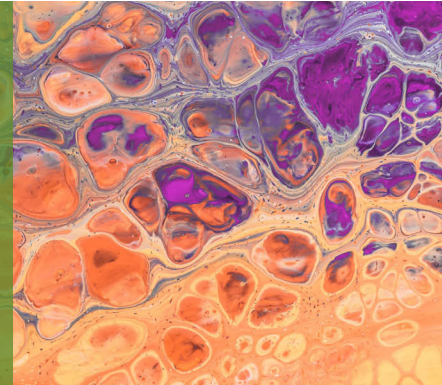




# MICROS 60™ / MICROS ES 60™

Horiba ABX Micros Series Hematology Analyzers

The leader in PRP quality control (QC) at the point of care



The Micros 60 and Micros ES60 devices are 3 part DIFF Hematology Analyzers, universally recognized for reliability, high platelet range (4 million platelets/ $\mu$ L) and ease of use to characterize Platelet Rich Plasma (PRP) in less than 1 minute.



Micros 60 Closed Tube (CT)



Micros ES60 Open Tube (OT)

## HOW DO THE MICROS ANALYZERS WORK?

The ABX Micros series hematology analyzers are designed to precisely and accurately calculate complete blood counts (CBC) by impedance and selective lysing. These devices have been studied and validated for their use to quantify whole blood samples as well as PRP in order to effectively identify the dose of platelets administered, the PRP purity (white blood cells (WBC)/red blood cells (RBC) contamination) and the efficiency of your bedside PRP protocols to recover platelets.

## HORIBA MICROS 60/ES60 FEATURES

### CBC + 3 PART DIFF

- 55-60 samples per hour
- Large touchscreen and integrated ticket printer (ES60)
- Integrated barcode reader (ES60)

### SEAMLESS CONNECTIVITY

- USB connection for easy archiving of patient QC results
- 7 connection ports
- HL7 protocol for electronic medical record integration

### EASY INTERPRETATION

- Unlimited patient report archiving and customization
- Control parameters from the main screen
- User-friendly interface

## BENEFITS

### Quality Assurance

- Accurate baseline whole blood and PRP cell counts
- Provides data to provider and patient
- Tie injectate to clinical outcomes

### Ease of Use

- KEDTA microtainers
- Small 10  $\mu$ L sample aliquot needed
- In-depth training provided
- No need for dilution

### Cost-Effective

- \$25 per patient\*
- Reagent pack minimizes waste
- Results in 1 min saves QC time
- Cheaper limited service contracts\*\*

### COMPREHENSIVE QC PROGRAM

- 3 simultaneous blood controls
- Levey-Jennings graphics
- Upload/Download control information

### AUTOMATIC SYSTEM MONITORING

- Real time instrument status
- Automatic reagent test countdown
- Automatic daily maintenance and operational alerts

### PATENTED MINIPACK SYSTEM

- Reagents and waste housed in a convenient pack
- No cumbersome bottles
- Ready to use and simple to discard

\*Based on 20 PRP patients per month ; \*\* ONLY available through PLYMOUTH MEDICAL



## COMPETITIVE ADVANTAGE

1. Validated linearity up to 4 million platelets per microliter sample, eliminates dilution and human error.
2. Integrated reagent packs simplify QC protocols at the point of care and footprint in the clinic setting.
3. Leading hematology platforms for Orthobiologics and blood donor centers (e.g American Red Cross) in the US and Canada.
4. French-made and engineered ensuring innovation, not imitation, for your QC needs.

## TECHNICAL + SAFETY INFORMATION

### Micros ES60

#### Dimensions & Weight

Height	Width	Depth	Weight
16.9 in	14.2 in	14.2 in	30.9 lb
43 cm	36 cm	36 cm	14 kg

#### Throughput

Average of 55 samples per hour (OT 60 / CT 50)

#### 16 Parameters

WBC	RBC	MCH	PLT
LYM# & LYM%	HGB	MCHC	MPV
MON# & MON%	HCT	RDW	
GRA# & GRA%	MCV		

#### Linearity

Parameter	Limit
WBC	0.0 - 100 x 10 <sup>3</sup> /mm <sup>3</sup>
RBC	0.0 - 8 x 10 <sup>6</sup> /mm <sup>3</sup>
HGB	0.0 - 24 g/dL
HCT	0.0 - 70%
PLT (Whole blood)	0 - 2200 x 10 <sup>3</sup> /mm <sup>3</sup>

#### Visible Range

100 - 150 x 10 <sup>3</sup> /mm <sup>3</sup>
8 - 18 x 10 <sup>6</sup> /mm <sup>3</sup>
26 - 30 g/dL
80 - 90%
2200 - 6000 x 10 <sup>3</sup> /mm <sup>3</sup>

#### Precision

Parameters	%CV	Nominal Values
WBC	<2.5	4-10.0 x 10 <sup>3</sup> /μL
RBC	<2.0	4-7 x 10 <sup>6</sup> /μL
HGB	<1.5	12-18 g/dL
HCT	<2.0	36-54%
PLT	<5.0	200-500 x 10 <sup>3</sup> /μL

### Micros 60

#### Dimensions & Weight

Height	Width	Depth	Weight
16.5 in	14.2 in	12.6 in	31 lb
42 cm	36 cm	33 cm	14 kg

#### Throughput

Average of 55 samples per hour (OT/CT)

#### 16 Parameters

WBC	RBC	MCH	PLT
LYM# & LYM%	HGB	MCHC	MPV
MON# & MON%	HCT	RDW	
GRA # & GRA%	MCV		

#### Linearity

Parameters	Limit
WBC	0 - 100 x 10 <sup>3</sup> /mm <sup>3</sup>
RBC	0 - 8 x 10 <sup>6</sup> /mm <sup>3</sup>
HGB	0 - 26 g/dL
HCT	0 - 80%
PLT (A)*	0 - 2200 x 10 <sup>3</sup> /mm <sup>3</sup>
PLT (B)*	0 - 4000 x 10 <sup>3</sup> /mm <sup>3</sup>

\*A for Hgb > 2 g/dL and RBC > 0.5 x 10<sup>6</sup>/mm<sup>3</sup> (WB)  
\*B for Hgb < 2 g/dL and RBC > 0.5 x 10<sup>6</sup>/mm<sup>3</sup> (PRP)

#### Precision

Parameters	%CV	Nominal Values
WBC	< 2.5	10 x 10 <sup>3</sup> /μL
RBC	< 2.0	5 x 10 <sup>6</sup> /μL
HGB	< 1.5	15 g/dL
HCT	< 2.0	45%
PLT	< 5.0	300 x 10 <sup>3</sup> /μL

## RELEVANT PUBLICATIONS

<sup>1</sup> Magalon J, Chateau AL, Bertrand B, et al DEPA classification: a proposal for standardising PRP use and a retrospective application of available devices BMJ Open Sport & Exercise Medicine 2016;2:e000060. doi: 10.1136/bmjsem-2015-000060

<sup>2</sup> Graiet H, Lokchine A, Francois P, et al Use of platelet-rich plasma in regenerative medicine: technical tools for correct quality control BMJ Open Sport & Exercise Medicine 2018;4:e000442. doi: 10.1136/bmjsem-2018-000442

<sup>3</sup> Mautner, Kenneth & Malanga, Gerard & Shiple, Brian & Ibrahim, Victor & Sampson, Steven & Bowen, Jay. (2015). A Call for a Standard Classification System for Future Biologic Research: The Rationale for New PRP Nomenclature. PM&R. 7. 10.1016/j.pmrj.2015.02.005.

<sup>4</sup> Fadadu, Priyal & Mazzola, Anthony & Hunter, Corey & Davis, Timothy. (2019). Review of concentration yields in commercially available platelet-rich plasma (PRP) systems: a call for PRP standardization. Regional Anesthesia & Pain Medicine. 44. rapm-2018. 10.1136/rapm-2018-100356.

Regulatory: K141161 and K014203  
Class II (Special Controls)

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