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DiaSys Parameters in COVID-19 Monitoring

CRP – Part of COVID-19 Management

C-reactive protein (CRP), a nonspecific inflammatory marker, serves as early inflammation or infection marker. Although CRP normally does not increase considerably in mild viral respiratory infections, a significant increase in CRP values was observed in severely ill patients with COVID-19. This is consistent with observations made during SARS (Severe Acute Respiratory Syndrome) epidemics in 2003 in patients with avian influenza H1N1 and H7N9. [1] One possible reason is the overproduction of inflammatory cytokines, which are involved in the defense of the pathogen. Cytokines may cause more severe symptoms and damage to the alveoli, and stimulate production of CRP. [2-4] For this reason, CRP tests are useful in the initial examination of coronavirus patients.

Studies in COVID-19 patients have shown that CRP levels directly correlate with disease severity and progression. A recently published study [5] has shown that low CRP levels are common in patients who do not require oxygen (mean 11 mg/L, interquartile range 1-20 mg/L) compared to patients who became hypoxemic (mean 66 mg/L, interquartile range 48-98 mg/L). Another study [6] focused on predictors for a fatal outcome in COVID-19 cases. In this study, it has been shown that elevated inflammatory markers in blood are good predictors in COVID-19 patients. A comparison of CRP levels with mortality risk has shown that surviving patients had a mean CRP of ~40 mg/L, whereas patients who died had a mean of 125 mg/L.

For information on DiaSys CRP FS and CRP U-hs, please refer to:

<u>CRP FS</u> <u>CRP U-hs</u>

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: <u>https://www.diasys-diagnostics.com/blog/</u>. For further details on DiaSys assays please have a look at our website: <u>https://www.diasys-diagnostics.com/</u>.

Irene Delseith-Hermsdorf Head of Global Marketing





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