



# CUSTOMER INFORMATION

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## DiaSys Parameters in COVID-19 Monitoring

### Ferritin – Part of COVID-19 Management

Ferritin is an iron storage protein that represents the primary source of reserve iron in each cell. Measurement of serum ferritin concentration gives a quantitative determination of the mobilizable storage iron. However, increased serum ferritin concentrations can also be suggestive of conditions not related to iron storage, such as severe inflammation. Therefore, the IFCC recommends monitoring of serum ferritin levels for COVID-19 management. [1,2]

A retrospective, multicenter cohort study of 191 COVID-19 patients showed that among other parameters, elevated serum ferritin levels was associated with death. [3]

Another study of 150 COVID-19 cases confirmed elevated inflammatory indicators, such as ferritin, as a predictor of fatality. In non-survivors mean serum ferritin levels was 1297.6 ng/mL, while it was only 614.0 ng/mL in survivors ( $p < 0.001$ ). The study concluded that the mortality was likely due to virally driven hyperinflammation. [4]

Mehta et al. advises to screen all patients with severe COVID-19 for hyperinflammation, by monitoring laboratory trends, including serum ferritin concentrations. [5]

For information on DiaSys Ferritin, please refer to:

[Ferritin FS](#)

[Ferritin SR](#) (optimized for respons<sup>®</sup>)

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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#### References

1. Worwood M. The laboratory assessment of iron status – an update. Clin Chim Acta 1997;259:3-23.
2. Kaltwasser JP, Werner E. Diagnosis and clinical evaluation of iron overload. Baillieres Clin Haematol 1989;2:363-89.
3. Zhou F, et al. Clinical course and risk factors for mortality of adult inpatients with COVID-19 in Wuhan, China: a retrospective cohort study. The Lancet, 2020.
4. Ruan Q, et al. Clinical predictors of mortality due to COVID-19 based on an analysis of data of 150 patients from Wuhan, China. Intensive care medicine, 2020, S. 1-3.
5. Mehta P, et al. COVID-19: consider cytokine storm syndromes and immunosuppression. The Lancet, 2020.