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DiaSys Parameters in COVID-19 Monitoring

LDH – Part of COVID-19 Management

Lactate dehydrogenase (LDH) catalyzes the reversible conversion of L-lactate and pyruvate and is present in the cytoplasm of all human tissues with higher concentrations in liver, heart and skeletal muscle. Increased LDH activities are found in a variety of pathological conditions such as myocardial infarction, liver diseases, blood diseases, and cancer or muscle diseases. [1]

Increased serum LDH values are one of the abnormal diagnostic parameters in COVID-19 patients with a severe or fatal course of disease [2 - 5]. Potential clinical and biological significance of elevated LDH are pulmonary injury, as well as widespread organ damage [6].

By empirically using cut-off levels for LDH and ASAT, Ferrari et al. was able to identify COVID-19 positivity/negativity in almost 70% of patients. With the right panel of analytes and appropriate cut-offs, it could be possible to identify COVID-19 patients with high accuracy in future. A simple blood test could be an inexpensive, fast and easy alternative to rRT-PCR and especially beneficial for developing countries and countries suffering from shortage of rRT-PCR reagents. [7]

In addition, Yuan et al. found that a decrease in LDH and creatine kinase (CK) was correlated with viral mRNA elimination, especially in virus mRNA positive patients. So far, no antiviral therapy has been proved to be effective for treatment of COVID-19. By predicting viral clearance and therefore a favorable response to treatment, monitoring of serum LDH and CK levels could be an easy method to validate potential therapeutic measures. [8]

For information on DiaSys LDH assays, please refer to:

[LDH FS IFCC](#)
[LDH FS DGKC](#)

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

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