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# Racial/Ethnic Distribution of Participants in NRG Oncology Clinical Trials: 2014-2021

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Our high-level **comparison of the racial/ethnic distribution of NRG trial participants to that in the USA SEER registry** provides supportive information for population representative enrollment in selected cancer sites and identifies opportunities to improve diversity to more closely represent the affected population.

## BACKGROUND

- External validity and applicability of clinical research relies upon characteristics of trial participants matching those of the respective disease groups in the general population.
- Understanding the racial/ethnic distribution of patients enrolled in recent USA-based, federally sponsored Phase II and III clinical trials could inform strategies to further align characteristics of trial participants with those of disease group populations.
- NRG Oncology is one of five USA NCI-funded National Clinical Trials Network (NCTN) groups which conduct large Phase II and Phase III cancer trials in the USA, Canada, and select global sites.
- We report the racial/ethnic distribution of participants in NRG Oncology studies for selected sites during 2014-2021 and compare the distribution to that from the USA Surveillance, Epidemiology, and End Results (SEER) program data from 17 registries during 2014-2021 (most recent data available).

## METHODS

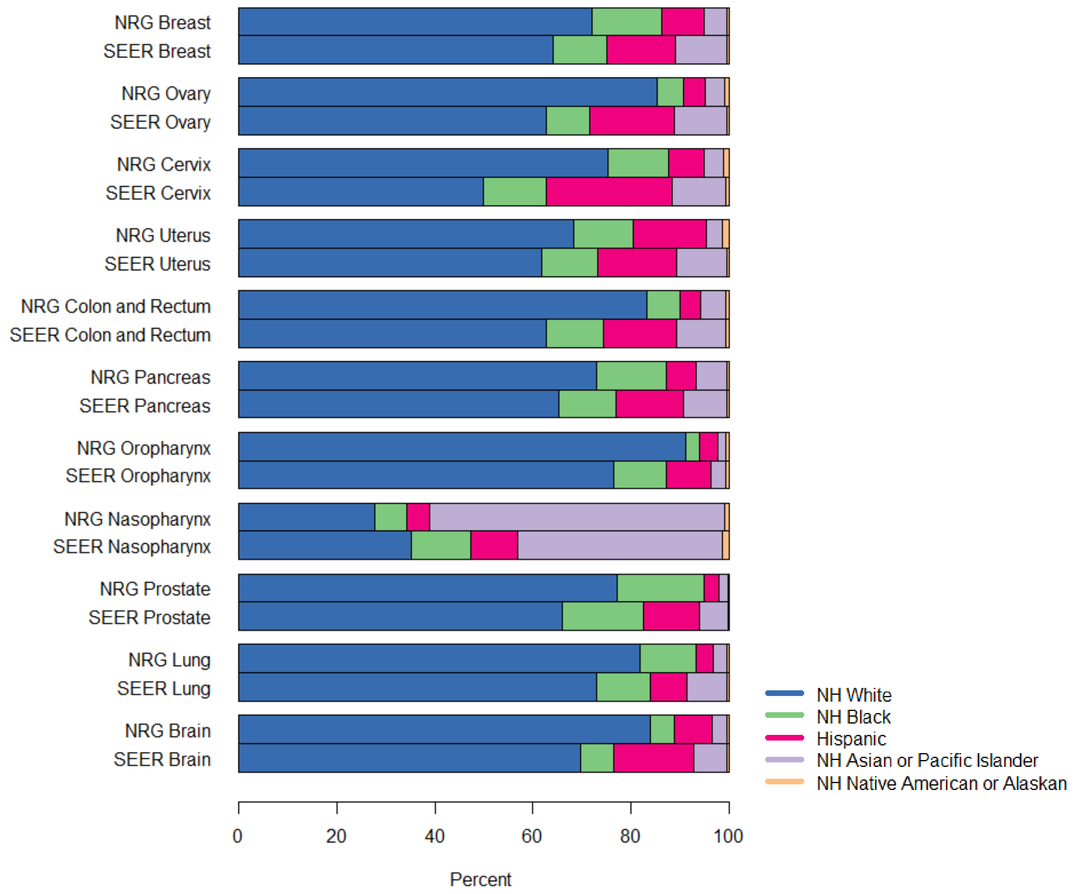
- Proportions of self-reported race/ethnicity were summarized for the 19,216 trial participants with selected cancers enrolled since Mar 1, 2014 (NRG Oncology inception) and before Jan 1, 2022, to therapeutic, symptom management, and other interventional trials.
- Non-North American patients enrolled in NRG trials were excluded, as were those with unknown or mixed race/ethnicity.
- SEER diagnoses (1,602,978) included malignant tumors that were first primaries.
- Patients in SEER with unknown race/ethnicity were excluded, as were non-Hispanic (NH) Native American/Alaskan patients who were not in a Purchased/Referred Care Delivery Area.
- SEER proportions were used to benchmark NRG trials for representativeness of disease burden in the USA population.

## RESULTS

- Among NRG trial participants over the study period, 77.2% were NH White, 11.6% NH Black, 6.0% Hispanic, 4.5% NH Asian/Pacific Islander, and 0.6% NH American Indian/Alaskan.
- Representation of NH Blacks was 3 to 8 percentage points lower in NRG ovary, colon and rectum, oropharynx, and nasopharynx cancer trials compared to SEER. Representation was comparable in other sites shown.
- For nasopharynx, NRG accrual of NH Asian/Pacific Islanders was higher than that reported in SEER. Accrual of other racial/ethnic groups was lower than that reported in SEER.
- For all other selected sites, NRG accrual of Hispanic and NH Asian/Pacific Islander was lower than that reported in SEER.

### Proportions of selected cancer diagnoses by race/ethnicity for NRG participants and SEER registry

| Cancer Site | Total N | | NH-White % | | NH-Black % | | Hispanic % | | NH Asian/ Pacific Islander % | | NH Native American/ Alaskan % | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NRG | SEER | NRG | SEER | NRG | SEER | NRG | SEER | NRG | SEER | NRG | SEER |
| Breast | 4,657 | 420,167 | 72.1 | 64.1 | 14.2 | 10.9 | 8.6 | 14.0 | 4.4 | 10.5 | 0.6 | 0.5 |
| Ovary | 3,459 | 36,309 | 85.2 | 62.6 | 5.6 | 9.0 | 4.3 | 17.2 | 4.1 | 10.7 | 0.9 | 0.6 |
| Cervix | 1,853 | 24,532 | 75.2 | 49.9 | 12.5 | 12.7 | 7.2 | 25.8 | 4.0 | 10.8 | 1.1 | 0.8 |
| Uterus | 980 | 100,099 | 68.4 | 61.9 | 11.9 | 11.2 | 14.9 | 16.2 | 3.4 | 10.1 | 1.4 | 0.6 |
| Colon and Rectum | 625 | 232,355 | 83.2 | 62.6 | 6.7 | 11.8 | 4.2 | 15.0 | 5.1 | 9.9 | 0.8 | 0.8 |
| Pancreas | 204 | 82,202 | 73.0 | 65.3 | 14.2 | 11.7 | 5.9 | 13.6 | 6.4 | 8.9 | 0.5 | 0.5 |
| Oropharynx | 714 | 3,735 | 91.2 | 76.4 | 2.8 | 10.7 | 3.6 | 9.1 | 1.7 | 3.0 | 0.7 | 0.7 |
| Nasopharynx | 352 | 3,865 | 27.8 | 35.3 | 6.5 | 12.1 | 4.5 | 9.6 | 60.2 | 41.6 | 0.9 | 1.5 |
| Prostate | 4,073 | 376,154 | 77.1 | 66.0 | 17.8 | 16.6 | 3.0 | 11.3 | 1.9 | 5.8 | 0.2 | 0.3 |
| Lung | 1,274 | 286,078 | 81.7 | 73.1 | 11.5 | 10.9 | 3.6 | 7.4 | 2.8 | 8.2 | 0.4 | 0.5 |
| Brain | 1,025 | 37,482 | 83.8 | 69.7 | 4.9 | 6.7 | 7.8 | 16.5 | 3.1 | 6.7 | 0.4 | 0.4 |




## CONCLUSIONS

- Our high-level comparison of the racial/ethnic distribution of NRG trial participants to that in the SEER registry provides supportive information for population representative enrollment in selected cancer sites and identifies opportunities to improve enrollment diversity to more closely represent the respective affected populations.
- Areas of success identified merit further investigation to understand if there are best practices which may be applied more broadly towards expanding access to federally funded clinical trials.
- Further planned analyses will focus on disease-specific subtypes to identify opportunities to obtain trial populations which reflect those impacted by these malignancies.

## FUNDING

This project was supported by grants U10CA180868, U10CA180822, U24CA196067, U24CA180803, and UG1CA189867 (NCORP) from the National Cancer Institute (NCI) . U.S. Dept of Health and Human Services