

Introduction to Genetics and ART



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Clinical genetics is an integral component of reproductive medicine. Carrier screening and preimplantation genetic testing (PGT) are commonly offered genetic tests in the assisted reproduction setting. Carrier screening can help determine if a couple may be at an increased risk for a genetic disorder in their future offspring, and provide

them with the opportunity to explore alternative reproductive options as needed. PGT-M (PGT-monogenic) may be available to test the couple's embryos for a specific genetic disorder. In addition, PGT-A (PGT-aneuploidy) is an option to determine the chromosomal status of embryos prior to transfer. For intended parents using a gamete donor, consideration of that donor's carrier screening results and family medical history is an important component of donor selection. Clinicians should consider referring patients to a genetics specialist, such as a genetic counselor, to discuss family medical history and genetic test results in the reproductive medicine setting.