

MATERIAL SUPPLEMENTARY

Appendix 1

Material and methods

According to WHO classification, diagnosis of systemic mastocytosis (SM) can be made if the major criterion (multifocal dense infiltrates of mast cells (MCs) in bone marrow (BM) and/or other extracutaneous organ) and at least one minor criterion (>25% of atypical MCs on BM smears or spindle-shaped MC in visceral organs infiltrates; cKIT D816V mutation; CD2 and/or CD25 positivity on MCs; baseline serum tryptase level >20 ng/mL) are present, or 3 minor criteria are detected¹.

EPICOVIDEHA is an online platform developed to gather epidemiological data of patients with hematological malignancies and SARS-CoV-2 infection from 132 hematological wards across 32 countries all over the world². Since the first report of 6 patients with mastocytosis among almost four thousand patients included³, 20 patients affected by mastocytosis were recruited and specific information were required. We retrospectively investigated the characteristics of these patients, to assess the overall survival (OS), identify factors associated with severity of symptoms of infection and compare the OS according to concomitant treatment for SM. The diagnosis of coronavirus disease 2019 (COVID-19) was made according to the international recommendations of the World Health Organization (WHO)⁴. At the time of the survey design, no well-defined criteria were yet available to establish a degree of infection severity. Therefore, the following definitions have been included: asymptomatic (no clinical signs or symptoms); mild (non-pneumonia and mild pneumonia); severe (dyspnea, respiratory frequency ≥ 30 breaths per min, SpO₂ $\leq 93\%$, PaO₂/FiO₂ < 300 , or lung infiltrates $> 50\%$), and critical (patients admitted in intensive care for respiratory failure, septic shock, or multiple organ dysfunction or failure). However, our grading definition was very similar to the one suggested by the China Centers for Disease Control and Prevention definitions⁵.

References

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