



# ERYTHROCYTE SEDIMENTATION RATE ANALYZERS

*Efficient ESR Solutions for Your Laboratory*

# CHALLENGING TIMES IN THE LABORATORY CALL FOR SIMPLE SOLUTIONS

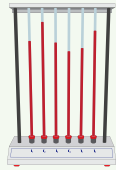
48 million erythrocyte sedimentation rate (ESR) tests are performed in the US every year<sup>1</sup>. Traditional ESR testing requires significant hands-on time, and it is harder than ever to find laboratory personnel. ALCOR<sup>®</sup> Scientific's iSED<sup>®</sup> analyzers are designed to make ESR testing as easy and efficient as possible, providing results within 20 seconds with minimal hands-on time.



Results within 20 seconds



Walk-away automation



Highly correlated to the Westergren Method



Sampling from primary EDTA tube



100 µl aspirated volume

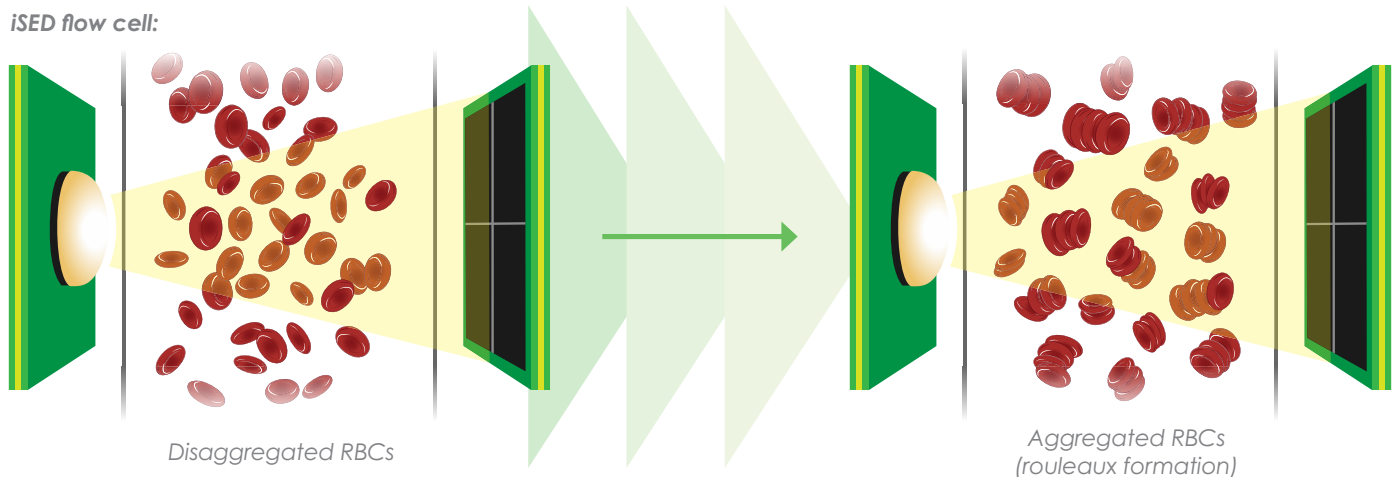
## ESR RESULTS IN SECONDS

ALCOR Scientific's iSED technology utilizes photometric reading to quantify the rouleaux formation, which is the earliest and most critical phase of red blood cell sedimentation<sup>2</sup>. An EDTA blood sample is injected into the iSED analyzer's flow cell which causes the red blood cells to disaggregate. The flow cell sensors capture the difference in light transmission over time as the injected red blood cells begin to re-aggregate.

The technical innovation of iSED ESR analyzers consists of "directly" measuring the aggregation of the red blood cells, whereas the traditional methods "indirectly" measure the aggregation of the red blood cells by recording the length at which the red blood cells settle in a Westergren tube.

The iSED technology is highly correlated to the Westergren method and provides results in mm/hr. Test results are available in just 15-20 seconds without the drawbacks and inconvenience of traditional ESR testing.

*iSED flow cell:*



1. ALCOR Scientific internal data.

2. Fabry, T. L. Mechanism of erythrocyte aggregation and sedimentation. *Blood*. 1987;70(5):1572-1576.



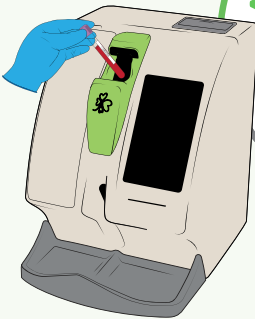
## ISED FULLY-AUTOMATED METHOD

1



Primary EDTA sample tube

2



iSED ESR Analyzer

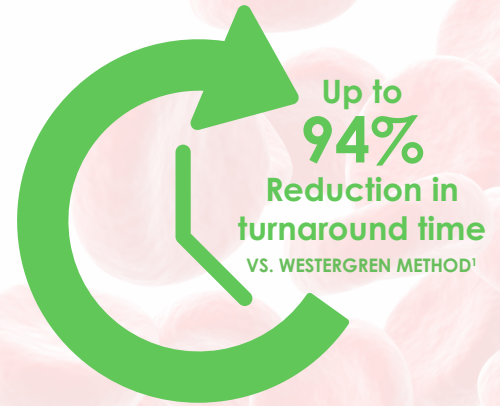
< 3 seconds  
of hands on time  
per sample

3



ESR Results

Results within  
20 seconds



### LIMITED IMPACT OF COMMON VARIABLES THAT AFFECT TRADITIONAL ESR TEST RESULTS

HEMATOCRIT



VIBRATIONS



MCV



PIPETTE ERRORS



HUMIDITY

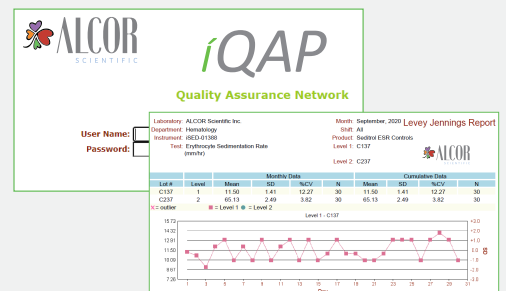


TEMPERATURE



## QUALITY CONTROL

Seditrol® Quality Controls are bi-level, human-based whole blood controls in ready-to-use, barcoded tubes. All Seditrol customers have access to iQAP, ALCOR Scientific's online peer-to-peer quality assurance program. The iQAP program has a robust network of users and allows laboratories to generate reports on demand.



WHICH ANALYZER IS  
RIGHT FOR YOU?

iSED<sup>®</sup> ELITE



miniSED<sup>®</sup>



iSED<sup>®</sup> ELITE is best for labs that...

- Receive more than one sample at a time
- Require the least amount of hands-on time
- Prefer automated sample mixing

miniSED<sup>®</sup> is best for labs that...

- Perform ESR testing less frequently
- Run single samples

<b>Sample Capacity</b>	20 samples (random access loading)
<b>Sample Type</b>	Primary EDTA tube; pediatric tube compatible
<b>Sample Volume</b>	500 µl required (only 100 µl aspirated)
<b>Test Throughput</b>	Up to 180 results / hour
<b>Sample Mixing</b>	Automatic onboard
<b>Test Time</b>	Results within 20 Seconds
<b>Barcode Reader</b>	Internal
<b>Dimensions (L x W x H)</b>	36 x 27 x 34 (cm) 14.3 x 10.5 x 13.4 (in)
<b>Data Storage Capacity</b>	>4 million
<b>LIS Connectivity</b>	LAN TCP/IP or Serial RS232 DB9 port
<b>Printer</b>	Internal

<b>Sample Capacity</b>	1
<b>Sample Type</b>	Primary EDTA tube; pediatric tube compatible
<b>Sample Volume</b>	500 µl required (only 100 µl aspirated)
<b>Test Throughput</b>	Up to 180 results / hour
<b>Sample Mixing</b>	External before sample is loaded
<b>Test Time</b>	Results in 15 seconds
<b>Barcode Reader</b>	Internal
<b>Dimensions (L x W x H)</b>	36 x 19 x 24 (cm) 14 x 7.5 x 9.5 (in)
<b>Data Storage Capacity</b>	>4 million
<b>LIS Connectivity</b>	LAN TCP/IP
<b>Printer</b>	Optional external printer



Product Information		
Catalog #	Description	Unit
<b>112-00222</b>	iSED ELITE ESR Analyzer	1 each
<b>112-01017</b>	miniiSED ESR Analyzer	1 each
<b>112-00250</b>	Test card; 250 test credits	1 each
<b>112-01000</b>	Test card; 1,000 test credits	1 each
<b>112-02000</b>	Test card; 2,000 test credits	1 each
<b>112-05000</b>	Test card; 5,000 test credits	1 each
<b>DSC06</b>	Seditrol Quality Control (Levels 1 & 2)	Pack of 6 x 4.0 mL
<b>DSC01</b>		Pack of 2 x 4.0 mL
<b>112-12-001</b>	iWASH® Wash Fluid	Pack of 4
<b>112-12-003</b>	miniiWASH® Wash Fluid	Pack of 4
<b>112-12-002</b>	iWASTE® Container	Pack of 24
<b>112-12-005</b>		Pack of 4
<b>112-12-004</b>	miniiWASTE® Container	Pack of 4
<b>DS-05233</b>	ALCOR Thermal Printer Paper	Pack of 5
<b>DS-05240</b>	ALCOR Thermal Printer	1 each



## ORDERING

ALCOR sales: 1.800.495.5270

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## SERVICE AND SUPPORT

ALCOR technical support: 1.800.495.5270

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