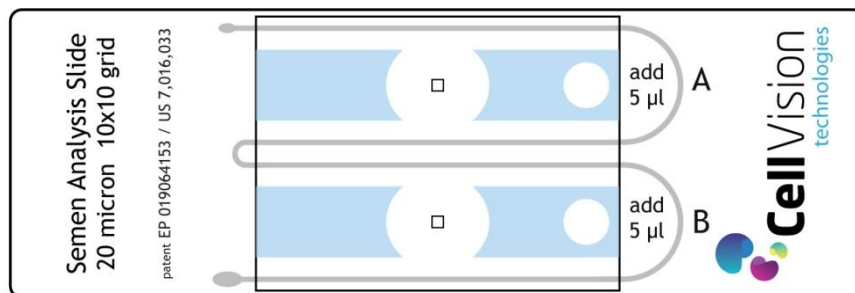


General Information:

The CellVision, Semen Analysis Slide, 20 micron with Sperm Counting Grid (SCG) is specially designed for the manual assessment of sperm parameters. The Semen Analysis Slide consists of 2 identical chambers both holding a SCG (total of 100 boxes, each box: 100 x 100 µm) and a motility-window close to the entrance.



Protocol:

1. Add 5 µl of fully liquefied and homogenised semen to entrance area A or B
2. The chamber will fill itself by capillary action for 80-90% resulting in an immediate steady view
3. After the chamber has filled, wipe away any surplus - if present - from the entrance area
4. Count all cells in (at least) 5 random boxes (*)
5. Determine the motility in the motility-window according to the WHO¹

Concentration Result:

The sperm count is the total number of cells counted in 5 boxes multiplied by 1 million per ml

Total analysis volume = $5 \times 0.1 \times 0.1 \times 0.02 = 0,000.001 \text{ mm}^2$

(*) WHO¹ recommendation: count at least 200 cells to obtain reliable results:

Protocol based on WHO recommendation:

Analyse as many boxes until more than 200 cells are counted. Divide the number of cells counted by the number of boxes analysed. Multiply this result by 5 to obtain the sperm count in millions per ml.

Motility Result:

Standard protocol to determine the motility percentages according to the WHO-manual.

Class PR : moving actively, either linearly or in large circles, regardless of speed

Class NP : all other patterns of motility with an absence of progression, e.g. swimming in small circles, the flagellar force hardly displacing the head, or when only a flagellar beat can be observed

Class IM : no movement

¹ World Health Organisation, Laboratorium Manual for the Examination and Processing of Human Sperm, Fifth Edition, 2010, ISBN 978 92 4 154778 9