

in asymptomatic patients. These abnormalities progress from the initial focal unilateral to diffuse bilateral ground-glass opacities and will further progress to or coexist with lung consolidation changes within 1 to 3 weeks([159](#)). The role played by radiologists in the current scenario is very important. Radiologists can help in the early diagnosis of lung abnormalities associated with COVID-19 pneumonia. They can also help in the evaluation of disease severity, identifying its progression to acute respiratory distress syndrome and the presence of secondary bacterial infections([160](#)). Even though chest CT is considered an essential diagnostic tool for COVID-19, the extensive use of CT for screening purposes in the suspected individuals might be associated with a disproportionate risk-benefit ratio due to increased radiation exposure as well as increased risk of cross-infection. Hence, the use of CT for early diagnosis of SARS-CoV-2 infection in high-risk groups should be done with great caution ([292](#)).

More recently, other advanced diagnostics have been designed and developed for the detection of SARS-CoV-2 ([345](#), [347](#), [350-352](#)). A reverse transcriptional loop-mediated isothermal amplification (RT-LAMP), namely, dLACO, has been developed for rapid and calorimetric detection of this