Conclusions Black and Hispanic women were underrepresented in gynecologic cancers trials involving targeted therapies. Careful interpretation of these results and their real-world application in US women is necessary given their distinct host and tumor biology.

Objectives Prior studies suggest use of genetic testing (GT) varies by race. In gynecologic cancer patients, we assessed frequency of positive tumor next generation sequencing (NGS) results that met ESMO 2019 recommendations for germline GT and determined differences in referral to and completion of germline GT by race/ethnicity.

Methods Patients with tumor NGS within a large healthcare system in New York City were retrospectively identified (Sept 2019-Feb 2022). Eligible patients with potentially actionable germline mutations on NGS were identified based on ESMO guidelines (Mandelker et al. 2019). Chi-square/Fisher’s exact analysis assessed differences in outcomes by race/ethnicity.

Results Of 357 gynecologic cancer patients undergoing tumor NGS, 79 (22.1%) had at least one positive tumor mutation meeting ESMO guidelines for germline GT. The racial/ethnic distribution of eligible patients was: 48 (60.7%) non-Hispanic White, 12 (15.2%) Asian, 8 (10.1%) Hispanic, 7 (8.9%) Black, 4 (5.1%) Other. Non-Hispanic White patients were more likely to be referred to GT than patients of Other race/ethnicity (93.8% vs 71.0%, p=0.009) as well as more likely to complete GT (81.3% vs 54.8%, p=0.02).

Conclusions There are racial disparities in referral to and completion of GT in gynecologic cancer patients whose tumor results met ESMO criteria for germline testing. As outcomes of gynecologic cancer are worse for racial minorities, actions need to be taken to avoid further exacerbating health disparities regarding GT. Development of reflex protocols based on positive somatic mutations identified on tumor NGS or, alternatively, population based germline GT may help reduce disparities related to germline GT in gynecologic cancer patients.

Conclusions With the National Cancer Institute (NCI) call-to-action to increase racial/ethnic diversity in clinical trial enrollment, we sought to evaluate minority patient enrollment in gynecologic cancer clinical trials as compared with disease prevalence estimates by race/ethnicity.

Methods Enrollment data from endometrial and ovarian therapeutic clinical trials from January 2018-May 2022 at a NCI-designated Comprehensive Cancer Center in New York City was analyzed. Minority enrollment in ovarian and endometrial cancer trials was compared to SEER estimates of disease prevalence using chi-square analysis. Population estimates of NYC demographics were obtained from the U. S. Census.

Results Over the study period, 129 patients were enrolled in ovarian cancer trials and 52 patients in endometrial cancer trials. Regarding total enrollment, the proportion of clinical trial participants identifying as racial/ethnic minorities (34.1%) was significantly higher than the SEER disease estimate of ovarian cancer in minority patients (25.7%), p<0.05. Likewise, total enrollment of minority patients in endometrial cancer trials (61.5%) exceeded their disease prevalence estimate of 28.5% (p<0.05). However, enrollment of Asian patients in endometrial cancer trials (1.9%) remained under disease prevalence estimates (7.7%) despite the NCI call-to-action (table 2).