



# HEMIX 5-60 vs SYSMEX

ANALYTICAL RESULTS  
CANNOT LIE!

SFRI's & SYSMEX's QUALITY  
IS THE SAME

# ANALYTICAL PART

SFRI conducted 5 studies between 2013 and 2017 comparing the HEMIX 5-60 to 8 analyzers.  
2 of the studies compared SFRI to SYSMEX: XS-1000i and XT-2000i.

Analytical results cannot lie!

5 studies, many results and always one conclusion: analyzers on the market are divided into 2 groups:

- the excellent ones: SFRI - SYSMEX - SIEMENS...
- and the others: HORIBA ABX - ORPHEE - MINDRAY...

One important fact also emerges from these studies: the faculty of SFRI & SYSMEX's analyzers to be accurate and precise. In total, SFRI compared 8 instruments to the HEMIX 5-60 and the only brand able to give as good results as SFRI was SYMEX. SFRI and SYSMEX give the same quality.

YOU WANT PROOF? HERE THEY ARE!

1

## HEMIX 5-60 vs. XS-1000i

The study comparing the HEMIX 5-60 to the XS-1000i was conducted in 2015 by Doctor Loudghiri of the Socrate Laboratory in Casablanca, Morocco.

- Study realized following current laboratory practice
- 234 samples tested on both the HEMIX 5-60 and the XS-1000i
- Determine the correlation coefficient to validate both analyzers
- The closer to « 1 » the results are, the more similar they are

THE CORRELATION BETWEEN SFRI & SYSMEX IS PERFECT

### CORRELATION COEFFICIENT

Leukocytes	0,9970
Red blood cells	0,9919
Hemoglobin	0,9968
MCV	0,9631
Hematocrit	0,9794
MCH	0,9794
Thrombocytes	0,9849
Neutrophils %	0,9834
Lymphocytes %	0,9753
Monocytes %	0,8018
Eosinophils	0,9138



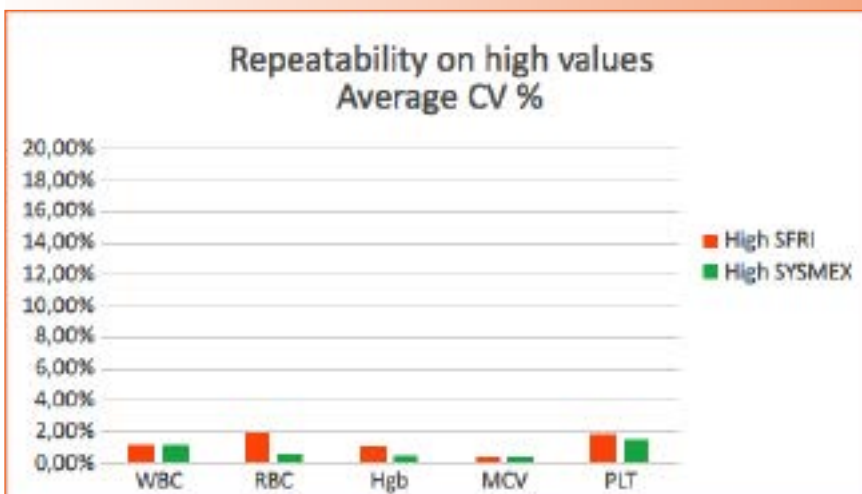
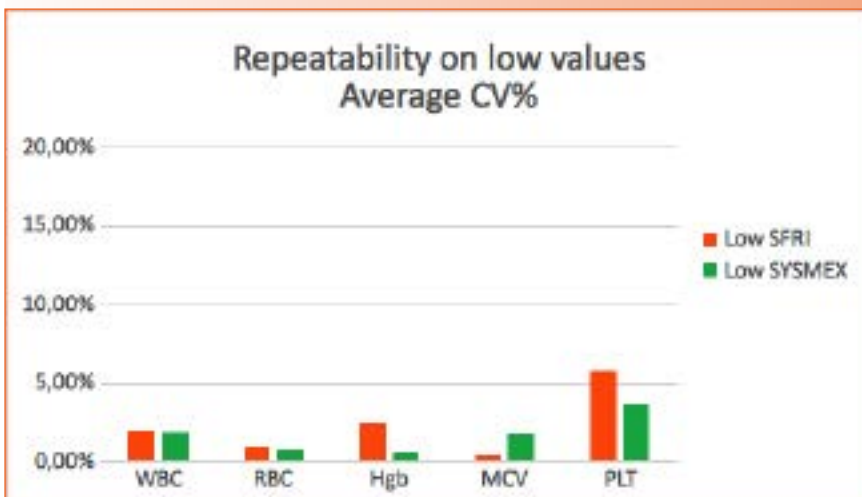
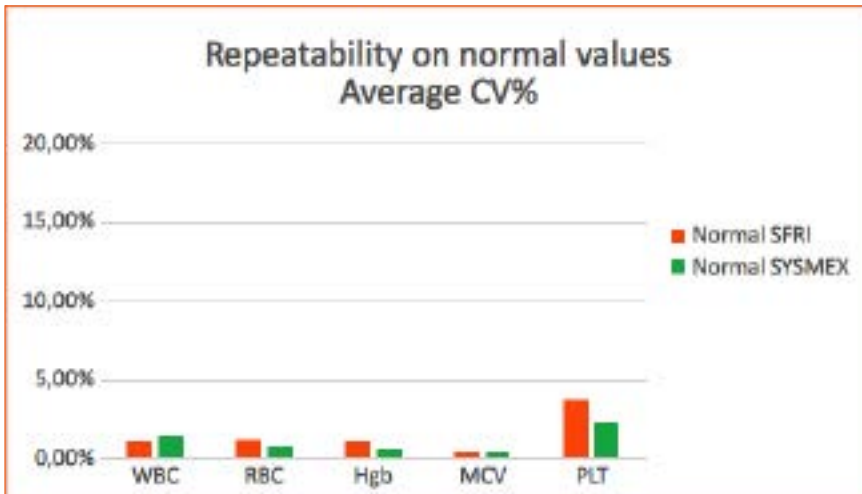
234 samples were run on both the SFRI HEMIX 5-60 and the SYSMEX XS-1000i. The correlation coefficient obtained is always close to « 1 » which mean that both analyzers are validated and their results are comparable. SFRI and SYSMEX give the same analytical results quality!

## HEMIX 5-60 vs. XT-2000i

This study compared the HEMIX 5-60 to the XT-2000i was conducted in 2017.

- Study realized following current laboratory practice
- 138 samples including 19 showing hematology pathologies
- Observation of both analyzers' reaction towards pathological samples thanks to:
  - Flag analysis
  - Alarm study
  - Calculation of sensitivity, specificity, positive predictive value, negative predictive value, accuracy

## REPEATABILITY



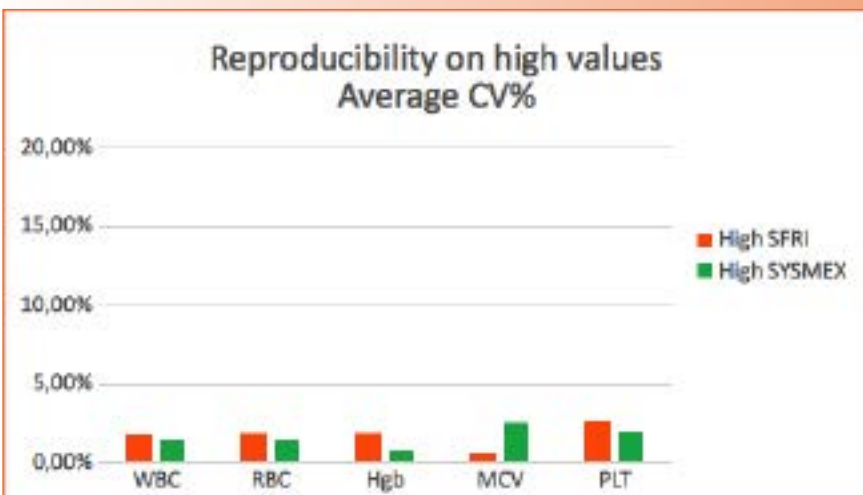
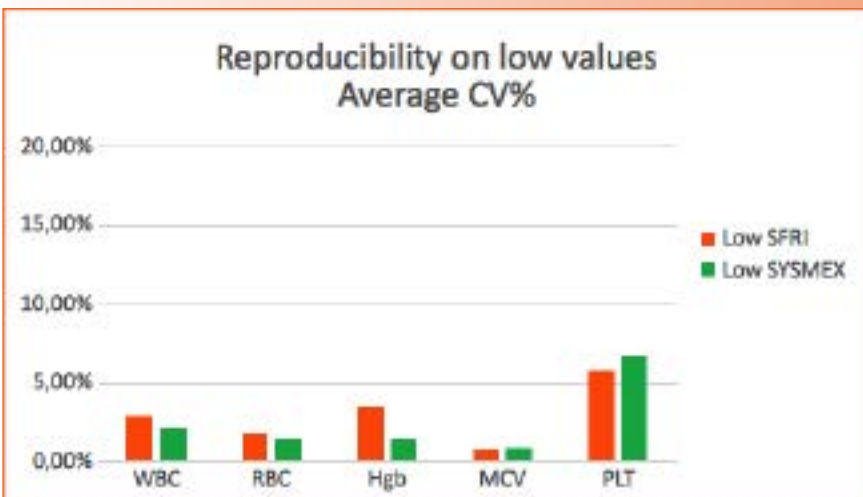
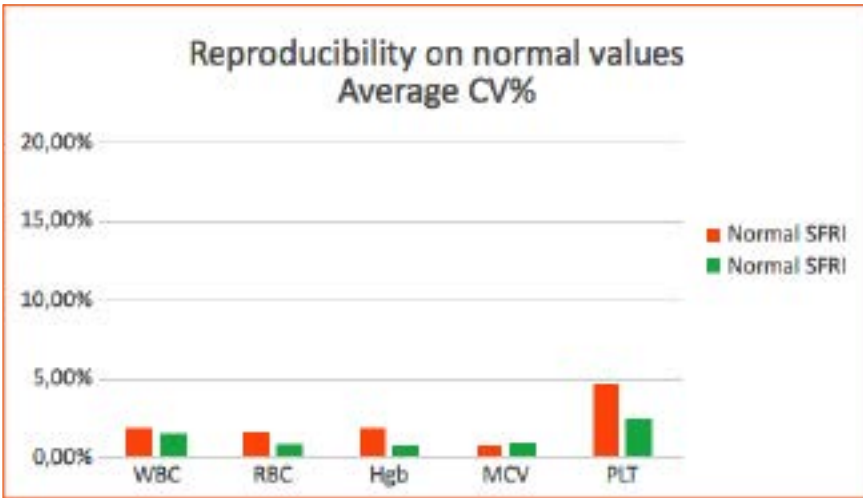
EQUAL  
REPEATABILITY

EQUAL  
COUNT OF SAMPLE

EQUAL  
STABILITY OF MEASURE



HEMIX 5-60 & XT-2000i's results are always equal.



**EQUAL**  
REPRODUCIBILITY

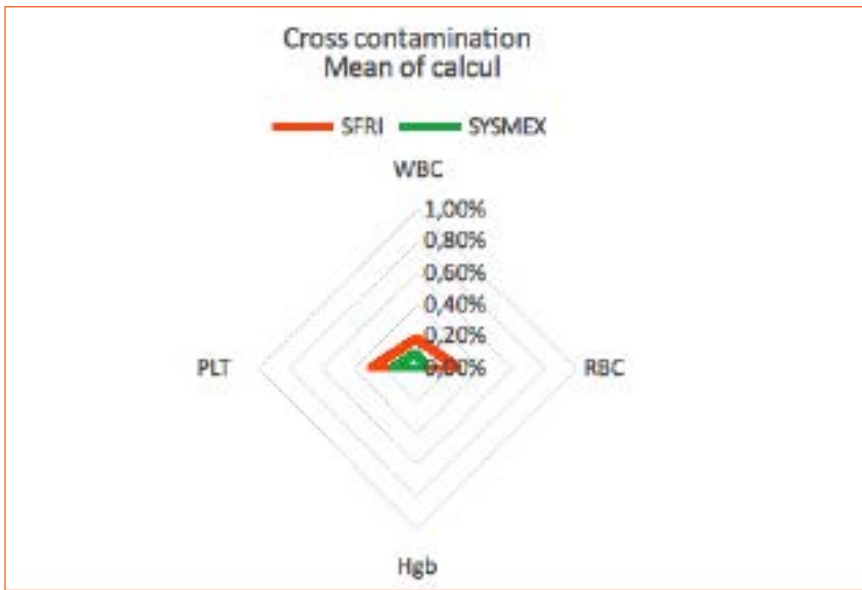
**EQUAL**  
CVs OF HEMIX 5-60  
& XT-2000i

**EQUAL**  
STABILITY THROUGH TIME



HEMIX 5-60 & XT-2000i's average CVs are still equal. Through time, both analyzers keep giving the same results!

# CROSS-CONTAMINATION



## NO SIGN

OF ANY CROSS-CONTAMINATION

+ No perturbation, no cross-contamination of samples, just accurate results for both analyzers

# LINEARITY

COMPARISON OF THE CORRELATION COEFFICIENT R<sup>2</sup>

	LINEARITY NORMAL RANGE R <sup>2</sup>		LINEARITY LOW VALUES RANGE R <sup>2</sup>	
	HEMIX 5-60	XT-2000i	HEMIX 5-60	XT-2000i
WBC	0,9997	0,9997	0,9972	1,000
RBC	1,0000	1,0000	0,9995	0,9999
Hgb	0,9985	0,9999	0,9997	0,9916
PLT	0,9987	0,9996	0,9999	0,9985

## PERFECTLY

SIMILAR LINEARITIES

+ The maximum use range of both the HEMIX 5-60 and the XT-2000i, was thoroughly tested. The more linear the range is, the less dilutions the laboratories will have to perform, which drastically limit the possibility of error and increase the control of results and their quality. SFRI and SYSMEX's linearities are exactly the same!

# DETECTION OF PATHOLOGICAL SAMPLES

The HEMIX 5-60 & the XT-2000i responded in the same way when processing pathological samples.

- They both gave accurate and precise results.
- All positive samples were detected.
- Only 8 and 9 % of useless slides → economical analyzers

<b>N =</b>	<b>138</b>	
<b>PREVALENCE*</b>	<b>13,8 %</b>	
*% of pathological samples on the total number of samples		
	<b>HEMIX 5-60</b>	<b>XT-2000i</b>
<b>SENSITIVITY</b>	<b>100 %</b>	<b>100 %</b>
<b>SPECIFICITY</b>	<b>92,4 %</b>	<b>93,3 %</b>
<b>POSITIVE PREDICTIVE VALUE</b>	<b>67,9 %</b>	<b>70,4 %</b>
<b>NEGATIVE PREDICTIVE VALUE</b>	<b>100 %</b>	<b>100 %</b>
<b>ACCURACY</b>	<b>93,5 %</b>	<b>94,2 %</b>

	<b>NUMBER OF SLIDES</b>	<b>POSITIVE PREDICTIVE VALUE</b>	<b>% OF SLIDES</b>	<b>% OF USELESS SLIDES</b>
<b>HEMIX 5-60</b>	<b>27</b>	<b>70,4 %</b>	<b>19,6 %</b>	<b>8</b>
<b>XT-2000i</b>	<b>28</b>	<b>67,9 %</b>	<b>20,3 %</b>	<b>9</b>

**PERFECTLY**  
SIMILAR LINEARITIES

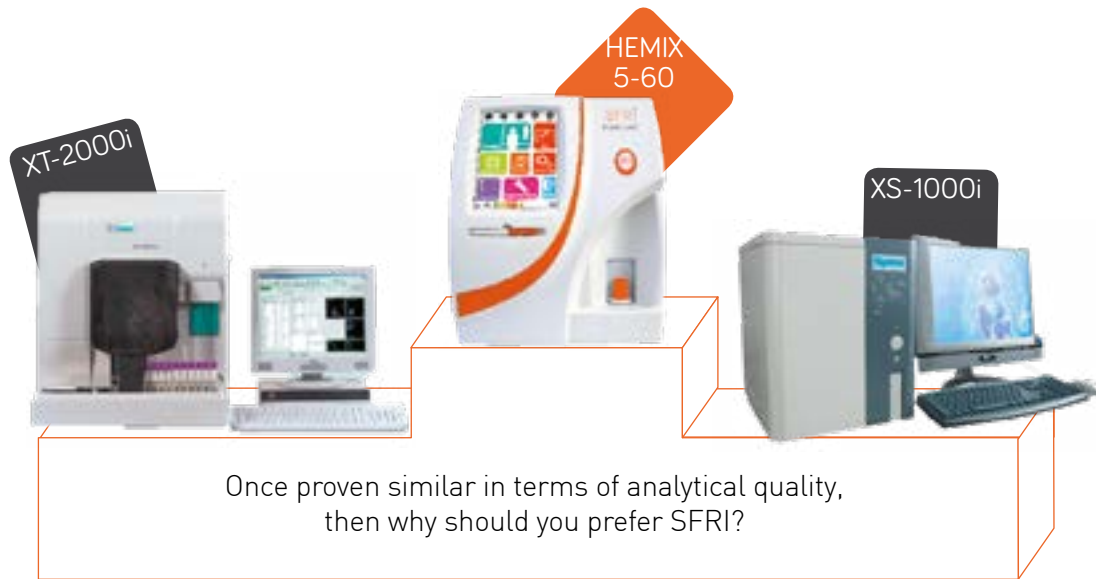


On 138 samples, SFRI & SYSMEX's analyzers keep acting in the same way. Same sensitivity, same specificity, same accuracy and same economy. MINDRAY & ORPHEE, on the contrary, generated 24 and 27 useless slides. Comparison is easy!

SFRI & SYSMEX belong together in the same group of accurate and excellent analyzers.

# ANALYTICAL RESULTS CANNOT LIES!

## SFRI & SYSMEX OFFER THE SAME QUALITY



## CHOOSING THE BEST

### IT'S CHOOSING SFRI & THE SIMPLIFICATION OF THE DAILY LAB'S WORK

Quality of results may be similar but SFRI offers more and the HEMIX 5-60 was created thinking about both laboratories' managers and users.



#### FOR THE MANAGER

Economical analyzer  
Controlled real cost per test\*  
Small analyzer, all-in-1 !  
Accepted & praised by all laboratory's team

**SAVE MORE THAN 9 000 € / YEAR**

*Compared to ORPHEE MYTHIC 22 (study published by SFRI)*

3 reagents only  
No useless slides (as seen), no rerun,  
No overconsumption  
Proven excellent accuracy  
→highly economical  
Leave space in the lab's bench  
No computer needed!

\*Cost per test = reagent consumption + instrument depreciation.  
Real cost per test = reagent consumption + instrument depreciation + reliability + rerun % + slides %.



#### FOR THE LABORATORY TECHNICIANS

User-friendly, highly intuitive and ergonomic  
100-position autoloader  
Easy daily maintenance  
Secure  
ROBUST ++: NO BREAKDOWN  
Large, colorful touchscreen  
One of the biggest autoloader  
Intuitive instrument



#### MEMBERS OF TESTING TEAMS

« Even maintenance & technical staff recognized a simplified work due to the quality of the instrument, well manufactured and using qualitative and durable materials ».

« Thoughtful : SFRI created an analyzer thinking about the people who will use it! Thank you ».

« Comprehensive, intuitive, easy, nice to working with ; appreciate working with ».



SFRI SAS

Lieu-dit Berganton  
33127 Saint Jean d'Ilac  
(Bordeaux), France

Tel. +33 (0)5 56 68 80 50

Fax +33 (0)5 56 21 79 03

[contact@sfri.com](mailto:contact@sfri.com)

[www.sfri.com](http://www.sfri.com)