











The Role of D-Dimers in the Initial Evaluation of COVID-19 [Response To Letter]

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Dear editor

I would like to begin by thanking Dr. Sachin Patel for his interest in our study on the role of D-dimers in the initial evaluation of the COVID-19 patient. We also thank the publisher for the opportunity to answer the questions in Dr. Sachin Patel’s letter.^{1,2}

Patient inclusion in moderate or severe COVID-19 forms was performed according to the guidelines of the World Health Organization.³

Regarding the requested information on the procalcitonin levels of the patients included in our study, we highlight the following aspects:

- we found negative procalcitonin values at admission in 596 patients in the favorable evolution group (73.85%) and in 28 patients in the unfavorable evolution group (71.42%), the difference being statistically insignificant ($p = 0.9342$).

- we found procalcitonin values between 0 and 0.49 ng/mL at admission in 170 patients in the group with favorable evolution (21.06%) and in 11 patients in the group with unfavorable evolution (26.19%), the difference being statistically insignificant ($p = 0.9818$).

- procalcitonin values between 0.5–1.99 ng/mL at admission were present in 34 patients in the group with favorable evolution (4.21%) and in 1 patient in the group with unfavorable evolution (2.38%), the difference being statistically significant ($p = 0.0142$).

- procalcitonin values between 2–10 ng/mL of at admission were present in 7 patients in the group with favorable evolution (0.86%) and in no patient in the group with unfavorable evolution (0%).

Because we found a statistical significance only for procalcitonin values between 0.5–1.99 ng/mL, we consider that this parameter does not have high great importance in the patient’s evolution, so it has no major relevance in the initial decision of treatment or hospitalization of the COVID-19 patients. We consider that this parameter has a greater importance in monitoring the antibiotic treatment during the hospitalization of the COVID-19 patients.

Regarding the imaging screening for deep thrombosis in patients with much higher values of D-dimers, just like in the case of rare malformative diseases,⁴ we consider it to be extremely important and useful. We support the necessity of this screening all the more so as many clinicians have stated that deep thrombosis diagnosed, including in the mesenteric and renal arteries, may be the tip of the iceberg of the deep thrombosis of COVID-19 patients.

The high correlation between the D-dimers values, liver damage and the prognosis of COVID-19 patients supports the need for complete and periodic exploration of the liver functions.⁵

COVID-19 multi-organic involvement (including skin changes)^{6,7} justifies a complex and complete initial assessment, which may strongly influence the management and the prognosis of these patients.

Acknowledgments

The authors wish to acknowledge that the present study was supported by the ‘Dunarea de Jos’ University of Galati, Romania, through the research center - Multidisciplinary Integrated Center of Dermatological Interface Research MIC-DIR.

Disclosure

The authors report no conflicts of interest in this communication.

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<https://doi.org/10.2147/TCRM.S373236>