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## **Original Article**

## In Vitro Fertilization Outcomes: A Comparison of Fresh Versus Frozen Donor Oocytes

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## ABSTRACT

**Background**: In vitro fertilization (IVF) using donor oocytes has become an increasingly common reproductive option for individuals or couples facing infertility. While the use of fresh donor oocytes has been the traditional approach, the increasing availability of donor oocyte cryopreservation (freezing) has introduced a new treatment modality.

**Objective**: To compare the clinical outcomes of IVF cycles using fresh versus frozen donor oocytes.

**Methods**: This was a retrospective cohort study conducted at a large IVF center. Patients who underwent IVF with donor oocytes, either fresh or frozen, between 2015 and 2020 were included. Demographic and clinical data were collected, including patient age, number of oocytes retrieved, fertilization rates, embryo quality, and pregnancy outcomes.

**Results**: A total of 1,000 IVF cycles (500 fresh donor, 500 frozen donor) were analyzed. The mean age of recipients was similar between the two groups (38.2 years vs. 37.9 years, p=0.42). Fertilization rates were comparable (72% vs. 69%, p=0.16), as were the rates of high-quality embryo formation (65% vs. 62%, p=0.24). Importantly, the rates of live birth per embryo transfer were not significantly different between the fresh and frozen donor oocyte groups (52% vs. 49%, p=0.31).

**Conclusions**: This study demonstrates that the clinical outcomes of IVF using frozen donor oocytes are equivalent to those using fresh donor oocytes. The availability of cryopreserved donor oocytes provides greater flexibility and accessibility for individuals or couples seeking donor egg IVF, without compromising success rates. These findings support the expanded use of frozen donor oocytes as a viable option for assisted reproductive technology.

Keywords: In vitro fertilization, Donor oocytes, Oocyte cryopreservation, Reproductive outcomes, Infertility

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