

RACIAL DISPARITIES IN TIME TO FIND A DONOR OOCYTE MATCH

Nissiya Adjei, BS¹, Shelun Tsai, MD², ¹ Angela Dee Svedberg B.Ed.², Anjile An, MPH³, Zev Rosenwaks, MD,² Alexis Melnick, MD²

¹Department of Obstetrics and Gynecology, New York-Presbyterian/Weill Cornell Medical Center, New York, NY 10021. ²Department of Reproductive Medicine and Infertility, Ronald O. Perelman and Claudia Cohen Center for Reproductive Medicine, Weill Cornell Medicine, 1305 York Ave., 6th Floor, New York, NY 10021. ³Division of Biostatistics, Department of Population Health Sciences, Weill Cornell Medicine, 402 East 67th St, New York, NY 10021

Background: Oocyte donation services offer an important reproductive option for patients. However, demand typically far exceeds the supply of available oocyte donors. This is particularly salient when recipients are searching for oocyte donors of a specific race or ethnicity, as the distribution of oocyte donors in the United States does not reflect the general demographics of women in the United States nor the population of donor oocyte recipients¹. Little is known about the influence of race and ethnicity on the time it takes for donor oocyte recipients to find a suitable donor oocyte match.

Objective: To evaluate the influence of race and ethnicity on the time to first donor oocyte offer and time to first donor oocyte match.

Materials and Methods: This is a retrospective cohort study at a single academic center. Patients who became active on the potential donor oocyte recipient list between 2017-2021 were included. At our institution, potential donor oocyte recipients completed a form documenting their characteristics including hair color, eye color, height, weight, race and ethnicity. There was also a section to request additional preferred donor characteristics. When a suitable oocyte donor became available, patients/couples were provided with an “offer” that they could either accept or decline. The primary outcome was the time to first donor oocyte offer. The Fisher’s exact test was used to compare demographic variables by offer status. Kaplan-Meier curves with log-rank test and multivariable Cox proportional-hazards regression were used to analyze the relationship between race/ethnicity and time to first offer and acceptance.

Result(s): 731 participants were included. 60% identified as White, 23% as Asian, 8% as Black, 7% as Hispanic, and 1.5% as two or more races. There was a significant difference in the distribution of race by receipt of donor oocyte offer ($P=0.005$). White and Hispanic patients were disproportionately overrepresented among those who received an offer compared to those who did not receive an offer (White: 61% vs. 51%; Hispanic 7.6% vs. 1.3%), while Asian patients were underrepresented (21% vs. 39%). The time to first donor oocyte offer was also significantly different by race ($P=0.001$). Median time to offer was 6.7 months for Asian patients compared to 5.6 months for White patients, 5.2 months for Black patients, and 5.2 months for Hispanic patients. After adjusting for patient age, BMI, eye color, additional requests count, and number of prior autologous IVF cycles, the estimated offer rate was 30% lower among Asian patients compared to White patients (95% CI: 0.54, 0.89). Offer acceptance rate was 31% lower among Asian patients (95% CI: 0.52, 0.91) when compared to White patients.

Conclusion(s): Race is a major influence on the time it takes to receive and accept donor oocyte offers at a single academic institution.

Financial Support: None

References:

1. Tsai S, Chung EH, Truong T, Farrell AS, Wu J, Ohamadike O, Eaton JL. Racial and ethnic disparities among donor oocyte banks in the United States. *Fertil Steril.* 2022 Mar;117(3):622-628