



**HEMATOLOGY CONTROL FOR SYSMEX XE 2100 ANALYZERS  
OPEN MODE ASSAY**

Expiration Date: <b>2010-10-11</b>		Quality Control Data Due Date #1: <b>30-Aug-10</b>				Quality Control Data Due Date #2: <b>11-Oct-10</b>							
Lot Number:		<b>02020810</b>			<b>02020811</b>			<b>02020812</b>					
Control:		<b>L1:Level 1</b>			<b>L2:Level 2</b>			<b>L3:Level 3</b>					
<b>PARAMETERS</b>	<b>MEAN</b>	<b>EXPECTED RANGE</b>			<b>MEAN</b>	<b>EXPECTED RANGE</b>			<b>MEAN</b>	<b>EXPECTED RANGE</b>			
OPEN	RBC (10 <sup>12</sup> /L)	2.30	2.21	-	2.39	4.34	4.21	-	4.47	5.21	5.05	-	5.37
	HGB (g/dL)	5.6	5.4	-	5.8	12.1	11.7	-	12.5	15.9	15.4	-	16.4
	HCT (%)	17.3	16.4	-	18.2	35.6	34.0	-	37.2	46.0	43.9	-	48.1
	MCV (fL)	75.5	68.7	-	82.3	81.9	76.1	-	88.4	88.2	81.9	-	95.1
	MCH (pg)	24.5	22.5	-	26.4	27.8	26.3	-	29.6	30.5	28.7	-	32.4
	MCHC (g/dL)	32.7	29.6	-	35.4	34.3	31.5	-	36.7	34.9	32.1	-	37.3
	PLT (10 <sup>9</sup> /L)	52	31	-	73	211	188	-	234	516	470	-	562
	RDW-SD (fL)	46.0	41.4	-	50.6	43.8	39.4	-	48.2	46.6	41.9	-	51.3
	RDW-CV (%)	16.8	15.1	-	18.5	14.9	13.4	-	16.4	14.8	13.3	-	16.3
	MPV (fL)	9.1	8.4	-	9.8	9.4	8.8	-	10.0	9.6	9.0	-	10.2
	WBC (10 <sup>9</sup> /L)	3.15	2.84	-	3.47	7.24	6.81	-	7.67	18.42	17.31	-	19.53
	NEUT%	44.3	35.4	-	53.2	48.5	41.2	-	55.8	51.6	43.9	-	59.3
	LYMPH%	34.7	20.8	-	48.6	30.1	24.1	-	36.1	25.6	20.5	-	30.7
	MONO%	11.4	2.3	-	20.5	10.6	6.4	-	14.8	11.6	8.1	-	15.1
	EO%	9.7	6.8	-	12.6	10.9	7.6	-	14.2	11.2	8.4	-	14.0
	BASO%	62.7	43.9	-	81.5	67.2	47.0	-	87.4	71.2	53.4	-	89.0
	NEUT# (10 <sup>9</sup> /L)	1.40	1.12	-	1.68	3.51	2.98	-	4.04	9.51	8.08	-	10.94
	LYMPH# (10 <sup>9</sup> /L)	1.09	0.65	-	1.53	2.18	1.74	-	2.62	4.72	3.78	-	5.66
	MONO# (10 <sup>9</sup> /L)	0.36	0.07	-	0.65	0.76	0.30	-	1.22	2.13	1.28	-	2.98
	EO# (10 <sup>9</sup> /L)	0.30	0.21	-	0.39	0.79	0.55	-	1.03	2.06	1.55	-	2.58
	BASO# (10 <sup>9</sup> /L)	1.97	1.38	-	2.56	4.86	3.40	-	6.32	13.12	9.84	-	16.40
	NRBC# (10 <sup>9</sup> /L)	0.15	0.08	-	0.23	0.45	0.32	-	0.59	1.14	0.80	-	1.48
	NRBC% (/100 WBC)	4.9	3.9	-	5.9	6.6	5.3	-	7.9	6.6	5.3	-	7.9
	PLT-O (10 <sup>9</sup> /L)	55	30	-	80	209	178	-	240	516	439	-	593
	RET# (10 <sup>12</sup> /L)	0.1288	0.0902	-	0.1674	0.1080	0.0756	-	0.1404	0.0522	0.0365	-	0.0679
	RET%	5.61	3.93	-	7.29	2.49	1.74	-	3.24	1.00	0.70	-	1.30
	IRF (%)	24.9	4.9	-	44.9	21.7	1.7	-	41.7	16.6	0.0	-	36.6
	<sup>a</sup> IG #	0.33	0.30	-	0.36	0.83	0.62	-	1.04	2.18	1.53	-	2.83
	<sup>a</sup> IG %	10.4	7.3	-	13.5	11.5	8.6	-	14.4	11.8	7.1	-	16.5
	<sup>b</sup> HPC #	0.014	0.012	-	0.016	0.032	0.029	-	0.035	0.097	0.087	-	0.107
<sup>c</sup> RET-HE (pg)	24.0	16.8	-	31.2	24.6	18.5	-	30.8	25.5	15.3	-	35.7	
<sup>d</sup> IPF %	21.800	18.530	-	25.070	21.900	18.615	-	25.185	21.600	18.360	-	24.840	

<sup>a</sup> IG values are only available with the Sysmex XE-Series IG Master software.  
<sup>b</sup> HPC values are only available with the Sysmex XE-Series HPC Master software.  
<sup>c</sup> RET-HE values are only available with the Sysmex XE-Series RET Master software.  
<sup>d</sup> IPF values are only available with the Sysmex XE-Series IPF Master software.

Sysmex recommends that laboratories establish their own Q.C. Target Values for each new lot number by collecting at least 10 data points per control level over 5 days. The mean Q.C. Target Values from this data collection should be inside the Expected Ranges. These Expected Ranges represent estimates of interlaboratory variation and are not included for use as the laboratory's internal Q.C. file limits. Sysmex recommends that each laboratory establish its own Q.C. file limits based on the laboratory's historical coefficient of variation. See your Sysmex Training Manual for more information on establishing Q.C. file limits.



**HEMATOLOGY CONTROL FOR SYSMEX XE 2100 ANALYZERS  
CLOSED MODE ASSAY**

Expiration Date <b>2010-10-11</b>		Quality Control Data Due Date #1: <b>30-Aug-10</b>			Quality Control Data Due Date #2: <b>11-Oct-10</b>				
Lot Number:		<b>02020810</b>		<b>02020811</b>		<b>02020812</b>			
Control:		<b>L1:Level 1</b>		<b>L2:Level 2</b>		<b>L3:Level 3</b>			
<b>PARAMETERS</b>	<b>MEAN</b>	<b>EXPECTED RANGE</b>		<b>MEAN</b>	<b>EXPECTED RANGE</b>		<b>MEAN</b>	<b>EXPECTED RANGE</b>	
<b>C L O S E D</b>	RBC (10 <sup>12</sup> /L)	2.30	2.16 - 2.44	4.34	4.12 - 4.56	5.21	4.95 - 5.47		
	HGB (g/dL)	5.6	5.3 - 5.9	12.1	11.5 - 12.7	15.9	15.1 - 16.7		
	HCT (%)	17.3	16.1 - 18.5	35.6	33.5 - 37.7	46.0	43.2 - 48.8		
	MCV (fL)	75.5	66.0 - 85.6	81.9	73.4 - 91.5	88.2	79.0 - 98.5		
	MCH (pg)	24.5	21.6 - 27.5	27.8	25.2 - 30.8	30.5	27.6 - 33.7		
	MCHC (g/dL)	32.7	28.4 - 36.9	34.3	30.5 - 38.0	34.9	31.0 - 38.6		
	PLT (10 <sup>9</sup> /L)	51	25 - 76	203	172 - 233	480	408 - 552		
	RDW-SD (fL)	46.0	41.4 - 50.6	43.8	39.4 - 48.2	46.6	41.9 - 51.3		
	RDW-CV (%)	16.8	15.1 - 18.5	14.9	13.4 - 16.4	14.8	13.3 - 16.3		
	MPV (fL)	9.1	8.4 - 9.8	9.4	8.8 - 10.0	9.6	9.0 - 10.2		
	WBC (10 <sup>9</sup> /L)	3.06	2.60 - 3.51	6.88	6.26 - 7.50	18.05	16.61 - 19.50		
	NEUT%	44.3	35.4 - 53.1	48.8	41.5 - 56.1	51.0	43.3 - 58.6		
	LYMPH%	34.6	20.8 - 48.4	29.8	23.8 - 35.8	26.1	20.9 - 31.4		
	MONO%	11.8	2.4 - 21.2	10.4	6.2 - 14.5	11.4	8.0 - 14.9		
	EO%	9.3	6.5 - 12.1	11.0	7.7 - 14.3	11.4	8.6 - 14.3		
	BASO%	63.2	44.2 - 82.1	65.7	46.0 - 85.4	69.8	52.3 - 87.2		
	NEUT# (10 <sup>9</sup> /L)	1.35	1.08 - 1.62	3.36	2.85 - 3.86	9.21	7.82 - 10.59		
	LYMPH# (10 <sup>9</sup> /L)	1.06	0.63 - 1.48	2.05	1.64 - 2.46	4.72	3.78 - 5.66		
	MONO# (10 <sup>9</sup> /L)	0.36	0.07 - 0.65	0.71	0.29 - 1.14	2.07	1.24 - 2.89		
	EO# (10 <sup>9</sup> /L)	0.29	0.20 - 0.37	0.76	0.53 - 0.99	2.06	1.55 - 2.58		
	BASO# (10 <sup>9</sup> /L)	1.93	1.35 - 2.51	4.52	3.16 - 5.88	12.60	9.45 - 15.74		
	NRBC# (10 <sup>9</sup> /L)	0.15	0.07 - 0.22	0.44	0.31 - 0.57	1.13	0.79 - 1.47		
	NRBC% (/100 WBC)	4.9	3.9 - 5.8	6.5	5.2 - 7.8	6.5	5.2 - 7.8		
	PLT-O (10 <sup>9</sup> /L)	52	26 - 78	205	174 - 236	506	430 - 582		
	RET# (10 <sup>12</sup> /L)	0.1288	0.0902 - 0.1674	0.1080	0.0756 - 0.1404	0.0522	0.0365 - 0.0679		
	RET%	5.61	3.93 - 7.29	2.49	1.74 - 3.24	1.00	0.70 - 1.30		
	IRF (%)	24.9	4.9 - 44.9	21.7	1.7 - 41.7	16.6	0.0 - 36.6		
	<sup>a</sup> IG #	0.33	0.30 - 0.36	0.83	0.62 - 1.04	2.18	1.53 - 2.83		
	<sup>a</sup> IG %	10.4	7.3 - 13.5	11.5	8.6 - 14.4	11.8	7.1 - 16.5		
	<sup>b</sup> HPC #	0.014	0.012 - 0.016	0.032	0.029 - 0.035	0.097	0.087 - 0.107		
<sup>c</sup> RET-HE (pg)	24.0	16.8 - 31.2	24.6	18.5 - 30.8	25.5	15.3 - 35.7			
<sup>d</sup> IPF %	21.800	18.530 - 25.070	21.900	18.615 - 25.185	21.600	18.360 - 24.840			

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