



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

Expiration Date: 2010-08-16		Quality Control Data Due Date #1: 5-Jul-10			Quality Control Data Due Date #2: 16-Aug-10				
Lot Number:		01460810		01460811		01460812			
Control:		L1:Level 1		L2:Level 2		L3:Level 3			
PARAMETERS	MEAN	EXPECTED RANGE		MEAN	EXPECTED RANGE		MEAN	EXPECTED RANGE	
OPEN	RBC (10 ¹² /L)	2.29	2.20 - 2.38	4.36	4.23 - 4.49	5.25	5.09 - 5.41		
	HGB (g/dL)	5.7	5.5 - 5.9	12.1	11.7 - 12.5	16.2	15.7 - 16.7		
	HCT (%)	17.6	16.7 - 18.5	35.8	34.2 - 37.4	46.7	44.6 - 48.8		
	MCV (fL)	76.7	70.2 - 84.1	82.1	76.1 - 88.5	88.8	82.5 - 95.8		
	MCH (pg)	25.0	23.0 - 27.0	27.7	26.1 - 29.5	30.9	29.1 - 32.8		
	MCHC (g/dL)	33.0	29.6 - 35.5	34.1	31.4 - 36.5	35.1	32.2 - 37.4		
	PLT (10 ⁹ /L)	53	32 - 74	212	189 - 235	505	460 - 550		
	RDW-SD (fL)	44.2	39.8 - 48.6	44.5	40.1 - 49.0	46.3	41.7 - 50.9		
	RDW-CV (%)	16.0	14.4 - 17.6	15.2	13.7 - 16.7	14.5	13.1 - 16.0		
	MPV (fL)	8.9	8.2 - 9.6	9.1	8.6 - 9.6	9.4	8.8 - 10.0		
	WBC (10 ⁹ /L)	3.06	2.75 - 3.37	6.95	6.53 - 7.37	18.08	17.00 - 19.16		
	NEUT%	45.7	36.6 - 54.8	49.5	42.1 - 56.9	53.9	45.8 - 62.0		
	LYMPH%	33.4	20.0 - 46.8	28.8	23.0 - 34.6	23.3	18.6 - 28.0		
	MONO%	11.0	2.2 - 19.8	11.3	6.8 - 15.8	11.6	8.1 - 15.1		
	EO%	10.0	7.0 - 13.0	10.5	7.4 - 13.7	11.2	8.4 - 14.0		
	BASO%	62.9	44.0 - 81.8	67.6	47.3 - 87.9	73.0	54.8 - 91.3		
	NEUT# (10 ⁹ /L)	1.40	1.12 - 1.68	3.44	2.92 - 3.96	9.75	8.29 - 11.21		
	LYMPH# (10 ⁹ /L)	1.02	0.61 - 1.43	2.00	1.60 - 2.40	4.21	3.37 - 5.05		
	MONO# (10 ⁹ /L)	0.34	0.07 - 0.61	0.78	0.31 - 1.25	2.10	1.26 - 2.94		
	EO# (10 ⁹ /L)	0.31	0.22 - 0.40	0.73	0.51 - 0.95	2.02	1.52 - 2.53		
	BASO# (10 ⁹ /L)	1.92	1.34 - 2.50	4.70	3.29 - 6.11	13.19	9.89 - 16.49		
	NRBC# (10 ⁹ /L)	0.16	0.08 - 0.24	0.43	0.30 - 0.56	1.11	0.78 - 1.44		
	NRBC# (/100 WBC)	5.5	4.4 - 6.6	6.6	5.3 - 7.9	6.6	5.3 - 7.9		
	PLT-O (10 ⁹ /L)	58	32 - 84	212	180 - 244	504	428 - 580		
	RET# (10 ¹² /L)	0.1633	0.1143 - 0.2123	0.1253	0.0877 - 0.1629	0.0597	0.0418 - 0.0776		
	RET%	7.12	4.98 - 9.26	2.87	2.01 - 3.73	1.14	0.80 - 1.48		
	IRF (%)	27.9	7.9 - 47.9	25.4	5.4 - 45.4	20.1	0.1 - 40.1		
	^a IG #	0.33	0.30 - 0.36	0.82	0.62 - 1.03	2.28	1.60 - 2.96		
	^a IG %	10.8	7.6 - 14.0	11.7	8.8 - 14.6	12.6	7.6 - 17.6		
	^b HPC #	0.013	0.011 - 0.015	0.033	0.030 - 0.036	0.094	0.085 - 0.103		
^c RET-HE (pg)	24.3	17.0 - 31.6	24.8	18.6 - 31.0	25.6	15.4 - 35.8			
^d IPF %	22.000	18.700 - 25.300	22.000	18.700 - 25.300	21.400	18.190 - 24.610			

^a IG values are only available with the Sysmex XE-Series IG Master software.
^b HPC values are only available with the Sysmex XE-Series HPC Master software.
^c RET-HE values are only available with the Sysmex XE-Series RET Master software.
^d 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**

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PARAMETERS	MEAN	EXPECTED RANGE		MEAN	EXPECTED RANGE		MEAN	EXPECTED RANGE	
C L O S E D	RBC (10 ¹² /L)	2.29	2.15 - 2.43	4.36	4.14 - 4.58	5.25	4.99 - 5.51		
	HGB (g/dL)	5.7	5.4 - 6.0	12.1	11.5 - 12.7	16.2	15.4 - 17.0		
	HCT (%)	17.6	16.4 - 18.8	35.8	33.7 - 37.9	46.7	43.9 - 49.5		
	MCV (fL)	76.7	67.4 - 87.5	82.1	73.5 - 91.6	88.8	79.6 - 99.3		
	MCH (pg)	25.0	22.1 - 28.1	27.7	25.1 - 30.7	30.9	27.9 - 34.1		
	MCHC (g/dL)	33.0	28.5 - 36.9	34.1	30.3 - 37.8	35.1	31.1 - 38.7		
	PLT (10 ⁹ /L)	52	26 - 78	204	173 - 234	470	399 - 540		
	RDW-SD (fL)	44.2	39.8 - 48.6	44.5	40.1 - 49.0	46.3	41.7 - 50.9		
	RDW-CV (%)	16.0	14.4 - 17.6	15.2	13.7 - 16.7	14.5	13.1 - 16.0		
	MPV (fL)	8.9	8.2 - 9.6	9.1	8.6 - 9.6	9.4	8.8 - 10.0		
	WBC (10 ⁹ /L)	2.97	2.52 - 3.41	6.60	6.01 - 7.20	17.72	16.30 - 19.14		
	NEUT%	45.3	36.2 - 54.3	49.8	42.3 - 57.3	53.3	45.3 - 61.3		
	LYMPH%	33.3	20.0 - 46.7	28.5	22.8 - 34.2	23.8	19.0 - 28.5		
	MONO%	11.5	2.3 - 20.6	11.1	6.7 - 15.5	11.5	8.0 - 14.9		
	EO%	9.9	6.9 - 12.9	10.6	7.4 - 13.8	11.4	8.6 - 14.3		
	BASO%	63.4	44.4 - 82.4	66.2	46.3 - 86.1	71.5	53.6 - 89.3		
	NEUT# (10 ⁹ /L)	1.34	1.08 - 1.61	3.29	2.80 - 3.78	9.45	8.03 - 10.87		
	LYMPH# (10 ⁹ /L)	0.99	0.59 - 1.39	1.88	1.50 - 2.26	4.21	3.37 - 5.05		
	MONO# (10 ⁹ /L)	0.34	0.07 - 0.61	0.73	0.29 - 1.17	2.04	1.22 - 2.85		
	EO# (10 ⁹ /L)	0.29	0.21 - 0.38	0.70	0.49 - 0.91	2.02	1.52 - 2.53		
	BASO# (10 ⁹ /L)	1.88	1.32 - 2.45	4.37	3.06 - 5.68	12.66	9.50 - 15.83		
	NRBC# (10 ⁹ /L)	0.16	0.08 - 0.24	0.42	0.29 - 0.55	1.10	0.77 - 1.43		
	NRBC# (/100 WBC)	5.4	4.4 - 6.5	6.5	5.2 - 7.8	6.5	5.2 - 7.8		
	PLT-O (10 ⁹ /L)	55	28 - 83	208	177 - 239	494	420 - 568		
	RET# (10 ¹² /L)	0.1633	0.1143 - 0.2123	0.1253	0.0877 - 0.1629	0.0597	0.0418 - 0.0776		
	RET%	7.12	4.98 - 9.26	2.87	2.01 - 3.73	1.14	0.80 - 1.48		
	IRF (%)	27.9	7.9 - 47.9	25.4	5.4 - 45.4	20.1	0.1 - 40.1		
	^a IG #	0.33	0.30 - 0.36	0.82	0.62 - 1.03	2.28	1.60 - 2.96		
	^a IG %	10.8	7.6 - 14.0	11.7	8.8 - 14.6	12.6	7.6 - 17.6		
	^b HPC #	0.013	0.011 - 0.015	0.033	0.030 - 0.036	0.094	0.085 - 0.103		
^c RET-HE (pg)	24.3	17.0 - 31.6	24.8	18.6 - 31.0	25.6	15.4 - 35.8			
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