



# OPTIMIZED SPERM STAINING USING AEROSPRAY® CYTOLOGY

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Automated and standardized staining in the field of andrology

Innovation with Integrity

A growing number of clinical laboratories are seeking **ISO 15189 accreditation for andrology services**, particularly in the field of sperm analysis. This trend is driven by the increasing demand for standardized fertility diagnostics and alignment with WHO and ISO 15189 criteria. Papanicolaou staining is the method recommended by the WHO for detailed assessment of sperm morphology due to its clarity and reproducibility.\*

**Various tests are performed in andrology, but the most important is infertility analysis.**

It involves various examinations of the semen sample (liquefaction, appearance, volume, motility, viscosity), which are performed before staining. Once these tests are complete, the semen sample is smeared and the slides are fixed by immersing them in methanol or ethanol for five minutes before staining.

Staining is mainly used to assess morphology properties in order to detect possible abnormalities in the sperm, but also to identify leukocytes and immature germ cells. In typical staining results, the **head is stained light blue in the acrosomal region and dark blue in the post-acrosomal region. The midpiece may show a slight red coloration and the tail is stained blue or reddish.** See Figures 1 and 2.

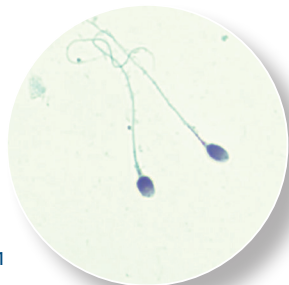


Figure 1

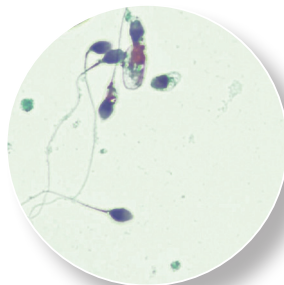


Figure 2

The Aerospray® Cytology slide stainer/cytocentrifuge uses the recommended **Papanicolaou stain for staining sperm**. It automates and standardizes sperm staining for morphology assessment. This eliminates the time and expense of sending samples to another reference laboratory. The Aerospray® Cytology stainer is the perfect tool to prepare **for ISO 15189 accreditation and WHO compliance in andrology diagnostics.**

#### Recommendations for the Aerospray® Cytology Slide Stainer in andrology diagnostics

Before staining (regressive staining method), smear the sperm samples and fix the slides in methanol or ethanol (95%) for 5 minutes.

##### Stain Program Settings

Prewash Alcohol	0
Prewash Bluing	0
Nuclear / HTOX	9
Acid-Alcohol Wash	5
Bluing	5
Bluing Wash	4
Orange G	6
Orange G Wash	5
Cytoplasmic / EA	6
Final Wash	5
End Spin	1

#### Advantages of the Aerospray® Cytology Slide Stainer / Cytocentrifuge

- Ease of use
- Compact design
- Closed staining system with standardized staining solutions
- No cross-contamination
- Consistent, reproducible results
- Superior staining quality
- Fast staining cycles
- Automated process
- Low maintenance

\* Sources: WHO Laboratory Manual for the Examination and Processing of Human Semen (6th edition), 2021.



**ELITechGroup Inc.**  
Logan, UT · USA

1.800.453.2725



Online information  
[Aerospraystaining.com](https://www.aerospraystaining.com)

