

CBC-X

HEMATOLOGY CONTROLS

CONTROL

ASSAY VALUES AND EXPECTED RANGES

LOT 24110801, 24110802, 24110803



2025-01-05

QCP DATA MONTHS: NOVEMBER, DECEMBER

		LOW LOT 24110801		NORMAL LOT 24110802		HIGH LOT 24110803				
Sysmex XN Series	Parameters	Assay Mean	± Limit	Expected Range	Assay Mean	± Limit	Expected Range	Assay Mean	± Limit	Expected Range
	WBC ($10^9/L$)	3.95 ± 1.20		2.75 - 5.15	7.90 ± 1.80		6.10 - 9.70	21.10 ± 3.00		18.10 - 24.10
	WBC-D ($10^9/L$)	3.80 ± 1.20		2.60 - 5.00	7.50 ± 1.80		5.70 - 9.30	21.00 ± 3.00		18.00 - 24.00
	RBC ($10^{12}/L$)	2.30 ± 0.15		2.15 - 2.45	4.60 ± 0.24		4.36 - 4.84	5.60 ± 0.30		5.30 - 5.90
	HGB (g/dL)	5.8 ± 0.4		5.4 - 6.2	13.3 ± 0.6		12.7 - 13.9	17.4 ± 0.7		16.7 - 18.1
	HCT (%)	17.9 ± 2.0		15.9 - 19.9	39.6 ± 2.5		37.1 - 42.1	51.2 ± 3.0		48.2 - 54.2
	MCV (fL)	78.0 ± 5.0		73.0 - 83.0	86.0 ± 5.0		81.0 - 91.0	91.5 ± 5.0		86.5 - 96.5
	MCH (pg)	25.2 ± 2.5		22.7 - 27.7	28.9 ± 2.5		26.4 - 31.4	31.1 ± 2.5		28.6 - 33.6
	MCHC (g/dL)	32.3 ± 3.0		29.3 - 35.3	33.6 ± 3.0		30.6 - 36.6	34.0 ± 3.0		31.0 - 37.0
	RDW-SD (fL)	47.0 ± 10.0		37.0 - 57.0	46.5 ± 10.0		36.5 - 56.5	49.0 ± 10.0		39.0 - 59.0
	RDW-CV (%)	16.5 ± 5.0		11.5 - 21.5	15.0 ± 5.0		10.0 - 20.0	14.5 ± 5.0		9.5 - 19.5
	PLT ($10^9/L$)	45 ± 20		25 - 65	194 ± 40		154 - 234	393 ± 65		328 - 458
	MPV (fL)	9.8 ± 3.0		6.8 - 12.8	8.9 ± 3.0		5.9 - 11.9	9.2 ± 3.0		6.2 - 12.2
	NEUT # ($10^9/L$)	2.45 ± 0.47		1.98 - 2.92	4.15 ± 0.79		3.36 - 4.94	12.34 ± 2.53		9.81 - 14.87
	LYMPH # ($10^9/L$)	0.59 ± 0.39		0.20 - 0.98	2.05 ± 0.79		1.26 - 2.84	4.01 ± 2.11		1.90 - 6.12
	MONO # ($10^9/L$)	0.10 ± 0.10		0.00 - 0.20	0.28 ± 0.28		0.00 - 0.56	0.53 ± 0.53		0.00 - 1.06
	EO # ($10^9/L$)	0.61 ± 0.28		0.33 - 0.89	1.03 ± 0.55		0.48 - 1.58	3.17 ± 1.48		1.69 - 4.65
	BASO # ($10^9/L$)	0.20 ± 0.20		0.00 - 0.40	0.40 ± 0.40		0.00 - 0.80	1.06 ± 1.06		0.00 - 2.12
	NEUT%	62.0 ± 12.0		50.0 - 74.0	52.5 ± 10.0		42.5 - 62.5	58.5 ± 12.0		46.5 - 70.5
	LYMPH%	15.0 ± 10.0		5.0 - 25.0	26.0 ± 10.0		16.0 - 36.0	19.0 ± 10.0		9.0 - 29.0
	MONO%	2.5 ± 2.5		0.0 - 5.0	3.5 ± 3.5		0.0 - 7.0	2.5 ± 2.5		0.0 - 5.0
	EO%	15.5 ± 7.0		8.5 - 22.5	13.0 ± 7.0		6.0 - 20.0	15.0 ± 7.0		8.0 - 22.0
	BASO%	5.0 ± 5.0		0.0 - 10.0	5.0 ± 5.0		0.0 - 10.0	5.0 ± 5.0		0.0 - 10.0
NRBC# ($10^9/L$)	0.40 ± 19.60		0.00 - 20.00	0.40 ± 19.60		0.00 - 20.00	0.40 ± 19.60		0.00 - 20.00	
NRBC% (/100 WBC)	2.0 ± 98.0		0.0 - 100.0	2.0 ± 98.0		0.0 - 100.0	2.0 ± 98.0		0.0 - 100.0	
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PLT-O ($10^9/L$)	60 ± 38		22 - 98	260 ± 65		195 - 325	480 ± 85		395 - 565	
PCT (%)	0.05 ± 0.03		0.02 - 0.08	0.17 ± 0.07		0.10 - 0.24	0.38 ± 0.11		0.27 - 0.49	
PDW (fL)	9.0 ± 5.0		4.0 - 14.0	9.0 ± 5.0		4.0 - 14.0	11.0 ± 5.0		6.0 - 16.0	
P-LCR (%)	23.0 ± 20.0		3.0 - 43.0	20.0 ± 20.0		0.0 - 40.0	20.0 ± 20.0		0.0 - 40.0	
IPF (%)	20.0 ± 20.0		0.0 - 40.0	20.0 ± 20.0		0.0 - 40.0	20.0 ± 20.0		0.0 - 40.0	
IG# ($10^9/L$)	0.63 ± 0.30		0.33 - 0.93	1.03 ± 0.40		0.63 - 1.43	3.06 ± 1.60		1.46 - 4.66	
IG%	16.0 ± 5.0		11.0 - 21.0	13.0 ± 5.0		8.0 - 18.0	14.5 ± 5.0		9.5 - 19.5	
RBC-O ($10^{12}/L$)	2.25 ± 0.30		1.95 - 2.55	4.50 ± 0.50		4.00 - 5.00	5.40 ± 0.60		4.80 - 6.00	

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R&D Systems, Inc.

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 2025-01-05

QCP DATA MONTHS: NOVEMBER, DECEMBER

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Parameters	LOW		NORMAL		HIGH		
	LOT 24110801		LOT 24110802		LOT 24110803		
	Assay Mean	± Limit	Expected Range	Assay Mean	± Limit	Expected Range	
Sysmex XNL Series	WBC-C ($10^9/L$)	4.15 ± 1.20	2.95 - 5.35	8.15 ± 2.00	6.15 - 10.15	22.00 ± 3.20	18.80 - 25.20
	WBC-D ($10^9/L$)	3.90 ± 1.20	2.70 - 5.10	7.50 ± 2.00	5.50 - 9.50	21.50 ± 3.20	18.30 - 24.70
	RBC ($10^{12}/L$)	2.26 ± 0.15	2.11 - 2.41	4.58 ± 0.24	4.34 - 4.82	5.65 ± 0.30	5.35 - 5.95
	HGB (g/dL)	5.9 ± 0.4	5.5 - 6.3	13.2 ± 0.6	12.6 - 13.8	17.6 ± 0.7	16.9 - 18.3
	HCT (%)	17.9 ± 2.0	15.9 - 19.9	39.8 ± 2.5	37.3 - 42.3	52.5 ± 3.0	49.5 - 55.5
	MCV (fL)	79.0 ± 5.0	74.0 - 84.0	87.0 ± 5.0	82.0 - 92.0	93.0 ± 5.0	88.0 - 98.0
	MCH (pg)	26.1 ± 2.5	23.6 - 28.6	28.8 ± 2.5	26.3 - 31.3	31.2 ± 2.5	28.7 - 33.7
	MCHC (g/dL)	33.0 ± 3.0	30.0 - 36.0	33.1 ± 3.0	30.1 - 36.1	33.5 ± 3.0	30.5 - 36.5
	RDW-SD (fL)	48.0 ± 10.0	38.0 - 58.0	49.0 ± 10.0	39.0 - 59.0	49.0 ± 10.0	39.0 - 59.0
	RDW-CV (%)	16.5 ± 5.0	11.5 - 21.5	15.0 ± 5.0	10.0 - 20.0	14.0 ± 5.0	9.0 - 19.0
	PLT ($10^9/L$)	46 ± 20	26 - 66	196 ± 40	156 - 236	403 ± 65	338 - 468
	MPV (fL)	10.2 ± 3.0	7.2 - 13.2	9.2 ± 3.0	6.2 - 12.2	9.3 ± 3.0	6.3 - 12.3
	NEUT # ($10^9/L$)	2.26 ± 0.39	1.87 - 2.65	3.60 ± 0.75	2.85 - 4.35	11.61 ± 2.15	9.46 - 13.76
	LYMPH # ($10^9/L$)	0.62 ± 0.39	0.23 - 1.01	2.06 ± 0.75	1.31 - 2.81	4.41 ± 2.15	2.26 - 6.56
	MONO # ($10^9/L$)	0.10 ± 0.10	0.00 - 0.20	0.23 ± 0.23	0.00 - 0.46	0.54 ± 0.54	0.00 - 1.08
	EO # ($10^9/L$)	0.57 ± 0.35	0.22 - 0.92	1.01 ± 0.67	0.34 - 1.68	3.23 ± 1.51	1.72 - 4.74
	BASO # ($10^9/L$)	0.35 ± 0.35	0.00 - 0.70	0.60 ± 0.60	0.00 - 1.20	1.72 ± 1.72	0.00 - 3.44
	NEUT%	58.0 ± 10.0	48.0 - 68.0	48.0 ± 10.0	38.0 - 58.0	54.0 ± 10.0	44.0 - 64.0
	LYMPH%	16.0 ± 10.0	6.0 - 26.0	27.5 ± 10.0	17.5 - 37.5	20.5 ± 10.0	10.5 - 30.5
	MONO%	2.5 ± 2.5	0.0 - 5.0	3.0 ± 3.0	0.0 - 6.0	2.5 ± 2.5	0.0 - 5.0
	EO%	14.5 ± 9.0	5.5 - 23.5	13.5 ± 9.0	4.5 - 22.5	15.0 ± 7.0	8.0 - 22.0
	BASO%	9.0 ± 9.0	0.0 - 18.0	8.0 ± 8.0	0.0 - 16.0	8.0 ± 8.0	0.0 - 16.0

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PLT-O ($10^9/L$)	58 ± 38	20 - 96	260 ± 65	195 - 325	475 ± 85	390 - 560
PCT (%)	0.05 ± 0.03	0.02 - 0.08	0.18 ± 0.07	0.11 - 0.25	0.38 ± 0.11	0.27 - 0.49
PDW (fL)	10.5 ± 5.0	5.5 - 15.5	10.0 ± 5.0	5.0 - 15.0	10.5 ± 5.0	5.5 - 15.5
P-LCR (%)	26.0 ± 20.0	6.0 - 46.0	17.0 ± 17.0	0.0 - 34.0	20.0 ± 20.0	0.0 - 40.0
IG # ($10^9/L$)	0.62 ± 0.30	0.32 - 0.92	1.01 ± 0.40	0.61 - 1.41	3.33 ± 1.60	1.73 - 4.93
IG%	16.0 ± 5.0	11.0 - 21.0	13.5 ± 5.0	8.5 - 18.5	15.5 ± 5.0	10.5 - 20.5
RBC-O ($10^{12}/L$)	2.20 ± 0.30	1.90 - 2.50	4.50 ± 0.50	4.00 - 5.00	5.50 ± 0.60	4.90 - 6.10

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QCP DATA MONTHS: NOVEMBER, DECEMBER

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Parameters	LOW		NORMAL		HIGH	
	LOT	24110801	LOT	24110802	LOT	24110803
		Assay Mean ± Limit		Assay Mean ± Limit		Assay Mean ± Limit
WBC ($10^9/L$)	4.05 ± 0.70	3.35 - 4.75	7.80 ± 1.00	6.80 - 8.80	20.50 ± 2.50	18.00 - 23.00
Neu # ($10^9/L$)	2.92 ± 0.41	2.51 - 3.33	4.76 ± 0.62	4.14 - 5.38	14.04 ± 1.64	12.40 - 15.68
Lym # ($10^9/L$)	0.55 ± 0.33	0.22 - 0.88	1.87 ± 0.55	1.32 - 2.42	3.59 ± 1.44	2.15 - 5.03
Mon # ($10^9/L$)	0.10 ± 0.10	0.00 - 0.20	0.27 ± 0.27	0.00 - 0.54	0.51 ± 0.51	0.00 - 1.02
Eos # ($10^9/L$)	0.43 ± 0.41	0.02 - 0.84	0.78 ± 0.70	0.08 - 1.48	2.15 ± 2.05	0.10 - 4.20
Bas # ($10^9/L$)	0.06 ± 0.20	-0.14 - 0.26	0.12 ± 0.40	-0.28 - 0.52	0.21 ± 1.05	-0.84 - 1.26
Neu %	72.0 ± 10.0	62.0 - 82.0	61.0 ± 8.0	53.0 - 69.0	68.5 ± 8.0	60.5 - 76.5
Lym %	13.5 ± 8.0	5.5 - 21.5	24.0 ± 7.0	17.0 - 31.0	17.5 ± 7.0	10.5 - 24.5
Mon %	2.5 ± 2.5	0.0 - 5.0	3.5 ± 3.5	0.0 - 7.0	2.5 ± 2.5	0.0 - 5.0
Eos %	10.5 ± 10.0	0.5 - 20.5	10.0 ± 9.0	1.0 - 19.0	10.5 ± 10.0	0.5 - 20.5
Bas %	1.5 ± 5.0	-3.5 - 6.5	1.5 ± 5.0	-3.5 - 6.5	1.0 ± 5.0	-4.0 - 6.0
MINDRAY BC-6800, BC-6600 QC Mode						
RBC ($10^{12}/L$)	2.32 ± 0.18	2.14 - 2.50	4.55 ± 0.24	4.31 - 4.79	5.55 ± 0.30	5.25 - 5.85
HGB (g/dL)	5.9 ± 0.4	5.5 - 6.3	13.2 ± 0.6	12.6 - 13.8	17.5 ± 0.8	16.7 - 18.3
HCT (%)	19.5 ± 2.0	17.5 - 21.5	41.2 ± 2.5	38.7 - 43.7	53.8 ± 3.0	50.8 - 56.8
MCV (fL)	84.0 ± 5.0	79.0 - 89.0	90.5 ± 5.0	85.5 - 95.5	97.0 ± 5.0	92.0 - 102.0
MCH (pg)	25.4 ± 2.5	22.9 - 27.9	29.0 ± 2.5	26.5 - 31.5	31.5 ± 2.5	29.0 - 34.0
MCHC (g/dL)	30.3 ± 3.0	27.3 - 33.3	32.1 ± 3.0	29.1 - 35.1	32.5 ± 3.0	29.5 - 35.5
RDW-CV (%)	16.0 ± 3.0	13.0 - 19.0	14.5 ± 3.0	11.5 - 17.5	14.5 ± 3.0	11.5 - 17.5
RDW-SD (fL)	47.5 ± 6.0	41.5 - 53.5	49.0 ± 6.0	43.0 - 55.0	50.0 ± 8.0	42.0 - 58.0
PLT ($10^9/L$)	48 ± 20	28 - 68	214 ± 40	174 - 254	428 ± 60	368 - 488
MPV (fL)	9.4 ± 3.0	6.4 - 12.4	8.7 ± 3.0	5.7 - 11.7	9.7 ± 3.0	6.7 - 12.7
PDW	16.5 ± 3.0	13.5 - 19.5	16.0 ± 3.0	13.0 - 19.0	16.5 ± 3.0	13.5 - 19.5
PCT (%)	0.050 ± 0.050	0.000 - 0.100	0.190 ± 0.100	0.090 - 0.290	0.420 ± 0.200	0.220 - 0.620
P-LCR (%)	26.0 ± 10.0	16.0 - 36.0	19.0 ± 10.0	9.0 - 29.0	25.0 ± 10.0	15.0 - 35.0
P-LCC ($10^9/L$)	12 ± 8	4 - 20	40 ± 24	16 - 64	105 ± 50	55 - 155
IMG # ($10^9/L$)	0.20 ± 0.20	0.00 - 0.40	0.39 ± 0.39	0.00 - 0.78	1.03 ± 1.03	0.00 - 2.06
IMG%	5.0 ± 5.0	0.0 - 10.0	5.0 ± 5.0	0.0 - 10.0	5.0 ± 5.0	0.0 - 10.0
IPF (%)	6.0 ± 6.0	0.0 - 12.0	6.0 ± 6.0	0.0 - 12.0	6.0 ± 6.0	0.0 - 12.0
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PLT-O ($10^9/L$)	48 ± 20	28 - 68	224 ± 40	184 - 264	374 ± 60	314 - 434

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