

## EQA round: AIM2/24 - Autoimmunity

Deadline: 27.9.2024

Setup: groups - M (measurement principle)

AV = assigned value	N <sub>tot</sub> = total number of the results	N <sub>eva</sub> = number of the results assessed
CVP = consensus of all participants	N <sub>rel</sub> = relative number of the results	N <sub>suc</sub> = number of successful results
>>> ... expected result		S <sub>rel</sub> = relative success
> ... acceptable result		
± ... result not assessed		

Test Sample Group	Frequency of the results					Success		
	AV	N <sub>tot</sub>	N <sub>rel</sub> [%]	Result	N <sub>eva</sub>	N <sub>suc</sub>	S <sub>rel</sub> [%]	
<b>Set 1</b>								
(560) <b>ANA screening (antibodies against cell nucleus) - prove</b>		77			77	76	99	
<b>Sample A1</b>		77			77	77	100	
(1) Fluorescent methods	CVP >>>	70	91	Positive				
(2) EIA methods	CVP >>>	7	9,1	Positive				
<b>Sample B1</b>		77			77	76	99	
(1) Fluorescent methods	CVP >>>	69	90	Negative				
		1	1,3	Positive				
(2) EIA methods	CVP >>>	7	9,1	Negative				
(572) <b>ANA screening (antibodies against cell nucleus) - semi-quantity</b>		67			0			
<b>Sample A1</b>		67			0			
(0) Not specified	±	1	1,5	titre 40				
	±	2	3	titre 320				
	±	7	10	titre 640				
	±	35	52	titre 1280				
	±	22	33	titre 2560				
<b>Sample B1</b>		67			0			
(0) Not specified	±	2	3	Not specified				
	±	51	76	titre 0 (not measurable)				
	±	5	7,5	titre 40				
	±	7	10	titre 80				
	±	1	1,5	titre 160				
	±	1	1,5	titre 2560				
(561) <b>ANA - type of fluorescence - nucleus</b>		70			70	64	91	
<b>Sample A1</b>		70			70	67	96	
(0) Not specified		1	1,4	DFS 70 (AC-2); Fine or coarse speckled or nuclear matrix (AC-4/AC-5)				
	CVP >>>	67	96	Fine or coarse speckled or nuclear matrix (AC-4/AC-5)				
		2	2,9	Fine or coarse speckled or nuclear matrix (AC-4/AC-5); No fluorescence (AC-0)				
<b>Sample B1</b>		70			70	67	96	
(0) Not specified		1	1,4	Not specified				
	CVP >>>	67	96	No fluorescence (AC-0)				
		2	2,9	Fine or coarse speckled or nuclear matrix (AC-4/AC-5)				
(563) <b>ANA screening (antibodies against cytoplasm) - prove</b>		69			69	69	100	
<b>Sample A1</b>		69			69	69	100	
(1) Fluorescent methods	CVP >>>	60	87	Negative				
	>	1	1,4	Inconclusive result (borderline)				
	>	8	12	Positive				
<b>Sample B1</b>		69			69	69	100	
(1) Fluorescent methods	CVP >>>	69	100	Negative				
(573) <b>ANA screening (antibodies against cytoplasm) - semi-quantity</b>		63			0			
<b>Sample A1</b>		63			0			
(0) Not specified	±	43	68	titre 0 (not measurable)				
	±	4	6,3	titre 40				
	±	11	17	titre 80				
	±	2	3,2	titre 160				
	±	1	1,6	titre 320				
	±	1	1,6	titre 640				
	±	1	1,6	titre 2560				
<b>Sample B1</b>		63			0			
(0) Not specified	±	49	78	titre 0 (not measurable)				
	±	5	7,9	titre 40				
	±	8	13	titre 80				
	±	1	1,6	titre 2560				
(564) <b>ANA - type of fluorescence - cytoplasm</b>		66			66	65	98	
<b>Sample A1</b>		66			66	66	100	
(0) Not specified	CVP >>>	57	86	No fluorescence (AC-0)				
	>	9	14	Dense or fine speckled cytoplasm (AC-19/AC-20)				

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Test Sample Group	AV	N <sub>tot</sub>	Frequency of the results		Success			
			N <sub>rel</sub> [%]	Result	N <sub>eva</sub>	N <sub>suc</sub>	S <sub>rel</sub> [%]	
<b>Sample B1</b>		66				66	65	98
(0) Not specified	CVP >>>	65	98	No fluorescence (AC-0)				
		1	1.5	Dense or fine speckled cytoplasm (AC-19/AC-20)				
<b>Set 2</b>								
<b>(565) ANCA imunofluorescence - prove</b>		63				63	63	100
<b>Sample A2</b>		63				63	63	100
(1) Fluorescent met. (ethanol)	CVP >>>	47	75	Negative				
(2) Fluorescent met. (formalin)	CVP >>>	7	11	Negative				
(99) Another measurement principle	CVP >>>	9	14	Negative				
<b>Sample B2</b>		63				63	63	100
(1) Fluorescent met. (ethanol)	CVP >>>	47	75	Positive				
(2) Fluorescent met. (formalin)	CVP >>>	7	11	Positive				
(99) Another measurement principle	CVP >>>	9	14	Positive				
<b>(574) ANCA IF (ethanol) - semi-quantity</b>		55				0		
<b>Sample A2</b>		55				0		
(0) Not specified	±	47	85	titre 0 (not measurable)				
	±	7	13	titre 20				
	±	1	1.8	titre 40				
<b>Sample B2</b>		55				0		
(0) Not specified	±	1	1.8	Not specified				
	±	4	7.3	titre 20				
	±	2	3.6	titre 40				
	±	1	1.8	titre 80				
	±	6	11	titre 160				
	±	12	22	titre 320				
	±	11	20	titre 640				
	±	14	25	titre 1280				
	±	4	7.3	titre 2560				
<b>(578) ANCA IF (formalin) - semi-quantity</b>		50				0		
<b>Sample A2</b>		50				0		
(0) Not specified	±	43	86	titre 0 (not measurable)				
	±	6	12	titre 20				
	±	1	2	titre 40				
<b>Sample B2</b>		50				0		
(0) Not specified	±	2	4	Not specified				
	±	4	8	titre 20				
	±	1	2	titre 40				
	±	8	16	titre 80				
	±	11	22	titre 160				
	±	9	18	titre 320				
	±	6	12	titre 640				
	±	6	12	titre 1280				
	±	3	6	titre 2560				
<b>(566) ANCA - type of fluorescence</b>		61				61	59	97
<b>Sample A2</b>		61				61	60	98
(0) Not specified		1	1.6	Not specified				
	CVP >>>	60	98	Fluorescence ANCA not present				
<b>Sample B2</b>		61				61	60	98
(0) Not specified	CVP >>>	60	98	Perinuclear fluorescence				
		1	1.6	Cytoplasmic granular fluorescence				
<b>(569) anti-myeloperoxidase</b>		73				73	72	99
<b>Sample A2</b>		73				73	73	100
(1) Fluorescent methods	CVP >>>	2	2.7	Negative				
(2) EIA methods	CVP >>>	49	67	Negative				
(5) LIA, ILMA	CVP >>>	12	16	Negative				
(6) Immunoblotting	CVP >>>	8	11	Negative				
(99) Another measurement principle	CVP >>>	2	2.7	Negative				
<b>Sample B2</b>		73				73	72	99
(1) Fluorescent methods	CVP >>>	2	2.7	Positive				
(2) EIA methods		1	1.4	Negative				
	CVP >>>	48	66	Positive				
(5) LIA, ILMA	CVP >>>	12	16	Positive				
(6) Immunoblotting	CVP >>>	8	11	Positive				
(99) Another measurement principle	CVP >>>	2	2.7	Positive				
<b>(570) anti-proteinase III</b>		73				73	72	99
<b>Sample A2</b>		73				73	73	100
(1) Fluorescent methods	CVP >>>	2	2.7	Negative				
(2) EIA methods	CVP >>>	49	67	Negative				

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Test Sample Group	Frequency of the results				Success		
	AV	N <sub>tot</sub>	N <sub>rel</sub> [%]	Result	N <sub>eva</sub>	N <sub>suc</sub>	S <sub>rel</sub> [%]
(5) LIA, ILMA	CVP >>>	12	16	Negative			
(6) Immunoblotting	CVP >>>	8	11	Negative			
(99) Another measurement principle	CVP >>>	2	2,7	Negative			
<b>Sample B2</b>		73			73	72	99
(1) Fluorescent methods	CVP >>>	2	2,7	Negative			
(2) EIA methods	CVP >>>	48	66	Negative			
		1	1,4	Positive			
(5) LIA, ILMA	CVP >>>	12	16	Negative			
(6) Immunoblotting	CVP >>>	8	11	Negative			
(99) Another measurement principle	CVP >>>	2	2,7	Negative			
<b>Set 3</b>							
(585) <b>anti-centromere</b>		75			75	75	100
<b>Sample A3</b>		75			75	75	100
(1) Fluorescent methods	CVP >>>	8	11	Negative			
(2) EIA methods	CVP >>>	21	28	Negative			
(5) LIA, ILMA	CVP >>>	4	5,3	Negative			
(6) Immunoblotting	CVP >>>	40	53	Negative			
(99) Another measurement principle	CVP >>>	2	2,7	Negative			
<b>Sample B3</b>		75			75	75	100
(1) Fluorescent methods	CVP >>>	8	11	Negative			
(2) EIA methods	CVP >>>	21	28	Negative			
(5) LIA, ILMA	CVP >>>	4	5,3	Negative			
(6) Immunoblotting	CVP >>>	40	53	Negative			
(99) Another measurement principle	CVP >>>	2	2,7	Negative			
(584) <b>anti-ENA, antigen Jo-1</b>		77			77	77	100
<b>Sample A3</b>		77			77	77	100
(1) Fluorescent methods	CVP >>>	1	1,3	Negative			
(2) EIA methods	CVP >>>	30	39	Negative			
(5) LIA, ILMA	CVP >>>	4	5,2	Negative			
(6) Immunoblotting	CVP >>>	41	53	Negative			
(99) Another measurement principle	CVP >>>	1	1,3	Negative			
<b>Sample B3</b>		77			77	77	100
(1) Fluorescent methods	CVP >>>	1	1,3	Negative			
(2) EIA methods	CVP >>>	30	39	Negative			
(5) LIA, ILMA	CVP >>>	4	5,2	Negative			
(6) Immunoblotting	CVP >>>	41	53	Negative			
(99) Another measurement principle	CVP >>>	1	1,3	Negative			
(583) <b>anti-ENA, antigen RNP</b>		77			77	77	100
<b>Sample A3</b>		77			77	77	100
(1) Fluorescent methods	CVP >>>	1	1,3	Positive			
(2) EIA methods	CVP >>>	28	36	Positive			
(5) LIA, ILMA	CVP >>>	4	5,2	Positive			
(6) Immunoblotting	CVP >>>	43	56	Positive			
(99) Another measurement principle	CVP >>>	1	1,3	Positive			
<b>Sample B3</b>		77			77	77	100
(1) Fluorescent methods	CVP >>>	1	1,3	Negative			
(2) EIA methods	CVP >>>	28	36	Negative			
(5) LIA, ILMA	CVP >>>	4	5,2	Negative			
(6) Immunoblotting	CVP >>>	43	56	Negative			
(99) Another measurement principle	CVP >>>	1	1,3	Negative			
(582) <b>anti-ENA, antigen Scl-70</b>		77			77	76	99
<b>Sample A3</b>		77			77	77	100
(1) Fluorescent methods	CVP >>>	1	1,3	Negative			
(2) EIA methods	CVP >>>	29	38	Negative			
(5) LIA, ILMA	CVP >>>	4	5,2	Negative			
(6) Immunoblotting	CVP >>>	42	55	Negative			
(99) Another measurement principle	CVP >>>	1	1,3	Negative			
<b>Sample B3</b>		77			77	76	99
(1) Fluorescent methods	CVP >>>	1	1,3	Negative			
(2) EIA methods	CVP >>>	28	36	Negative			
		1	1,3	Inconclusive result (borderline)			
(5) LIA, ILMA	CVP >>>	4	5,2	Negative			
(6) Immunoblotting	CVP >>>	42	55	Negative			
(99) Another measurement principle	CVP >>>	1	1,3	Negative			
(580) <b>anti-ENA, antigen SS-A/Ro-60</b>		77			77	77	100
<b>Sample A3</b>		77			77	77	100
(1) Fluorescent methods	CVP >>>	1	1,3	Positive			
(2) EIA methods	CVP >>>	29	38	Positive			

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			N <sub>rel</sub> [%]	Result	N <sub>eva</sub>	N <sub>suc</sub>	S <sub>rel</sub> [%]	
(5) LIA, ILMA	CVP >>>	4	5,2	Positive				
(6) Immunoblotting	CVP >>>	42	55	Positive				
(99) Another measurement principle	CVP >>>	1	1,3	Positive				
<b>Sample B3</b>		77			77	77	100	
(1) Fluorescent methods	CVP >>>	1	1,3	Negative				
(2) EIA methods	CVP >>>	29	38	Negative				
(5) LIA, ILMA	CVP >>>	4	5,2	Negative				
(6) Immunoblotting	CVP >>>	42	55	Negative				
(99) Another measurement principle	CVP >>>	1	1,3	Negative				
(581) <b>anti-ENA, antigen SS-B/La</b>		77			77	77	100	
<b>Sample A3</b>		77			77	77	100	
(1) Fluorescent methods	CVP >>>	1	1,3	Positive				
(2) EIA methods	CVP >>>	29	38	Positive				
(5) LIA, ILMA	CVP >>>	4	5,2	Positive				
(6) Immunoblotting	CVP >>>	42	55	Positive				
(99) Another measurement principle	CVP >>>	1	1,3	Positive				
<b>Sample B3</b>		77			77	77	100	
(1) Fluorescent methods	CVP >>>	1	1,3	Negative				
(2) EIA methods	CVP >>>	29	38	Negative				
(5) LIA, ILMA	CVP >>>	4	5,2	Negative				
(6) Immunoblotting	CVP >>>	42	55	Negative				
(99) Another measurement principle	CVP >>>	1	1,3	Negative				
<b>Set 4</b>								
(588) <b>anti-dsDNA immunofluorescence - prove</b>		55			55	55	100	
<b>Sample A4</b>		55			55	55	100	
(0) Not specified	CVP >>>	55	100	Negative				
<b>Sample B4</b>		55			55	55	100	
(0) Not specified	CVP >>>	55	100	Positive				
(577) <b>anti-dsDNA immunofluorescence - semi-quantity</b>		52			0			
<b>Sample A4</b>		52			0			
(0) Not specified	±	1	1,9	Not specified				
	±	42	81	titre 0 (not measurable)				
	±	9	17	titre 10				
<b>Sample B4</b>		52			0			
(0) Not specified	±	2	3,8	titre 10				
	±	2	3,8	titre 80				
	±	7	13	titre 160				
	±	12	23	titre 320				
	±	21	40	titre 640				
	±	7	13	titre 1280				
	±	1	1,9	titre 2560				
(589) <b>anti-dsDNA other methods</b>		62			62	61	98	
<b>Sample A4</b>		62			62	62	100	
(0) Not specified	CVP >>>	1	1,6	Negative				
(2) EIA methods	CVP >>>	43	69	Negative				
(5) LIA, ILMA	CVP >>>	8	13	Negative				
(6) Immunoblotting	CVP >>>	8	13	Negative				
(99) Another measurement principle	CVP >>>	2	3,2	Negative				
<b>Sample B4</b>		62			62	61	98	
(0) Not specified		1	1,6	Negative				
(2) EIA methods	CVP >>>	43	69	Positive				
(5) LIA, ILMA	CVP >>>	8	13	Positive				
(6) Immunoblotting	CVP >>>	8	13	Positive				
(99) Another measurement principle	CVP >>>	2	3,2	Positive				
<b>Set 5</b>								
(591) <b>anti-nukleosomes IgG</b>		56			56	52	93	
<b>Sample A5</b>		56			56	55	98	
(2) EIA methods	CVP >>>	38	68	Negative				
		1	1,8	Positive				
(6) Immunoblotting	CVP >>>	17	30	Negative				
<b>Sample B5</b>		56			56	52	93	
(2) EIA methods		2	3,6	Negative				
	CVP >>>	37	66	Positive				
(6) Immunoblotting		2	3,6	Negative				
	CVP >>>	15	27	Positive				