

Supplement Table 4. Analysis of heterogeneity. The results were deemed as high heterogeneity between comparisons and the random effects model was used if  $I^2 > 50\%$ . NA: not applicable.

4a. Analysis of heterogeneity for RVs

Included studies	Comparisons	$I^2$		Odds Ratio (95% CrI)	
		pair-wise	network	pair-wise	network
3	Saliva versus NPS	95.7%	93.7%	0.47 (0.14, 1.6)	0.40 (0.15, 1.1)
3	MTS versus NPS	0.0%	0.0%	0.98 (0.29, 3.3)	0.93 (0.41, 2.2)
5	NS versus NPS	17.2%	0.0%	0.98 (0.37, 2.7)	0.80 (0.46, 1.4)
7	Sputum versus NPS	97.0%	93.0%	0.75 (0.33, 1.7)	0.98 (0.50, 2.)
5	NPA versus NPS	88.6%	84.9%	0.77 (0.30, 2.0)	0.69 (0.38, 1.2)
2	BAL versus NPS	94.7%	94.6%	1.0 (0.23, 4.5)	0.98 (0.26, 3.7)
7	OPS versus NPS	81.2%	81.0%	0.67 (0.31, 1.5)	0.71 (0.36, 1.4)
2	NW versus NPS	0.0%	68.2%	0.48 (0.11, 2.1)	0.73 (0.30, 1.8)
2	TS versus NPS	NA	0.0%	0.41 (0.086, 2.0)	0.44 (0.20, 0.97)
5	NPW versus NPS	77.1%	76.7%	1.3 (0.54, 3.4)	1.2 (0.58, 2.5)

1	VTM-Swab versus NPS	0.0%	74.3%	1.0 (0.13, 7.7)	0.76 (0.23, 2.5)
1	NA versus NPS	NA	90.7%	0.22 (0.028, 1.9)	0.67 (0.27, 1.7)
1	TS versus Saliva	NA	40.5%	1.7 (0.21, 15.)	1.1 (0.35, 3.4)
1	NS versus MTS	0.0%	0.0%	0.80 (0.10, 6.6)	0.87 (0.35, 2.2)
1	NPA versus MTS	0.0%	71.4%	1.1 (0.15, 8.9)	0.74 (0.29, 1.9)
1	NPW versus MTS	0.0%	48.4%	0.98 (0.12, 7.8)	1.3 (0.47, 3.5)
9	NPA versus NS	NA	96.0%	0.89 (0.43, 1.9)	0.86 (0.50, 1.4)
1	OPS versus NS	0.0%	4.4%	1.2 (0.14, 9.4)	0.88 (0.38, 2.)
2	NW versus NS	0.0%	4.0%	1.3 (0.28, 6.2)	0.92 (0.37, 2.3)
3	TS versus NS	9.4%	84.2%	0.80 (0.18, 3.5)	0.54 (0.24, 1.2)
1	NPW versus NS	0.0%	69.1%	0.84 (0.10, 7.0)	1.5 (0.63, 3.6)
1	VTM-Aspirate versus NS	NA	0.0%	0.90 (0.11, 7.0)	1.1 (0.28, 4.2)
2	NA versus NS	0.0%	0.0%	0.76 (0.16, 3.6)	0.83 (0.34, 2.0)

1	NB versus NS	0.0%	0.0%	0.87 (0.087, 8.3)	0.73 (0.14, 3.8)
3	TS versus Sputum	96.6%	92.9%	0.29 (0.067, 1.1)	0.45 (0.18, 1.1)
1	NA versus Sputum	0.0%	76.0%	1.2 (0.15, 10.)	0.68 (0.24, 2.)
1	NB versus NPA	0.0%	83.1%	1.8 (0.23, 14.)	1.1 (0.42, 2.8)
1	TS versus NPA	0.0%	12.5%	6.0e+07 (7.9e-34, 1.1e+66)	0.64 (0.27, 1.5)
1	N-TS versus NPA	NA	0.0%	0.79 (0.10, 6.2)	0.92 (0.23, 3.6)
1	VTM-Swab versus NPA	0.0%	12.7%	0.94 (0.12, 7.2)	1.1 (0.33, 3.6)
1	NW versus OPS	NA	82.4%	0.50 (0.059, 4.1)	1.0 (0.37, 3.)
1	NPW versus OPS	0.0%	0.0%	1.9 (0.23, 14.)	1.7 (0.67, 4.3)
1	NA versus NW	0.0%	NA	0.66 (0.066, 6.8)	0.91 (0.30, 2.8)
1	NB versus NW	NA	0.0%	0.62 (0.062, 6.4)	0.80 (0.15, 4.4)
2	NA versus TS	96.4%	92.4%	1.7 (0.36, 7.6)	1.5 (0.57, 4.1)

1	NA versus N-TS	0.0%	0.0%	0.94 (0.12, 7.2)	1.1 (0.28, 4.2)
1	VTM-Aspirate versus VTM-Swab	NA	0.0%	1.3 (0.17, 9.8)	1.2 (0.28, 4.7)
1	NA versus VTM-Aspirate	0.0%	NA	0.74 (0.091, 6.1)	0.76 (0.19, 3.1)
1	NB versus NA	NA	0.0%	0.92 (0.091, 9.3)	0.87 (0.16, 4.9)

## 4b. Analysis of heterogeneity for INF

Included studies	Comparisons	I <sup>2</sup>		Odds Ratio (95% CrI)	
		pair-wise	network	pair-wise	network
3	Saliva versus NPS	65.8%	65.2%	0.65 (0.34, 1.2)	0.86 (0.46, 1.7)
2	MTS vs NPS	0.0%	0.0%	0.94 (0.41, 2.3)	0.99 (0.47, 2.1)
2	NS vs NPS	NA	0.0%	0.91 (0.45, 1.8)	0.78 (0.48, 1.3)
6	Sputum vs NPS	93.1%	96.3%	1.0 (0.58, 1.6)	0.85 (0.47, 1.4)
4	NPA vs NPS	87.3%	86.5%	0.61 (0.35, 1.2)	0.72 (0.44, 1.2)
7	OPS vs NPS	65.2%	63.9%	0.78 (0.51, 1.2)	0.77 (0.51, 1.2)

3	NW vs NPS	36.5%	75.9%	0.64 (0.34, 1.2)	0.90 (0.53, 1.5)
1	TS vs NPS	0.0%	66.5%	3.8 (0.52, 28.)	0.88 (0.41, 1.8)
2	NPW vs NPS	58.8%	18.7%	1.0 (0.48, 2.1)	1.0 (0.54, 1.9)
1	M vs NPS	0.0%	0.0%	0.99 (0.32, 3.1)	1.0 (0.30, 3.4)
1	TS vs Saliva	NA	85.9%	0.022 (0.00061, 0.30)	1.0 (0.38, 2.5)
1	NPW vs MTS	0.0%	0.0%	0.96 (0.36, 2.5)	1.0 (0.46, 2.2)
4	NPA vs NS	NA	0.0%	1.0 (0.58, 1.9)	0.93 (0.57, 1.6)
1	OPS vs NS	0.0%	0.0%	1.2 (0.42, 3.4)	0.98 (0.55, 1.8)
2	NW vs NS	NA	0.0%	1.3 (0.47, 3.9)	1.2 (0.64, 2.1)
2	TS vs NS	NA	36.8%	0.93 (0.43, 2.0)	1.1 (0.56, 2.2)
1	NA vs NS	NA	0.0%	1.3 (0.14, 13.)	0.88 (0.30, 2.6)
1	NB vs NS	NA	0.0%	0.75 (0.041, 13.)	0.51 (0.083, 2.3)
1	TS vs Sputum	0.0%	87.0%	11. (1.5, 81.)	1.0 (0.46, 2.6)

1	NW vs NPA	0.0%	69.3%	1.8 (0.68, 4.7)	1.3 (0.66, 2.3)
1	N-TS vs NPA	NA	0.0%	0.94 (0.36, 2.6)	1.0 (0.38, 2.5)
1	NW vs OPS	NA	0.0%	1.1 (0.25, 5.3)	1.2 (0.61, 2.2)
1	NPW vs OPS	NA	55.9%	1.8 (0.67, 5.0)	1.3 (0.64, 2.6)
1	NPW vs NW	0.0%	1.4%	0.83 (0.28, 2.5)	1.1 (0.53, 2.3)
1	NA vs NW	0.0%	0.0%	0.69 (0.12, 4.0)	0.76 (0.25, 2.4)
1	NB vs NW	NA	0.0%	0.37 (0.040, 3.6)	0.44 (0.073, 2.)
1	NA vs N-TS	0.0%	0.0%	0.91 (0.36, 2.4)	0.96 (0.38, 2.4)
1	NB vs NA	0.0%	NA	0.53 (0.043, 6.3)	0.58 (0.088, 2.9)

## 4c. Analysis of heterogeneity for INFa

Included studies	Comparisons	I <sup>2</sup>		Odds Ratio (95% CrI)	
		pair-wise	network	pair-wise	network
3	Saliva versus NPS	65.7%	66.4%	0.64 (0.20, 2.)	0.64 (0.24, 1.6)
1	MTS versus NPS	0.0%	0.0%	0.87 (0.14, 5.4)	1.0 (0.30, 3.6)
2	NS versus NPS	NA	0.0%	0.91 (0.23, 3.3)	0.69 (0.34, 1.4)
6	Sputum versus NPS	96.7%	91.9%	0.82 (0.32, 1.8)	0.99 (0.49, 1.9)
2	NPA versus NPS	93.9%	91.2%	0.50 (0.14, 1.9)	0.63 (0.29, 1.4)
5	OPS versus NPS	82.2%	80.0%	0.88 (0.37, 2.3)	0.84 (0.41, 1.8)
2	NW versus NPS	67.0%	68.7%	0.63 (0.17, 2.4)	0.80 (0.34, 1.9)
1	TS versus NPS	NA	73.6%	3.8 (0.30, 52.)	0.69 (0.26, 1.8)
1	NPW versus NPS	0.0%	0.0%	0.74 (0.11, 4.9)	0.61 (0.18, 2.0)
1	NPW versus MTS	NA	0.0%	0.49 (0.075, 3.3)	0.59 (0.16, 2.1)
4	NPA versus NS	NA	0.0%	1.0 (0.37, 3.2)	0.91 (0.46, 1.9)

1	OPS versus NS	0.0%	0.0%	1.2 (0.18, 8.1)	1.2 (0.50, 3.3)
2	NW versus NS	0.0%	NA	1.3 (0.25, 6.6)	1.2 (0.49, 2.9)
2	TS versus NS	0.0%	NA	0.96 (0.24, 3.8)	1.0 (0.39, 2.5)
1	NA versus NS	NA	0.0%	1.3 (0.075, 22.)	0.89 (0.22, 3.9)
1	NB versus NS	0.0%	0.0%	0.71 (0.027, 18.)	0.51 (0.070, 3.3)
2	TS versus Sputum	94.6%	88.6%	0.44 (0.084, 2.5)	0.69 (0.25, 2.)
1	NW versus NPA	0.0%	62.7%	1.8 (0.27, 12.)	1.3 (0.48, 3.3)
1	N-TS versus NPA	0.0%	0.0%	0.92 (0.13, 6.0)	0.99 (0.26, 3.7)
1	NPW versus NW	0.0%	0.0%	0.84 (0.12, 5.7)	0.76 (0.21, 2.7)
1	VTM-Swab versus NW	0.0%	0.0%	0.98 (0.099, 9.4)	1.0 (0.16, 6.5)
1	VTM-Aspirate versus NW	NA	0.0%	0.98 (0.11, 9.2)	1.0 (0.15, 6.4)
1	NA versus NW	0.0%	0.0%	0.67 (0.059, 7.1)	0.76 (0.18, 3.2)
1	NB versus NW	0.0%	0.0%	0.35 (0.023, 5.5)	0.44 (0.057, 2.8)



1	NA versus N-TS	0.0%	0.0%	0.91 (0.14, 5.9)	0.98 (0.27, 3.6)
1	VTM-Aspirate versus VTM-Swab	0.0%	0.0%	0.99 (0.11, 9.4)	0.99 (0.15, 6.1)
1	NB versus NA	0.0%	0.0%	0.54 (0.029, 11.)	0.57 (0.069, 4.)

## 4d. Analysis of heterogeneity for INfb

Included studies	Comparisons	I <sup>2</sup>		Odds Ratio (95% CrI)	
		pair-wise	network	pair-wise	network
3	Saliva versus NPS	66.5%	66.8%	0.64 (0.20, 1.9)	0.64 (0.24, 1.7)
1	MTS versus NPS	0.0%	0.0%	0.87 (0.13, 5.6)	1.0 (0.29, 3.6)
2	NS versus NPS	0.0%	38.8%	0.90 (0.23, 3.4)	0.69 (0.33, 1.4)
6	Sputum versus NPS	96.9%	92.3%	0.81 (0.32, 1.8)	0.99 (0.47, 1.9)
2	NPA versus NPS	93.8%	90.8%	0.50 (0.13, 1.9)	0.62 (0.28, 1.4)
5	OPS versus NPS	82.2%	80.9%	0.87 (0.37, 2.3)	0.85 (0.41, 1.8)
2	NW versus NPS	65.4%	67.7%	0.63 (0.17, 2.4)	0.79 (0.34, 1.9)
1	TS versus NPS	0.0%	75.6%	3.8 (0.31, 46.)	0.68 (0.24, 1.8)
1	NPW versus NPS	NA	0.0%	0.73 (0.11, 4.9)	0.60 (0.18, 2.0)
1	NPW versus MTS	0.0%	0.0%	0.50 (0.072, 3.4)	0.60 (0.16, 2.1)
4	NPA versus NS	NA	0.0%	1.1 (0.38, 3.3)	0.91 (0.45, 1.9)

1	OPS versus NS	0.0%	0.0%	1.2 (0.17, 7.8)	1.2 (0.49, 3.4)
2	NW versus NS	0.0%	0.0%	1.3 (0.27, 6.6)	1.2 (0.47, 2.9)
2	TS versus NS	NA	0.0%	0.96 (0.24, 3.7)	0.98 (0.38, 2.5)
1	NA versus NS	0.0%	0.0%	1.3 (0.084, 20.)	0.87 (0.20, 3.8)
1	NB versus NS	NA	0.0%	0.72 (0.027, 19.)	0.52 (0.072, 3.4)
2	TS versus Sputum	94.0%	86.7%	0.43 (0.086, 2.5)	0.69 (0.25, 2.)
1	NW versus NPA	0.0%	65.7%	1.8 (0.29, 12.)	1.3 (0.48, 3.3)
1	N-TS versus NPA	NA	0.0%	0.92 (0.14, 5.9)	0.97 (0.26, 3.7)
1	NPW versus NW	NA	0.0%	0.84 (0.12, 5.6)	0.76 (0.21, 2.8)

1	VTM-Swab versus NW	0.0%	0.0%	0.99 (0.11, 8.9)	0.99 (0.15, 6.7)
1	VTM-Aspirate versus NW	NA	0.0%	0.99 (0.10, 9.4)	0.99 (0.15, 6.5)
1	NA versus NW	NA	0.0%	0.67 (0.060, 7.3)	0.75 (0.17, 3.3)
1	NB versus NW	NA	0.0%	0.35 (0.021, 6.)	0.45 (0.061, 2.8)
1	NA versus N-TS	0.0%	NA	0.91 (0.14, 5.7)	0.98 (0.26, 3.6)
1	VTM-Aspirate versus VTM-Swab	NA	0.0%	0.98 (0.10, 10.)	1.0 (0.15, 6.6)
1	NB versus NA	NA	0.0%	0.54 (0.024, 12.)	0.60 (0.074, 4.2)

## 4e. Analysis of heterogeneity for RV

Included studies	Comparisons	I <sup>2</sup>		Odds Ratio (95% CrI)	
		pair-wise	network	pair-wise	network
1	Saliva versus NPS	0.0%	0.0%	1.6 (0.73, 3.6)	1.6 (0.79, 3.5)
1	MTS versus NPS	NA	0.0%	0.37 (0.013, 6.5)	0.53 (0.019, 7.9)
1	NS versus NPS	0.0%	0.0%	0.83 (0.34, 2.1)	0.66 (0.32, 1.2)
3	Sputum versus NPS	NA	0.0%	1.0 (0.61, 1.7)	1.0 (0.62, 1.6)
4	OPS versus NPS	49.5%	47.1%	0.45 (0.26, 0.69)	0.47 (0.29, 0.70)
1	NW versus NPS	0.0%	0.0%	0.53 (0.15, 1.9)	0.72 (0.34, 1.4)
1	NPW versus NPS	0.0%	0.0%	1.3 (0.53, 3.0)	1.2 (0.58, 2.4)
4	NPA versus NS	34.4%	34.4%	1.5 (0.94, 2.4)	1.1 (0.68, 1.7)
2	NW versus NS	0.0%	0.0%	1.2 (0.62, 2.4)	1.1 (0.64, 1.9)
1	TS versus NS	NA	0.0%	0.071 (0.026, 0.18)	0.069 (0.027, 0.19)

1	NA versus NS	0.0%	0.0%	1.0 (0.29, 3.5)	0.86 (0.37, 2.1)
1	NB versus NS	0.0%	0.0%	1.1 (0.29, 3.8)	0.82 (0.35, 2.0)
1	NW versus OPS	NA	0.0%	0.95 (0.22, 3.7)	1.5 (0.71, 3.3)
1	NPW versus OPS	0.0%	0.0%	2.5 (0.96, 6.5)	2.6 (1.3, 5.6)
1	NA versus NW	NA	0.0%	0.64 (0.18, 2.2)	0.79 (0.33, 1.9)
1	NB versus NW	0.0%	0.0%	0.59 (0.19, 2.1)	0.75 (0.31, 1.8)
1	NB versus NA	0.0%	0.0%	0.95 (0.29, 3.2)	0.95 (0.36, 2.5)

## 4f. Analysis of heterogeneity for RSV

Included studies	Comparisons	I <sup>2</sup>		Odds Ratio (95% CrI)	
		pair-wise	network	pair-wise	network
1	Saliva versus NPS	0.0%	43.6%	4.0e-06 (1.5e-11, 2.3)	0.88 (0.41, 1.9)
2	MTS versus NPS	40.3%	0.0%	0.46 (0.17, 1.3)	0.42 (0.25, 0.70)
2	NS versus NPS	0.0%	0.0%	0.98 (0.66, 1.4)	0.95 (0.73, 1.2)
5	Sputum versus NPS	34.6%	31.8%	0.93 (0.77, 1.3)	0.92 (0.77, 1.2)
4	NPA versus NPS	0.0%	0.0%	1.1 (0.75, 1.5)	1.1 (0.87, 1.5)
6	OPS versus NPS	0.0%	0.0%	0.90 (0.67, 1.1)	0.90 (0.71, 1.1)
1	NW versus NPS	0.0%	0.0%	2.3 (0.11, 83.)	0.98 (0.52, 1.8)
2	NPW versus NPS	NA	0.0%	1.1 (0.73, 1.7)	1.1 (0.77, 1.5)
1	VTM-Swab versus NPS	0.0%	0.0%	1.0 (0.64, 1.6)	1.0 (0.70, 1.6)
1	TS versus Saliva	0.0%	0.0%	0.90 (0.43, 1.7)	0.96 (0.50, 1.8)

1	NPW versus MTS	0.0%	0.0%	2.7 (1.6, 4.5)	2.6 (1.7, 4.0)
7	NPA versus NS	60.6%	54.1%	1.2 (1.0, 1.5)	1.2 (1.0, 1.4)
1	OPS versus NS	NA	0.0%	0.85 (0.44, 1.7)	0.94 (0.69, 1.3)
1	NW versus NS	0.0%	0.0%	1.1 (0.20, 6.5)	1.0 (0.55, 2.0)
2	TS versus NS	47.5%	2.3%	0.91 (0.58, 1.4)	0.90 (0.60, 1.3)
1	N-TS versus NPA	0.0%	0.0%	0.93 (0.57, 1.6)	0.95 (0.58, 1.6)
1	NW versus OPS	NA	0.0%	2.5 (0.15, 50.)	1.1 (0.58, 2.1)
1	NPW versus OPS	0.0%	0.0%	0.99 (0.42, 2.2)	1.2 (0.83, 1.8)
1	VTM-Swab versus NW	NA	0.0%	1.1 (0.60, 2.1)	1.1 (0.66, 1.8)
1	VTM-Aspirate versus NW	0.0%	0.0%	0.53 (0.29, 0.97)	0.52 (0.31, 0.90)
1	NA versus TS	0.0%	0.0%	6.9 (2.5, 20.)	6.4 (2.4, 20.)
1	VTM-Aspirate vs VTM-Swab	NA	0.0%	0.49 (0.26, 0.90)	0.49 (0.29, 0.83)



## 4g. Analysis of heterogeneity for PIV

Included studies	Comparisons	I <sup>2</sup>		Odds Ratio (95% CrI)	
		pair-wise	network	pair-wise	network
1	Saliva versus NPS	0.0%	52.7%	1.4 (0.33, 10.)	2.5 (0.44, 9.4)
1	NS versus NPS	0.0%	82.4%	0.96 (0.62, 1.6)	0.84 (0.54, 1.3)
4	Sputum versus NPS	NA	0.0%	0.70 (0.53, 1.0)	0.71 (0.52, 1.0)
1	NPW versus NPS	NA	0.0%	1.0 (0.62, 1.7)	1.0 (0.59, 1.7)
1	TS versus Saliva	0.0%	0.0%	0.040 (0.0022, 0.37)	0.080 (0.0065, 0.41)
5	NPA versus NS	NA	0.0%	1.1 (0.83, 1.5)	1.1 (0.81, 1.4)
2	NW versus NS	0.0%	0.0%	1.2 (0.40, 3.)	0.92 (0.39, 2.2)
1	TS versus NS	NA	43.2%	1.2 (0.064, 44.)	0.21 (0.016, 1.5)
1	NA versus NS	0.0%	0.0%	0.75 (0.078, 15.)	1.1 (0.14, 5.8)
1	NB versus NS	0.0%	0.0%	0.93 (0.072, 8.4)	1.0 (0.20, 4.3)

1	N-TS versus NPA	0.0%	0.0%	0.90 (0.47, 1.7)	0.92 (0.45, 1.8)
1	NW versus OPS	0.0%	NA	0.78 (0.00065, 4.6e+02)	1.3 (0.52, 3.6)
1	NA versus NW	NA	0.0%	0.83 (0.075, 7.4)	1.2 (0.16, 6.2)
1	NB versus NW	NA	0.0%	1.0 (0.063, 8.5)	1.1 (0.20, 4.7)
1	NB versus NA	0.0%	0.0%	0.89 (0.077, 13.)	0.92 (0.25, 5.5)

## 4h. Analysis of heterogeneity for ADV

Included studies	Comparisons	I <sup>2</sup>		Odds Ratio (95% CrI)	
		pair-wise	network	pair-wise	network
1	Saliva versus NPS	0.0%	0.0%	19. (4.9, 1.1e+02)	16. (4.4, 74.)
1	NS versus NPS	NA	0.0%	0.96 (0.36, 2.4)	0.90 (0.37, 2.)
2	Sputum versus NPS	94.0%	96.1%	0.76 (0.46, 2.1)	0.80 (0.46, 2.0)
4	OPS versus NPS	78.9%	82.4%	1.0 (0.46, 1.6)	1.0 (0.49, 1.6)
1	NW versus NPS	0.0%	21.3%	0.17 (0.018, 1.4)	0.45 (0.12, 1.3)
1	NPW versus NPS	0.0%	0.0%	3.3 (1.2, 8.7)	3.3 (1.2, 8.7)
1	TS versus Saliva	NA	0.0%	0.61 (0.0072, 1.3e+02)	0.14 (0.0066, 3.3)
1	NPA versus MTS	0.0%	0.0%	1.1 (0.025, 60.)	1.2 (0.025, 58.)
5	NPA versus NS	0.0%	0.0%	1.3 (0.73, 2.1)	1.2 (0.72, 2.1)
1	NW versus NS	NA	0.0%	0.83 (0.12, 6.)	0.50 (0.14, 1.5)

1	TS versus NS	0.0%	0.0%	1.0 (0.021, 48.)	2.5 (0.15, 62.)
1	NA versus NS	0.0%	0.0%	0.61 (0.087, 5.1)	0.50 (0.10, 2.1)
1	NB versus NS	NA	0.0%	0.85 (0.11, 8.3)	0.65 (0.13, 2.8)
1	N-TS versus NPA	NA	0.0%	0.68 (0.24, 1.8)	0.68 (0.25, 1.9)
1	NW versus OPS	NA	0.0%	0.35 (0.016, 8.1)	0.46 (0.12, 1.6)
1	NB versus NW	0.0%	0.0%	0.88 (0.11, 7.4)	1.3 (0.25, 6.1)
1	NB versus NA	0.0%	0.0%	1.4 (0.12, 13.)	1.3 (0.22, 7.0)
1	NA versus NW	NA	0.0%	0.81 (0.091, 6.7)	0.99 (0.19, 5.1)

## 4i. Analysis of heterogeneity for COV

Included studies	Comparisons	I <sup>2</sup>		Odds Ratio (95% CrI)	
		pair-wise	network	pair-wise	network
1	Saliva versus NPS	0.0%	0.0%	0.97 (0.53, 1.7)	0.97 (0.56, 1.7)
1	MTS versus NPS	0.0%	0.0%	1.1 (0.48, 2.6)	0.99 (0.46, 2.3)
1	Sputum versus NPS	NA	0.0%	1.6 (0.62, 4.2)	1.7 (0.64, 4.1)
3	OPS versus NPS	NA	0.0%	0.85 (0.54, 1.3)	0.84 (0.57, 1.2)
1	NW versus NPS	0.0%	0.0%	0.89 (0.35, 2.2)	0.87 (0.43, 1.7)
2	NPW versus NPS	0.0%	0.0%	0.98 (0.58, 1.6)	0.95 (0.61, 1.4)
2	NPA versus NS	0.0%	0.0%	1.1 (0.58, 2.)	1.1 (0.60, 1.9)
2	NW versus NS	NA	0.0%	1.2 (0.49, 2.4)	1.1 (0.54, 2.3)
1	TS versus NS	0.0%	0.0%	0.85 (0.28, 2.5)	0.83 (0.28, 2.5)

1	NA versus NS	0.0%	0.0%	0.81 (0.13, 5.)	0.92 (0.25, 2.6)
1	NB versus NS	0.0%	0.0%	0.79 (0.13, 4.5)	0.92 (0.23, 2.7)
1	NW versus OPS	NA	0.0%	1.0 (0.35, 2.7)	1.0 (0.51, 2.1)
1	NPW versus OPS	NA	0.0%	1.1 (0.56, 2.1)	1.1 (0.70, 1.8)
1	NA versus NW	0.0%	0.0%	0.81 (0.13, 5.7)	0.81 (0.23, 2.4)
1	NB versus NW	0.0%	NA	0.86 (0.15, 6.1)	0.82 (0.20, 2.5)
1	NB versus NA	0.0%	0.0%	0.94 (0.11, 6.4)	1.0 (0.25, 4.2)

Abbreviation: NPS=Nasopharyngeal swabs;NS=Nasal swab; MTS=Mid-turbinate swab;OPS=Oropharyngeal swab;TS=Throat swab;TS=Nose-Throat swab; NPA=Nasopharyngeal aspirate;NA=Nasal aspirate;NW=Nasopharyngeal wash; NS=Nasal wash;NB=Nasal brush;BAL=Bronchoalveolar Lavage;VTM-S=Swab with viral transport medium; VTM-A=Aspirate with viral transport medium;RVs=Respiratory viruses;INF=Influenza virus; INFa=Influenza a;INFb=Influenza b;RV=Rhinovirus;RSV=Respiratory syncytial virus; PIV=Parainfluenza virus;ADV=Adenovirus;COV=Coronavirus;