Technical Release Bulletin: Temporary Use of Standard Slides for Semen Assessment Issue date: January 21, 2020

Background:

In some specific cases, using the SQA-V/Vision sperm analyzers requires visual assessment of semen samples using the device visualization system. To ensure accurate counting, ease of use and sample stability, the use of MES Vision fixed coverslip slides are recommended.

Update:

The MES manufacturing partner of the Vision Fixed Coverslip slides recently advised MES that they will no longer be supplying the custom made two chamber Vision slides. MES has located and qualified a new vendor however there is a temporary delay in supply until March 2020.

Temporary solution:

MES recommends using a standard slide following the protocol below, based on the WHO 5th ed. manual guidelines (p. 18).

Preparing the standard slide:

- Mix the semen sample well.
- Remove an aliquot of semen immediately after mixing, allowing no time for the spermatozoa to settle out of suspension.
- Remix the semen sample before removing replicate aliquots.
- Use a positive displacement pipette for this purpose.
- The volume of semen and the dimensions of the coverslip must be standardized, so that the analyses are carried out on a preparation of fixed depth of about 20 μ m, which allows the spermatozoa to swim freely.
- Place a standard volume of semen, 10 μ l, onto a clean glass slide with dimensions 1"x3" (2.5cm x 7.6cm), 4"/10cm aside from the slide edge.
- Touch a standard slide by an inclined edge of 22mm × 22mm coverslip and carefully cover a drop of sample, to provide a chamber 20 μm deep. The weight of the coverslip spreads the sample.
- Take care to avoid the formation and trapping of air bubbles between the coverslip and the slide.
- Assess the freshly made wet preparation as soon as the contents are no longer drifting (normally the sample stabilization time is 1-2 minutes).
- For concentration assessment, the field of view "freezing" function of the SQA device can speed up the process and eliminate the need for waiting for sample stabilization. For motility assessment it is recommended to wait.
- Follow the user guide instructions for sample assessment.

Distribution: All SQA-V and Vision users Authority: Dr. Lev Rabinovitch, CTO Emeritus