TECHNICAL BULLETIN: TESTING SAMPLES WITH HIGH LEVELS OF DEBRIS and/or ROUND CELLS

For SQA-V GOLD Version 2.43 to 2.60 | Wednesday, January 14th, 2015

BACKGROUND:

FRESH and WASHED samples that contain 50% or greater round cells and/or debris can influence the SQA-V Sperm Concentration algorithm in some cases. If the reported result from the SQA-V shows a higher than expected/observed Sperm Concentration, and a lower than expected/observed Motility % this may be an indicator of excessive debris in the sample. There are 3 different ways you can handle this situation on the SQA-V system:

OPTION NUMBER 1:

- After visual confirmation confirms the presence of >50% Debris / Round Cells, re-run the sample and select ≥1 M/mL in the WBC data entry field. This field activates a unique algorithm designed for large amounts of WBCs but the algorithm will also work for Round Cells and Debris.

- If the WBC concentration was in fact ≤1 M/mL make sure you make a note in V-Sperm and on the final report noting that WBC Conc. was in fact ≤1 M/mL even though ≥1 M/mL was displayed on the report. It would also be appropriate to make a note in the comments section of V-Sperm that the presence of Debris / Round Cells was >50%.

OPTION NUMBER 2:

- The Motile Sperm Concentration (MSC), Progressive Motile Sperm Concentration (PMSC), Morphology, Velocity, and Functional Sperm Concentration results are unaffected by the presence of Debris and Round Cells – only Sperm Concentration may be affected.

- It is possible to use the automated values for all parameters other than Sperm Concentration, and supplement a visual Sperm Concentration count in place of the systems automated result using the SQA-V's Visualization System.

- After running the sample and receiving your results, count Sperm Concentration using the SQA-V Slide Adapter and Visualization System per User Guide instructions. Slide preparation: (10 µl of semen on a 1" x 3" lab side covered by 22mm x 22mm coverslip).

- Divide MSC and PMSC into your Concentration count to get Motility % and Progressive Motility % (Example: MSC ÷ Sperm Count = Motility %). The other parameters like Morphology, Velocity, and Functional Sperm Concentration can used as they were reported from the SQA-V.

OPTION NUMBER 3:

- Like any automated solution the SQA-V is a tool designed to work with the Technologist to deliver the most accurate semen analysis possible. There are rare cases where the best option is to analyze the sample under the microscope to confirm the SQA-V's results. Remember to keep your judgment in the process to ensure top level quality of care for your patients.