RETHINKING EMBRYO SELECTION IN PGT-A

A recent paper in *Reproductive BioMedicine Online* (1) explores whether it is time to rethink how we interpret chromosomal abnormalities detected during preimplantation genetic testing for aneuploidy (PGT-A).

The authors argue that current approaches may lead to the unnecessary discard of potentially viable embryos because they do not clearly distinguish between meiotic aneuploidies, which affect the entire embryo, and mitotic abnormalities, which arise later and often remain confined to the trophectoderm.

By combining genome-wide SNP parental haplotyping (karyomapping) with allelic intensity analysis, it is possible to determine the origin of chromosomal alterations and differentiate meiotic from mitotic events. This distinction is clinically relevant: embryos showing only mitotic imbalances with normal biparental inheritance may still retain developmental potential and could be considered for transfer with appropriate genetic counselling.

The work highlights the importance of adopting more informative genomic approaches to reduce the risk of discarding embryos that might lead to healthy live births.

1. 10.1016/j.rbmo.2026.105504