1. Record Nr. UNINA9910484711003321 Autore Kuliev Anver Titolo Practical preimplantation genetic testing / / Anver Kuliev, Svetlana Rechitsky, Joe Leigh Simpson Pubbl/distr/stampa Cham, Switzerland: ,: Springer, , [2020] ©2020 **ISBN** 3-030-43157-6 Edizione [3rd ed. 2020.] Descrizione fisica 1 online resource (XII, 291 p. 118 illus., 62 illus. in color.) 616.042 Disciplina Preimplantation genetic diagnosis Soggetti Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Place of Preimplantation Genetic Testing (PGT) in the Options for Primary Prevention of Genetic Disorders -- Major Components of Preimplantation Genetic Testing: Obtaining Biopsy Material -- Major Components of Preimplantation Genetic Testing: Adjustment of Available Genetic Technologies to PGT Practice -- Strategies and Indications for Preimplantation Genetic Testing of Monogenic Disorders (PGT-M) -- Preimplantation Genetic Testing for Human Leucocyte Antigens (HLA) (PGT-HLA) -- Preimplantation Genetic Testing for Chromosomal Disorders -- Clinical Outcomes of Preimplantation Genetic Testing -- Ethical, Social and Legal Issues with Preimplantation Genetic Testing. Sommario/riassunto Fully revised and updated with the most current information, the third edition of this practical clinical text covers all aspects of the rapidly advancing field of preimplantation genetic testing (PGT). Although PGT has become an established procedure for genetics and assisted reproduction practices over the last decade, its wider application has occurred after the introduction of next generation technologies in the last few years, necessitating this much-needed new edition. This will include, first of all, an update on PGT accuracy, reliability and safety, to ensure improved access to PGT for those who may benefit greatly from this technology. New content will also present progress in the primary

prevention of genetic disorders, which now discusses approaches for

prospective identification of at-risk PGT couples through the

application of the extended gene testing panels. In fact, because of dramatic technological improvements in all aspects of PGT, most of the sections have been updated, with the addition of new sections on next generation technologies and universal PGT with combined testing for single gene and chromosomal disorders, which has previously presented a challenge. The guiding PGT strategies for different genetic disorders are presented, with emphasis on the most complicated cases that might be of special utility in the wider application PGT technologies worldwide. Additionally, a new section will be devoted to borderline indications, which will include common adult-onset conditions with genetic predisposition and non-genetic indications. expanding PGT applications to heart disease and cancer and the use of PGT for stem cell transplantation treatment of genetic and acquired disorders, where unique outcome data has become available. Combining the latest research and the most cutting-edge practice. Practical Preimplantation Genetic Testing, 3e is an excellent resource for clinical reproductive medicine specialists, genetic counselors, researchers and analysts.