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**OnePGT: A single workflow for concurrent PGT-M, PGT-SR and PGT-A on blastomere and trophectoderm biopsies**

Genome-wide haplotyping strategies, such as karyomapping and haplarithmisis, have paved the way for comprehensive PGT, i.e. leveraging PGT-M, PGT-A and PGT-SR in a single workflow. These methods are based upon SNP array technology. OnePGT offers a generic, NGS-based approach for automated haplotyping and copy-number assessment, both combined or independently, in human single blastomere and trophectoderm samples based on reduced representation of the genome. A multi-centre verification for a total of 225 embryos shows a 100% concordance between OnePGT and reference PGT-M methods. Employment of OnePGT for PGT-M, PGT-SR, PGT-A or combined as comprehensive PGT offers a scalable platform, which is inherently generic and thereby, eliminates the need for family-specific design and optimization.