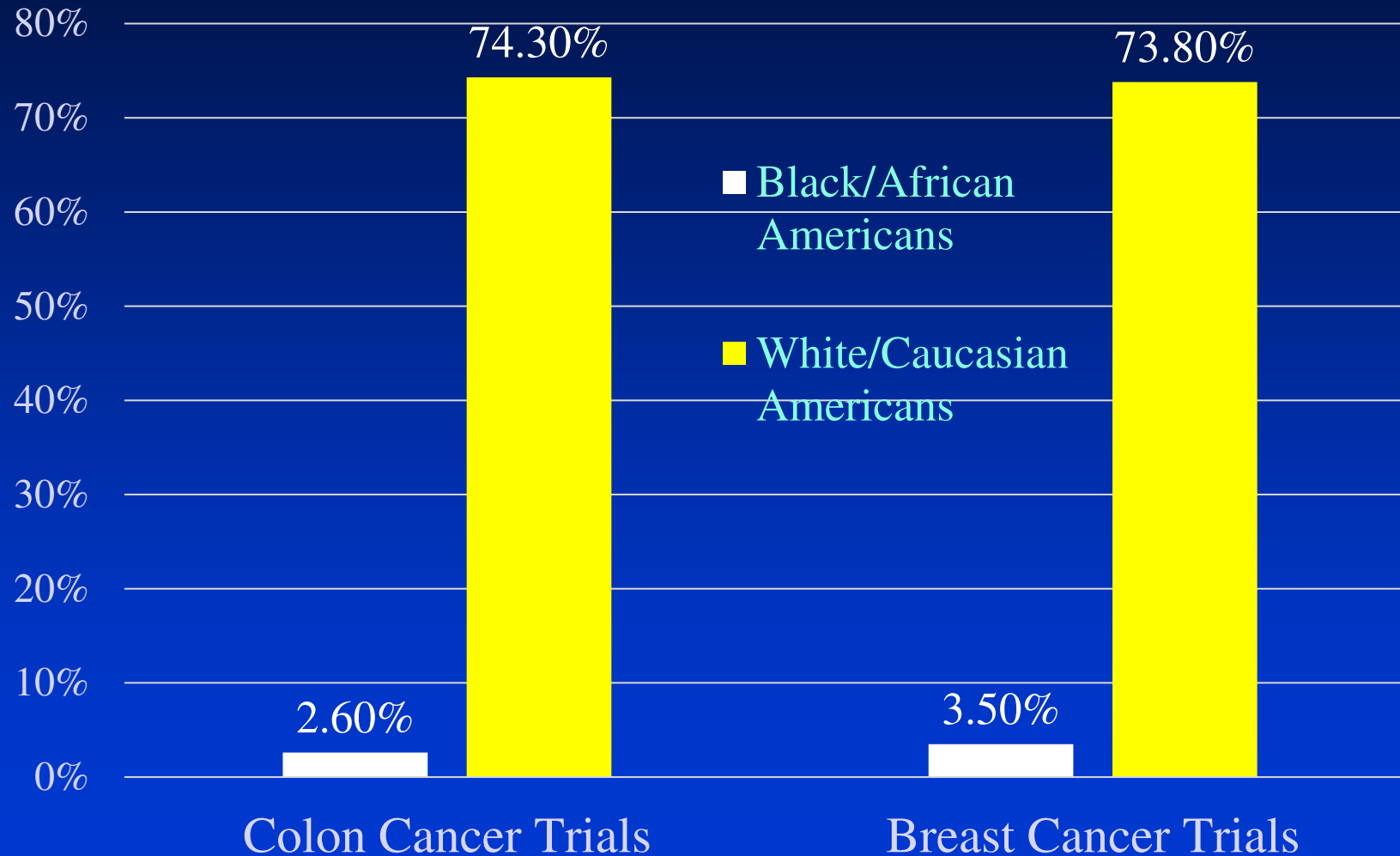
Current Status: Race distribution of recent phase III oncology clinical trials



- Source: ClinicalTrials.gov, 2003-2016
- N= 1,012 trials
- 310 (31%) with enrollment info by race/ethnicity
- 6% African Americans enrolled overall
- 7.2% African Americans in breast CA trials



Current Status: Race distribution of recent phase III oncology clinical trials



Phase III trials from ClinicalTrials.gov 1999-2019

- 9/20 colon studies with race data
N=5,537 pts
- 39/74 breast studies with race data
N= 24,170 pts



Sources of Disparities in Accrual to Cancer Clinical Trials


- Provider-level issues
 - Inadequate cultural competence
 - Biases in delivery of care/fear of “alienating” patients
 - Inadequate diversity in healthcare workforce
- Patient-level issues
 - Fear and mistrust of healthcare system
- Systems-level issues
 - Negative messages in media regarding clinical trials
 - Disparities in socioeconomic status
 - Disparities in availability of clinical trials
 - Clinical trial design



Inadequate Communication

- Lack of Awareness
- Harris Interactive Survey, Jan 2001
 - nearly 6,000 cancer patients
 - 85% of pts were unaware of clinical trials option
 - 75% of these pts expressed an interest in clinical trial participation
 - 97% of clinical trial pts reported excellent satisfaction with quality of care and provider treatment

Bias and Stereotyping Among Research and Clinical Professionals: Perspectives on Minority Recruitment for Oncology Clinical Trials

Soumya J. Niranjani, BPharm, MS, PhD ¹; Michelle Y. Martin, PhD²; Mona N. Fouad, MD, MPH³; Selwyn M. Vickers, MD⁴; Jennifer A. Wenzel, PhD⁵; Elise D. Cook, MD, MBA⁶; Badrinath R. Konety, MD, MS⁷; and Raegan W. Durant, MD, MPH³

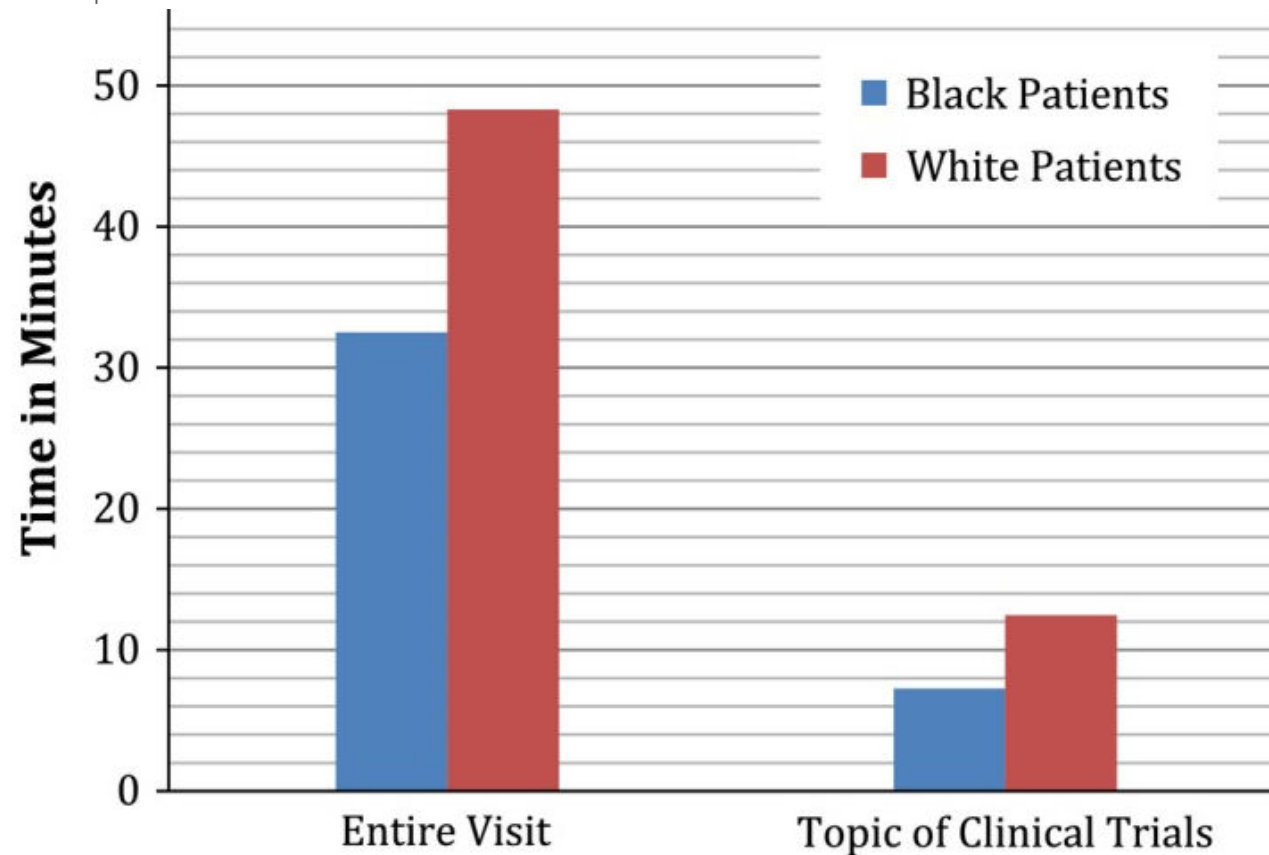
BACKGROUND: In recent years, extensive attention has been paid to the possibility that bias among health care professionals contributes to health disparities. In its 2003 report, the Institute of Medicine concluded that bias against racial minorities may affect communication or care offered. However, to the authors' knowledge, the role of bias within the context of recruitment of racial and ethnic minorities to

potential minority participants for clinical trials. **CONCLUSIONS:** Not only did some respondents view racial and ethnic minorities as less promising participants, some respondents reported withholding trial opportunities from minorities based on these perceptions. Some providers endorsed using tailored recruitment strategies whereas others eschewed race as a factor in trial recruitment. The presence of bias and stereotyping among clinical and research professionals recruiting for cancer clinical trials should be considered when designing interventions to increase minority enrollment. **Cancer 2020;126:1958-1968.** © 2020 American Cancer Society.

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A disparity of words: racial differences in oncologist–patient communication about clinical trials

Susan Eggly PhD,* Ellen Barton PhD,‡ Andrew Winckles PhD,§ Louis A. Penner PhD† and Terrance L. Albrecht PhD†





APRIL 23, 2002

Powell's Mission Impossible



HOW
MEDICAL
TESTING
HAS TURNED
MILLIONS OF
US INTO ...

HUMAN
GUINEA
PIGS



www.ama-assn.org A01 Research TIME

Legacy of research atrocities such as the Tuskegee Study and the story of Henrietta Lacks



Tuskegee Study

- Tuskegee Study of Untreated Syphilis in the Negro Male initiated in 1932
- Major objective: investigate effects of untreated disease, penicillin not used at time of study initiation; available treatments were quite toxic
- Subjects were not informed about their disease or the fact that the research would not benefit them



(Courtesy National Archives)

1943: penicillin adopted as standard treatment, but continued to be withheld from study subjects

1972: details of the study reported in the news and resulted in public outrage; the study was discontinued; treatment instituted and all medical expenses paid for the rest of the subjects' lives



(CNN)

"They treated us like...dumb pigs ...guinea pigs."

-- Herman Shaw

1997: President Clinton formally apologizes to trial participants and families on behalf of the U.S. government



IMPACT OF THE TUSKEGEE STUDY

Global Effects

- Legacy of mistrust for the healthcare system
 - Mistrust of physicians
 - Mistrust of scientists
 - Mistrust of clinical trials
 - Mistrust of medical treatment
- Impacts patients of all ethnic backgrounds
- Shavers, et al JNMA 2000
 - Johns Hopkins School of Public Health
 - Mail and telephone survey
 - 46% of African Americans and 34% of White Americans respondents cited Tuskegee as a factor that would influence decisions regarding clinical trials



DISPARITIES IN ACCESS TO CLINICAL TRIALS

- Disproportionate access to clinical trials analyzed by Adams-Campbell (Howard University) and Simon (Karmanos Cancer Institute)
 - Eligibility barriers; comorbidities
 - Failure of clinicians to offer clinical trial



- What have we learned about breast cancer disparities from clinical trials data thus far?



Disentangling SES and Inherent Racial/Ethnic Cancer Risks *Clinical Trials Data*

Pooled analysis of SWOG adjuvant therapy trials for various cancers
Albain et al, JNCI 2009

- Equal treatments delivered through clinical trials resulted in equal outcomes (regardless of race/ethnicity)
- **Exception: African Americans with hormonally-driven cancers (e.g. breast & prostate cancers)**
 - 30-40% higher recurrence and mortality hazard rates for African American breast cancer patients on SWOG adjuvant therapy trials



TIME.com

Aug 22, 2009

**“Why Racial Profiling
Persists in
Medical Research”**





Breast Cancer in African Americans

Clinical Trials Data

Women's Health Initiative (WHI): "Ethnicity and Breast Cancer"-Chlebowski et al JNCI 2005

- WHI- prospective randomized trial of hormone replacement therapy in 156,570 postmenopausal women; provided definitive proof that HRT increases risk for breast cancer
- Subset analysis: African American vs. White American participants that developed cancer
 - ER-neg tumors 4x more common in AA participants
 - Mortality for AA HR = 1.79, 95% CI = 1.05 to 3.05 (adjusted for breast cancer prognostic features)



Other Clinical Trials

- SWOG 8814/8897

- Adjuvant CTX trials in breast cancer
- AA participants with worse disease-free and overall survival rates compared to WA participants
 - *Hershman et al, JCO 2009*

- CALGB 9342/9840

- Taxanes for metastatic breast cancer
- AA participants with worse overall survival and shorter median survival compared to WA participants
 - *Polite et al, JCO 2008*

- ECOG-ACRIN 5103

- Taxane, Bevacizumab for high-risk breast cancer
- Genetic African ancestry associated with severity of taxane-induced neuropathy
 - *Schneider et al, JCO Precis Onc 2017*



TAILORx: 21-Gene Recurrence Score

Albain et al, SABCS 2018 and JNCI 2021

- N= 9,719 HR-positive, HER2-negative, node-negative patients
 - 84% WA; 7% AA
- RS distribution similar for AA and WA pts
- RS had comparable prognostic/predictive value in AA and WA pts
- **BUT...**

AA with worse outcomes compared to WA, even within RS category

RS 11-25 (intermediate risk range):

AA with 80% higher relative risk of recurrence

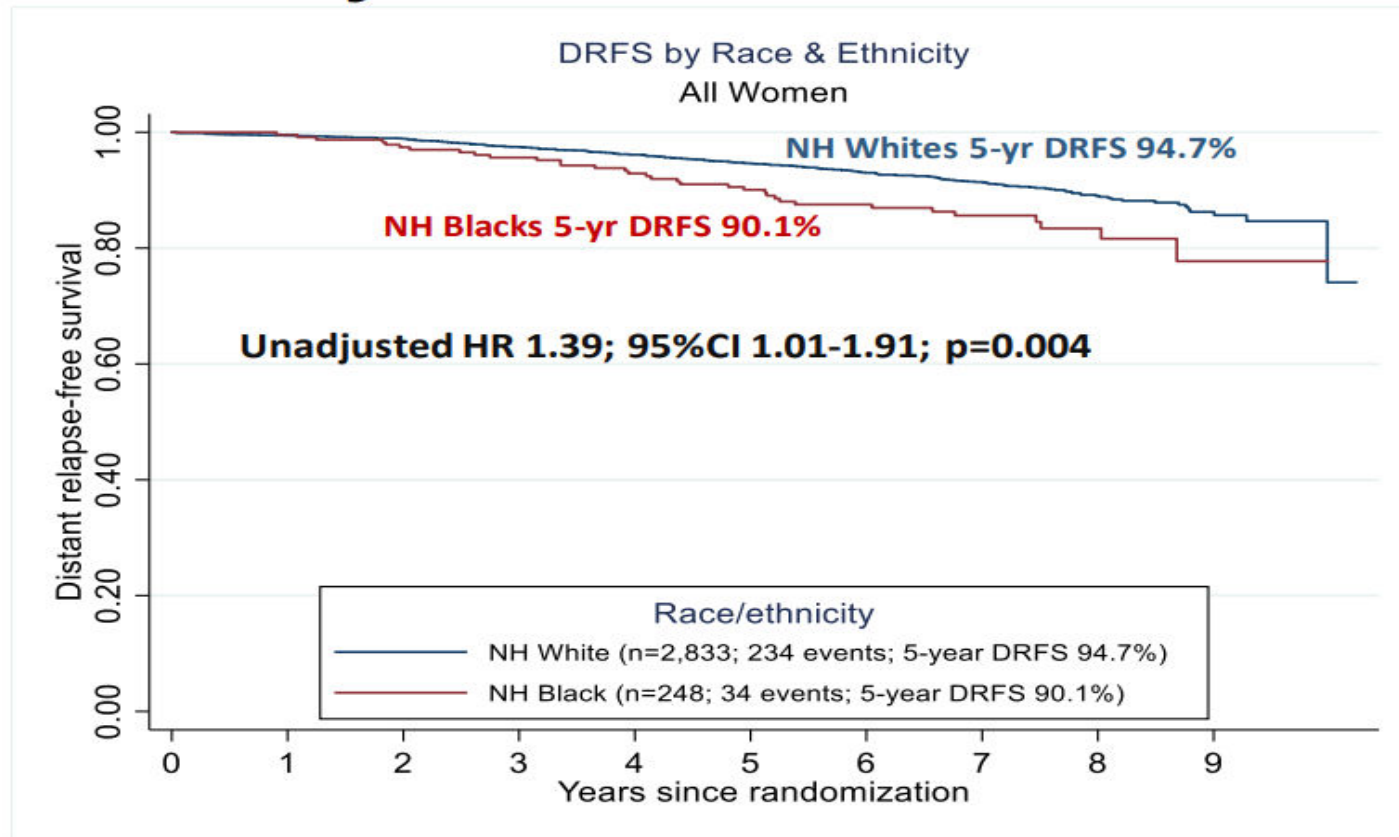
AA with 67% higher relative risk of death



RxPonder Trial: HR+ HER2- Node-Pos

San Antonio Breast Cancer Symposium®, December 6-10, 2022

DRFS by NH White and Black Race





Clinical Trials and the Future

- Improved design, with more relevant accrual targets
 - Accounting for breast cancer subtypes in addition to stage
- Utilization of genotyping and ancestry informative markers (AIMs) to quantify extent of geographically-defined ancestral heredity
- Expand clinic hours
- Transportation support
- Financial compensation for patient time/expenses
- Impact of healthcare reform



Progress: Policy and Trial Design



- December 2020
- Bipartisan legislation
- Mandates Medicaid coverage for routine costs (lab tests; clinic visits) associated with clinical trial participation

**ECOG-
ACRIN
EAZ 171**

- Docetaxel or Paclitaxel in Reducing Chemotherapy-Induced Peripheral Neuropathy in African American Pts With Stage I-III Breast Cancer;
PI Bryan Schneider



Progress: Guidance from the FDA

Enhancing the Diversity of Clinical Trial Populations — Eligibility Criteria, Enrollment Practices, and Trial Designs Guidance for Industry

Additional copies are available from:

*Office of Communications, Division of Drug Information
Center for Drug Evaluation and Research
Food and Drug Administration
10001 New Hampshire Ave., Hillandale Bldg., 4th Floor
Silver Spring, MD 20993-0002
Phone: 855-543-3784 or 301-796-3400; Fax: 301-431-6353
Email: druginfo@fda.hhs.gov*

<https://www.fda.gov/drugs/guidance-compliance-regulatory-information/guidances-drugs>

and/or

*Office of Communication, Outreach and Development
Center for Biologics Evaluation and Research
Food and Drug Administration
10903 New Hampshire Ave., Bldg. 71, Room 3128
Silver Spring, MD 20993-0002
Phone: 800-835-4709 or 240-402-8010
Email: ocod@fda.hhs.gov*

<https://www.fda.gov/vaccines-blood-biologics/guidance-compliance-regulatory-information-biologics/biologics-guidances>

**U.S. Department of Health and Human Services
Food and Drug Administration
Center for Drug Evaluation and Research (CDER)
Center for Biologics Evaluation and Research (CBER)**

**November 2020
Clinical/Medical**



FDA Guidance Tips

- Broaden eligibility criteria
- Sample size: enrichment strategies based upon burden of disease
- Limit inconvenience of participation
- Enhance inclusiveness by involving advocates, community-based organizations
- Consider geography in site selection
- Facilitate medical record gathering to unburden patient
- Recruitment events, gatherings
- Social Media
- Electronic informed consent

Thank You!!!



NewYork-Presbyterian

**AMAZING
THINGS
ARE
HAPPENING
HERE**