In the visual comparison it can be observed that in the COVID-19 patient the small blood vessels (depicted in red) are less prevalent compared to the healthy subject due to vasoconstriction.
In the visual comparison it can be observed that in the PAH patient the large blood vessels (depicted in blue) are dilated compared to the healthy subject due to downstream vasoconstriction.
Distribution of blood vessel volume over different size vessels is quite constant in a healthy population. The area above the healthy line represents vasodilation, the area below vasoconstriction.
Virtually no overlap between small blood vessel volume in COVID-19 compared to a healthy cohort, signs of (severe) vasoconstriction.

For COVID-19 patients, the transition point from vasoconstriction to vasodilation is around 5mm².
Different small blood vessel characteristics observed in full blown ARDS (not COVID-19) compared to COVID-19, where COVID-19 seems to be predominantly driven by vasoconstriction, ARDS shows more vasodilation of the smaller vessels.
Significant reduction observed in small blood vessels (BV5) of COVID-19 and PAH patients, expressed as % of total blood vessel volume visible in HRCT scan.
Blood vessels measured from HRCT scans with cross sectional area between 5 and 10 mm² (BV5_10)

Significant increase observed in medium blood vessels (BV5_10) of COVID-19, but not PAH patients, expressed as % of total blood vessel volume visible in HRCT scan.
Blood vessels measured from HRCT scans with cross sectional area > 10 mm² (BV10)

Significant increase observed in large blood vessels (BV10) of COVID-19 and PAH patients, expressed as % of total blood vessel volume visible in HRCT scan.