

# ADVIA 360, ADVIA 560, and ADVIA 560 AL Systems

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Answers for life.

# The ADVIA Hematology Family



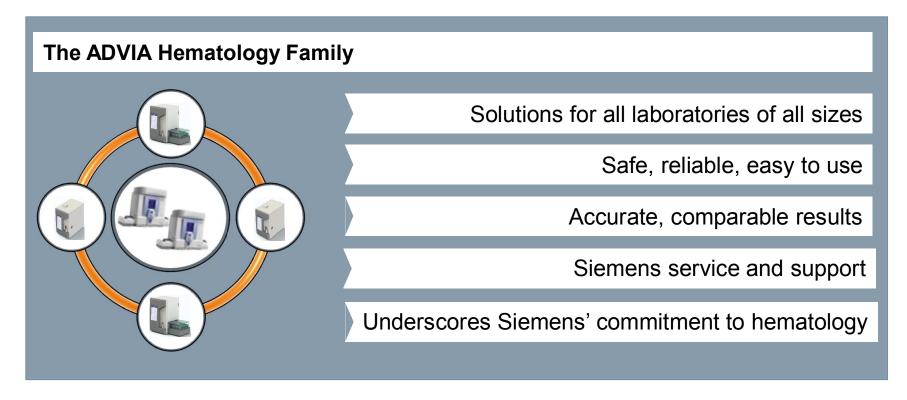
Siemens can now offer a total solution with the ADVIA® 360, ADVIA 560, ADVIA 560 AL and ADVIA 2120i Hematology Systems.\*

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\*Product availability varies by country

François Richir / BM / BA LD HH

# The ADVIA Hematology Family



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# **ADVIA 360 System Specifications**

| Throughput      | Up to 60 tests/hr   |
|-----------------|---|
| Parameters      | 22,* including 3-part WBC differential  |
| Technology      | Impedance for CBC Absorbance for HGB  |
| Samples         | 100 μL sample volume<br>Closed- and open-tube manual modes                                |
| Reagents        | Three cyanide-free reagents   |
| Quality Control | Quality-control database<br>Levey-Jennings graphs   |
| IT              | Storage capacity: 10,000 records Easy-to-use multilingual user interface HL7 connectivity |



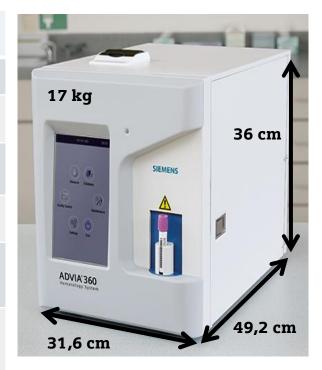
\*OUS only; 18 parameters in the U.S.

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# **ADVIA 360 System Specifications**

| Throughput      | Up to 60 tests/hr   |
|-----------------|---|
| Parameters      | 22, including <u>3-part WBC</u> differential  |
| Technology      | Impedance for CBC Absorbance for HGB  |
| Samples         | 100 μL sample volume<br>Closed- and open-tube manual modes                                |
| Reagents        | Three cyanide-free reagents   |
| Quality Control | Quality-control database<br>Levey-Jennings graphs   |
| IT              | Storage capacity: 10,000 records Easy-to-use multilingual user interface HL7 connectivity |

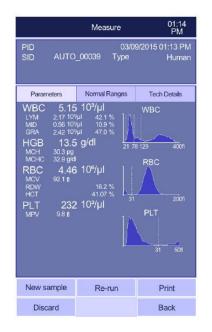


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# **ADVIA 360 System User Interface**







# **ADVIA 560 System Specifications**

| Throughput      | Up to 60 tests/hr  |  |  |  |
|-----------------|--|--|--|--|
| Parameters      | 26,* including 5-part WBC Differential   |  |  |  |
| Technology      | <u>Laser</u> light scatter for 5-part Differential Impedance for CBC Absorbance for HGB    |  |  |  |
| Samples         | 110 μL sample volume<br>Closed- and open-tube manual modes                                 |  |  |  |
| Reagents        | Three cyanide-free reagents  |  |  |  |
| Quality Control | Quality-control database<br>Levey-Jennings graphs  |  |  |  |
| IT              | Storage capacity: 100,000 records Easy-to-use multilingual user interface HL7 connectivity |  |  |  |



\*OUS only; 22 parameters in the U.S.

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# **ADVIA 560 System Specifications**

| Throughput      | Up to 60 tests/hr  |
|-----------------|--|
| Parameters      | 26, including 5-part WBC Differential  |
| Technology      | <u>Laser</u> light scatter for <u>5-part</u> Differential Impedance for CBC Absorbance for HGB |
| Samples         | 110 μL sample volume<br>Closed- and open-tube manual modes                                     |
| Reagents        | Three cyanide-free reagents  |
| Quality Control | Quality-control database<br>Levey-Jennings graphs  |
| IT              | Storage capacity: 100,000 records Easy-to-use multilingual user interface HL7 connectivity     |



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#### **SIEMENS**

# **ADVIA 560 AL System Specifications**

| Throughput      | Up to 60 tests/hr   |
|-----------------|---|
| Parameters      | 26, including 5-part WBC Differential   |
| Technology      | Laser light scatter for 5-part Differential Impedance for CBC Absorbance for HGB  |
| Samples         | 110 μL sample volume<br>Closed- and open-tube manual modes<br><u>Autoloader holds 100 samples</u> (10 racks, 10 samples per rack) |
| Reagents        | Three cyanide-free reagents   |
| Quality Control | Quality-control database<br>Levey-Jennings graphs   |
| ІТ              | Storage capacity: 100,000 records Easy-to-use multilingual user interface HL7 connectivity  |



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# ADVIA 560 and ADVIA 560AL System User Interface





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# **Quality Control on ADVIA 360 and ADVIA 560 Systems**

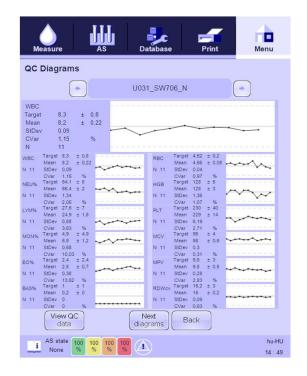
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#### QC Database and 24 QC files

Target values can be scanned

Levey-Jennings graphs



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# **Manual Closed-Vial Sampling**

## Closed- or open-vial sampling

Suitable for various cap-pierceable tubes

110 μL sample volume

Available on the ADVIA 360,560, and 560 AL Systems

Manual bar-code reader for positive sample ID





# **Tube management**



#### External Barcode Reader

Code 128; Code 39; Interleaved 2 of 5; Codabar; EAN-8; EAN-13

## Supported Sample Tube Types

K2- or K3-EDTA 13 x 75-mm sample-tubes

- Sarstedt Monovette
- Becton Dickinson (BD) Vacutainer
- Terumo Venosafe ...

# **Autoloader Upgrade on ADVIA 560 System**









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#### 1. ADVIA 360/560 Dil

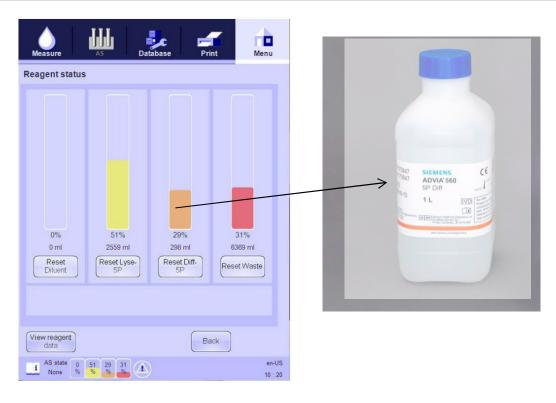
- Color Code GREEN
- Dilution of blood sample
- Sheat for optical measurement

### 2. ADVIA 560 Lyse 5P

- Color code YELLOW
- Lyses RBCs and PLTs to determine WBC count, 5diff and HGB concentration

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#### 3. ADVIA 560 Diff-5P

- Color code ORANGE
- Stop the lysing process and prevent WBC from lysing

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# Reagents Lock System/Hardware (HW) Key

- Each ADVIA 560 Lyse reagent container comes with a reagent HW key that contains 900 measurement credits
- System count down warns operator when the remaining test is 50



# ADVIA 360

| Function                    | Diluent              | Lyse                 | Cleaner              | Controls                         | Calibration                  |
|-----------------------------|----------------------|----------------------|----------------------|----------------------------------|------------------------------|
| Product Name                | ADVIA 360/560<br>Dil | ADVIA 360 Lyse       | ADVIA 360<br>Cleaner | ADVIA 360 Control Set<br>(L-N-H) | ADVIA 360, 560<br>Calibrator |
| SMN                         | 11170845             | 11170848             | 11170849             | 11170853                         | 11170852                     |
| Content                     | 20 Ltr               | 1 Ltr / 900<br>tests | 1 Ltr                | 2 x 3 x 3 mL                     | 2 x 3 mL                     |
| Consumption per measurement | 41 mL                | 1,1 mL               | 20 mL                | 110 μL                           | 110 μL                       |
| Cycle                       | 480 tests            | 900 tests            | 50 days              | 80 tests                         | 80 tests                     |
| Open vial stability         | 60 days              | 90 days              | 90 days              | 14 days                          | 7 days                       |

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# ADVIA 560

| Function                    | Diluent              | Lyse                 | Stopper              | HypoClean CC               | Controls                         | Calibration                  |
|-----------------------------|----------------------|----------------------|----------------------|----------------------------|----------------------------------|------------------------------|
| Product Name                | ADVIA 360/560<br>Dil | ADVIA 560<br>Lyse    | ADVIA 560 5P<br>Diff | ADVIA 360,560<br>Hypoclean | ADVIA 560 Control Set<br>(L-N-H) | ADVIA 360, 560<br>Calibrator |
| SMN                         | 11170845             | 11170846             | 11170847             | 11170851                   | 11170854                         | 11170852                     |
| Content                     | 20 Ltr               | 5 Ltr / 900<br>tests | 1 Ltr                | 100 ml                     | 2 x 3 x 3 mL                     | 2 x 3 mL                     |
| Consumption per measurement | 52 mL                | 5,7 mL               | 0,7 mL               | 4mL/jour                   | 110 μL                           | 110 μL                       |
| Cycles                      | 380 tests            | 900 tests            | 1400 tests           | 25 days                    | 80 tests                         | 80 tests                     |
| Open vial stability         | 60 days              | 60 days              | 60 days              | 60 days                    | 8 days                           | 7 days                       |

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# **ADVIA 360 and 560 System Methodology**

|                         | Technologies |
|-------------------------|--------------|
| Volumetric Impedance    |              |
| Photometric Measurement |              |
| Optical Measurement     |              |

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## **ADVIA 560 System Result Screen**



# The Diff cytogram has same orientation and color-coding as the ADVIA 2120i System

X axis: complexity and granularity

Y axis: cell size

#### The baso cytogram

X axis: cell complexity

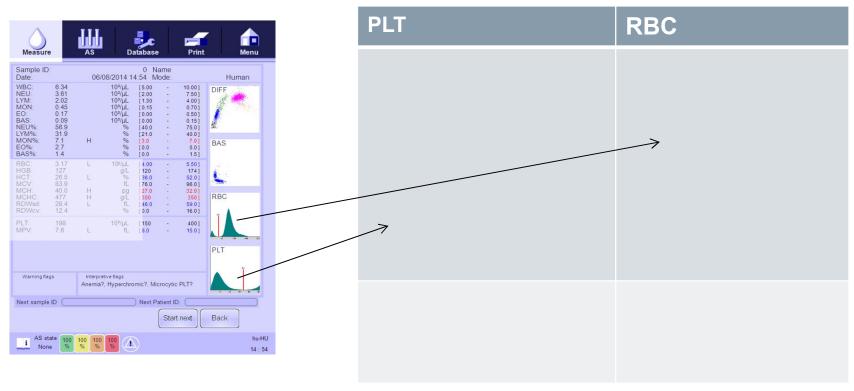
Y axis: cell size

#### Red cell and platelet histograms

X axis: cell size

Y axis: cell number

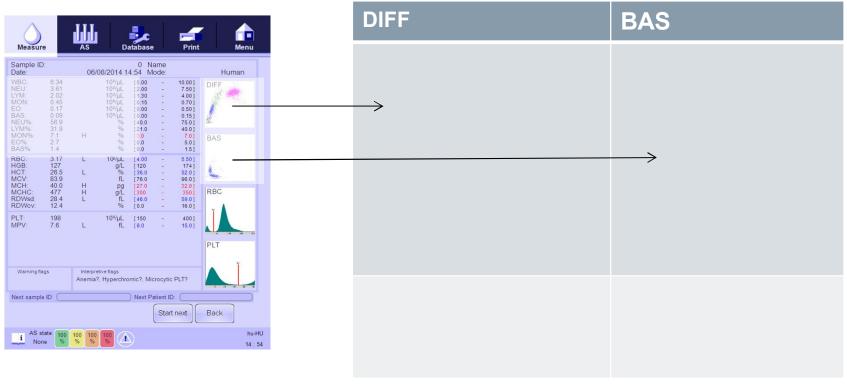
# **ADVIA 360 and 560 System Methodology**



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# **ADVIA 360 and 560 System Methodology**



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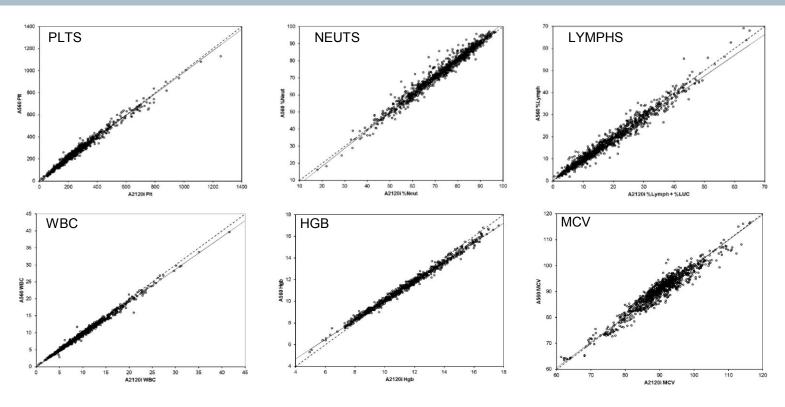
# ADVIA 560 vs 2120i System Results (USA)

| Parameter                 | n    | r     | Slope | Intercept | Syx   | ADVIA 2120<br>Mean | ADVIA 560<br>Mean | Bias  |
|---------------------------|------|-------|-------|-----------|-------|--------------------|-------------------|-------|
| WBC x 10 <sup>3</sup> /µL | 1009 | 0.996 | 0.96  | 0.09      | 0.05  | 9.72               | 9.38              | -0.34 |
| RBC x 10 <sup>6</sup> /µL | 1009 | 0.995 | 0.97  | -0.02     | 0.02  | 3.83               | 3.69              | -0.14 |
| Hgb (g/dL)                | 1009 | 0.996 | 0.89  | 1.1       | 0.02  | 11.3               | 11.2              | -0.1  |
| Hct (%)                   | 1009 | 0.986 | 1.00  | -1.2      | 0.03  | 34.4               | 33.2              | -1.2  |
| MCV (fL)                  | 1009 | 0.960 | 0.99  | 1.5       | 0.02  | 90.2               | 90.4              | 0.2   |
| MCH (pg)                  | 1009 | 0.942 | 1.02  | 0.4       | 0.03  | 29.6               | 30.6              | 1.0   |
| MCHC (g/dL)               | 1009 | 0.344 | 0.69  | 11.4      | 0.04  | 32.8               | 33.9              | 1.1   |
| RDW (%)                   | 1007 | 0.892 | 1.22  | -3.4      | 0.07  | 15.8               | 15.8              | 0.0   |
| Plt x 10 <sup>3</sup> /µL | 1009 | 0.991 | 0.98  | 11        | 19.50 | 256                | 261               | 5     |
| MPV (fL)                  | 1007 | 0.651 | 2.19  | -7.9      | 0.23  | 7.5                | 8.6               | 1.1   |
| Neut %                    | 1006 | 0.984 | 1.05  | -2.7      | 0.04  | 72.0               | 72.6              | 0.6   |
| Lymph %                   | 1006 | 0.983 | 0.94  | 0.4       | 0.13  | 19.1               | 18.5              | -0.6  |
| Mono %                    | 1006 | 0.818 | 1.34  | -1.9      | 2.17  | 6.0                | 6.1               | 0.1   |
| Eos %                     | 1006 | 0.931 | 0.88  | -0.1      | 0.53  | 2.4                | 2.1               | -0.3  |
| Baso %                    | 1006 | 0.649 | 1.52  | -0.1      | 0.70  | 0.6                | 0.8               | 0.2   |

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# ADVIA 560 vs 2120i System Results (USA)



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# **Operator Maintenance?**



| Reduced Maintenance |                              |
|---------------------|------------------------------|
| Daily:              | System Shut Down (automatic) |
| Weekly:             | Na*                          |
| Monthly:            | Na*                          |
| On demand:          |                              |

- Shear valve cleaning 5 min
- Cleaning the Wash head 5 min
- Measuring chambers 1 min



# ADVIA 560, ADVIA 560AL, and ADVIA 360 Systems

- Small footprint with onboard cleaning and zero daily maintenance
- Good reliability
- Full support supplied by Siemens







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# Siemens Scalable Hematology Systems to Suit Every laboratory\*

**SIEMENS** 

| Siemens Range of<br>Hematology Systems*       | STAT Labs | Satellite<br>Labs | Low<br>Workload | Medium<br>Workload | High<br>Workload | Core<br>Automation<br>Lab | Backup<br>Systems |
|---|-----------|-------------------|-----------------|--------------------|------------------|---------------------------|-------------------|
| HemaPrep Device                               | <b>√</b>  | ✓                 | <b>√</b>        | <b>√</b>           |                  |                           | ✓                 |
| Diff-Quick Stain Kit                          | ✓         |                   |                 |                    |                  |                           |                   |
| Hematek <sup>®</sup> 3000 System              |           | ✓                 | ✓               | ✓                  |                  |                           | ✓                 |
| ADVIA 360 System                              | <b>√</b>  | ✓                 | ✓               |                    |                  |                           | <b>√</b>          |
| ADVIA 560 System                              |           | ✓                 | ✓               |                    |                  |                           |                   |
| ADVIA 560AL System                            |           |                   |                 | <b>√</b>           |                  |                           | ✓                 |
| CellaVision <sup>®</sup> Image Capture System |           | ✓                 |                 |                    |                  |                           | 4                 |
| CellaVision DM1200                            |           |                   | ✓               | ✓                  |                  |                           |                   |
| CellaVision DM9600                            |           |                   |                 |                    | <b>√</b>         | ✓                         |                   |
| ADVIA 2120i System                            |           |                   |                 |                    | ✓                | ✓                         |                   |
| ADVIA Autoslide                               |           |                   |                 |                    | ✓                | ✓                         |                   |
| Aptio™ Automation                             |           |                   |                 |                    |                  | <b>√</b>                  |                   |

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\*Product availability varies by country.

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2016-06-09

# **Meeting Requirements**

| Your Requirements                                    | ADVIA Hematology Family  |
|--|--|
| A range of systems to meet future demands            | A range of upgradeable systems   |
| Compatible LIS or middleware systems                 | HL7 LIS or middleware connectivity   |
| Opportunities for Automation and satellite solutions | Siemens can provide multidisciplinary Automation plus satellite packages   |
| Protection from exposure to biohazards               | All systems provide closed vial sampling                                   |
| Potential of digital microscopy                      | All CellaVision systems are available                                      |
| Confidence that systems are easy to use              | Systems can be used by all skill levels                                    |
| Fully supported systems                              | Siemens provides full-service support                                      |
| A single supplier providing a total solution         | Siemens can provide a comprehensive solution to meet all your requirements |

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# **The ADVIA Hematology Family**



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