



# CUSTOMER INFORMATION

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## DiaSys Parameters in COVID-19 Monitoring

### Role of D-Dimer in COVID-19

During plasma coagulation, soluble fibrin is generated. D-Dimers are released as characteristic degeneration products of cross-linked fibrin. Low D-Dimer concentrations can be used to exclude venous thrombotic events (VTE) such as deep vein thrombosis of the leg (DVT) and pulmonary embolism (PE). On the other hand, increased D-Dimer levels indicate the activation of coagulation and following fibrinolytic processes demanding for further diagnostic and therapeutic approaches.

The annual incidence of VTE is approximately one in 1000 adults. In addition to inherited risk factors for venous thromboembolism, numerous acquired risk factors for venous thromboembolism exist, including infections and inflammatory diseases. Even before the outbreak of the coronavirus pandemic, increased D-Dimer levels were reported in influenza like infections due to the activation of coagulation by respiratory viruses.(1)

The recently published IFFC Guidelines on COVID-19 strongly suggest D-Dimer testing in patients with COVID-19, (2) since studies on SARS-CoV-2 revealed a high correlation between severity and outcome of COVID-19 in patients with increased D-Dimer levels.(3–6)

Despite from activated coagulation in COVID-19, even disseminated intravascular coagulation (DIC) can develop in severe cases.(3,4) Marietta *et al.* related increased D-Dimer levels as a predictor of developing acute respiratory distress in COVID-19, mentioning the probability of micro pulmonary embolism especially in severe forms of COVID-19. (7)

Recently performed autopsies on 12 patients with COVID-19 showed deep vein thrombosis in seven patients whereof four had pulmonary embolism (PE) as main pathological findings.(8) In two of these cases PE was directly stated in the clinical cause of death.(8)

For further information on D-Dimer, please visit our microsite <https://www.diasys-ddimer.com/> or refer to [D-Dimer FS](#) for direct information on Diasys reagent D-Dimer FS. For further details on DiaSys assays, please have a look at our website: <https://www.diasys-diagnostics.com/>.

With continuous information about "Laboratory Diagnostics in COVID-19", we want to support you in marketing DiaSys products in times of pandemic. For all information we published on this topic, please refer to our newly created BLOG: <https://www.diasys-diagnostics.com/blog/>.

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