



**HEMATOLOGY CONTROL FOR SYSMEX XE-5000 ANALYZERS
OPEN MODE ASSAY**

Expiration Date: 2012-01-02		Quality Control Data Due Date #1: 21-Nov-11			Quality Control Data Due Date #2: 02-Jan-12				
Lot Number:		12860810		12860811		12860812			
Control:		L1:Level 1		L2:Level 2		L3:Level 3			
PARAMETERS	MEAN	EXPECTED RANGE		MEAN	EXPECTED RANGE		MEAN	EXPECTED RANGE	
O P E N	RBC (10 ¹² /L)	2.26	2.17 - 2.35	4.30	4.17 - 4.43	5.24	5.08 - 5.40		
	HGB (g/dL)	5.8	5.6 - 6.0	12.1	11.7 - 12.5	16.7	16.2 - 17.2		
	HCT (%)	17.3	16.4 - 18.2	35.0	33.4 - 36.6	47.5	45.4 - 49.6		
	MCV (fL)	76.9	69.9 - 83.7	81.4	75.5 - 87.7	90.6	84.0 - 97.7		
	MCH (pg)	25.5	23.7 - 27.8	28.0	26.5 - 29.9	31.8	30.0 - 33.8		
	MCHC (g/dL)	33.2	30.7 - 36.7	34.5	32.1 - 37.3	35.1	32.6 - 37.9		
	PLT (10 ⁹ /L)	55	33 - 77	208	185 - 231	500	455 - 545		
	RDW-SD (fL)	44.3	39.9 - 48.7	44.7	40.2 - 49.2	47.7	42.9 - 52.5		
	RDW-CV (%)	15.8	14.2 - 17.4	15.2	13.7 - 16.7	14.7	13.2 - 16.2		
	MPV (fL)	8.6	7.9 - 9.3	9.0	8.5 - 9.5	9.3	8.7 - 9.9		
	WBC (10 ⁹ /L)	3.01	2.71 - 3.31	7.05	6.63 - 7.47	18.06	16.98 - 19.14		
	WBC-D (10 ⁹ /L)	2.85	2.57 - 3.14	6.57	6.18 - 6.96	17.24	16.21 - 18.27		
	NEUT%	44.6	35.7 - 53.5	48.6	41.3 - 55.9	52.5	44.6 - 60.4		
	LYMPH%	34.0	20.4 - 47.6	30.2	24.2 - 36.2	24.7	19.8 - 29.6		
	MONO%	11.6	2.3 - 20.9	10.7	6.4 - 15.0	11.4	8.0 - 14.8		
	EO%	9.9	6.9 - 12.9	10.4	7.3 - 13.5	11.4	8.6 - 14.3		
	BASO%	63.7	44.6 - 82.8	67.5	47.3 - 87.8	72.8	54.6 - 91.0		
	NEUT# (10 ⁹ /L)	1.34	1.07 - 1.61	3.43	2.92 - 3.94	9.48	8.06 - 10.90		
	LYMPH# (10 ⁹ /L)	1.02	0.61 - 1.43	2.13	1.70 - 2.56	4.46	3.57 - 5.35		
	MONO# (10 ⁹ /L)	0.35	0.07 - 0.63	0.76	0.30 - 1.22	2.06	1.24 - 2.88		
	EO# (10 ⁹ /L)	0.30	0.21 - 0.39	0.74	0.52 - 0.96	2.06	1.55 - 2.58		
	BASO# (10 ⁹ /L)	1.92	1.34 - 2.50	4.76	3.33 - 6.19	13.14	9.86 - 16.43		
	NRBC# (10 ⁹ /L)	0.17	0.09 - 0.26	0.46	0.32 - 0.60	1.13	0.79 - 1.47		
	NRBC% (/100 WBC)	6.1	3.1 - 9.2	7.0	4.9 - 9.1	6.7	4.7 - 8.7		
	PLT-O (10 ⁹ /L)	61	34 - 88	211	179 - 243	516	439 - 593		
	RET# (10 ¹² /L)	0.1398	0.0979 - 0.1817	0.1157	0.0810 - 0.1504	0.0641	0.0449 - 0.0833		
	RET%	6.20	4.34 - 8.06	2.69	1.88 - 3.50	1.22	0.85 - 1.59		
	IRF (%)	33.0	13.0 - 53.0	28.1	8.1 - 48.1	21.5	1.5 - 41.5		
	IG #	0.32	0.29 - 0.35	0.80	0.60 - 1.00	2.22	1.55 - 2.89		
	IG %	10.6	7.4 - 13.8	11.4	8.6 - 14.3	12.3	7.4 - 17.2		
HPC #	0.015	0.013 - 0.017	0.036	0.032 - 0.040	0.108	0.097 - 0.119			
RET-HE (pg)	24.6	17.2 - 32.0	24.9	18.7 - 31.1	26.0	15.6 - 36.4			
IPF %	21.8	18.5 - 25.1	21.6	18.4 - 24.8	22.0	18.7 - 25.3			

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-5000 ANALYZERS
CLOSED MODE ASSAY**

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Control:		L1:Level 1		L2:Level 2		L3:Level 3			
PARAMETERS	MEAN	EXPECTED RANGE		MEAN	EXPECTED RANGE		MEAN	EXPECTED RANGE	
C L O S E D	RBC (10 ¹² /L)	2.26	2.12 - 2.40	4.30	4.09 - 4.52	5.24	4.98 - 5.50		
	HGB (g/dL)	5.8	5.5 - 6.1	12.1	11.5 - 12.7	16.7	15.9 - 17.5		
	HCT (%)	17.3	16.1 - 18.5	35.0	32.9 - 37.1	47.5	44.7 - 50.4		
	MCV (fL)	76.9	67.2 - 87.1	81.4	72.9 - 90.8	90.6	81.2 - 101.1		
	MCH (pg)	25.5	22.8 - 28.9	28.0	25.5 - 31.1	31.8	28.8 - 35.2		
	MCHC (g/dL)	33.2	29.5 - 38.2	34.5	31.0 - 38.6	35.1	31.5 - 39.3		
	PLT (10 ⁹ /L)	55	28 - 83	204	173 - 234	475	404 - 546		
	RDW-SD (fL)	44.3	39.9 - 48.7	44.7	40.2 - 49.2	47.7	42.9 - 52.5		
	RDW-CV (%)	15.8	14.2 - 17.4	15.2	13.7 - 16.7	14.7	13.2 - 16.2		
	MPV (fL)	8.6	7.9 - 9.3	9.0	8.5 - 9.5	9.3	8.7 - 9.9		
	WBC (10 ⁹ /L)	2.92	2.48 - 3.36	6.77	6.16 - 7.38	17.52	16.12 - 18.92		
	WBC-D (10 ⁹ /L)	2.74	2.33 - 3.15	6.31	5.74 - 6.87	15.95	14.67 - 17.22		
	NEUT%	44.6	35.6 - 53.5	48.6	41.3 - 55.8	52.6	44.7 - 60.4		
	LYMPH%	33.9	20.3 - 47.4	30.8	24.7 - 37.0	25.5	20.4 - 30.6		
	MONO%	11.4	2.3 - 20.5	10.1	6.1 - 14.1	10.6	7.4 - 13.8		
	EO%	10.2	7.1 - 13.2	10.5	7.3 - 13.6	11.4	8.6 - 14.3		
	BASO%	65.1	45.6 - 84.6	67.5	47.3 - 87.8	73.5	55.1 - 91.9		
	NEUT# (10 ⁹ /L)	1.30	1.04 - 1.56	3.29	2.79 - 3.78	9.21	7.83 - 10.59		
	LYMPH# (10 ⁹ /L)	0.99	0.59 - 1.39	2.09	1.67 - 2.50	4.46	3.57 - 5.35		
	MONO# (10 ⁹ /L)	0.33	0.07 - 0.60	0.68	0.27 - 1.09	1.85	1.11 - 2.60		
	EO# (10 ⁹ /L)	0.30	0.21 - 0.39	0.71	0.50 - 0.92	2.00	1.50 - 2.50		
	BASO# (10 ⁹ /L)	1.90	1.33 - 2.47	4.57	3.20 - 5.94	12.88	9.66 - 16.10		
	NRBC# (10 ⁹ /L)	0.17	0.08 - 0.25	0.44	0.31 - 0.57	1.13	0.79 - 1.47		
	NRBC% (/100 WBC)	6.1	3.1 - 9.2	7.0	4.9 - 9.1	6.7	4.7 - 8.7		
	PLT-O (10 ⁹ /L)	60	30 - 91	209	178 - 240	501	425 - 576		
	RET# (10 ¹² /L)	0.1398	0.0979 - 0.1817	0.1157	0.0810 - 0.1504	0.0641	0.0449 - 0.0833		
	RET%	6.20	4.34 - 8.06	2.69	1.88 - 3.50	1.22	0.85 - 1.59		
	IRF (%)	33.0	13.0 - 53.0	28.1	8.1 - 48.1	21.5	1.5 - 41.5		
	IG #	0.32	0.29 - 0.35	0.77	0.58 - 0.96	2.15	1.51 - 2.80		
	IG %	10.6	7.4 - 13.8	11.4	8.6 - 14.3	12.3	7.4 - 17.2		
HPC #	0.015	0.013 - 0.017	0.036	0.032 - 0.040	0.108	0.097 - 0.119			
RET-HE (pg)	24.6	17.2 - 32.0	24.9	18.7 - 31.1	26.0	15.6 - 36.4			
IPF %	21.8	18.5 - 25.1	21.6	18.4 - 24.8	22.0	18.7 - 25.3			

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