INDICATIONS FOR TESTING
Female and male reproductive partners unable to achieve pregnancy:
- Within 12 mos if female partner <35 yrs of age
- Within 6 mos if female partner 35-40 yrs of age
- Within <6 mos if female partner ≥40 yrs of age

A concurrent evaluation of the female reproductive partner is recommended; refer to the [Infertility Testing for the Female Reproductive Partner Algorithm](#).

Testing should be accompanied by a detailed history and evaluation for [thyroid disease](#) and [sexually transmitted infections](#).

ORDER

Semen analysis (preferably twice, 1 mo apart)

- >1 million round cells/mL
  - Stain to differentiate between sperm and WBCs
  - >1 million WBCs/mL
    - Pyospermia
    - Evaluate for infection/inflammation

- Azoospermia (confirmed with pelleted sample)
  - Repeat semen analysis (if not already performed; order no sooner than 1-2 wks after first semen analysis)
    - Azoospermia confirmed
      - ORDER
        - FSH test
        - Examine for obstructive azoospermia

- Oligospermia
  - ORDER
    - Testosterone test (using an immunoassay method)

- No abnormalities on semen analysis or history
  - ORDER
    - Repeat semen analysis (if not already performed)

- Low
  - CONSIDER
    - Other potential causes of infertility (eg, female factors)

- Normal
  - CONSIDER
    - Other potential causes of infertility (eg, female factors)

- High FSH and/or consistent clinical findings (eg, testicular atrophy)
  - CONSIDER
    - Biopsy

- Low or low normal FSH without additional clinical findings
  - CONSIDER
    - Nonobstructive azoospermia
      - Klinefelter syndrome
      - Cytogenetic abnormalities
      - ORDER
        - Chromosome analysis and Y-chromosome microdeletion testing

- Normal FSH and/or consistent clinical findings (eg, low semen volume)
  - CONSIDER
    - Obstructive azoospermia
      - Assess for cystic fibrosis
      - Reference to the ARUP Consult [Cystic Fibrosis topic](#)

Abbreviations
- FSH  Follicle-stimulating hormone
- WBC  White blood cell

References