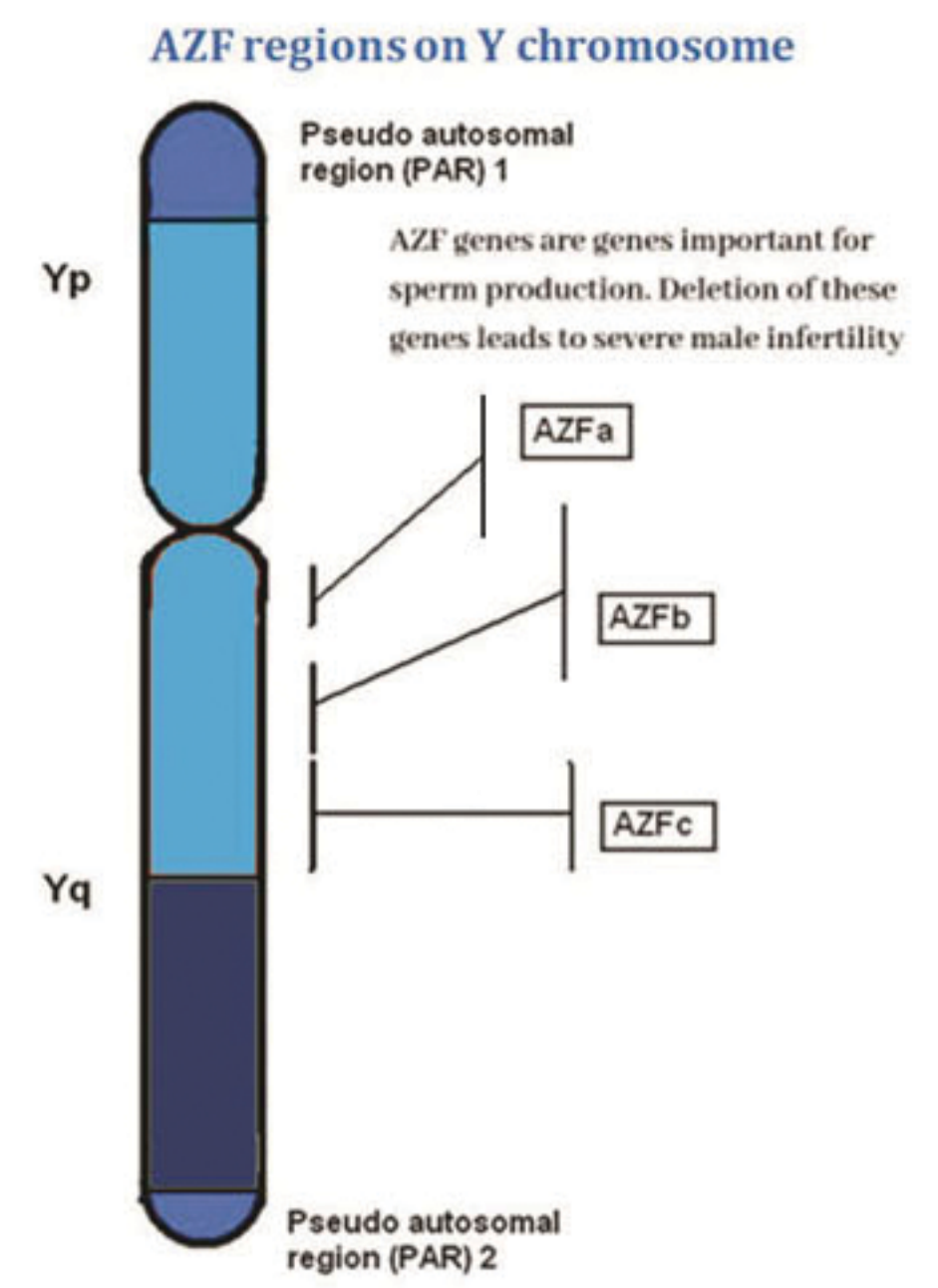


Y Chromosome Microdeletion




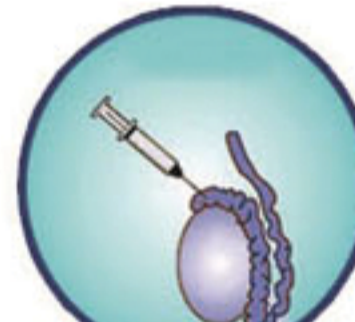

What is Y chromosome microdeletion?

- Infertility affects 15-20 % of couples of reproductive age, with male-factor infertility accounting for one-half of cases.
- Y chromosome microdeletions (YCMDs) are the second most common genetic cause of male infertility.



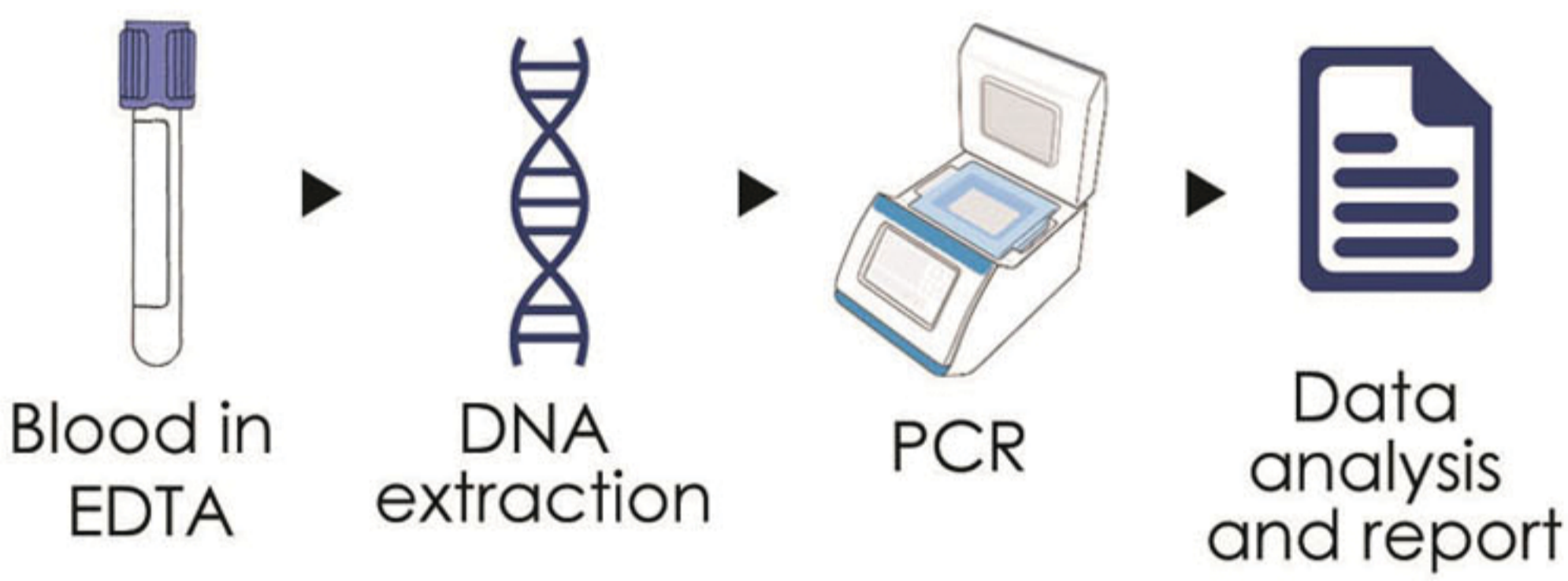
- Y chromosome microdeletion (YCM) is a genetic disorder caused by deletions of genes in the AZF regions of the Y chromosome which results in conditions like Azoospermia (absence of sperm), Oligospermia (Low sperm count), and/or abnormal sperm morphology/motility.
- The prevalence of Y chromosome deletions and microdeletions is approximately 1/2,000-3,000 males.

Indications for molecular screening of the Y chromosome microdeletion

-  Men with non-obstructive azoospermia (no sperm due to failure of spermatogenesis)
-  Men with moderate or severe oligospermia and teratospermia (low sperm count)
-  Patients undergoing intracytoplasmic sperm injection (ICSI)
-  Testicular sperm extraction (TESE)
-  History of male infertility

Y chromosome microdeletion (YCM) is a genetic disorder caused by missing genes in the Y chromosome.

Methodology



Why Greenarray ?

- Simple and safe
- Convenient
- Fast result
- Reliable and accurate

Clinical Interpretation

Y chromosome microdeletion test detects the genetic markers in AZFa, AZFb, AZFc & AZFd regions:

- **Detected:** Absence of one or more genetic markers indicate Y-chromosome microdeletion.
- **Not Detected:** Presence of all genetic markers indicates no microdeletion in Y-chromosome.

Limitation


- Diagnostic errors can occur due to rare sequence variations.
- Breakpoints of identified microdeletions will not be determined.
- Variants within individual genes included in the AZF regions will not be detected.
- Male infertility due to causes other than the Y chromosome microdeletions tested will not be detected.

References

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- Skaletsky, H. et al. (2003) The male-specific region of the human Y chromosome is a mosaic of discrete sequence classes. *Nature* 423, 825-37.

About Greenarray

Greenarray is a molecular diagnostic laboratory. We offer diagnosis of infectious diseases, genetic testing and healthcare information to improve health and wellness. Our goal is to provide high quality affordable and accessible services.

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