Supplemental Table 2. FDA-approved immunomodulatory drugs that may serve useful in the treatment of severe COVID-19 infection.

| Generic name       | Brand name     | Mechanism of action                          | Labeled Indication(s)                                                                 |
|--------------------|----------------|-----------------------------------------------|--------------------------------------------------------------------------------------|
| Basiliximab        | Simulect       | IL-2 inhibitor                                | Organ transplantation.                                                                |
| Daclizumab         | Zinbryta       | IL-2 inhibitor                                | Multiple sclerosis, relapsing.                                                        |
| Ganodermycin       | N/A            | CXCL10 inhibitor                               | N/A                                                                                  |
| Atorvastatin       | Lipitor        | HMG-CoA reductase inhibitor and CXCL10 inhibitor | High cholesterol and to lower the risk of stroke, heart attack, or other heart complications in people with type 2 diabetes, coronary heart disease, or other risk factors. |
| Adalimumab         | Humira         | TNF-α inhibitor                               | Rheumatoid arthritis, psoriatic arthritis, ankylosing spondylitis, Crohn's disease, ulcerative colitis, psoriasis, hidradenitis suppurativa, uveitis, and juvenile idiopathic arthritis. |
| Certolizumab       | Cimzia         | TNF-α inhibitor                               | Crohn's disease, rheumatoid arthritis, psoriatic arthritis, ankylosing spondylitis, and plaque psoriasis. |
| Etanercept         | Enbrel         | TNF-α inhibitor                               | Rheumatoid arthritis, plaque psoriasis, and psoriatic arthritis.                     |
| Golimumab          | Simponi        | TNF-α inhibitor                               | Rheumatoid arthritis and ankylosing spondylitis.                                     |
| Infliximab         | Xeljanz        | TNF-α inhibitor                               | Rheumatoid arthritis, psoriatic arthritis, ankylosing spondylitis, plaque psoriasis, Crohn's disease and ulcerative colitis. |
| Rilonacept         | Arcalyst       | IL-1β inhibitor                               | Familial Cold Auto-inflammatory Syndrome (FCAS) and Muckle-Wells Syndrome (MWS).     |
| Canakinumab        | Ilaris         | IL-1β inhibitor                               | Familial Cold Auto-inflammatory Syndrome (FCAS), Muckle-Wells Syndrome (MWS), Tumor Necrosis Factor Receptor Associated Periodic Syndrome (TRAPS), Hyperimmunoglobulin D Syndrome (HIDS), and Familial Mediterranean Fever (FMF). |
| Anakinra           | Kineret        | IL-1R inhibitor                               | Rheumatoid arthritis and Neonatal-Onset Multisystem Inflammatory Disease (NOMID).    |
| Tocilizumab        | Actermra       | IL-6 inhibitor                                | Rheumatoid arthritis and giant cell arteritis.                                       |
| Siltuximab         | Sylvant        | IL-6 inhibitor                                | Multicentric Castleman's Disease (MCD).                                             |
| Ruxolitinib        | Jakafi and Jakavi | JAK1/JAK2 inhibitor                  | Myelofibrosis, polycythemia vera, and graft-versus-host disease.                     |
| Baricitinib        | Olumiant       | JAK1/JAK2 inhibitor                           | Rheumatoid arthritis.                                                                |

FDA-approved immunomodulatory drugs that may warrant further investigation include rilonacept, canakinumab, anakinra, tocilizumab, siltuximab, golimumab, infliximab, ruxolitinib, and baricitinib. Rilonacept and canakinumab are human monoclonal antibodies targeted at neutralizing interleukin-1 beta (IL-1β) [Drugs.com, 2020 (Rilonacept); Drugs.com, 2020 (Canakinumab)]. Anakinra interacts with the IL-1 receptor, blocking IL-1α and IL-1β from binding [Drugs.com, 2020 (Anakinra)]. IL-1 pathways are implicated in multiple inflammatory processes, known for triggering fever production and implicated in cytokine release syndrome in humans [Gabay et al., 2010; Dinarello, 2015; Bird, 2018]. Targeting IL-6 using drugs such as tocilizumab or siltuximab may also help to control inflammation and reduce fever in patients with COVID-19. Interleukin-6 (IL-6) is an important mediator of fever by initiating the synthesis of hypothalamic prostaglandin E2 (PGE2), thereby changing the body's temperature set point [Drugs.com, 2020 (Tocilizumab); Drugs.com, 2020 (Siltuximab)]. Lastly, Janus kinase 1 and 2 (JAK1/2) inhibition with drugs such as ruxolitinib and baricitinib may serve as a useful approach in controlling inflammation in patients with severe COVID-19 infection [Drugs.com, 2020 (Ruxolitinib); Drugs.com, 2020 (Baricitinib)]. JAK1/2 are critical effectors of pro-inflammatory cytokine signaling and regulate immune function [Roskoski, 2016; Kohler et al., 2017]. JAK1/2 inhibition may be useful in controlling cytokine release in patients at risk of cytokine storm.