ABX Pentra DX 120
Hematology analyzer

- 45 parameters
- Integrated slide-maker
- Expert validation system
**Complete cytology platform**

- **120 samples per hour**
  - Continuous loading option
  - 150-tube loader capacity
- **45 parameters**
  - CBC (12), DIFF (20), RET (10), NRBC (3)
- **Automatic reflex testing**
  - Immediate confirmation of tests based on the chosen validation rules
- **Automatic validation of results**
  - Laboratory-defined rules
- **Integrated cytology atlas**
  - Hematovision, a software designed and developed by HORIBA Medical
- **SPS evolution**
  - Integrated smearer stainer (optional)
Differentiation and quantification of hematopoietic populations using 7 analytical systems

- **Erythropoiesis**
  3 dedicated channels: erythroblasts / reticulocytes / erythrocytes

- **Thrombopoiesis**
  2 dedicated channels: thrombocytes / double matrix

- **Leukopoiesis**
  4 dedicated channels: leukocytes / double matrix / basophils / erythroblasts

**DHSS Concept**

**Flow cytometry**
Injection of the sample prepared in a double hydrodynamic flow cytometer (HORIBA Medical patent), and determination of the cell complexity by measuring the absorbance of a polychromatic light source, or the fluorescence by fluorocytometry (with argon-ion laser).

**Cytochemistry**
Incubation of the sample at a regulated temperature and cells stained with Chlorazole Black. This reagent stains specifically leukocyte cytoplasm, granules, and nuclei.
**A concentrate of technology**

5 recognised measurement principles included on a single analyzer.

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<th>Reference methods</th>
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**Double DIFF matrix**

**Full leukopoiesis analysis:**
Routine identification and quantification of three immature cell lines
- granulocytic line (IMG)
- lymphocytic line (IML)
- monocytic line (IMM)

Reduction of the number of slide examinations
Diagnostic and follow-up tool for rapid decision-making

**Erythroblasts**

**Fluorescence-based count:**
Erythroblast analysis in routine or reflex mode based on:
- internal laboratory rules
- detection alarms
- patient demographics...

Use of Thiazole Orange fluorochrome
Automatic correction of leukocyte count (WBC Fluo)
Double Hydrodynamic Sequential System (HORIBA Medical Patent)

**Reticulocytes**

**Differential diagnosis of anemia:**
Simultaneous count of 10 parameters
Classification according to three stages of maturation (Heilmeyer):
- RET High
- RET Medium
- RET Low

Follow-up of iron-deficiency anemia based on the MRV (Mean Reticulocyte Volume)
Confirmation of bone marrow regeneration level based on the CRC (Corrected Reticulocyte Count)
SPS Evolution
Perfect standardization of blood smears

- **Integrated slide-maker**
  - 120 slides per hour
  - Fully automated and secured process
- **Choice of staining protocols**
  - May-Grünwald Giemsa, Wright, Wright Giemsa, etc.
- **Sampling volume**: 50 µl of whole blood (added)
  - On primary closed tube
- **Positive identification**
  - Barcode reading
  - Patient data printed automatically on the slide
- **Smearing flexibility**
  - User-defined smearing profiles based on the laboratory’s own rules

* optional module

Validation station
Result validation

- **Full management of samples**
  - Alarms triggered according to patient profile
  - Delta check
  - Programmable rerun rules
- **Manual entry capability**
  - Results, comments, etc.
- **Automatic validation**
  - Based on rules, flags, patient history, etc.
- **Integrated cytology atlas**
  - Hematovision