



# Barriers to screening and diagnostic testing among patients with a confirmed triple negative breast cancer (TNBC) diagnosis

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## Key Findings

- In this retrospective study using patient-chart data on 283 US patients with TNBC, racial and ethnic disparities were observed in the rates of screening (via mammogram) and testing among Black and Hispanic patients.
- Only 22% of black patients are identified via annual screening compared to 40% of non-Hispanic white patients.
- Similarly, HCPs perceive higher rates of genetic testing barriers are observed in 93% of Black and 86% of Hispanic patients compared to 50% of non-Hispanic White patients.

## Conclusions

- Reasons for first-time mammogram differed by race (routine screening vs family history vs symptomology); Black patients were less likely to have a first-time mammogram for annual screening and Black and Latina patients were more likely to experience difficulty in accessing genetic testing.
- These barriers could delay diagnosis and impact treatment decisions, exacerbating existing disparities.
- Findings from this study underscore a need to improve education and remove barriers to screening and testing among patients from racial and ethnic minority groups which may provide positive downstream effects on health outcomes.

**References:** 1. Bauer KR, et al. *Cancer*. 2007;109(9):1721-1728. 2. Anderson WF, et al. *Breast Cancer Res Treat*. 2002;76(1):27-36. 3. Plasilova ML, et al. *Medicine (Baltimore)*. 2016;95(35):e4614. 4. Li X, Yang J, Peng L, et al. *Breast Cancer Res Treat*. 2017;161(2):279-287.

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## Introduction

- Triple negative breast cancer (TNBC) is an aggressive form of breast cancer that disproportionately affects people of racial and ethnic minority groups.<sup>1-3</sup>
- TNBC is associated with poorer prognosis and lower long-term survival rates versus other cancer subtypes.<sup>4</sup>
- Understanding and quantifying barriers to access for routine services like mammography and genetic testing may reveal areas for improved diagnostic and treatment paradigms and the enablement of more equitable healthcare delivery.

## Objective

- To assess information on, and differences in, screening, diagnosis, and genetic testing by race among patients with a confirmed TNBC diagnosis using a physician survey and patient-chart review.

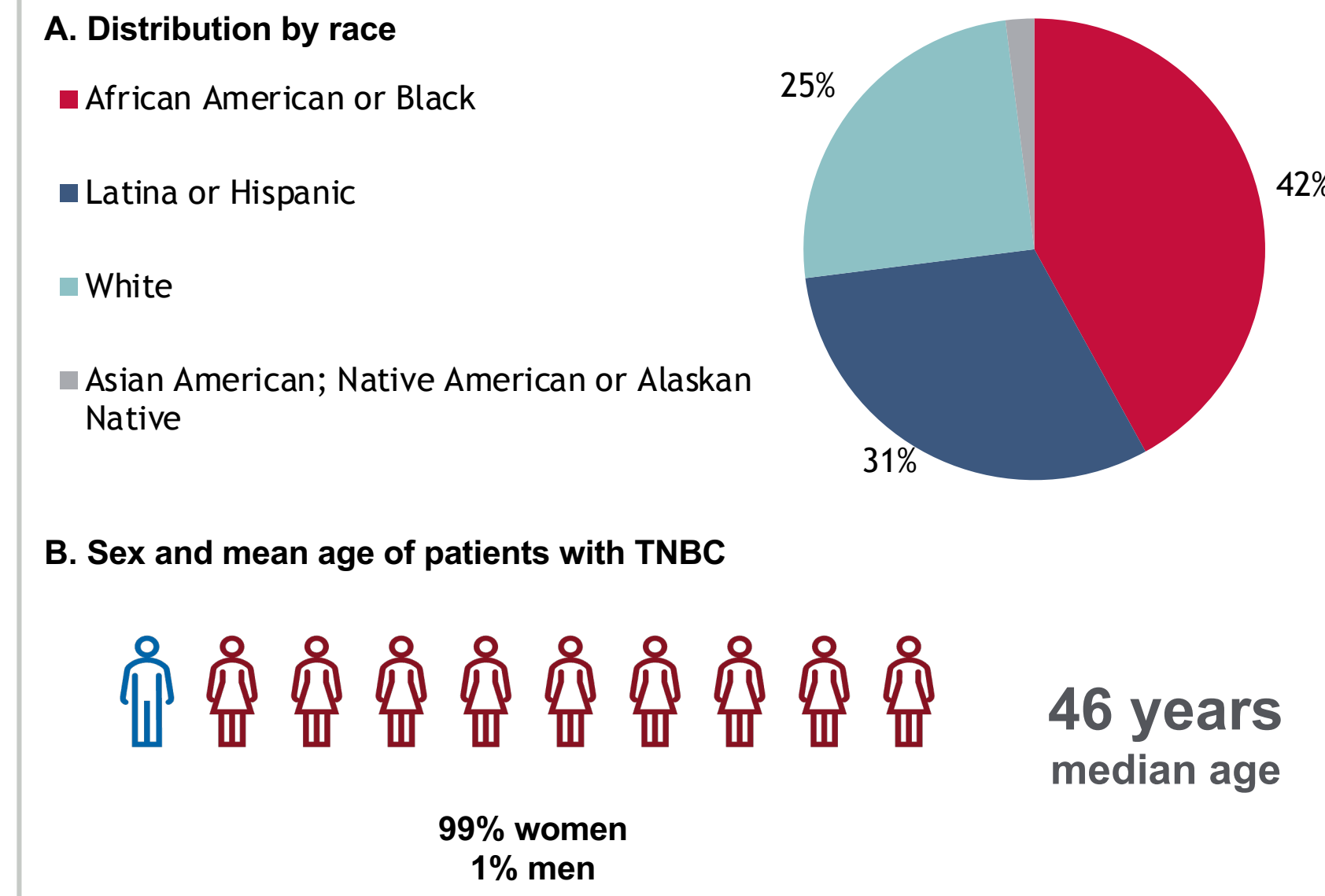
## Methods

- This study described oncologists' perceptions of screening and diagnostic testing among patients with a confirmed TNBC diagnosis.
- An analysis on 283 patients with TNBC, provided by 101 oncologists, was completed.
- Data collection consisted of a 60-min physician survey and linked retrospective review of patients' charts conducted June-July 2022.
- Participating oncologists across the US were required to be board-certified, in practice 3-30 years post-residency, and managing > 7 patients with TNBC in the past 3 years.
- Oncologists extracted patient-level data from 2-4 patient records for the chart review. This study did not investigate mortality.
- Selection of charts oversampled patients on Medicaid, Black and Latina patients, and patients with later stage TNBC to allow for robust disparities analyses.
- Data collected included tests and diagnostic procedures performed, rationale for tests and procedures, and barriers experienced in accessing care.
- Descriptive statistics were used to examine baseline demographic and clinical characteristics of TNBC cases.
- A limitation of this design is that data represents HCP perception of patient experience versus patient perception of their own experience.
- Oversampling of patients on Medicaid, Black and Latina patients, and patients with later stage TNBC does not allow for a random sample.

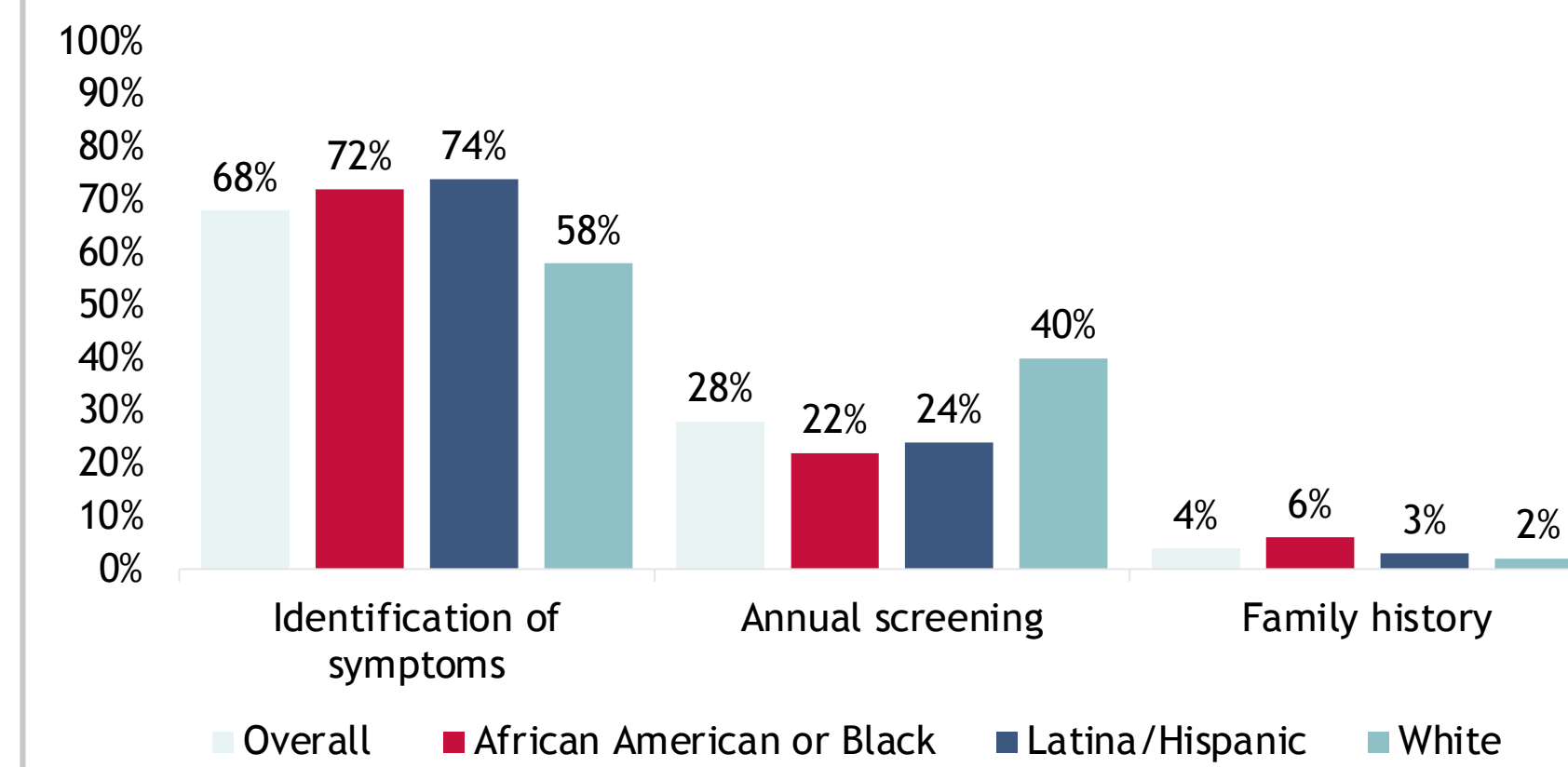
## Results

- We identified 283 patients [99% female; median age=46 years; race= 42% Black, 31% Latina, 25% White, 2% Other] diagnosed with TNBC who met the criteria for study inclusion.

**Figure 1. TNBC patient population demographics**



**Figure 2. Reason for first time Mammogram by race**

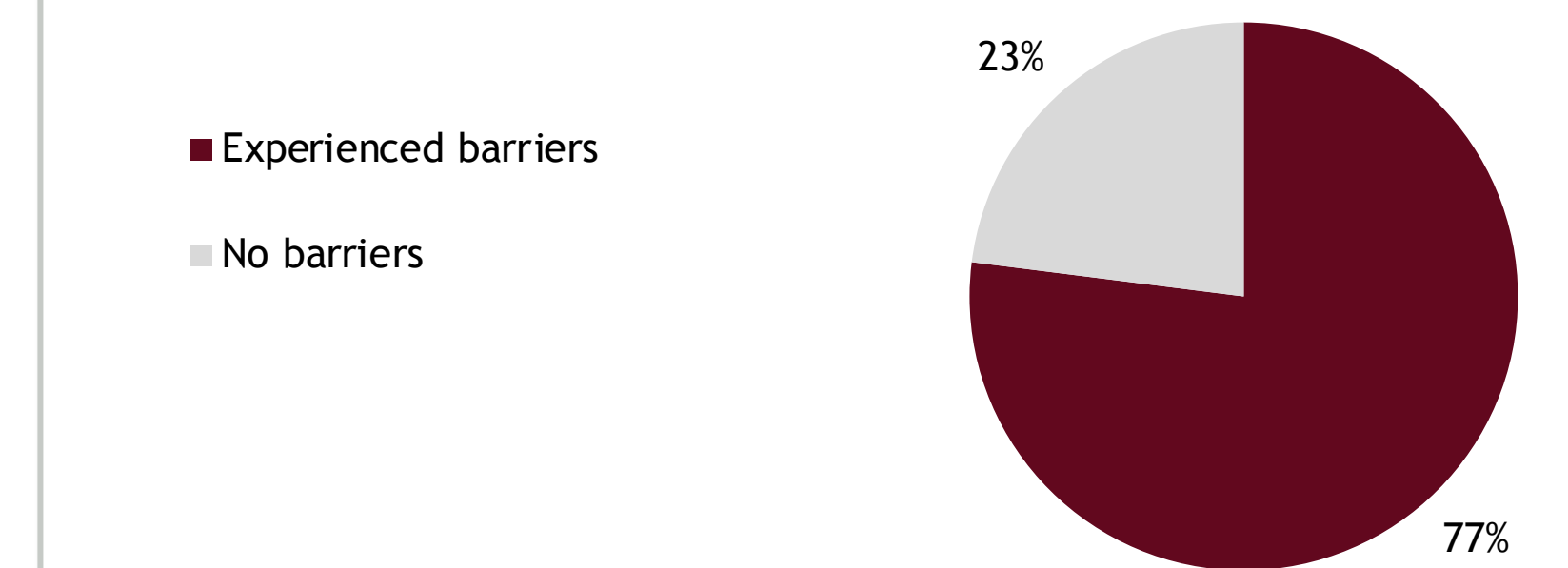


- Most first-time mammograms were performed due to identification of symptoms (68%) as compared to annual screening (28%) or family history (4%).
- White patients were more likely to have annual screening (40%) as the reason for their first-time mammogram compared to Black patients (22%).
- Black and Latina patients were more likely to have a first-time mammogram due to identification of symptoms (72%) compared to White patients (58%).

- Oncologists perceived that few (4%) of their patients experienced barriers to mammogram access, though they perceived higher rates of barriers among Black patients (6%) than Latina (4%) or White (3%) patients.
- They listed cost, scheduling, and access to clinics as the predominant barriers patients experienced.
- Oncologists perceived that most patients (77%) encounter difficulty in accessing genetic testing; this varied by race, with oncologists reporting that 93% of Black patients, 86% of Latina patients, and 50% of White patients encounter difficulty in accessing genetic testing.

**Figure 3. HCP Perception of % of Patients who Experience Barriers / Difficulty Accessing Genetic Testing**

**A. Distribution for the overall TNBC Population**



**A. Distribution by Race**

