

Department I for Internal Medicine – COVID-19 Management Path (June 2023)

WHO 0	WHO 1	WHO 2	WHO 3	WHO 4	WHO 5	WHO 6	WHO 7	WHO 8	WHO 9
Uninfected	Ambulatory mild disease			Hospitalized, moderate disease		Hospitalized, severe disease			
	Asymptomatic; viral RNA detected	Symptomatic, independent	Symptomatic, assistance needed	No oxygen therapy	Oxygen by mask or nasal prong (due to COVID-Pneumonia)	Oxygen by NIV or high flow	Intubated, mechanical ventilation (pO2/FiO2 ≥ 150)	Mechanical ventilation (pO2/FiO2 < 150) or vasopressors	Mechanical ventilation (pO2/FiO2 < 150) and vasopressors, dialysis or ECMO

Active immunisation (according to STIKO recommendations) Consider passive immunisation in case of humoral immunodeficiency + vaccination failure: Tixagevimab/Cilgavimab 300/300 mg i.m. (dose is off-label, single injection, every 6 months) see STIKO Epid Bull 08/2023 Consider study inclusion for monoclonal antibodies with sustained activity (see below)	Consider antiviral treatment in pt. with risk factors for progression* Especially in case of immunodeficiency ± vaccination failure, higher age ≥ 65 and unvaccinated pt. Within 5d (7d for RDV) of symptom onset/pos. PCR or point of care test		Dexamethasone 1 x 6 mg/d po/iv up to d10	
	Options Nirmatrelvir/ritonavir 2 x 300/100 mg (= 2 x 3 tabl.) for 5 days - Check for CYP3A interactions (www.covid19-druginteractions.org/checker) Remdesivir 200 mg i.v. d1, 100 mg iv d2-3 (3 days) - KI: GFR < 30 ml/ml; ALT > 5x ULN Neutralizing monoclonal antibodies (single administration) Depending on and susceptibility of local availability and circulating variants*		Consider addition of 2nd immuno-modulator (especially in case of progression):	
	O R	Baricitinib 1 x 4 mg p.o. up to 14 days - Off-label use (EMA authorization application withdrawn!) - KI: active tuberculosis; Cautious use in known or suspected latent tuberculosis or other chronic infection	No baricitinib	
		Tocilizumab 1 x 8 mg/kg i.v. (max. 800 mg) as single infusion - Patients with rapidly progressing respiratory disease and signs of hyperinflammatory syndrome (CRP > 75 mg/L) - Non-ICU: Rapidly progressing O₂ demand, e.g. progression to High-Flow O₂ - ICU: Within 24h of respiratory support initiation - KI: concomitant infection other than SARS-CoV-2		
		Consider remdesivir 200 mg iv d1, 100mg d2-d5 (up to 10d) - Early in the course of infection - KI: GFR < 30 ml/ml; ALT > 5x ULN	No remdesivir	
		Consider (off-label) antiviral treatment in patients with immunodeficiency (see antiviral options on the left). Please contact Med1 - Infectious Diseases for evaluation.		

Standard of care		To be considered		VTE prophylaxis	
clinical trials		clinical trials		clinical trials	
BOOSTAVAC (BNT162b2) Start: 23.0.2023		INSIGHT018 / STRIVE platform trial Appendix E1 S-217622 (Entrelisvir)+SoC vs. placebo+SoC (multiple investigational agents); Start ~ 07/2023			
SUPERNOVA (AZD5156) Start ~07/2023					
EU COVAT-PT1 (BNT162b2 / mRNA-1273) Start 11/2022					

enrolling	planned
* Currently available nMABs: - Casirivimab/Imdevimab 600/600 mg as single infusion: no sufficient efficacy against currently circulating variants (e.g. Gruell et al. 2022, Takashita et al. 2022) - Sotrovimab 500 mg i.v. as single infusion: no sufficient efficacy against currently circulating variants (e.g. Gruell et al. 2022, Takashita et al. 2022); Preliminary data indicate potential Fc-mediated effects independent of neutralisation - Tixagevimab/Imdevimab 300/300 mg i.m.: no sufficient efficacy against currently predominantly circulating variants. Mutation analyses may reveal relatively sensitive variants in individual cases. For pre-expositions prophylaxis see Epid Bull;8:3-21. DOI 10.25646/11151	
Abbr.: ECMO, extracorporeal membrane oxygenation; NIV, non-invasive ventilation; VTE, venous thromboembolism; WHO, World Health Organization.	
Ref.: S3-Leitlinie - Empfehlungen zur Therapie von Patienten mit COVID-19 (Version September 2022); Dtsch Arztebl Int 2022; 119: 342-9; doi: 10.3238/arztebl.m2022.0203; COVID-19-Therapieempfehlungen: Interaktive Orientierungshilfe für Ärztinnen und Ärzte. Deutsche Gesellschaft für Internistische Intensivmedizin und Notfallmedizin e.V. (DGIN). Available at: www.dgin.de/covriin/index.html#/. Gruell et al. Cell Host Microbe. 2022 Jul 7. doi: 10.1016/j.chom.2022.07.002; Montgomery et al. Lancet Respir Med. 2022 Jun. doi: 10.1016/S2213-2600(22)00180-1. Takashita et al. N Engl J Med. 2022 Jul 20. doi: 10.1056/NEJMc2207519. Mikolajewska A et al. Epid Bull;8:3-21. DOI 10.25646/11151	