



“Remember, it ALL Started with a Sperm!”

### SQA-VISION Automated Parameter Reference Ranges (WHO 5<sup>th</sup> Edition)

SEMEN PARAMETER	SQA-V TEST NAME	REFERENCE RANGE*	SOURCE
Sperm Concentration (Count)	SPERM CONC.	≥15 M/ml	WHO 5th manual*
Total Motility (PR+NP)	TOTAL MOTILITY <PR+NP>	≥40 %	WHO 5th manual*
Progressive Motility (PR)	PROG. MOTILITY <PR>	≥32 %	WHO 5th manual*
Non-progressive Motility (NP)	NONPROG. MOTILITY <NP>	N/A	N/A
Immotility (IM)	IMMOTILITY <IM>	N/A	N/A
Sperm Morphology (normal forms, %)	MORPH. NORM FORMS, WHO 5th	≥4%	WHO 5th manual*
Motile Sperm Concentration	MSC	≥6 M/ml	MES*
Progressively Motile Sperm Concentration	PMSC	≥5 M/ml	MES*
Functional Sperm Concentration	FSC	N/A	N/A
Velocity (Average path velocity – VAP)	VELOCITY	≥5 mic./sec.	MES*
Sperm Motility Index	SMI	≥80	MES*
Total Sperm Number	SPERM #	≥39 M	WHO 5th manual*
Total Motile Sperm	MOT. SPERM	≥16 M	MES*
Total Progressively Motile Sperm	PROG. SPERM	≥12 M	MES*
Total Functional Sperm	FUNC. SPERM	N/A	N/A
Total Morphologically Normal Sperm	MORPH. NORM. SPERM	≥2 M	MES*

\* The ranges established above are based on WHO 5th reference values or MES (for proprietary semen parameters).