PERSPECTIVE
INFECTIOUS DISEASE

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Clinical phenotypes of SARS-CoV-2: implications for clinicians and researchers

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SARS-CoV-2 infections present different specific individual phenotypes. Applying a personalised approach would benefit in optimisation of therapies and outcome improvement. #COVID19 https://bit.ly/3akTSuf

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ABSTRACT Patients with COVID-19 present a broad spectrum of clinical presentation. Whereas hypoxaemia is the marker of severity, different strategies of management should be customised to five specific individual phenotypes. Many intubated patients present with phenotype 4, characterised by pulmonary hypoxic vasoconstriction, being associated with severe hypoxaemia with "normal" (>40 mL·cmH_2O^{-1}) lung compliance and likely representing pulmonary microvascular thrombosis. Phenotype 5 is often associated with high plasma procalcitonin and has low pulmonary compliance, Which is a result of co-infection or acute lung injury after noninvasive ventilation. Identifying these clinical phenotypes and applying a personalised approach would benefit the optimisation of therapies and improve outcomes.