

**EXPLANATION OF TEST RESULTS**  
 Reproductive Testing Laboratory  
 Department of Obstetrics/Gynecology and Urology  
 University of Iowa Hospitals and Clinics

The results of the reproductive tests you requested are enclosed. The normal values for all tests performed by the Reproductive Testing Laboratory are provided below.

**Semen Analysis**

<u>Parameter</u>	<u>Normal Range*</u>
Days Contenance (DC)**	: 2-7 days optimal
Volume	: $\geq 2$ ml
pH of seminal fluid	: $\geq 7.2$
Motile Sperm/ejaculate ( $\times 10^6$ )	: $\geq 20$
Sperm/ejaculate ( $\times 10^6$ )	: $\geq 40$
Motile sperm/ml ( $\times 10^6$ )	: $\geq 10$
Sperm/ml ( $\times 10^6$ )	: $\geq 20$
% motile	: $\geq 50\%$
Speed	: 3 or 4 (active)
Viscosity	: 4 (low)
Agglutination	: 4 (< 5%)
Post ejaculate urine	: for laboratory use only unless noted in comments section

\* 1999 WHO Laboratory Manual for the Examination of Human Semen and Sperm-Cervical Mucus Interaction Fourth Edition

\*\* Days of Abstinence

**PLEASE NOTE: Sperm and semen parameters vary between ejaculates. We recommend patients have two seminal fluid analyses performed to accurately determine sperm count and other semen parameters.**

**Sperm Morphology (Kruger Strict Criteria) and WBC**

<u>Strictly Normal Head</u>	<u>Explanation</u>
Shape $\geq 11\%$ 5-11%	<p style="text-align: center;"><b><u>normal fertility</u></b> <b><u>equivocal range</u></b></p> <p><u>In Vitro</u>: Fertilization rate with IVF somewhat reduced unless higher than normal motile sperm concentration used for in vitro insemination.</p> <p><u>In Vivo</u>: No published data for in vivo fertility.</p>
$\leq 4\%$	<p style="text-align: center;"><b><u>male factor infertility</u></b></p> <p><u>In Vitro</u>: Low rate of fertilization or no fertilization expected with conventional IVF, even with increased insemination concentration. ICSI will be used to assist fertilization for IVF cases.</p> <p><u>In Vivo</u>: No published data for in vivo fertility.</p>
<b>Germinal Cells <math>\times 10^6</math>/ml</b>  <b>WBC <math>&lt; 1 \times 10^6</math>/ml</b>	<p>Normal values not established, but if elevated relative to mature sperm count, may indicate spermatogenesis defect.</p> <p>If <math>&gt; 2 \times 10^6</math> WBC/ml semen, recommend semen culture.</p>

\*\*We recommend patients with less than 5% strictly normal head shape sperm be scheduled for a repeat morphology four weeks after the first test. Intracytoplasmic sperm injection (ICSI) will be used to assist fertilization for IVF patients with <5% strict morphology on two successive tests.

If you have any questions please contact: Reproductive Testing Laboratory, Department of Obstetrics/Gynecology and Urology, University of Iowa Hospitals and Clinics, telephone: (319) 384-8354, facsimile: (319) 384-8353