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Your Way.

SPRING FERTILITY

How to Interpret a Semen Analysis

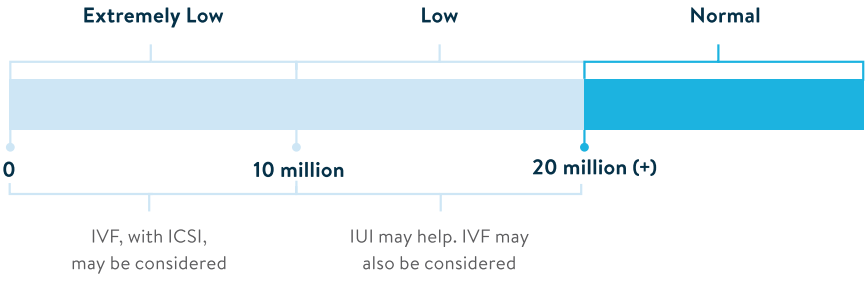
This document was created as a reference guide for practitioners to counsel patients about their semen analysis. Spring Fertility follows the World Health Organization (WHO) recommendations and criteria. The 5th edition WHO manual provides updated, standardized recommendations for semen analysis parameters. You will see these referenced in the 'WHO 5th Edition Column' below. This will allow providers to quickly recognize if the patient's analysis is within normal range based on WHO parameters.

Here is a sample Spring Fertility semen analysis:

Semen Parameters	Results	WHO 5th Edition Reference
1. Volume	1.50mL	≥ 1.5mL
2. Color	White/Gray	Whitish, Gray, Opalescent
3. Viscosity	0 – None	Normal
4. Liquefaction	< 30 minutes	Complete in 30 minutes
5. Round Cells	< 1 million per mL	≤ 1 x 10^6/mL semen

Sperm Parameters	Results	WHO 5th Edition Reference
6. Concentration	22.00mL	≥ 15 x 10^6/mL
7. Total Sperm Count	33.00mL	≥ 39 x 10^6/mL
8. Total Percent Motility	70%	≥ 40%
9. Forward Progression	3	2 – 4
Total Motile Count (TMC)	**23.10 Million (M)**	

The **Total Motile Count** is the most important parameter.



Total Motile Count (TMC) = Volume x Concentration x Total Percent Motility

Example: 1.5 x 22 x .70 = **23.10 Million (M)**

PLEASE REFER TO THE BACK FOR ADDITIONAL INFORMATION

Semen Parameters

1. **Volume:** How many milliliters were produced
   Normal: Between 1.5 – 5 mL
   Numbers Outside Normal Range? Low volumes potentially indicate dysfunction or blockage in the seminal vesicles or prostate.
2. **Color:** A whitish, gray or opalescent color is considered normal
3. **Viscosity:** Measuring semen's consistency and resistance to flow
   Normal: A number 0 – 3 is assigned. The more viscous the semen, the harder time it has leaving the reproductive track and the higher the number.
4. **Liquefaction:** Providing time for semen to change from gel to liquid, then analyzing at the 30 minute mark.
5. **Round Cells:** Premature sperm and blood cells
   Normal: Less than 1 million per mL
   Numbers outside normal range? Spring's SF lab will do a follow up assay. High concentrations of cells may indicate an infection.

Sperm Parameters

6. **Concentration:** How many million sperm per mL
   Normal: Approximately 15-20+million
   Numbers Outside Normal Range? Lower numbers may indicate that sperm is being blocked or that the testicles are not producing sperm the way they should.
7. **Total Sperm Count:** Concentration x Volume
8. **Total Percent Motility & Progressive Motility:** Percentage of sperm moving
   Normal: 40% of greater
9. **Forward Progression:** The forward movement of sperm
   Normal: 2 – 4 is considered normal

Total Motile Count — Please refer to the chart on the bottom, front page. Spring Fertility considers the Total Motile Count the most crucial parameter in the semen analysis.

Morphology Data

This data looks at the characteristics of the sperm including percentage of head, neck, midpiece and tail defects. Patients may ask if abnormal sperm will increase the chances of a birth defect. Only normal sperm are capable of fertilizing an egg.

Normal: Minimum 4 out of 100 normal sperm must be found

Appointment Details

At Spring Fertility, we are happy to see individual patients or both intended parents for an initial fertility consult. Patients can make an initial consult appointment by calling **(415) 964-5618** or clicking the "**Book A Consult**" button on **Springfertility.com**

1. Patients must make an appointment prior to visiting Spring (ideally 24 hours before)
2. This service is self-pay. Payment due at first appointment.
3. **Pricing:** $275
4. Referring providers should send a referral form to:
   5. **Fax:** **(415) 877-1879** or
   6. **Email:** **newpatients@springfertility.com**

Urologist Recommendations:

Ira Sharlip (SF)
Golden Gate Urology
(415) 543-2830

Paul Turek (SF & San Jose)
(888) 887-3563

James Smith (SF)
UCSF Department of Urology
(415) 353-2200

Shu Pan (Oakland)
(510) 465-5800