

# Evaluation Report Summary for SARS-CoV-2 IgG/IgM

## 1. People's Hospital of Wuhan University (Wuhan, Hubei)

A. SARS-CoV-2 IgG: Based on 254 patient samples.

		Clinical Information of Patients		Total
		Confirmed Positive Patients	Negative Patients	
YHLO Reagents	Positive	106	2	108
	Negative	2	118	120
Total		108	120	228

$$\text{Sensitivity} = (106/108) \times 100\% = 98.1\%$$

$$\text{Specificity} = (118/120) \times 100\% = 98.3\%$$

$$\text{PPV} = (106/108) \times 100\% = 98.1\%$$

$$\text{NPV} = (118/120) \times 100\% = 98.3\%$$

B. SARS-CoV-2 IgM: Based on 254 patient samples.

		Clinical Information of Patients		Total
		Confirmed Positive Patients	Negative Patients	
YHLO Reagents	Positive	98	0	98
	Negative	10	120	130
Total		108	120	228

$$\text{Sensitivity} = (98/108) \times 100\% = 90.7\%$$

$$\text{Specificity} = (120/120) \times 100\% = 100\%$$

$$\text{PPV} = (98/98) \times 100\% = 100\%$$

$$\text{NPV} = (120/130) \times 100\% = 92.3\%$$

## 2. Tongji Medical College of Huazhong University of Science and Technology (Wuhan, Hubei)

A. SARS-CoV-2 IgG: Based on 141 patient samples with confirmed or excluded conclusion.

		Clinical Information of Patients		Total
		Confirmed Positive Patients	Negative Patients	
YHLO Reagents	Positive	44	2	46
	Negative	1	94	95
Total		45	96	141

$$\text{Sensitivity} = (44/45) \times 100\% = 97.8\%$$

$$\text{Specificity} = (94/96) \times 100\% = 97.9\%$$

$$\text{PPV} = (44/46) \times 100\% = 95.7\%$$

$$\text{NPV} = (94/95) \times 100\% = 98.9\%$$

B. SARS-CoV-2 IgM: Based on 141 patient samples with confirmed or excluded conclusion.

		Clinical Information of Patients		Total
		Confirmed Positive Patients	Negative Patients	
YHLO Reagents	Positive	38	2	40
	Negative	7	94	101
Total		45	96	141

$$\text{Sensitivity} = (38/45) \times 100\% = 84.4\%$$

$$\text{Specificity} = (94/96) \times 100\% = 97.9\%$$

$$\text{PPV} = (38/40) \times 100\% = 95.0\%$$

$$\text{NPV} = (94/101) \times 100\% = 93.1\%$$

### 3. The 5<sup>th</sup> Affiliated Hospital of Sun Ya-Sen University (Guangdong)

A. SARS-CoV-2 IgG: Based on 58 patient samples

		Clinical Information of Patients		Total
		Confirmed Positive Patients	Negative Patients	
YHLO Reagents	Positive	8	1	9
	Negative	0	49	49
Total		8	50	58

$$\text{Sensitivity} = (8/8) \times 100\% = 100\%$$

$$\text{Specificity} = (49/50) \times 100\% = 98\%$$

$$\text{PPV} = (8/9) \times 100\% = 88.9\%$$

$$\text{NPV} = (49/49) \times 100\% = 100\%$$

B. SARS-CoV-2 IgM: 58 patient samples.

		Clinical Information of Patients		Total
		Confirmed Positive Patients	Negative Patients	
YHLO Reagents	Positive	8	0	8
	Negative	0	50	50
Total		8	50	58

$$\text{Sensitivity} = (8/8) \times 100\% = 100\%$$

$$\text{Specificity} = (50/50) \times 100\% = 100\%$$

$$\text{PPV} = (8/8) \times 100\% = 100\%$$

$$\text{NPV} = (50/50) \times 100\% = 100\%$$

#### 4. Huangshi Central Hospital (Huangshi, Hubei):

##### A. SARS-CoV-2 IgG: Based on 169 patient samples

		Clinical Information of Patients		Total
		Confirmed Positive Patients	Negative Patients	
YHLO Reagents	Positive	66	9	75
	Negative	2	92	94
Total		68	101	169

$$\text{Sensitivity} = (66/68) \times 100\% = 97.1\%$$

$$\text{Specificity} = (92/101) \times 100\% = 91.1\%$$

$$\text{PPV} = (66/75) \times 100\% = 88.0\%$$

$$\text{NPV} = (92/94) \times 100\% = 97.9\%$$

##### B. SARS-CoV-2 IgM: Based on 169 patient samples.

		Clinical Information of Patients		Total
		Confirmed Positive Patients	Negative Patients	
YHLO Reagents	Positive	60	1	61
	Negative	8	100	108
Total		68	101	169

$$\text{Sensitivity} = (60/68) \times 100\% = 88.2\%$$

$$\text{Specificity} = (100/101) \times 100\% = 99.0\%$$

$$\text{PPV} = (60/61) \times 100\% = 98.4\%$$

$$\text{NPV} = (100/108) \times 100\% = 92.6\%$$