ISO 23162:2021 (E)

Basic semen examination — Specification and test methods

Contents

Foreword

Introduction

1 Scope

2 Normative References

3 Terms and Definitions

4 Staff Training and Competence

- 4.1 General Aspects
- 4.2 Training
- 4.2.1 General
- 4.2.2 Training for quantitative assessments
- 4.2.3 Training for qualitative assessments
- 4.2.4 Training for pH assessment
- 4.3 Maintenance of Competence

5 Semen Characteristics, Sampling and Pre-Examination Handling

- 5.1 General Characteristics
- 5.2 Physical and Chemical Characteristics
- 5.3 Sample Collection and Initial Handling
- 5.4 Subject Information and Data Collection
- 5.4.1 Information to be Provided to Subjects
- 5.4.2 Data Collection from the Subject
- 5.5 Initial Sample Handling
- 5.6 Sperm Toxicity Testing

6 Examinations

- 6.1 Required Equipment
- 6.2 In-house Prepared Reagents
- 6.3 Assessments
- 6.3.1 Initiation of Assessments
- 6.3.2 Macroscopic Assessment
- 6.3.3 Direct Microscopy of the Wet Preparation
- 6.3.4 Sperm Motility Assessment
- 6.3.5 Sperm Concentration Assessment
- 6.3.6 Assessment of Absence of Spermatozoa
- 6.3.7 Sperm Vitality Assessment
- 6.3.8 Sperm Morphology Evaluation

7 Post-Examination Handling and Test Report

- 7.1 General
- 7.2 Results Calculations and Presentation
- 7.2.1 Total Amount in the Ejaculate
- 7.2.2 Other Calculations
- 7.3 Presentation of Results
- 7.3.1 General
- 7.3.2 Contents of the Semen Examination Report
- 7.4 Practical Aspects of Quality Assurance
- 7.4.1 Internal Quality Control
- 7.4.2 Intralaboratory Comparisons
- 7.4.3 Interlaboratory Comparisons

Annex A **(informative) The statistical basis for determination of absence of spermatozoa**

Annex B **(informative) High power field**

Annex C **(informative) Motility assessment training**

Annex D **(informative) Diluent for sperm concentration assessment**

Annex E **(informative) Estimation of suitable dilution for the assessment of sperm concentration**

Annex F **(informative) Comparison of concordance between two replicate assessments that report percentages**

Annex G **(informative) Comparison of concordance between two replicate counts of sperm concentration**

Annex H **(informative) Sperm vitality assessment**

Annex I **(informative) Sperm morphology assessment**

Page count: 32