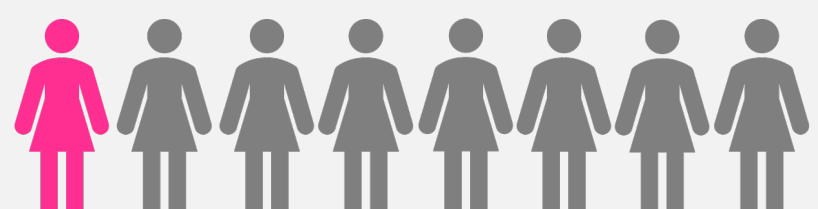


Self-identified race and Area Deprivation Index in patients with invasive lobular carcinoma of the breast: associations with tumor characteristics and event free survival

Mandeep Kaur¹, Anne Patterson², Julissa Molina-Vega², Harriet Rothschild¹, Elle Clelland¹, Laura J Esserman², Olufunmilayo Olopade³, Rita A Mukhtar²

School of Medicine, University of California, San Francisco, CA, USA¹ Division of Surgical Oncology, Department of Surgery, University of California, San Francisco, CA, USA², Hematology/Oncology Section, University of Chicago, Chicago, IL, USA³

Introduction

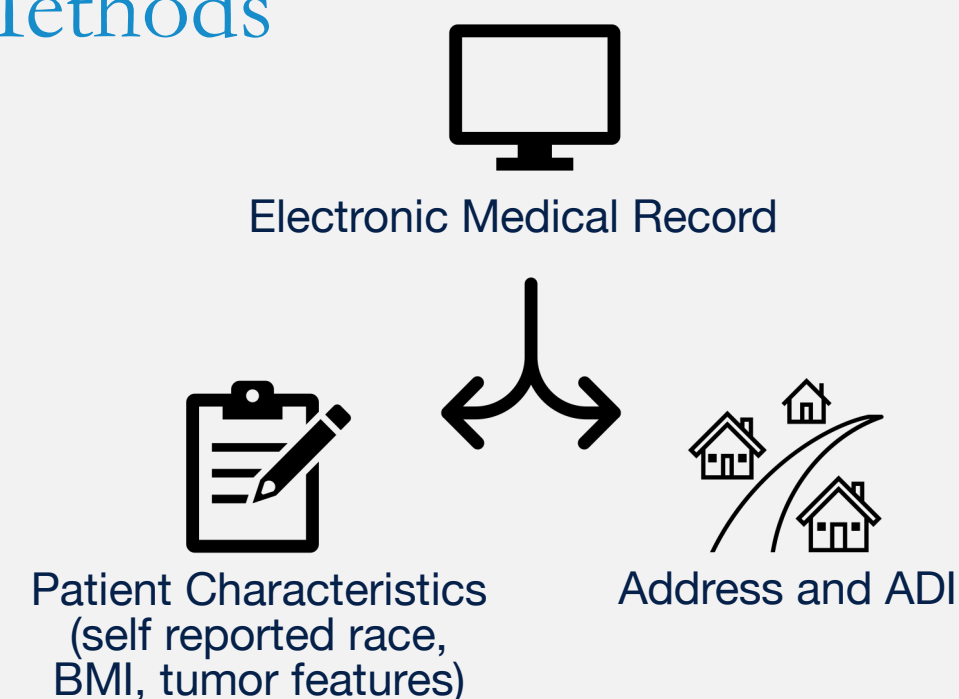


- Invasive lobular carcinoma (ILC) makes up 10-15% of all breast cancers.
- ILC is usually hormone receptor positive and HER2 negative.
- Recent data show an association between non-white race and worse survival outcomes in patients with early stage ILC.**

Research Question

Is self-identified race associated with event free survival (EFS) in patients with stage I-III ILC when adjusting for Area Deprivation Index, a robust indicator of socioeconomic status?

Methods

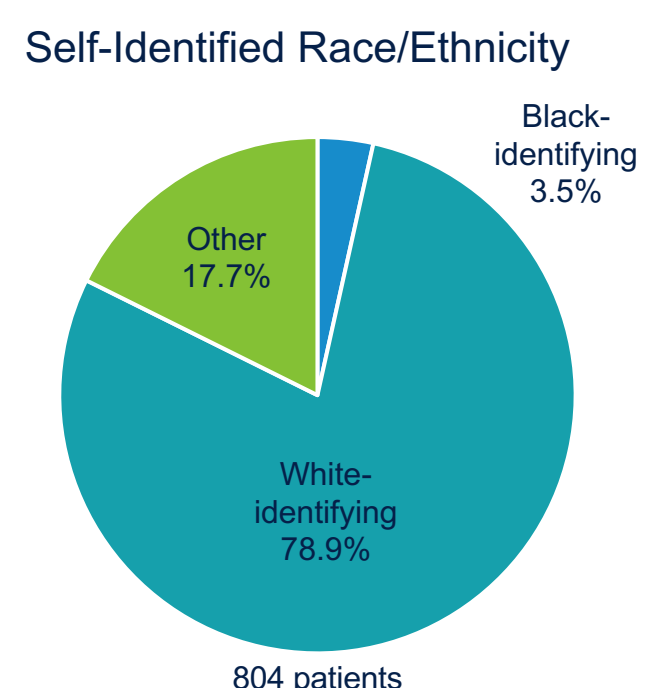


Key Point

Area Deprivation Index and body mass index mitigate the relationship between self-identified race and EFS in patients with early stage ILC.

Results

Study Cohort

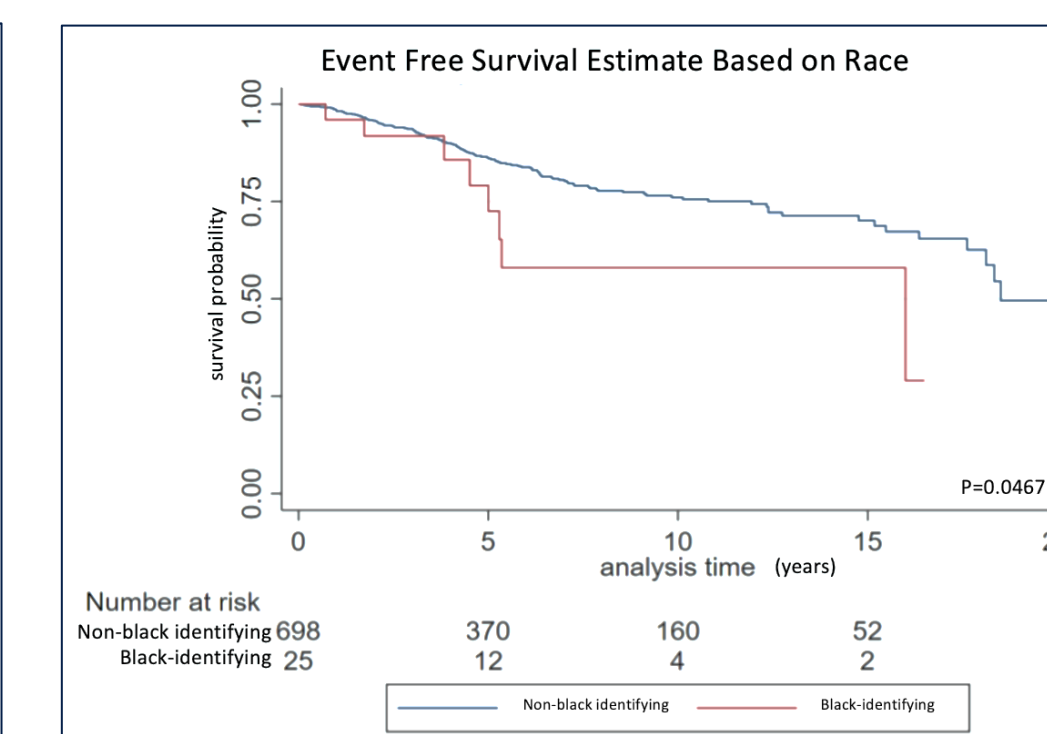
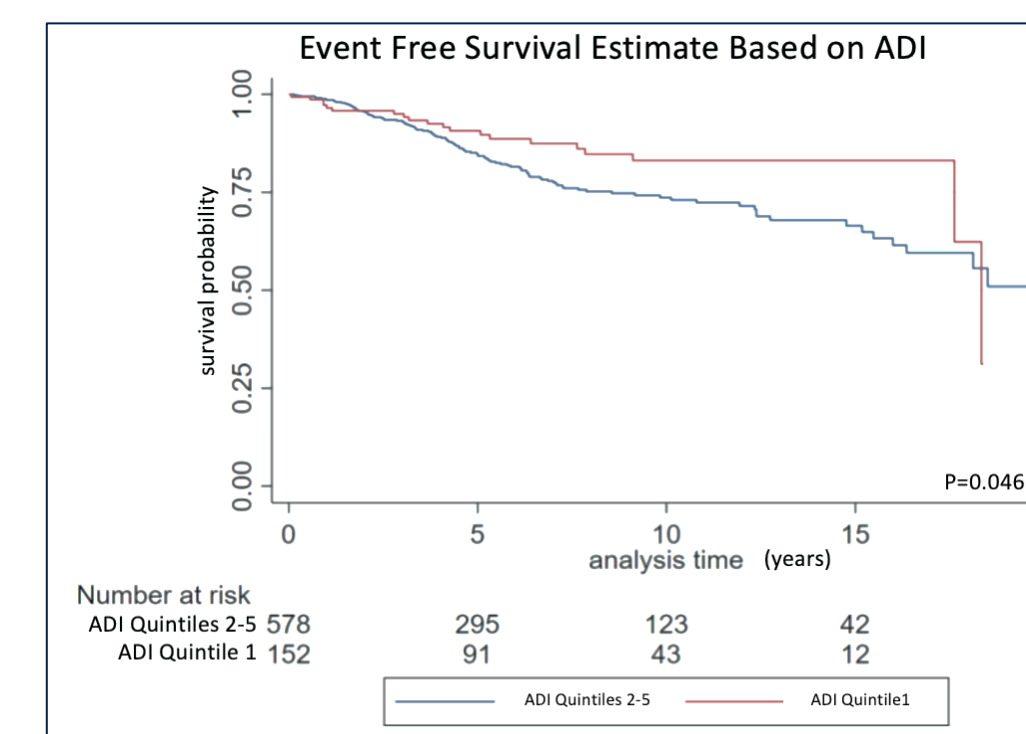


Area Deprivation Index (ADI)



- Higher body mass index (BMI)
- More lymphovascular invasion
- Increased stage at diagnosis
- Less adjuvant endocrine therapy
- Associated with Black-identifying race

Univariate Event Free Survival (EFS) Estimates



Patient and Tumor Characteristics by Self-Identified Race

	Black-identifying (n, %)	White-identifying (n, %)	Other (n, %)	p-value
Average Age at Time of Diagnosis	65.8 years	59.9 years	58.0 years	p = 0.0074
ADI Quintile				p < 0.0001
Body Mass Index (BMI)				p = 0.013

Multivariate Cox Proportional Hazards Model for EFS

	Hazard Ratio	95% Confidence Interval	P value
Self-identified Race			
Non-black	reference		
Black	2.12	0.97-4.61	0.059
BMI			
Normal BMI	reference		
Overweight/Obese	1.56	1.07-2.28	0.022
ADI			
Quintiles 2-5	reference		
Quintile 1 (least deprived)	0.74	0.44-1.24	0.254

Conclusions

On univariate analysis, self-identified Black race was associated with worse outcomes in stage I-III ILC. However, this is mitigated by adjusting for Area Deprivation Index, which is strongly associated with both self-identified race and body mass index.

