

EQA round: T05/24 - Immunophenotypisation (study)

Deadline: 22.4.2024

Setup: groups - M (gating strategy); minimal size of the groups n = 5

RoM = robust average	AV = assigned value	D _{max} = acceptable difference
SD = standard deviation	CVP = consensus of all participants	LL = lower limit
CV = coefficient of variation	U _{AV} = expanded uncertainty of the assigned value (k = 2)	UL = upper limit
N _{tot} = total number of the results		N _{eva} = number of the results assessed
N _{out} = number of the results removed before calculation		N _{suc} = number of successful results
		S _{rel} = relative success

Test Sample Group	[unit]	RoM	SD	CV [%]	N _{tot}	N _{out}	Comparability					N _{eva}	N _{suc}	S _{rel} [%]
							AV	U _{AV}	D _{max}	LL	UL			
(637) B lymphocytes (CD5+CD19+)	[% of B]				25							25	19	76
Sample A												25	20	80
(0) Not specified		15,8	15	96	25	0	CVP	15,8	7,4	100%	0	31,6	25	
Sample B												25	19	76
(0) Not specified		13,1	13	100	25	0	CVP	13,1	6,6	100%	0	26,2	25	
(638) Isotype switched memory B lymphocytes	[% of B]				15							15	13	87
Sample A												15	13	87
(1) CD19+CD27+IgD- Other		17,5 16,7	6,3 2,2	36 13	15 9	0	CVP	17,5	4	60%	7	28	9	6
					6	0	4x 2, 2x 99					6		
Sample B												15	14	93
(1) CD19+CD27+IgD- Other		13,9 14	3,3 2,3	24 16	15 9	0	CVP	13,9	2,1	60%	5,56	22,3	9	6
					6	0	4x 2, 2x 99					6		
(639) Naive B lymphocytes	[% of B]				17							17	13	76
Sample A												17	15	88
(2) CD19+CD27-IgD+ Other		61,1 60,8	6,2 6,3	10 10	17 11	0	CVP	61,1	3,7	20%	48,8	73,4	11	6
					6	0	2x 1, 3x 3, 1x 99					6		
Sample B												17	14	82
(2) CD19+CD27-IgD+ Other		75,4 75,2	3,9 3,8	5,2 5,1	17 11	0	CVP	75,4	2,3	10%	67,8	83	11	6
					6	0	2x 1, 3x 3, 1x 99					6		
(640) Activated T lymphocytes (HLA-DR+)	[% of T]				46							46	40	87
Sample A												46	40	87
(0) Not specified		3,99	2,8	71	46	0	CVP	3,99	1	100%	0	7,98	46	
Sample B												46	44	96
(0) Not specified		7,86	4,3	54	46	0	CVP	7,86	1,5	100%	0	15,8	46	
(641) gamma-delta T lymphocytes (CD3+TcRγδ+)	[% of T]				22							22	20	91
Sample A												22	21	95
(0) Not specified		4,82	0,86	18	22	0	CVP	4,82	0,45	40%	2,89	6,75	22	
Sample B												22	21	95
(0) Not specified		6,45	1,4	22	22	0	CVP	6,45	0,75	40%	3,87	9,03	22	
(642) T regulatory lymphocytes	[% of Th]				31							31	27	87
Sample A												31	27	87
(1) CD3+CD4+CD25+CD127low (99) Other gating strategy		3,93 4,08	1,6 1,7	42 41	31 26	0	CVP	3,93	0,73	70%	1,17	6,69	26	5
		3,36	1,4	42	5	0						5		
Sample B												31	29	94
(1) CD3+CD4+CD25+CD127low (99) Other gating strategy		5,75 5,7	1,6 1,6	28 28	31 26	0	CVP	5,75	0,72	70%	1,72	9,78	26	5
		6,44	1,6	25	5	0						5		
(643) Naive Th lymphocytes	[% of Th]				18							18	17	94
Sample A												18	18	100
(1) CD3+CD4+CD45RA+ Other		35 38,3	10 7,6	28 20	18 12	0	CVP	35	5,8	55%	15,7	54,3	12	6
					6	0	4x 2, 2x 99					6		
Sample B												18	17	94
(1) CD3+CD4+CD45RA+ Other		36,9 39,4	9,5 7,5	26 19	18 12	0	CVP	36,9	5,5	55%	16,6	57,2	12	6
					6	0	4x 2, 2x 99					6		
(630) WBC	[·10 ⁹ /L]				31							31	28	90
Sample A												31	29	94
(0) Not specified		2,87	0,21	7,4	31	0	CVP	2,87	0,093	15%	2,43	3,31	31	
Sample B												31	30	97
(0) Not specified		3,01	0,13	4,3	31	0	CVP	3,01	0,057	10%	2,7	3,32	31	
(631) Lymphocytes	[·10 ⁹ /L]				32							32	29	91
Sample A												32	30	94
(0) Not specified		1,3	0,2	15	32	1	CVP	1,3	0,087	30%	0,91	1,69	32	
Sample B												32	29	91
(0) Not specified		0,818	0,14	17	32	1	CVP	0,818	0,062	30%	0,572	1,07	32	

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Test Sample Group	[unit]	RoM	SD	CV [%]	N _{tot}	N _{out}	Comparability					N _{eva}	N _{suc}	S _{rel} [%]	
							AV	U _{AV}	D _{max}	LL	UL				
(644) B lymphocytes (CD5+CD19+) (abs. count)	[·10 ⁹ /L]				17							17	14	82	
Sample A (0) Not specified		0,044	0,036	83	17	0	CVP	0,044	0,021	100%	0	0,088	17	15	88
Sample B (0) Not specified		0,019	0,017	90	17	0	CVP	0,019	0,01	100%	0	0,038	17	14	82
(645) Isotype switched memory B lymphocytes (abs. count)	[·10 ⁹ /L]				10							10	9	90	
Sample A (1) CD19+CD27+IgD- Other		0,03 0,03	0,013 0,006	43 20	10 5	0 0	CVP	0,03 0,03	0,01	70%	0,009	0,051	10 5	9 5	90 90
Sample B (1) CD19+CD27+IgD- Other		0,012 0,012	0,003 0,002	28 13	10 5	0 0	CVP	0,012 0,012	0,003	70%	0,003	0,021	10 5	10 5	100 100
															3x 2, 2x 99
(646) Naïve B lymphocytes (abs. počet)	[·10 ⁹ /L]				12							12	11	92	
Sample A (2) CD19+CD27-IgD+ Other		0,091 0,091	0,022 0,017	25 19	12 6	0 0	CVP	0,091 0,091	0,016	50%	0,045	0,137	12 6	11 6	92 92
Sample B (2) CD19+CD27-IgD+ Other		0,054 0,059	0,013 0,013	24 22	12 6	0 0	CVP	0,054 0,059	0,009	50%	0,027	0,081	12 6	11 6	92 92
															2x 1, 3x 3, 1x 99
(647) Activated T lymphocytes (HLA-DR+) (abs.c)	[·10 ⁹ /L]				31							31	24	77	
Sample A (0) Not specified		0,04	0,03	75	31	0	CVP	0,04	0,013	100%	0	0,08	31	25	81
Sample B (0) Not specified		0,049	0,025	51	31	0	CVP	0,049	0,011	100%	0	0,098	31	26	84
(648) gamma-delta T lymphocytes(CD3+TcRγδ+) (abs. count)	[·10 ⁹ /L]				15							15	13	87	
Sample A (0) Not specified		0,046	0,012	26	15	0	CVP	0,046	0,008	55%	0,02	0,072	15	14	93
Sample B (0) Not specified		0,038	0,011	28	15	0	CVP	0,038	0,007	55%	0,017	0,059	15	13	87
(649) T regulatory lymphocytes (abs. count)	[·10 ⁹ /L]				22							22	19	86	
Sample A (1) CD3+CD4+CD25+CD127low Other		0,029 0,031	0,018 0,02	64 64	22 20	0 0	CVP	0,029 0,031	0,01	100%	0	0,058	22 20	19 20	86 86
Sample B (1) CD3+CD4+CD25+CD127low Other		0,03 0,031	0,021 0,023	71 74	22 20	0 0	CVP	0,03 0,031	0,011	100%	0	0,06	22 20	20 2	91 91
															2x 99
(650) Naïve Th lymphocytes (abs. count)	[·10 ⁹ /L]				12							12	11	92	
Sample A (1) CD3+CD4+CD45RA+ Other		0,206 0,225	0,095 0,037	46 16	12 9	0 0	CVP	0,206 0,225	0,067	100%	0	0,412	12 9	11 3	92 92
Sample B (1) CD3+CD4+CD45RA+ Other		0,137 0,151	0,075 0,06	55 40	12 9	0 0	CVP	0,137 0,151	0,053	100%	0	0,274	12 9	11 3	92 92
															3x 2