



Reply to the letter by Gaetano Loscocco, Secondary hemophagocytic lymphohistiocytosis, HScore and COVID-19

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I acknowledge the kind remarks by Dr. Loscocco regarding my interpretation [1] of a recent paper [2] in which the use of both immunosuppressive therapy and the JAK2 inhibitor for hypercytokinemia due to severe COVID-19 has been proposed. I should have stated that “a recent report by Mehta et al. [2] in which all patients with severe COVID-19 should be assessed for secondary hemophagocytic lymphohistiocytosis (sHLH) in the bone marrow and hyperferritinemia using the HScore”, because it is now evident that severe COVID-19 can cause sHLH [3, 4]. However, it should be considered that as implied by Dr. Loscocco and in recent reports [3, 5], patients with severe COVID-19 may not be in a good enough condition to undertake a bone marrow examination due to their severe condition, thus resulting in difficulty demonstrating hemophagocytosis. Regardless of whether hemophagocytosis is demonstrated or whether the HScore should be used, COVID-19 infection can induce hypercytokinemia associated with marked macrophage activation [6, 7], thus leading to both organ damage and coagulopathy. I would like to reiterate the potential efficacy of low-dose etoposide monotherapy for patients with severe COVID-19 by compensating for the immunoregulator aberration and macrophage activation.

Compliance with ethical standards

Conflict of interest The author reports no potential conflict of interest.

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