

Cervical Cytology Digital Atlas GISCI-SiCi

GISCI Italian Group for Cervical Cancer Screening

SiCi Italian Society of Cytology

Digital Atlas GISCI-SiCi Working Group

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Foreword

The digital atlas was initiated by two scientific Societies in Italy - GISCI and SiCi – with the aim of providing a useful tool to cervical cytology trainees and practitioners to support in comparison and analysis.

To create the Atlas, a Working Group, comprising biologists and physicians from various Italian laboratories, selected slides from their daily routine and agreed on the cytologic interpretations, applying The Bethesda System for Reporting Cervical Cytology. As a result, the Atlas provides a comprehensive overview of the activities performed in these laboratories.

It is worth noting that the term Atlas should not be considered as a static process, but rather a dynamic one. In fact users are not limited to inspect only the selected microscopic fields/sections and related annotations, but they will be able to observe the entire slide using different magnifications, as if they were using a microscope.

A brief description of the Atlas' structure follows:

- Slides have been prepared from Liquid based preparations, both BD SurePath™ and Hologic ThinPrep™, and have been selected from daily cases.
- Slides have been digitized by a 3DHistech scanner, the Pannoramic P1000, equipped with Extended focus scanning capability, by EpreDia Italy Srl.
- Specimens have been organised into four sections:

Section A Negative for Intraepithelial Lesion or Malignancy (NILM)

Section B Atypical squamous cells

- ♦ of undetermined significance (ASC-US)
- ♦ cannot exclude high-grade squamous intraepithelial lesion (ASC-H)

Section C

- ♦ Low-grade squamous intraepithelial lesion (LSIL)
- ♦ High-grade squamous intraepithelial lesion (HSIL)
- ♦ Squamous cell carcinoma (SCC)

Section D

- ♦ Atypical glandular cells (AGC)
 - ♦ Endocervical adenocarcinoma in situ (AIS)
 - ♦ Adenocarcinoma
- Cytologic interpretations contained in the Atlas follow the 2014 Bethesda System and have been agreed by the whole Group. They include the woman's age and typology of preparations.

The Group has decided not to provide further information (HPV status, any subsequent histological reports) in order to emphasize the goal of the Atlas, i.e. to indicate the plain morphological criteria that should direct the screener towards an adequate interpretation according to TBS 2014.

- In each digital slide, some of the more representative fields/sections have been marked and are accompanied by an explicative annotation based on TBS 2014 criteria.

Slides' quality is not always optimal: particularly, the cellular aggregates are often *non-photogenic* and their examination may be very difficult. However, these are critical issues that practitioners encounter daily.

The decision not to "discard" these cases confirm what has already been stated, namely our desire to virtually welcome all those who consult the Atlas into our laboratories and to share the criteria we have used to discriminate between cases that are evidently negative and those that require closer examination and/or collegial review.

On behalf of the Working Group, we wish that this Atlas will be useful in your cytological practice.

We extend our sincere gratitude to EpreDia for their technical-application support and to all colleagues who have contributed to the production of the Atlas, sharing the pleasure of collaboration and teamwork.

Antonella Pellegrini and Teresa Rubino
Working Group Coordinators

