A USER GUIDE TO THE MALE FERTILITY TEST REPORT AT SOUTHEND HOSPITAL

This information sheet is intended to provide guidance on the interpretation of the semen analysis report.

An appointment **MUST** be made with the laboratory on 01702 422555 for the MFT sample to be tested, failure to do so will result in a repeat sample being required. There are **NO** facilities at Southend Hospital to enable patients to collect samples in private. Patients are expected to produce the sample at home, keep the sample warm, e.g. an inside pocket is ideal, and bring to the laboratory within 1 hour of collection.

**Three** patient identifiers from the following are required:
- Patient name
- DOB
- Unit or NHS number
- Patient address

Specimens will be rejected if;
- **3 patient identifiers** are not provided on both the **request form and specimen container** – patients are asked to copy either the Unit or NHS number from the request form **(effective from 5th September 2011)**
- The male partners name is not given on the request form or specimen container
- The container has leaked
- The booking system has not been used
- Sample is received more than 90 minutes post collection

Laboratory personnel are not authorised to give interpretative information or advice but will be able to give results or to answer any general queries. Dr Winston Justin is the clinical lead for the semen analysis service.
### PHYSICAL ELEMENTS

<table>
<thead>
<tr>
<th>Colour</th>
<th>Normally homogenous, grey-opalescent appearance, it may appear less opaque if the concentration is low. A bloody sample would be indicative of haematospermia.</th>
<th>Reported as NORMAL or BLOODSTAINED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volume</td>
<td>Can be of importance in low sperm density, poor motility and poor morphology specimens. Low semen volume can also be the result of collection problems (loss of a fraction of the ejaculate), or partial retrograde ejaculation. Low semen volume is characteristic of obstruction of the ejaculatory duct or congenital bilateral absence of the vas deferens.</td>
<td>1.5ml is the lower reference limit as advised by WHO</td>
</tr>
<tr>
<td>pH</td>
<td>If the pH is less than 7.0 in a semen sample with low volume and low sperm numbers, there may be ejaculatory duct obstruction or congenital bilateral absence of the vas deferens.</td>
<td>7.2 is the lower threshold limit</td>
</tr>
<tr>
<td>Viscosity</td>
<td>High viscosity can interfere with the determinations of motility, concentration and antibody coating of spermatozoa.</td>
<td>Reported as either NORMAL or HIGH</td>
</tr>
</tbody>
</table>

### NON-PHYSICAL ELEMENTS

| Vitality | Sperm vitality testing is especially important for samples with less than 40% progressively motile sperm. This analysis is therefore only carried out on samples where progressive motility has been reported as less than 40%. It is clinically important to know whether immotile spermatozoa are alive or dead | The lower reference limit for vitality is 58% |

**Vitality**

Sperm vitality testing is especially important for samples with less than 40% progressively motile sperm. This analysis is therefore only carried out on samples where progressive motility has been reported as less than 40%. It is clinically important to know whether immotile spermatozoa are alive or dead.
and vitality results should be assessed in conjunction with motility results from the same semen sample. The presence of a large proportion of vital but immotile cells may be indicative of structural defects in the flagellum; a high percentage of immotile and non-viable cells may indicate epididymal pathology.

<table>
<thead>
<tr>
<th>Concentration</th>
<th>The total number of spermatozoa per ejaculate and the sperm concentration are related to both time to pregnancy and pregnancy rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motility</td>
<td>The total number of motile spermatozoa (progressive and non progressive motility) in the ejaculate is of biological significance as it is related to pregnancy rates. 32% is considered the lower limit for progressive motility</td>
</tr>
<tr>
<td>Morphology</td>
<td>The total number of morphologically normal spermatozoa in the ejaculate is of biological significance as fertilisation rates decrease with less than 8% normal morphology. The lower reference limit for normal morphology is 4%</td>
</tr>
<tr>
<td>Sperm with defects</td>
<td>WHO advise that we classify the different kinds of malformations seen morphologically as abnormal spermatozoa generally have a lower fertilising potential. Classifications are divided into head, neck/midpiece or tail abnormalities. No reference ranges advised by WHO</td>
</tr>
</tbody>
</table>
Turnaround times | within 5 working days
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The comment below is added automatically to the report when each of the results for these fields are greater than or equal to the lower threshold limits for motility, concentration and morphology, it can be seen beneath the comment field on the ICE report.

“SPERM CONCENTRATION, MOTILITY AND MORPHOLOGY ARE ALL WITHIN NORMAL LIMITS”

**PLEASE NOTE**

All of the analyses need to be read together and a single aberrant result may not be of any significance.

The specimen container we will be using is shown here and has been toxicity tested as advised by the World Health Organisation. Stocks of the containers can be ordered thorough the usual Laboratory Supplies order form, alternatively we can despatch through the courier and the green transport bags if the laboratory is contacted directly. Please contact the laboratory on 01702 385198.
This handbook and other useful Pathology information can be found on the Southend Hospital website. If you click on the For Health Professional tab (as outlined in red in the image below), scroll to the bottom of the page and click on *Please click here if you are looking for the Pathology Handbook* and then click on Cellular Pathology tab. This handbook can be found on our Test Repertoire page under Semen Analysis.