**LOX-1+ immature neutrophils predict severe COVID-19 patients at risk of thrombotic complications**

Supplementary results

**Demographics and baseline characteristics of ICU and non-ICU COVID-19 patients from the first wave**

The first pilot study included 38 COVID-19 patients admitted to either ICU departments or non-ICU departments. Clinical and biological characteristics of the 38 patients are shown in Table 1. The median age of the patients was 57 years (range 25–79 years), and 65.8% were male. Analysis was performed on average 8 days after the onset of symptoms (median was 8 days for the ICU patients and 13 days for the non-ICU patients). The most common past medical comorbidities were hypertension (50%), type 2 diabetes (34.2%), and obesity (36.8%). The treatment regimen at baseline was mostly antihypertensive therapy (ACE inhibitors, 26.3%; angiotensin II receptor blockers, 15.8%). Severity at baseline was assessed by the SAPS II score for all patients (median 33; range 25–78) and an additional SOFA score for ICU patients (median 8.5; range 2–17). Twenty-eight patients were assessed with CT chest imaging, which showed ground-glass opacities and/or consolidation of >50% of the lung field in 50% of all patients, and up to 81.3% of the ICU patients. Laboratory findings showed a decreased median lymphocyte count at 0.94 × 109/L, an increased median neutrophil count at 7.87 × 109/L, an increased median lactate dehydrogenase at 475.5 U/L, and an increased median D-dimer level at 2450 ng/mL. During hospitalization, eight patients received hydroxychloroquine (42.1%), while all patients received antibiotics. Oxygen therapy was administered to 100% of the patients; 87.5% of ICU patients received invasive mechanical ventilation, while 54.2% received extracorporeal membrane oxygenation. Acute respiratory distress syndrome occurred in 55.3% of all patients (87.5% of ICU patients); acute kidney injury, in 31.2% of all patients. Among the 38 patients, 2 were diagnosed with pulmonary embolism (5.3%) and 10 (all ICU) (26.3%) were diagnosed with venous thromboembolism. As of June 8, 2020, 76.3% of all patients had been discharged, 10.5% remained in hospital, and 13.2% had died, the latter all being ICU patients.

**Demographics and baseline characteristics of ICU and non-ICU COVID-19 patients from the second wave**

From mid-September 2020, our study included 118 COVID-19 patients admitted to either ICU departments or non-ICU departments. Clinical and biological characteristics of the 118 patients are shown in Table 2. Severity was defined according to WHO classification (<https://www.who.int/publications/i/item/clinical-management-of-covid-19>). Baseline clinical characteristics were similar to those of the first wave: median age was 61 years (range 21–78 years), with 63.6% being male, and there was a high prevalence of hypertension (52.5%), obesity (31.4%), and type 2 diabetes (30.5%). Analysis was performed on average 7 days after the onset of symptoms (7 days for the ICU patients; 5 days for the non-ICU patients). It is of note that these patients benefited from the last recommendations regarding standard of care, including corticosteroids and thromboprophylaxis, leading to an otherwise shorter duration in hospital, mostly among non-ICU patients.