

DIAGNOSTIC TOOLS FOR THE MANAGEMENT OF COVID-19 PATIENTS

COVID-19 CLINICAL MANIFESTATIONS

SEVERITY	PROPORTION OF CASES	CLINICAL MANIFESTATIONS
MILD	80%	Mild and often non-specific symptoms such as malaise, fever and cough in addition to possible specific symptoms such as loss of smell and taste
MODERATE	15%	Viral pneumonia requiring hospitalization (dyspnea and/or comorbidities)
SEVERE/CRITICAL	5%	Systemic hyperinflammation syndrome associated with severe respiratory distress and potential other organ failure requiring intensive care

PATIENT MANAGEMENT PRIORITIES	LABORATORY TESTS	BIOMÉRIEUX SOLUTIONS
PRIMARY DIAGNOSIS	<ul style="list-style-type: none"> • RT-PCR for SARS-COV-2 for the detection of Viral RNA • SARS-COV-2 IgG and IgM (indirect detection)* • Imaging 	<ul style="list-style-type: none"> • ARGENE® SARS-COV-2 R-GENE® test • NUCLISENS® Extraction reagents • BIOFIRE® RP2.1/RP2.1plus Panel • VIDAS® SARS COV-2 IgG • VIDAS® SARS COV-2 IgM
SEVERITY ASSESSMENT	<ul style="list-style-type: none"> • Biomarkers of inflammation (CRP, PCT, Ferritin, IL6) • Complete blood count (CBC) • Liver function (Serum aminotransferases, lactate dehydrogenase, bilirubin) • Respiratory function (PaO2/FiO2) • Coagulation biomarkers (D-Dimer, Prothrombin Time) • Cardiac biomarkers (HS Troponin I, NT-pro-BNP) • Kidney function (Serum Creatinine) 	<ul style="list-style-type: none"> • VIDAS® B•R•A•H•M•S PCT™ • VIDAS® Ferritin • VIDAS® D-Dimer Exclusion II • VIDAS® High Sensitive Troponin I • VIDAS® NT-proBNP2 • Astute NEPHROCHECK
IDENTIFY POTENTIAL CO-INFECTIONS AND SECONDARY INFECTIONS	<ul style="list-style-type: none"> • Multiplex PCR for detection of respiratory tract infections (virus, bacteria, fungi) • Culture including Blood Culture, pathogens identification • Automated gram staining • Multiplex PCR for identification of pathogens on positive Blood Culture • Serial testing of bacterial infection biomarkers 	<ul style="list-style-type: none"> • BIOFIRE® RP2.1/RP 2.1 plus Panel • BIOFIRE® PN/PN plus Panel • NUCLISENS® Extraction reagents • ARGENE® Respiratory R-GENE® tests • BACT/ALERT® Blood Culture • PREVI® COLOR GRAM automated stainer • CHROMID® and conventional culture plates (Blood Agar, McConkey Agar & Chocolate agar) • BIOFIRE® BCID/BCID2 Panel • VITEK®2 Identification cards • VITEK® MS • VIDAS® B•R•A•H•M•S PCT™ (1)
TREATMENT SELECTION AND MONITORING	<ul style="list-style-type: none"> • Antimicrobial susceptibility testing and MIC determination • Serial testing of bacterial infection biomarkers • Serial testing of organ functions (respiratory, cardiac, liver, kidney) 	<ul style="list-style-type: none"> • VITEK® 2 Susceptibility cards • ETEST® for critical cases • VIDAS® B•R•A•H•M•S PCT™
OUTCOME ASSESSMENT/ DISCHARGE	<ul style="list-style-type: none"> • Monitoring of SARS-COV-2 viral clearance • Assess immune response 	<ul style="list-style-type: none"> • NUCLISENS® Extraction reagents • ARGENE® SARS-COV-2 R-GENE® test • VIDAS® SARS-COV-2 IgG and IgM

Availability of these products are subject to local regulatory approvals, allocation priorities, supply chain policies, etc. Please check with the appropriate department.

* Not to be used alone for diagnostic purposes.

(1) Lippi G. *et al.*, 2020.