



VideoTest-Sperm 2.1

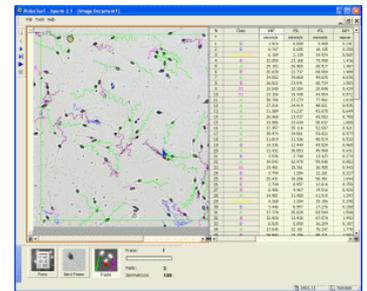
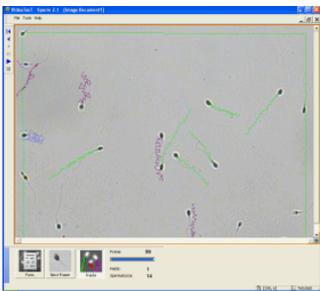
Computer Assisted Sperm Analyzer

VideoTest-Sperm 2.1 CASA is designed to equip the workplace of specialists dealing with sperm analysis. The analyzer enables experts to count the amount of spermatozoa and to estimate their motility parameters in a native specimen, and to analyze the morphology of stained specimens.

VideoTest-Sperm 2.1 CASA includes two standard methods, “**Motility**” and “**Morphology**”, a facility for automatic report generation, and a built-in database. The analysis of the parameters is performed according to the recommendations given by the World Health Organization (WHO). The parameters that can be determined with help of the VideoTest-Sperm 2.1 CASA are the main ones for estimation of the sperm fertility (Menkveld et al., 1991).

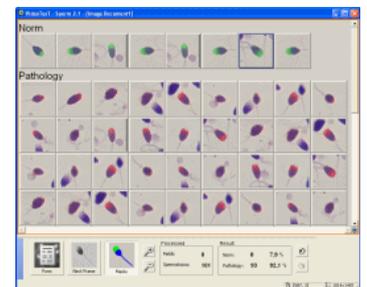
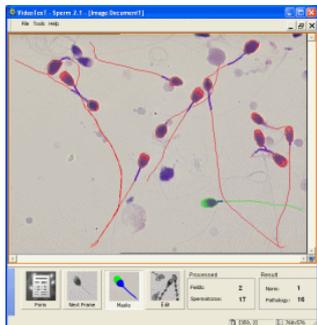
Motility Standard Method

The method is designed to estimate the spermatozoa concentration and their motility in a native specimen. To perform the analysis, a counting chamber with the specimen is placed under microscope, after which a video is recorded. The recorded objects are thresholded and their motion paths are reconstructed automatically. The color of the particular spermatozoon path corresponds to its motility class. To obtain statistically valid results, several clips can be recorded. The results of the analyses of each clip are summarized and transferred to the database.



Morphology Standard Method

The method is designed to determine the morphological parameters of spermatozoa and to reveal pathology. Rigorous criteria of analysis of spermatozoa heads, which have been proposed by Krueger and Menkveld, are utilized in this standard method. The heads, middle parts, and tails of the spermatozoa are thresholded and measured automatically. The pathology is revealed based on the head parameters. The obtained data is automatically transferred to the database.



Database

The built-in database enables the experts to store any kind of obtained information, including results of visual evaluation and subsidiary investigation. The obtained results are summarized in a customizable report form and can be printed. If required, the layout of the report form can be changed by the specialists of the laboratory.

