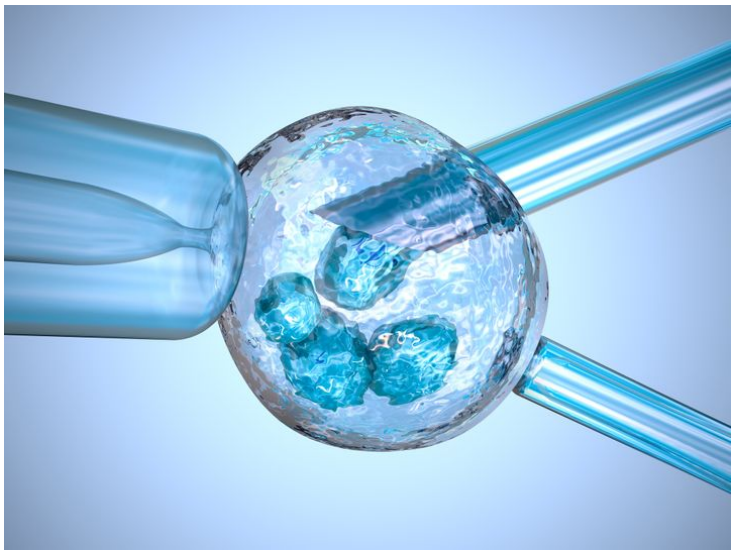
BioSpectrum
the business of Bio & Health Sciences
ASIA EDITION

PerkinElmer unveils innovative genetic testing kit

16 October 2019 | News

PG-Seq™ Rapid Non-Invasive Preimplantation Genetic Testing Kit as Alternative to IVF Embryo Biopsies



PerkinElmer, Inc., a global leader committed to innovating for a healthier world, has introduced its PG-Seq™ Rapid Non-Invasive Preimplantation Genetic Testing for Aneuploidy (PGT-A) kit. This solution tests spent embryo culture media for chromosomal abnormalities during *in vitro* fertilization (IVF) treatment.

PGT-A is used to identify viable embryos, so the transfer or storage of embryos with an incorrect number of chromosomes can be avoided, as those typically lead to failed IVF cycles. Traditionally, PGT-A requires a biopsy of a developing embryo by creating an opening in the outer coating prior to removal and testing of a few cells. However, recent studies have shown that an embryo releases small amounts of DNA into the culture media in which it is growing, allowing the surrounding fluid to be genetically tested instead.

PerkinElmer's PG-Seq Rapid Non-Invasive PGT-A kit is specifically designed for this type of sample, which enables embryos to remain fully intact. Leveraging the science behind PerkinElmer's biopsy-based PG-Seq kit 2.0, the new non-invasive kit tests the spent embryo culture media to accurately detect aneuploidies, as well as structural rearrangements, including unbalanced translocations and segmental errors.

The kit is a modified version of the new PG-Seq Rapid kit, a three-hour sample preparation workflow—less than half of the sample preparation time compared to the PG-Seq kit 2.0 workflow.