

Semen analysis

see also **Fertility diagnostics**

General:

The significance of a spermiogram for male fertility has to be considered relative and is specific exclusively in complete absence of spermatozoae (azoospermia). The prognosis of the spermiogram parameter for the probability of pregnancy is approx. 20%. In the spermiogram the following parameters are considered: ejaculate quantity, number of sperms, pH-value, viscosity, motility, microscopic differentiation.

Indication: Fertility disturbances, hypogonadism, e.g. infertility for > 1 year, therapy monitoring

Material: Sperm, native, without spermicidal substances, collection into sterile container, send the sample as soon as possible to laboratory. Transportation time should not exceed 1 hour, alternatively send patient to the laboratory for sample collection. Four to five days without ejaculation should be considered prior to performing the test.

Preanalytics: send immediately!

TAT: same day, FML

Method: Microscopy, staining (Eosin, Giemsa)

Ref.- range: see report

Note: Fructose determination is recommended as additional examination, see also fructose in seminal fluid. Further parameters are: FSH, LH, testosterone in serum.

Nomenclature:

<i>Aspermia</i>	no ejaculate	retrograde ejaculation by neurogene or mechanical causes (e.g. retroperitoneal lymphadenektomia, diabetes mellitus, spinal arterial throm-bosis, traumata, genital anomalia), perturbation in the range of ampullae and prostatic urethra, psychic caused aneja-culation
<i>Azoospermia</i>	neither spermatozoae nor cells of the spermatoge-nesis visible in the ejaculate	<i>Transportation perturbations:</i> congenital (aplasia, dysgenesis, pH decreased, fructose re-duced), inflammatory (epidi-dymitis) or iatrogen. (e.g. vasectomy). Testes volume and FSH in the normal range. <i>Production perturbations:</i> Tubular testicular parenchyma damage, FSH almost always increased, usually testicle volume reduced.
<i>Asthenozoospermia</i>	less than 50% spermato-zoae with a fast, progres-sive, linear movement and less than 50% slow spermatozoae with inert, linear or not linear movement or less than 25% spermatozoae with a fast, linear, progressive movement	
<i>Hemospermia</i>	erythrocytes in ejaculate, redish/brownish color	
<i>Hyperspermia</i>	volume of the ejaculate > than 6 ml	
<i>Kryptozoospermia</i>	less than 1 million sper-matozoae/ml	
<i>Nekrozoospermia</i>	only non vigorous sper-matozoae	

<i>OAT syndrome</i>	oligoasthenoterato-spermia	oligozoospermia with unsatisfactory growth of normal spermatozoae
<i>Oligozoospermia</i>	< than 20 mio. spermatoz./ml	
<i>Polyspermia</i>	more than 250 mio. spermatoz./ml	
<i>Pyospermia</i>	ejaculate with bacteria, many granulocytes	e.g. in acute prostatic vesiculitis, pH higher than 8
<i>Teratozoospermia</i>	less than 30% normal spermatozoae	

For complete list of laboratory test offered at Freiburg Medical Laboratory, please visit <http://www.fml-dubai.com/parameter-listings/>