Supplementary 2. Details of identified interactions between anti-COVID-19 agents and other co-administered medications by the Liverpool COVID-19 interactions online software in the study population

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| Drug- drug interaction | Number of cases | Quality of Evidence | Severity | Mechanism(s) | Management |
| Dexamethasone and Tacrolimus | 58 | Very Low | Potential | Tacrolimus is metabolized by CYP3A4, and Dexamethasone can enhance Tacrolimus metabolism by inducing CYP3A4, potentially leading to decreased Tacrolimus concentrations. | Monitor Tacrolimus concentration during COVID-19 treatment and 2 weeks after the end of treatment. |
| Dexamethasone and Cyclosporine | 13 | Very Low | Potential | Cyclosporine is metabolized by CYP3A4, and Dexamethasone can enhance Cyclosporine metabolism by inducing CYP3A4, potentially leading to decreased Cyclosporine concentrations. | Monitor Cyclosporine concentration during COVID-19 treatment and 2 weeks after the end of treatment. |
| Tocilizumab and Tacrolimus | 3 | Very Low | Potential weak | Tacrolimus is metabolized by CYP3A4, and patients with COVID-19 may have high levels of IL-6, which can inhibit CYP3A4 expression/activity. Tocilizumab can normalize the activity of CYP3A4 by inhibiting the increase of IL-6, potentially leading to decreased Tacrolimus concentrations. | Monitor Tacrolimus concentrations and increase its dose to maintain therapeutic effect, if required. |
| Tocilizumab and Cyclosporine | 2 | Poor | Potential weak | Cyclosporine is metabolized by CYP3A4, and patients with COVID-19 may have high levels of IL-6, which can inhibit CYP3A4 expression/activity. Tocilizumab can normalize the activity of CYP3A4 by inhibiting the increase of IL-6, potentially leading to decreased Cyclosporine concentrations. | Monitor Cyclosporine concentrations and increase its dose to maintain therapeutic effect, if required. |

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| Drug- drug interaction | Number of cases | Quality of Evidence | Severity | Mechanism(s) | Management |
| Hydoxychloroquine and Tacrolimus | 1 | Very Low | Potential | Hydroxychloroquine is an inhibitor of P-glycoprotein and can increase the concentration of Tacrolimus.Both Hydroxychloroquine and Tacrolimus have QT prolongation toxicity, potentially leading to *torsades de pointes* arrhythmia.  | - Monitor tacrolimus concentrations and decrease its dose to prevent toxicity, if required.- Check electrocardiogram regularly.  |
| Dexamethasone and Sirolimus | 1 | Very Low | Potential | Sirolimus is metabolized by CYP3A4, and Dexamethasone can enhance Sirolimus metabolism by inducing CYP3A4, potentially leading to decreased Sirolimus concentrations. | Monitor Sirolimus concentration during COVID-19 treatment and 2 weeks after the end of treatment. |
| Dexamethasone and Everolimus | 1 | Very Low | Potential weak | Everolimus is metabolized by CYP3A4, and Dexamethasone can enhance Sirolimus metabolism by inducing CYP3A4, potentially leading to decreased Everolimus concentrations. | Monitor Everolimus concentration during COVID-19treatment and 2 weeks after treatment |
| Hydroxychloroquine and Dexamethasone | 1 | Very Low | Potential | Although it is unlikely that Hydroxychloroquine and Dexamethasone exposure can be affected significantly, there is an increased potential risk of myopathies.  | Monitor for signs/symptoms of myopathy during treatment. |

Supplementary 2.