

**Summary statistics - qualitative results**

(Groups: manufacturer of kit)

**EQA round: IH3/21 - Blood Group Serology**

Deadline: 17.09.2021

Key: &gt;&gt;&gt; ... marks correct (expected) result

N ... number of the results

&gt; ... marks conditionally correct (acceptable) result

Nrel ... relative number of the results

± ... marks the result not evaluated

**Test**

Sample	Group	N	Result	N <sub>rel</sub>
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**Set 1 and 2****(700) AB0 blood group**

E1 and S1 (14) Bio-Rad	>>>	52	Blood group: A	30 %
(40) Ortho Clinical Diagnostics	>>>	4	Blood group: A	2,3 %
(52) Dynex	>>>	1	Blood group: A	0,57 %
(64) Exbio Olomouc	>>>	7	Blood group: A	4,0 %
(80) DiaMed	>>>	12	Blood group: A	6,9 %
(159) Grifols	>>>	53	Blood group: A	30 %
(171) Diagast	>>>	2	Blood group: A	1,1 %
(172) Immucor	>>>	26	Blood group: A	15 %
(173) Sanguin	>>>	5	Blood group: A	2,9 %
(174) IVT Imuno	>>>	6	Blood group: A	3,4 %
(183) Immunodiagnostic Systems	>>>	3	Blood group: A	1,7 %
(999) another manufacturer	>>>	4	Blood group: A	2,3 %
Total per sample: n = 175	—	Success: 100 %	—	

E2 and S2 (14) Bio-Rad	>>>	52	Blood group: AB	30 %
(40) Ortho Clinical Diagnostics	>>>	4	Blood group: AB	2,3 %
(52) Dynex	>>>	1	Blood group: AB	0,57 %
(64) Exbio Olomouc	>>>	7	Blood group: AB	4,0 %
(80) DiaMed	>>>	12	Blood group: AB	6,9 %
(159) Grifols	>>>	53	Blood group: AB	30 %
(171) Diagast	>>>	2	Blood group: AB	1,1 %
(172) Immucor	>>>	26	Blood group: AB	15 %
(173) Sanguin	>>>	5	Blood group: AB	2,9 %
(174) IVT Imuno	>>>	6	Blood group: AB	3,4 %
(183) Immunodiagnostic Systems	>>>	3	Blood group: AB	1,7 %
(999) another manufacturer	>>>	4	Blood group: AB	2,3 %
Total per sample: n = 175	—	Success: 100 %	—	

Total success: 100 %

**(703) A subgroup**

E1 and S1 (0) not specified	>>>	49	A subgroup A1	100 %
Total per sample: n = 49	—	Success: 100 %	—	
E2 and S2 (0) not specified		2	Not specified	4,1 %
	>>>	47	A subgroup A1	96 %

Total success: 96 %

**(705) Rh D antigen (blood-donor)**

E1 and S1 (0) not specified	>>>	2	Negative (RhD-)	1,9 %
(14) Bio-Rad	>>>	33	Negative (RhD-)	31 %
(52) Dynex	>>>	2	Negative (RhD-)	1,9 %
(64) Exbio Olomouc	>>>	2	Negative (RhD-)	1,9 %
(80) DiaMed	>>>	6	Negative (RhD-)	5,7 %
(159) Grifols	>>>	26	Negative (RhD-)	25 %
(171) Diagast	>>>	2	Negative (RhD-)	1,9 %
(172) Immucor	>>>	22	Negative (RhD-)	21 %
(173) Sanguin	>>>	1	Negative (RhD-)	0,95 %
(174) IVT Imuno	>>>	3	Negative (RhD-)	2,9 %
(183) Immunodiagnostic Systems	>>>	2	Negative (RhD-)	1,9 %
(203) ANTITOXIN	>>>	2	Negative (RhD-)	1,9 %
(999) another manufacturer	>>>	2	Negative (RhD-)	1,9 %
Total per sample: n = 105	—	Success: 100 %	—	
E2 and S2 (0) not specified	>>>	2	Negative (RhD-)	1,9 %
(14) Bio-Rad	>>>	33	Negative (RhD-)	31 %
(52) Dynex	>>>	2	Negative (RhD-)	1,9 %
(64) Exbio Olomouc	>>>	2	Negative (RhD-)	1,9 %
(80) DiaMed	>>>	6	Negative (RhD-)	5,7 %
(159) Grifols	>>>	26	Negative (RhD-)	25 %
(171) Diagast	>>>	2	Negative (RhD-)	1,9 %
(172) Immucor	>>>	22	Negative (RhD-)	21 %
(173) Sanguin	>>>	1	Negative (RhD-)	0,95 %
(174) IVT Imuno	>>>	3	Negative (RhD-)	2,9 %
(183) Immunodiagnostic Systems	>>>	2	Negative (RhD-)	1,9 %
(203) ANTITOXIN	>>>	2	Negative (RhD-)	1,9 %
(999) another manufacturer	>>>	2	Negative (RhD-)	1,9 %

**Summary statistics - qualitative results**

(Groups: manufacturer of kit)

**EQA round: IH3/21 - Blood Group Serology**

Deadline: 17.09.2021

**Test**

Sample	Group	N	Result	N <sub>rel</sub>
	Total per sample: n = 105	Success: 100 %		
	Total success: 100 %			

**(709) Rh D antigen (recipient)**

E1 and S1 (14) Bio-Rad	>>> 51	Negative (RhD-)	31 %	
(40) Ortho Clinical Diagnostics	>>> 4	Negative (RhD-)	2,4 %	
(52) Dynex	>>> 1	Negative (RhD-)	0,61 %	
(64) Exbio Olomouc	>>> 6	Negative (RhD-)	3,7 %	
(80) DiaMed	>>> 10	Negative (RhD-)	6,1 %	
(159) Grifols	>>> 51	Negative (RhD-)	31 %	
(170) Biotest	>>> 1	Negative (RhD-)	0,61 %	
(171) Diagast	>>> 2	Negative (RhD-)	1,2 %	
(172) Immucor	>>> 24	Negative (RhD-)	15 %	
(173) Sanguin	>>> 4	Negative (RhD-)	2,4 %	
(174) IVT Imuno	>>> 3	Negative (RhD-)	1,8 %	
(183) Immunodiagnostic Systems	>>> 1	Negative (RhD-)	0,61 %	
(203) ANTITOXIN	>>> 2	Negative (RhD-)	1,2 %	
(999) another manufacturer	>>> 4	Negative (RhD-)	2,4 %	
	Total per sample: n = 164	Success: 100 %		

E2 and S2 (14) Bio-Rad	>>> 51	Negative (RhD-)	31 %	
(40) Ortho Clinical Diagnostics	>>> 4	Negative (RhD-)	2,4 %	
(52) Dynex	>>> 1	Negative (RhD-)	0,61 %	
(64) Exbio Olomouc	>>> 6	Negative (RhD-)	3,7 %	
(80) DiaMed	>>> 10	Negative (RhD-)	6,1 %	
(159) Grifols	>>> 51	Negative (RhD-)	31 %	
(170) Biotest	>>> 1	Negative (RhD-)	0,61 %	
(171) Diagast	>>> 2	Negative (RhD-)	1,2 %	
(172) Immucor	>>> 24	Negative (RhD-)	15 %	
(173) Sanguin	>>> 4	Negative (RhD-)	2,4 %	
(174) IVT Imuno	>>> 3	Negative (RhD-)	1,8 %	
(183) Immunodiagnostic Systems	>>> 1	Negative (RhD-)	0,61 %	
(203) ANTITOXIN	>>> 2	Negative (RhD-)	1,2 %	
(999) another manufacturer	>>> 4	Negative (RhD-)	2,4 %	
	Total per sample: n = 164	Success: 100 %		

Total success: 100 %

**(715) Antigen C**

E1 and S1 (14) Bio-Rad	>>> 35	Negative	38 %	
(50) Merck	>>> 1	Negative	1,1 %	
(64) Exbio Olomouc	>>> 2	Negative	2,2 %	
(80) DiaMed	>>> 8	Negative	8,7 %	
(159) Grifols	>>> 28	Negative	30 %	
(171) Diagast	>>> 1	Negative	1,1 %	
(172) Immucor	>>> 10	Negative	11 %	
(173) Sanguin	>>> 1	Negative	1,1 %	
(174) IVT Imuno	>>> 2	Negative	2,2 %	
(183) Immunodiagnostic Systems	>>> 1	Negative	1,1 %	
(203) ANTITOXIN	>>> 1	Negative	1,1 %	
(999) another manufacturer	>>> 2	Negative	2,2 %	
	Total per sample: n = 92	Success: 100 %		

E2 and S2 (14) Bio-Rad	>>> 35	Negative	38 %	
(50) Merck	>>> 1	Negative	1,1 %	
(64) Exbio Olomouc	>>> 2	Negative	2,2 %	
(80) DiaMed	>>> 8	Negative	8,7 %	
(159) Grifols	>>> 28	Negative	30 %	
(171) Diagast	>>> 1	Negative	1,1 %	
(172) Immucor	>>> 10	Negative	11 %	
(173) Sanguin	>>> 1	Negative	1,1 %	
(174) IVT Imuno	>>> 2	Negative	2,2 %	
(183) Immunodiagnostic Systems	>>> 1	Negative	1,1 %	
(203) ANTITOXIN	>>> 1	Negative	1,1 %	
(999) another manufacturer	>>> 2	Negative	2,2 %	
	Total per sample: n = 92	Success: 100 %		

Total success: 100 %

**(716) Antigen c**

E1 and S1 (14) Bio-Rad	>>> 35	Positive	38 %
(50) Merck	>>> 1	Positive	1,1 %
(64) Exbio Olomouc	>>> 2	Positive	2,2 %
(80) DiaMed	>>> 8	Positive	8,7 %
(159) Grifols	>>> 28	Positive	30 %

**Summary statistics - qualitative results**

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**Test**

Sample	Group	N	Result	N <sub>rel</sub>
E1 and S1 (171)	Diagast	>>>	1 Positive	1,1 %
(172)	Immucor	>>>	10 Positive	11 %
(173)	Sanguin	>>>	1 Positive	1,1 %
(174)	IVT Imuno	>>>	2 Positive	2,2 %
(183)	Immunodiagnostic Systems	>>>	1 Positive	1,1 %
(203)	ANTITOXIN	>>>	1 Positive	1,1 %
(999)	another manufacturer	>>>	2 Positive	2,2 %
Total per sample: n = 92		Success: 100 %		
E2 and S2 (14)	Bio-Rad	>>>	35 Positive	38 %
(50)	Merck	>>>	1 Positive	1,1 %
(64)	Exbio Olomouc	>>>	2 Positive	2,2 %
(80)	DiaMed	>>>	8 Positive	8,7 %
(159)	Grifols	>>>	28 Positive	30 %
(171)	Diagast	>>>	1 Positive	1,1 %
(172)	Immucor	>>>	10 Positive	11 %
(173)	Sanguin	>>>	1 Positive	1,1 %
(174)	IVT Imuno	>>>	2 Positive	2,2 %
(183)	Immunodiagnostic Systems	>>>	1 Positive	1,1 %
(203)	ANTITOXIN	>>>	1 Positive	1,1 %
(999)	another manufacturer	>>>	2 Positive	2,2 %
Total per sample: n = 92		Success: 100 %		

Total success: 100 %

**(717) Antigen Cw**

E1 and S1 (14)	Bio-Rad	>>>	23 Negative	32 %
(50)	Merck	>>>	1 Negative	1,4 %
(64)	Exbio Olomouc	>>>	3 Negative	4,1 %
(80)	DiaMed	>>>	2 Negative	2,7 %
(159)	Grifols	>>>	30 Negative	41 %
(170)	Biotest	>>>	1 Negative	1,4 %
(172)	Immucor	>>>	7 Negative	9,6 %
(173)	Sanguin	>>>	4 Negative	5,5 %
(174)	IVT Imuno	>>>	1 Negative	1,4 %
(999)	another manufacturer	>>>	1 Negative	1,4 %
Total per sample: n = 73		Success: 100 %		
E2 and S2 (14)	Bio-Rad	>>>	23 Negative	32 %
(50)	Merck	>>>	1 Negative	1,4 %
(64)	Exbio Olomouc	>>>	3 Negative	4,1 %
(80)	DiaMed	>>>	2 Negative	2,7 %
(159)	Grifols	>>>	30 Negative	41 %
(170)	Biotest	>>>	1 Negative	1,4 %
(172)	Immucor	>>>	7 Negative	9,6 %
(173)	Sanguin	>>>	4 Negative	5,5 %
(174)	IVT Imuno	>>>	1 Negative	1,4 %
(999)	another manufacturer	>>>	1 Negative	1,4 %
Total per sample: n = 73		Success: 100 %		

Total success: 100 %

**(718) Antigen E**

E1 and S1 (14)	Bio-Rad	>>>	35 Negative	38 %
(50)	Merck	>>>	1 Negative	1,1 %
(64)	Exbio Olomouc	>>>	2 Negative	2,2 %
(80)	DiaMed	>>>	8 Negative	8,7 %
(159)	Grifols	>>>	28 Negative	30 %
(171)	Diagast	>>>	1 Negative	1,1 %
(172)	Immucor	>>>	10 Negative	11 %
(173)	Sanguin	>>>	1 Negative	1,1 %
(174)	IVT Imuno	>>>	2 Negative	2,2 %
(183)	Immunodiagnostic Systems	>>>	1 Negative	1,1 %
(203)	ANTITOXIN	>>>	1 Negative	1,1 %
(999)	another manufacturer	>>>	2 Negative	2,2 %
Total per sample: n = 92		Success: 100 %		
E2 and S2 (14)	Bio-Rad	>>>	34 Negative	37 %
			1 Positive	1,1 %
(50)	Merck	>>>	1 Negative	1,1 %
(64)	Exbio Olomouc	>>>	2 Negative	2,2 %
(80)	DiaMed	>>>	8 Negative	8,7 %
(159)	Grifols	>>>	28 Negative	30 %
(171)	Diagast	>>>	1 Negative	1,1 %
(172)	Immucor	>>>	10 Negative	11 %

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**Test**

Sample	Group	N	Result	N <sub>rel</sub>
E2 and S2 (173)	Sanguin	>>>	1 Negative	1,1 %
(174)	IVT Imuno	>>>	2 Negative	2,2 %
(183)	Immunodiagnostic Systems	>>>	1 Negative	1,1 %
(203)	ANTITOXIN	>>>	1 Negative	1,1 %
(999)	another manufacturer	>>>	2 Negative	2,2 %
Total per sample: n = 92		Success: 99 %		

Total success: 99 %

**(719) Antigen e**

E1 and S1 (14)	Bio-Rad	>>>	35 Positive	38 %
(50)	Merck	>>>	1 Positive	1,1 %
(64)	Exbio Olomouc	>>>	2 Positive	2,2 %
(80)	DiaMed	>>>	8 Positive	8,7 %
(159)	Grifols	>>>	28 Positive	30 %
(171)	Diagast	>>>	1 Positive	1,1 %
(172)	Immucor	>>>	10 Positive	11 %
(173)	Sanguin	>>>	1 Positive	1,1 %
(174)	IVT Imuno	>>>	2 Positive	2,2 %
(183)	Immunodiagnostic Systems	>>>	1 Positive	1,1 %
(203)	ANTITOXIN	>>>	1 Positive	1,1 %
(999)	another manufacturer	>>>	2 Positive	2,2 %
Total per sample: n = 92		Success: 100 %		
E2 and S2 (14)	Bio-Rad	>>>	35 Positive	38 %
(50)	Merck	>>>	1 Positive	1,1 %
(64)	Exbio Olomouc	>>>	2 Positive	2,2 %
(80)	DiaMed	>>>	8 Positive	8,7 %
(159)	Grifols	>>>	28 Positive	30 %
(171)	Diagast	>>>	1 Positive	1,1 %
(172)	Immucor	>>>	10 Positive	11 %
(173)	Sanguin	>>>	1 Positive	1,1 %
(174)	IVT Imuno	>>>	2 Positive	2,2 %
(183)	Immunodiagnostic Systems	>>>	1 Positive	1,1 %
(203)	ANTITOXIN	>>>	1 Positive	1,1 %
(999)	another manufacturer	>>>	2 Positive	2,2 %
Total per sample: n = 92		Success: 100 %		

Total success: 100 %

**(720) Antigen K**

E1 and S1 (14)	Bio-Rad	>>>	35 Negative	36 %
(50)	Merck	>>>	1 Negative	1,0 %
(64)	Exbio Olomouc	>>>	1 Negative	1,0 %
(80)	DiaMed	>>>	8 Negative	8,2 %
		>>>	1 Positive	1,0 %
(159)	Grifols	>>>	33 Negative	34 %
(171)	Diagast	>>>	1 Negative	1,0 %
(172)	Immucor	>>>	10 Negative	10 %
(173)	Sanguin	>>>	1 Negative	1,0 %
(174)	IVT Imuno	>>>	3 Negative	3,1 %
(183)	Immunodiagnostic Systems	>>>	1 Negative	1,0 %
(203)	ANTITOXIN	>>>	1 Negative	1,0 %
(999)	another manufacturer	>>>	2 Negative	2,0 %
Total per sample: n = 98		Success: 99 %		
E2 and S2 (14)	Bio-Rad	>>>	35 Negative	36 %
(50)	Merck	>>>	1 Negative	1,0 %
(64)	Exbio Olomouc	>>>	1 Negative	1,0 %
(80)	DiaMed	>>>	9 Negative	9,2 %
(159)	Grifols	>>>	33 Negative	34 %
(171)	Diagast	>>>	1 Negative	1,0 %
(172)	Immucor	>>>	10 Negative	10 %
(173)	Sanguin	>>>	1 Negative	1,0 %
(174)	IVT Imuno	>>>	3 Negative	3,1 %
(183)	Immunodiagnostic Systems	>>>	1 Negative	1,0 %
(203)	ANTITOXIN	>>>	1 Negative	1,0 %
(999)	another manufacturer	>>>	2 Negative	2,0 %
Total per sample: n = 98		Success: 100 %		

Total success: 99 %

**(721) Antigen k**

E1 and S1 (14)	Bio-Rad	>>>	10 Positive	23 %
(64)	Exbio Olomouc	>>>	2 Positive	4,5 %

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**Test**

Sample	Group	N	Result	N <sub>rel</sub>
E1 and S1 (80) DiaMed		>>>	2 Positive	4,5 %
(159) Grifols		>>>	12 Positive	27 %
(172) Immucor		>>>	9 Positive	20 %
(173) Sanguin		>>>	7 Positive	16 %
(203) ANTITOXIN		>>>	1 Positive	2,3 %
(999) another manufacturer		>>>	1 Positive	2,3 %
Total per sample: n = 44	—	Success: 100 %	—	
E2 and S2 (14) Bio-Rad		>>>	10 Positive	23 %
(64) Exbio Olomouc		>>>	2 Positive	4,5 %
(80) DiaMed		>>>	2 Positive	4,5 %
(159) Grifols		>>>	12 Positive	27 %
(172) Immucor		>>>	9 Positive	20 %
(173) Sanguin		>>>	7 Positive	16 %
(203) ANTITOXIN		>>>	1 Positive	2,3 %
(999) another manufacturer		>>>	1 Positive	2,3 %
Total per sample: n = 44	—	Success: 100 %	—	
Total success: 100 %				

**(722) Antigen M**

E1 and S1 (14) Bio-Rad		>>>	13 Positive	28 %
(64) Exbio Olomouc		>>>	1 Positive	2,2 %
(80) DiaMed		>>>	5 Positive	11 %
(159) Grifols		>>>	11 Positive	24 %
(171) Diagast		>>>	1 Positive	2,2 %
(172) Immucor		>>>	7 Positive	15 %
(173) Sanguin		>>>	4 Positive	8,7 %
(183) Immunodiagnostic Systems		>>>	1 Positive	2,2 %
(203) ANTITOXIN		>>>	3 Positive	6,5 %
Total per sample: n = 46	—	Success: 100 %	—	
E2 and S2 (14) Bio-Rad		>>>	13 Positive	28 %
(64) Exbio Olomouc		>>>	1 Positive	2,2 %
(80) DiaMed		>>>	5 Positive	11 %
(159) Grifols		>>>	11 Positive	24 %
(171) Diagast		>>>	1 Positive	2,2 %
(172) Immucor		>>>	7 Positive	15 %
(173) Sanguin		>>>	4 Positive	8,7 %
(183) Immunodiagnostic Systems		>>>	1 Positive	2,2 %
(203) ANTITOXIN		>>>	3 Positive	6,5 %
Total per sample: n = 46	—	Success: 100 %	—	
Total success: 100 %				

**(723) Antigen N**

E1 and S1 (14) Bio-Rad		>>>	13 Positive	30 %
(64) Exbio Olomouc		>>>	1 Positive	2,3 %
(80) DiaMed		>>>	5 Positive	11 %
(159) Grifols		>>>	11 Positive	25 %
(171) Diagast		>>>	1 Positive	2,3 %
(172) Immucor		>>>	1 Negative	2,3 %
		>>>	5 Positive	11 %
(173) Sanguin		>>>	3 Positive	6,8 %
(183) Immunodiagnostic Systems		>>>	1 Positive	2,3 %
(203) ANTITOXIN		>>>	3 Positive	6,8 %
Total per sample: n = 44	—	Success: 98 %	—	
E2 and S2 (14) Bio-Rad		>>>	13 Positive	30 %
(64) Exbio Olomouc		>>>	1 Positive	2,3 %
(80) DiaMed		>>>	5 Positive	11 %
(159) Grifols		>>>	11 Positive	25 %
(171) Diagast		>>>	1 Positive	2,3 %
(172) Immucor		>>>	6 Positive	14 %
(173) Sanguin		>>>	3 Positive	6,8 %
(183) Immunodiagnostic Systems		>>>	1 Positive	2,3 %
(203) ANTITOXIN		>>>	3 Positive	6,8 %
Total per sample: n = 44	—	Success: 100 %	—	
Total success: 98 %				

**(724) Antigen S**

E1 and S1 (14) Bio-Rad		>>>	13 Negative	28 %
(64) Exbio Olomouc		>>>	1 Negative	2,1 %
(80) DiaMed		>>>	5 Negative	11 %
(159) Grifols		>>>	13 Negative	28 %

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**Test**

Sample	Group	N	Result	N <sub>rel</sub>
E1 and S1 (172)	Immucor	>>>	7 Negative	15 %
(173)	Sanguin	>>>	4 Negative	8,5 %
(203)	ANTITOXIN	>>>	4 Negative	8,5 %
Total per sample: n = 47		Success: 100 %		
E2 and S2 (14)	Bio-Rad	>>>	13 Negative	28 %
(64)	Exbio Olomouc	>>>	1 Negative	2,1 %
(80)	DiaMed	>>>	5 Negative	11 %
(159)	Grifols	>>>	13 Negative	28 %
(172)	Immucor	>>>	7 Negative	15 %
(173)	Sanguin	>>>	4 Negative	8,5 %
(203)	ANTITOXIN	>>>	4 Negative	8,5 %
Total per sample: n = 47		Success: 100 %		

Total success: 100 %

**(725) Antigen s**

E1 and S1 (14)	Bio-Rad	>>>	12 Positive	26 %
(64)	Exbio Olomouc	>>>	1 Positive	2,2 %
(80)	DiaMed	>>>	5 Positive	11 %
(159)	Grifols	>>>	13 Positive	28 %
(172)	Immucor	>>>	6 Positive	13 %
(173)	Sanguin	>>>	5 Positive	11 %
(203)	ANTITOXIN	>>>	3 Positive	6,5 %
(999)	another manufacturer	>>>	1 Positive	2,2 %
Total per sample: n = 46		Success: 100 %		
E2 and S2 (14)	Bio-Rad	>>>	12 Positive	26 %
(64)	Exbio Olomouc	>>>	1 Positive	2,2 %
(80)	DiaMed	>>>	5 Positive	11 %
(159)	Grifols	>>>	13 Positive	28 %
(172)	Immucor	>>>	6 Positive	13 %
(173)	Sanguin	>>>	5 Positive	11 %
(203)	ANTITOXIN	>>>	3 Positive	6,5 %
(999)	another manufacturer	>>>	1 Positive	2,2 %
Total per sample: n = 46		Success: 100 %		

Total success: 100 %

**(726) Antigen P1**

E1 and S1 (14)	Bio-Rad	>>>	10 Positive	31 %
(64)	Exbio Olomouc	>>>	1 Positive	3,1 %
(80)	DiaMed	>>>	2 Positive	6,3 %
(159)	Grifols	>>>	9 Positive	28 %
(172)	Immucor	>>>	3 Positive	9,4 %
(173)	Sanguin	>>>	4 Positive	13 %
(174)	IVT Imuno	>>>	1 Positive	3,1 %
(183)	Immunodiagnostic Systems	>>>	1 Positive	3,1 %
(203)	ANTITOXIN	>>>	1 Positive	3,1 %
Total per sample: n = 32		Success: 100 %		
E2 and S2 (14)	Bio-Rad	>>>	10 Negative	31 %
(64)	Exbio Olomouc	>>>	1 Negative	3,1 %
(80)	DiaMed	>>>	2 Negative	6,3 %
(159)	Grifols	>>>	9 Negative	28 %
(172)	Immucor	>>>	3 Negative	9,4 %
(173)	Sanguin	>>>	4 Negative	13 %
(174)	IVT Imuno	>>>	1 Negative	3,1 %
(183)	Immunodiagnostic Systems	>>>	1 Negative	3,1 %
(203)	ANTITOXIN	>>>	1 Negative	3,1 %
Total per sample: n = 32		Success: 100 %		

Total success: 100 %

**(727) Antigen Fya**

E1 and S1 (14)	Bio-Rad		1 Negative	2,1 %
(64)	Exbio Olomouc	>>>	16 Positive	33 %
(80)	DiaMed	>>>	1 Positive	2,1 %
(159)	Grifols	>>>	4 Positive	8,3 %
(172)	Immucor	>>>	13 Positive	27 %
(173)	Sanguin	>>>	6 Positive	13 %
(203)	ANTITOXIN	>>>	5 Positive	10 %
Total per sample: n = 48		Success: 98 %		4,2 %
E2 and S2 (14)	Bio-Rad	>>>	17 Positive	35 %
(64)	Exbio Olomouc	>>>	1 Positive	2,1 %

**Summary statistics - qualitative results**

(Groups: manufacturer of kit)

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Deadline: 17.09.2021

**Test**

Sample	Group	N	Result	N <sub>rel</sub>
E2 and S2 (80)	DiaMed	>>>	4 Positive	8,3 %
(159)	Grifols	>>>	13 Positive	27 %
(172)	Immucor	>>>	6 Positive	13 %
(173)	Sanguin	>>>	5 Positive	10 %
(203)	ANTITOXIN	>>>	2 Positive	4,2 %
Total per sample: n = 48		Success: 100 %		-

Total success: 98 %

**(728) Antigen Fyb**

E1 and S1 (14)	Bio-Rad	>>>	17 Positive	35 %
(64)	Exbio Olomouc	>>>	1 Positive	2,1 %
(80)	DiaMed	>>>	4 Positive	8,3 %
(159)	Grifols	>>>	13 Positive	27 %
(172)	Immucor	>>>	6 Positive	13 %
(173)	Sanguin	>>>	5 Positive	10 %
(203)	ANTITOXIN	>>>	2 Positive	4,2 %
Total per sample: n = 48		Success: 100 %		-
E2 and S2 (14)	Bio-Rad	>>>	16 Negative	33 %
(64)	Exbio Olomouc	>>>	1 Positive	2,1 %
(80)	DiaMed	>>>	4 Negative	8,3 %
(159)	Grifols	>>>	13 Negative	27 %
(172)	Immucor	>>>	6 Negative	13 %
(173)	Sanguin	>>>	5 Negative	10 %
(203)	ANTITOXIN	>>>	2 Negative	4,2 %
Total per sample: n = 48		Success: 98 %		-

Total success: 98 %

**(729) Antigen Jka**

E1 and S1 (0)	not specified	>>>	1 Positive	2,0 %
(14)	Bio-Rad	>>>	14 Positive	29 %
(64)	Exbio Olomouc	>>>	2 Positive	4,1 %
(80)	DiaMed	>>>	4 Positive	8,2 %
(159)	Grifols	>>>	15 Positive	31 %
(172)	Immucor	>>>	5 Positive	10 %
(173)	Sanguin	>>>	6 Positive	12 %
(203)	ANTITOXIN	>>>	2 Positive	4,1 %
Total per sample: n = 49		Success: 100 %		-
E2 and S2 (0)	not specified	>>>	1 Negative	2,0 %
(14)	Bio-Rad	>>>	14 Negative	29 %
(64)	Exbio Olomouc	>>>	2 Negative	4,1 %
(80)	DiaMed	>>>	4 Negative	8,2 %
(159)	Grifols	>>>	15 Negative	31 %
(172)	Immucor	>>>	5 Negative	10 %
(173)	Sanguin	>>>	6 Negative	12 %
(203)	ANTITOXIN	>>>	2 Negative	4,1 %
Total per sample: n = 49		Success: 100 %		-

Total success: 100 %

**(730) Antigen Jkb**

E1 and S1 (0)	not specified	>>>	1 Negative	2,0 %
(14)	Bio-Rad	>>>	13 Negative	27 %
(64)	Exbio Olomouc	>>>	2 Negative	4,1 %
(80)	DiaMed	>>>	4 Negative	8,2 %
(159)	Grifols	>>>	15 Negative	31 %
(172)	Immucor	>>>	7 Negative	14 %
(173)	Sanguin	>>>	5 Negative	10 %
(203)	ANTITOXIN	>>>	2 Negative	4,1 %
Total per sample: n = 49		Success: 100 %		-
E2 and S2 (0)	not specified	>>>	1 Positive	2,0 %
(14)	Bio-Rad	>>>	13 Positive	27 %
(64)	Exbio Olomouc	>>>	2 Positive	4,1 %
(80)	DiaMed	>>>	4 Positive	8,2 %
(159)	Grifols	>>>	15 Positive	31 %
(172)	Immucor	>>>	7 Positive	14 %
(173)	Sanguin	>>>	5 Positive	10 %
(203)	ANTITOXIN	>>>	2 Positive	4,1 %
Total per sample: n = 49		Success: 100 %		-

Total success: 100 %

**Summary statistics - qualitative results**

(Groups: manufacturer of kit)

**EQA round: IH3/21 - Blood Group Serology**

Deadline: 17.09.2021

**Test**

Sample	Group	N	Result	N <sub>rel</sub>
<b>(731) Antigen Lua</b>				
E1 and S1 (0) not specified		>>>	1 Negative	3,0 %
(14) Bio-Rad		>>>	10 Negative	30 %
(64) Exbio Olomouc		>>>	1 Negative	3,0 %
(159) Grifols		>>>	16 Negative	48 %
(172) Immucor		>>>	2 Negative	6,1 %
(173) Sanguin		>>>	2 Negative	6,1 %
(183) Immunodiagnostic Systems		>>>	1 Negative	3,0 %
Total per sample: n = 33	—	Success:	100 %	—
E2 and S2 (0) not specified		>>>	1 Negative	3,0 %
(14) Bio-Rad		>>>	10 Negative	30 %
(64) Exbio Olomouc		>>>	1 Negative	3,0 %
(159) Grifols		>>>	16 Negative	48 %
(172) Immucor		>>>	2 Negative	6,1 %
(173) Sanguin		>>>	2 Negative	6,1 %
(183) Immunodiagnostic Systems		>>>	1 Negative	3,0 %
Total per sample: n = 33	—	Success:	100 %	—

Total success: 100 %

**(732) Antigen Lub**

E1 and S1 (14) Bio-Rad		>>>	9 Positive	28 %
(64) Exbio Olomouc		>>>	1 Positive	3,1 %
(159) Grifols		>>>	16 Positive	50 %
(172) Immucor		>>>	2 Positive	6,3 %
(173) Sanguin		>>>	2 Positive	6,3 %
(183) Immunodiagnostic Systems		>>>	1 Positive	3,1 %
(999) another manufacturer		>>>	1 Positive	3,1 %
Total per sample: n = 32	—	Success:	100 %	—
E2 and S2 (14) Bio-Rad		>>>	9 Positive	28 %
(64) Exbio Olomouc		>>>	1 Positive	3,1 %
(159) Grifols		>>>	16 Positive	50 %
(172) Immucor		>>>	2 Positive	6,3 %
(173) Sanguin		>>>	2 Positive	6,3 %
(183) Immunodiagnostic Systems		>>>	1 Positive	3,1 %
(999) another manufacturer		>>>	1 Positive	3,1 %
Total per sample: n = 32	—	Success:	100 %	—

Total success: 100 %

**(733) Antigen Lea**

E1 and S1 (14) Bio-Rad		>>>	11 Negative	31 %
(64) Exbio Olomouc		>>>	1 Negative	2,9 %
(80) DiaMed		>>>	1 Negative	2,9 %
(159) Grifols		>>>	12 Negative	34 %
(172) Immucor		>>>	4 Negative	11 %
(173) Sanguin		>>>	2 Negative	5,7 %
(174) IVT Imuno		>>>	1 Negative	2,9 %
(183) Immunodiagnostic Systems		>>>	1 Negative	2,9 %
(203) ANTITOXIN		>>>	1 Negative	2,9 %
			1 Positive	2,9 %
Total per sample: n = 35	—	Success:	97 %	—
E2 and S2 (14) Bio-Rad		>>>	11 Negative	31 %
(64) Exbio Olomouc		>>>	1 Negative	2,9 %
(80) DiaMed		>>>	1 Negative	2,9 %
(159) Grifols		>>>	12 Negative	34 %
(172) Immucor		>>>	4 Negative	11 %
(173) Sanguin		>>>	2 Negative	5,7 %
(174) IVT Imuno		>>>	1 Negative	2,9 %
(183) Immunodiagnostic Systems		>>>	1 Negative	2,9 %
(203) ANTITOXIN		>>>	2 Negative	5,7 %
Total per sample: n = 35	—	Success:	100 %	—

Total success: 97 %

**(734) Antigen Leb**

E1 and S1 (14) Bio-Rad		>>>	11 Positive	31 %
(64) Exbio Olomouc		>>>	1 Positive	2,9 %
(80) DiaMed		>>>	1 Positive	2,9 %
(159) Grifols		>>>	2 Negative	5,7 %
		>>>	10 Positive	29 %
(172) Immucor		>>>	4 Positive	11 %
(173) Sanguin		>>>	2 Positive	5,7 %
(174) IVT Imuno		>>>	1 Positive	2,9 %

**Summary statistics - qualitative results**

(Groups: manufacturer of kit)

**EQA round: IH3/21 - Blood Group Serology**

Deadline: 17.09.2021

**Test**

Sample	Group	N	Result	N <sub>rel</sub>
E1 and S1 (183)	Immunodiagnostic Systems	>>>	1 Positive	2,9 %
(203)	ANTITOXIN		1 Negative	2,9 %
		>>>	1 Positive	2,9 %
Total per sample: n = 35		Success:	91 %	
E2 and S2 (14)	Bio-Rad	>>>	11 Positive	31 %
(40)	Exbio Olomouc	>>>	1 Positive	2,9 %
(80)	DiaMed	>>>	1 Positive	2,9 %
(159)	Grifols	>>>	12 Positive	34 %
(172)	Immucor	>>>	4 Positive	11 %
(173)	Sanguin	>>>	2 Positive	5,7 %
(174)	IVT Imuno	>>>	1 Positive	2,9 %
(183)	Immunodiagnostic Systems	>>>	1 Positive	2,9 %
(203)	ANTITOXIN	>>>	2 Positive	5,7 %
Total per sample: n = 35		Success:	100 %	

Total success: 91 %

**(737) Direct Coombs (antiglobulin) test**

E1 and S1 (14)	Bio-Rad	>>>	60 Negative	45 %
(40)	Ortho Clinical Diagnostics	>>>	4 Negative	3,0 %
(64)	Exbio Olomouc	>>>	2 Negative	1,5 %
(80)	DiaMed	>>>	21 Negative	16 %
(159)	Grifols	>>>	45 Negative	34 %
(172)	Immucor	>>>	2 Negative	1,5 %
Total per sample: n = 134		Success:	100 %	
E2 and S2 (14)	Bio-Rad	>>>	60 Negative	45 %
(40)	Ortho Clinical Diagnostics	>>>	4 Negative	3,0 %
(64)	Exbio Olomouc	>>>	2 Negative	1,5 %
(80)	DiaMed	>>>	21 Negative	16 %
(159)	Grifols	>>>	45 Negative	34 %
(172)	Immucor	>>>	2 Negative	1,5 %
Total per sample: n = 134		Success:	100 %	

Total success: 100 %

**(741) Antibody screening (IAT, blood donor)**

E1 and S1 (6)	APR	>>>	1 Positive	1,1 %
(14)	Bio-Rad	>>>	39 Positive	42 %
(64)	Exbio Olomouc	>>>	1 Positive	1,1 %
(80)	DiaMed	>>>	15 Positive	16 %
(159)	Grifols	>>>	23 Positive	25 %
(171)	Diagast	>>>	2 Positive	2,2 %
(172)	Immucor	>>>	11 Positive	12 %
Total per sample: n = 92		Success:	100 %	
E2 and S2 (6)	APR	>>	1 Positive	1,1 %
(14)	Bio-Rad		4 Negative	4,3 %
		>>>	35 Positive	38 %
(64)	Exbio Olomouc	>>>	1 Positive	1,1 %
(80)	DiaMed		1 Negative	1,1 %
		>>>	14 Positive	15 %
(159)	Grifols		1 Negative	1,1 %
		>>>	22 Positive	24 %
(171)	Diagast	>>>	2 Positive	2,2 %
(172)	Immucor		1 Negative	1,1 %
		>>>	10 Positive	11 %
Total per sample: n = 92		Success:	92 %	

Total success: 92 %

**(743) Antibody screening (IAT, recipient)**

E1 and S1 (6)	APR	>>>	1 Positive	0,67 %
(14)	Bio-Rad	>>>	64 Positive	43 %
(40)	Ortho Clinical Diagnostics	>>>	4 Positive	2,7 %
(80)	DiaMed	>>>	21 Positive	14 %
(159)	Grifols	>>>	53 Positive	36 %
(172)	Immucor	>>>	6 Positive	4,0 %
Total per sample: n = 149		Success:	100 %	
E2 and S2 (6)	APR	>>>	1 Positive	0,67 %
(14)	Bio-Rad	>>>	64 Positive	43 %
(40)	Ortho Clinical Diagnostics	>>>	4 Positive	2,7 %
(80)	DiaMed	>>>	21 Positive	14 %
(159)	Grifols		1 Negative	0,67 %
		>>>	52 Positive	35 %

**Summary statistics - qualitative results**

(Groups: manufacturer of kit)

**EQA round: IH3/21 - Blood Group Serology**

Deadline: 17.09.2021

**Test**

Sample	Group	N	Result	N <sub>rel</sub>
E2 and S2 (172)	Immucor	>>>	6 Positive	4,0 %
		Total per sample: n = 149	Success: 99 %	
		Total success: 99 %		

**(745) Antibody screening (IAT, pregnant)**

E1 and S1 (6)	APR	>>>	1 Positive	0,79 %
(14)	Bio-Rad	>>>	49 Positive	39 %
(40)	Ortho Clinical Diagnostics	>>>	4 Positive	3,2 %
(64)	Exbio Olomouc	>>>	1 Positive	0,79 %
(80)	Diamed	>>>	18 Positive	14 %
(159)	Grifols	>>>	47 Positive	37 %
(172)	Immucor	>>>	6 Positive	4,8 %
		Total per sample: n = 126	Success: 100 %	
E2 and S2 (6)	APR	>>>	1 Positive	0,79 %
(14)	Bio-Rad	>>>	49 Positive	39 %
(40)	Ortho Clinical Diagnostics	>>>	4 Positive	3,2 %
(64)	Exbio Olomouc	>>>	1 Positive	0,79 %
(80)	Diamed	>>>	18 Positive	14 %
(159)	Grifols	>>>	1 Negative	0,79 %
(172)	Immucor	>>>	46 Positive	37 %
		Total per sample: n = 126	Success: 99 %	
		Total success: 99 %		

**(747) Antibody screening (enzyme test)**

E1 and S1 (14)	Bio-Rad	>>>	43 Positive	43 %
(40)	Ortho Clinical Diagnostics	>>>	4 Positive	4,0 %
(80)	Diamed	>>>	1 Negative	0,99 %
		>>>	14 Positive	14 %
(159)	Grifols	>>>	37 Positive	37 %
(172)	Immucor	>>>	2 Positive	2,0 %
		Total per sample: n = 101	Success: 99 %	
E2 and S2 (14)	Bio-Rad	>>>	39 Negative	39 %
			4 Positive	4,0 %
(40)	Ortho Clinical Diagnostics	>>>	4 Negative	4,0 %
(80)	Diamed	>>>	12 Negative	12 %
			3 Positive	3,0 %
(159)	Grifols	>>>	34 Negative	34 %
			3 Positive	3,0 %
(172)	Immucor	>>>	2 Negative	2,0 %
		Total per sample: n = 101	Success: 90 %	
		Total success: 90 %		

**(750) Antibody identification**

E1 and S1 (0)	not specified	2	anti-D	4,1 %
		>>>	45 anti-D; anti-Jkb	92 %
		>	1 anti-D; anti-Jkb; anti-Kpa	2,0 %
			1 anti-H	2,0 %
		Total per sample: n = 49	Success: 94 %	
E2 and S2 (0)	not specified	>>>	49 anti-S	100 %
		Total per sample: n = 49	Success: 100 %	
		Total success: 94 %		

**(752) Antibody titre, Sample 1: 1st antibody**

E1 and S1 (0)	not specified	±	5 titré 256	12 %
		±	2 titré 512	4,9 %
		±	4 titré 32	9,8 %
		±	13 titré 64	32 %
		±	17 titré 128	41 %
		Total per sample: n = 41	Success (only evaluated results): evaluation	

**(753) Antibody titre, Sample 1: 2nd antibody**

E1 and S1 (0)	not specified	±	10 titré 0 (not measurable)	48 %
		±	5 titré 1	24 %
		±	4 titré 2	19 %
		±	2 titré 4	9,5 %
		Total per sample: n = 21	Success (only evaluated results): evaluation	

**(756) Antibody titre, Sample 2: 1st antibody**

E2 and S2 (0)	not specified	±	1 titré 0 (not measurable)	2,4 %
		±	8 titré 1	19 %
		±	20 titré 2	48 %

**Summary statistics - qualitative results**

(Groups: manufacturer of kit)

**EQA round: IH3/21 - Blood Group Serology**

Deadline: 17.09.2021

**Test**

Sample	Group	N	Result	N <sub>rel</sub>
E2 and S2 (0) not specified		± 7	titre 4	17 %
		± 3	titre 8	7,1 %
		± 2	titre 16	4,8 %
		± 1	titre 128	2,4 %
Total per sample: n = 42		Success (only evaluated results): evaluation		

**Set 3****(760) Crossmatch**

S1	All results	>>> 123	Crossmatch successful	100 %
	Total per sample: n = 123	—	Success: 100 %	—
S2	All results	>>> 123	Crossmatch successful	100 %
	Total per sample: n = 123	—	Success: 100 %	
Total success: 100 %				

**(761) Crossmatch (segment K1)**

S1	(0) not specified	>>> 117	Negative test	95 %
		>	6 Positive test	4,9 %
	Total per sample: n = 123	—	Success: 100 %	—
S2	(0) not specified	>>> 123	Negative test	100 %
	Total per sample: n = 123	—	Success: 100 %	—
Total success: 100 %				

**(762) Serve transfusion product (segment K1)**

S1	(0) not specified	± 45	Impossible, risk of haemolysis	37 %
		± 58	Decision depends on results of other tests not performed in our laboratory	47 %
		± 10	Only if more suitable products are not available	8,1 %
		± 10	Possible	8,1 %
	Total per sample: n = 123	—	Success (only evaluated results): evaluation	—
S2	(0) not specified	± 3	Impossible, risk of haemolysis	2,4 %
		± 62	Decision depends on results of other tests not performed in our laboratory	50 %
		± 27	Only if more suitable products are not available	22 %
		± 31	Possible	25 %
	Total per sample: n = 123	—	Success (only evaluated results): evaluation	—

**(764) Crossmatch (segment K2)**

S1	(0) not specified	>>> 119	Negative test	97 %
		>	4 Positive test	3,3 %
	Total per sample: n = 123	—	Success: 100 %	—
S2	(0) not specified	>>> 123	Negative test	100 %
	Total per sample: n = 123	—	Success: 100 %	
Total success: 100 %				

**(765) Serve transfusion product (segment K2)**

S1	(0) not specified	± 43	Impossible, risk of haemolysis	35 %
		± 58	Decision depends on results of other tests not performed in our laboratory	48 %
		± 8	Only if more suitable products are not available	6,6 %
		± 13	Possible	11 %
	Total per sample: n = 122	—	Success (only evaluated results): evaluation	—
S2	(0) not specified	± 3	Impossible, risk of haemolysis	2,5 %
		± 61	Decision depends on results of other tests not performed in our laboratory	50 %
		± 26	Only if more suitable products are not available	21 %
		± 32	Possible	26 %
	Total per sample: n = 122	—	Success (only evaluated results): evaluation	—

st\_kl End of report

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