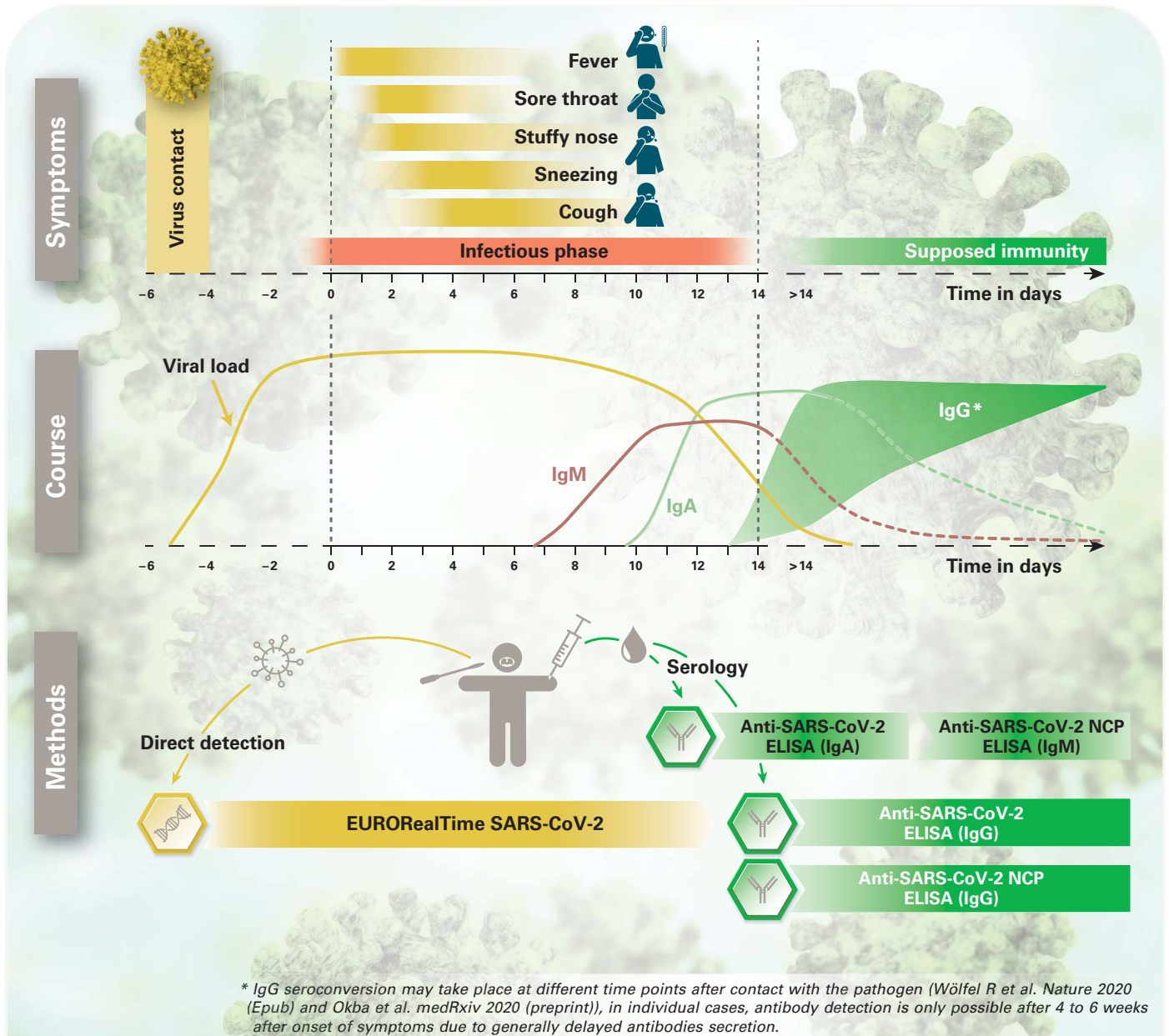




Application of EUROIMMUN tests for COVID-19 diagnostics



Correct application of our tests

- Identification of an acute infection by direct virus detection by PCR: **EURORealTime SARS-CoV-2**
- Further monitoring of patients with acute infection (confirmed by positive PCR): Antibody detection using the **Anti-SARS-CoV-2 ELISA (IgA)** and **Anti-SARS-CoV-2 ELISA (IgM)**
- Detection of a past contact with the pathogen (from 2 to 4 weeks after infection): Antibody detection using the **Anti-SARS-CoV-2 ELISA (IgG)** or the **Anti-SARS-CoV-2 NCP ELISA (IgG)**



Areas of application of EUROIMMUN SARS-CoV-2 tests

	EURORealTime SARS-CoV-2	Anti-SARS-CoV-2 ELISA (IgA)	Anti-SARS-CoV-2 NCP ELISA (IgM)	Anti-SARS-CoV-2 ELISA (IgG)	Anti-SARS-CoV-2 NCP ELISA (IgG)
Detection of acute infection	✓	✗	✗	✗	✗
Screening for detection of acute infections	✓	✗	✗	✗	✗
Detection of pathogen contact (up to day 10)	✓	✗	✗/✓	✗	✗(✓)
Detection of pathogen contact (from week 2 to 4)	✗	✗	✗	✓	✓
Further monitoring after acute infection (confirmed by positive PCR result)	✓	✓	✓	✓	✓
Detection of past infections	✗	✗	✗	✓	✓

Interpretation of SARS-CoV-2 test results

	EURORealTime SARS-CoV-2	Anti-SARS-CoV-2 IgM	Anti-SARS-CoV-2 IgA	Anti-SARS-CoV-2 IgG
Early phase of acute infection (up to day 10)	+	+/-	-	- (+)
Late phase of acute infection (from day 10)	- (+)	+/-	+ (-)	+ (-)
Past infection	-	-	+/-	+
No statement possible	-	+	+	-

Characteristics of EUROIMMUN SARS-CoV-2 tests

- **EURORealTime SARS-CoV-2:** High sensitivity and reliability due to simultaneous detection of two target sequences of SARS-CoV-2; only one reaction per sample
- **Anti-SARS-CoV-2 ELISA (IgG):** High specificity of 99.6% due to the use of the spike protein domain S1 incl. the immunologically relevant receptor binding domain – the main target antigen for virus-neutralising antibodies
- **Anti-SARS-CoV-2 NCP ELISA (IgM or IgG):** Most immunodominant antigen within the coronavirus family; especially high specificity of the ELISAs of 98.6% (IgM) and 99.8% (IgG), due to the use of a modified nucleocapsid protein (NCP) containing exclusively diagnostically relevant epitopes
- **Anti-SARS-CoV-2 ELISA (IgA):** Use of the S1 domain of the spike protein as the antigen; for supportive analysis of follow-up samples after infection confirmed by PCR; indicates a beginning immune reaction