

EQA round: AIM1/23 - Autoimmunity

Deadline: 20.3.2023

Setup: groups - measurement principle

AV = assigned value

CVP = consensus of all participants

>>> ... expected result

> ... acceptable result

± ... result not assessed

N_{tot} = total number of the resultsN_{rel} = relative number of the resultsN_{eva} = number of the results assessedN_{suc} = number of successful resultsS_{rel} = relative success

Test Sample Group	Frequency of the results					Success		
	AV	N _{tot}	N _{rel} [%]	Result	N _{eva}	N _{suc}	S _{rel} [%]	
Set 1								
(560) ANA screening (antibodies against cell nucleus) - prove		82			82	62	76	
Sample A1		82			82	74	90	
(1) Fluorescent methods	CVP >>>	72	88	Negative				
		3	3,7	Positive				
(2) EIA methods	CVP >>>	2	2,4	Negative				
		4	4,9	Positive				
(99) Another measurement principle		1	1,2	Inconclusive result (borderline)				
Sample B1		82			82	70	85	
(1) Fluorescent methods	CVP >>>	63	77	Negative				
		4	4,9	Inconclusive result (borderline)				
		8	9,8	Positive				
(2) EIA methods	CVP >>>	6	7,3	Negative				
(99) Another measurement principle	CVP >>>	1	1,2	Negative				
(572) ANA screening (antibodies against cell nucleus) - semi-quantity		70			0			
Sample A1		70			0			
(0) Not specified	±	47	67	titre 0 (not measurable)				
	±	12	17	titre 40				
	±	7	10	titre 80				
	±	1	1,4	titre 320				
	±	1	1,4	titre 640				
	±	2	2,9	titre 1280				
Sample B1		70			0			
(0) Not specified	±	39	56	titre 0 (not measurable)				
	±	15	21	titre 40				
	±	11	16	titre 80				
	±	3	4,3	titre 160				
	±	2	2,9	titre 320				
(561) ANA - type of fluorescence - nucleus		75			75	60	80	
Sample A1		75			75	72	96	
(0) Not specified	CVP >>>	72	96	No fluorescence				
		1	1,3	Smooth membranous nuclear pattern				
		2	2,7	Unknown type of fluorescence				
Sample B1		75			75	63	84	
(0) Not specified	CVP >>>	63	84	No fluorescence				
		12	16	Coarse or fine speckled				
(563) ANA screening (antibodies against cytoplasm) - prove		74			74	69	93	
Sample A1		74			74	73	99	
(1) Fluorescent methods		1	1,4	Negative				
	CVP >>>	73	99	Positive				
Sample B1		74			74	70	95	
(1) Fluorescent methods	CVP >>>	70	95	Negative				
		4	5,4	Positive				
(573) ANA screening (antibodies against cytoplasm) - semi-quantity		68			0			
Sample A1		68			0			
(0) Not specified	±	1	1,5	titre 0 (not measurable)				
	±	1	1,5	titre 40				
	±	1	1,5	titre 80				
	±	2	2,9	titre 160				
	±	7	10	titre 320				
	±	24	35	titre 640				
	±	24	35	titre 1280				
	±	8	12	titre 2560				
Sample B1		68			0			
(0) Not specified	±	46	68	titre 0 (not measurable)				
	±	13	19	titre 40				
	±	7	10	titre 80				
	±	2	2,9	titre 160				

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Test Sample Group	AV	N _{tot}	N _{rel} [%]	Frequency of the results Result	Success		
					N _{eva}	N _{suc}	S _{rel} [%]
(564) ANA - type of fluorescence - cytoplasma					74	67	91
Sample A1		74			74	71	96
(0) Not specified		1	1,4	No fluorescence			
	CVP >>>	71	96	Cytoskeletal patterns			
		1	1,4	Cytoskeletal patterns; Fine speckled cytoplasmic pattern			
		1	1,4	Unknown type of fluorescence			
Sample B1		74			74	70	95
(0) Not specified	CVP >>>	70	95	No fluorescence			
		4	5,4	Unknown type of fluorescence			
Set 2							
(565) ANCA imunofluorescence - prove					64	64	100
Sample A2		64			64	64	100
(0) Not specified	CVP >>>	1	1,6	Positive			
(1) Fluorescent met. (ethanol)	CVP >>>	49	77	Positive			
(2) Fluorescent met. (formalin)	CVP >>>	6	9,4	Positive			
(99) Another measurement principle	CVP >>>	8	13	Positive			
Sample B2		64			64	64	100
(0) Not specified	CVP >>>	1	1,6	Negative			
(1) Fluorescent met. (ethanol)	CVP >>>	49	77	Negative			
(2) Fluorescent met. (formalin)	CVP >>>	6	9,4	Negative			
(99) Another measurement principle	CVP >>>	8	13	Negative			
(574) ANCA IF (ethanol) - semi-quantity					0		
Sample A2		55			0		
(0) Not specified	±	1	1,8	Not specified			
	±	4	7,3	titre 20			
	±	3	5,5	titre 40			
	±	9	16	titre 80			
	±	13	24	titre 160			
	±	17	31	titre 320			
	±	8	15	titre 640			
Sample B2		55			0		
(0) Not specified	±	44	80	titre 0 (not measurable)			
	±	10	18	titre 20			
	±	1	1,8	titre 40			
(578) ANCA IF (formalin) - semi-quantity					0		
Sample A2		51			0		
(0) Not specified	±	1	2	Not specified			
	±	3	5,9	titre 20			
	±	2	3,9	titre 40			
	±	6	12	titre 80			
	±	15	29	titre 160			
	±	17	33	titre 320			
	±	7	14	titre 640			
Sample B2		51			0		
(0) Not specified	±	41	80	titre 0 (not measurable)			
	±	9	18	titre 20			
	±	1	2	titre 40			
(566) ANCA - type of fluorescence					62	60	97
Sample A2		62			62	60	97
(0) Not specified	CVP >>>	60	97	Cytoplasmic granular fluorescence			
		2	3,2	Cytoplasmic granular fluorescence; ANA			
Sample B2		62			62	62	100
(0) Not specified	CVP >>>	62	100	No fluorescence			
(569) anti-myeloperoxidase					72	71	99
Sample A2		72			72	72	100
(1) Fluorescent methods	CVP >>>	1	1,4	Negative			
(2) EIA methods	CVP >>>	50	69	Negative			
(5) LIA, ILMA	CVP >>>	10	14	Negative			
(6) Immunoblotting	CVP >>>	8	11	Negative			
(99) Another measurement principle	CVP >>>	3	4,2	Negative			
Sample B2		72			72	71	99
(1) Fluorescent methods	CVP >>>	1	1,4	Negative			
(2) EIA methods	CVP >>>	50	69	Negative			
(5) LIA, ILMA	CVP >>>	10	14	Negative			
(6) Immunoblotting	CVP >>>	7	9,7	Negative			
		1	1,4	Inconclusive result (borderline)			
(99) Another measurement principle	CVP >>>	3	4,2	Negative			

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Test Sample Group	Frequency of the results					Success		
	AV	N _{tot}	N _{rel} [%]	Result	N _{eva}	N _{suc}	S _{rel} [%]	
(570) anti-proteinase III		72			72	72	100	
Sample A2		72			72	72	100	
(1) Fluorescent methods	CVP >>>	1	1,4	Positive				
(2) EIA methods	CVP >>>	51	71	Positive				
(5) LIA, ILMA	CVP >>>	10	14	Positive				
(6) Immunoblotting	CVP >>>	7	9,7	Positive				
(99) Another measurement principle	CVP >>>	3	4,2	Positive				
Sample B2		72			72	72	100	
(1) Fluorescent methods	CVP >>>	1	1,4	Negative				
(2) EIA methods	CVP >>>	51	71	Negative				
(5) LIA, ILMA	CVP >>>	10	14	Negative				
(6) Immunoblotting	CVP >>>	7	9,7	Negative				
(99) Another measurement principle	CVP >>>	3	4,2	Negative				
Set 3								
(585) anti-centromere		76			76	76	100	
Sample A3		76			76	76	100	
(1) Fluorescent methods	CVP >>>	9	12	Negative				
(2) EIA methods	CVP >>>	17	22	Negative				
(5) LIA, ILMA	CVP >>>	2	2,6	Negative				
(6) Immunoblotting	CVP >>>	46	61	Negative				
(99) Another measurement principle	CVP >>>	2	2,6	Negative				
Sample B3		76			76	76	100	
(1) Fluorescent methods	CVP >>>	9	12	Negative				
(2) EIA methods	CVP >>>	17	22	Negative				
(5) LIA, ILMA	CVP >>>	2	2,6	Negative				
(6) Immunoblotting	CVP >>>	46	61	Negative				
(99) Another measurement principle	CVP >>>	2	2,6	Negative				
(584) anti-ENA, antigen Jo-1		79			79	79	100	
Sample A3		79			79	79	100	
(1) Fluorescent methods	CVP >>>	1	1,3	Negative				
(2) EIA methods	CVP >>>	29	37	Negative				
(5) LIA, ILMA	CVP >>>	2	2,5	Negative				
(6) Immunoblotting	CVP >>>	45	57	Negative				
(99) Another measurement principle	CVP >>>	2	2,5	Negative				
Sample B3		79			79	79	100	
(1) Fluorescent methods	CVP >>>	1	1,3	Negative				
(2) EIA methods	CVP >>>	29	37	Negative				
(5) LIA, ILMA	CVP >>>	2	2,5	Negative				
(6) Immunoblotting	CVP >>>	45	57	Negative				
(99) Another measurement principle	CVP >>>	2	2,5	Negative				
(583) anti-ENA, antigen RNP		79			79	79	100	
Sample A3		79			79	79	100	
(1) Fluorescent methods	CVP >>>	1	1,3	Negative				
(2) EIA methods	CVP >>>	29	37	Negative				
(5) LIA, ILMA	CVP >>>	2	2,5	Negative				
(6) Immunoblotting	CVP >>>	45	57	Negative				
(99) Another measurement principle	CVP >>>	2	2,5	Negative				
Sample B3		79			79	79	100	
(1) Fluorescent methods	CVP >>>	1	1,3	Negative				
(2) EIA methods	CVP >>>	29	37	Negative				
(5) LIA, ILMA	CVP >>>	2	2,5	Negative				
(6) Immunoblotting	CVP >>>	45	57	Negative				
(99) Another measurement principle	CVP >>>	2	2,5	Negative				
(582) anti-ENA, antigen Scl-70		80			80	80	100	
Sample A3		80			80	80	100	
(1) Fluorescent methods	CVP >>>	1	1,3	Negative				
(2) EIA methods	CVP >>>	29	36	Negative				
(5) LIA, ILMA	CVP >>>	2	2,5	Negative				
(6) Immunoblotting	CVP >>>	46	58	Negative				
(99) Another measurement principle	CVP >>>	2	2,5	Negative				
Sample B3		80			80	80	100	
(1) Fluorescent methods	CVP >>>	1	1,3	Negative				
(2) EIA methods	CVP >>>	29	36	Negative				
(5) LIA, ILMA	CVP >>>	2	2,5	Negative				
(6) Immunoblotting	CVP >>>	46	58	Negative				
(99) Another measurement principle	CVP >>>	2	2,5	Negative				

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(580) anti-ENA, antigen SS-A/Ro-60		80			80	79	99	
Sample A3		80			80	80	100	
(1) Fluorescent methods	CVP >>>	1	1,3	Positive				
(2) EIA methods	CVP >>>	29	36	Positive				
(5) LIA, ILMA	CVP >>>	2	2,5	Positive				
(6) Immunoblotting	CVP >>>	46	58	Positive				
(99) Another measurement principle	CVP >>>	2	2,5	Positive				
Sample B3		80			80	79	99	
(1) Fluorescent methods	CVP >>>	1	1,3	Negative				
(2) EIA methods	CVP >>>	28	35	Negative				
		1	1,3	Positive				
(5) LIA, ILMA	CVP >>>	2	2,5	Negative				
(6) Immunoblotting	CVP >>>	46	58	Negative				
(99) Another measurement principle	CVP >>>	2	2,5	Negative				
(581) anti-ENA, antigen SS-B/La		80			80	76	95	
Sample A3		80			80	76	95	
(1) Fluorescent methods	CVP >>>	1	1,3	Positive				
(2) EIA methods		1	1,3	Negative				
	CVP >>>	28	35	Positive				
(5) LIA, ILMA	CVP >>>	2	2,5	Positive				
(6) Immunoblotting		2	2,5	Negative				
		1	1,3	Inconclusive result (borderline)				
	CVP >>>	43	54	Positive				
(99) Another measurement principle	CVP >>>	2	2,5	Positive				
Sample B3		80			80	80	100	
(1) Fluorescent methods	CVP >>>	1	1,3	Negative				
(2) EIA methods	CVP >>>	29	36	Negative				
(5) LIA, ILMA	CVP >>>	2	2,5	Negative				
(6) Immunoblotting	CVP >>>	46	58	Negative				
(99) Another measurement principle	CVP >>>	2	2,5	Negative				
Set 4								
(588) anti-dsDNA immunofluorescence - prove		57			57	57	100	
Sample A4		57			57	57	100	
(0) Not specified	CVP >>>	57	100	Positive				
Sample B4		57			57	57	100	
(0) Not specified	CVP >>>	57	100	Negative				
(577) anti-dsDNA immunofluorescence - semi-quantity		51			0			
Sample A4		51			0			
(0) Not specified	±	1	2	titre 10				
	±	1	2	titre 20				
	±	2	3,9	titre 40				
	±	8	16	titre 80				
	±	23	45	titre 160				
	±	14	27	titre 320				
	±	2	3,9	titre 640				
Sample B4		51			0			
(0) Not specified	±	40	78	titre 0 (not measurable)				
	±	11	22	titre 10				
(589) anti-dsDNA other methods		58			58	56	97	
Sample A4		58			58	56	97	
(2) EIA methods		1	1,7	Negative				
	CVP >>>	42	72	Positive				
(5) LIA, ILMA	CVP >>>	6	10	Positive				
(6) Immunoblotting		1	1,7	Negative				
	CVP >>>	5	8,6	Positive				
(99) Another measurement principle	CVP >>>	3	5,2	Positive				
Sample B4		58			58	58	100	
(2) EIA methods	CVP >>>	43	74	Negative				
(5) LIA, ILMA	CVP >>>	6	10	Negative				
(6) Immunoblotting	CVP >>>	6	10	Negative				
(99) Another measurement principle	CVP >>>	3	5,2	Negative				
Set 5								
(591) anti-nukleosoms IgG		55			55	53	96	
Sample A5		55			55	53	96	
(2) EIA methods		1	1,8	Negative				
	CVP >>>	38	69	Positive				
(6) Immunoblotting		1	1,8	Inconclusive result (borderline)				

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	AV	N _{tot}	N _{rel} [%]	Result	N _{eva}	N _{suc}	S _{rel} [%]
	CVP >>>	15	27	Positive			
Sample B5		55			55	54	98
(2) EIA methods	CVP >>>	38	69	Negative			
		1	1,8	Positive			
(6) Immunoblotting	CVP >>>	16	29	Negative			