

Supplementary Table 3. Immunomodulatory agents in active clinical trials in sepsis

Agent	Immunologic Effects	Phase	National Clinical Trial #	Endpoints
GM-CSF	Increases myelopoiesis Activates monocytic or macrophage population-producing inflammatory cytokines and adhesion molecules Increases HLA-DR expression on antigen-presenting cells	Phase III	NCT02361528	Incidence of ICU-acquired infection Effect on monocyte HLA-DR
IFN-γ	Increases monocyte expression of inflammatory cytokines Increases HLA-DR expression on antigen-presenting cells Increases macrophage activity	Phase III	NCT01649921	LPS stimulated TNF- α , Incidence of secondary infections, Organ function
Thymosin-α1	Increases CD4+ T cell and NK cell numbers Augments T cell function Increases HLA-DR expression on antigen-presenting cells Enhances antiviral activity	Phase II/III	Starting in near future (Previous trial # NCT00711620)	Mortality Incidence of secondary infections
IL-7	Blocks T cell apoptosis Restores T cell function Increases IFN- γ which activates innate immune system Increases lymphoid trafficking to infected sites Increases T cell proliferation	Phase II	NCT02803346 NCT02797431 NCT02640807	Safety Increase in absolute lymphocyte count, Mortality Incidence of nosocomial infections
α-PD-L1	Releases checkpoint inhibition Prevents T cell exhaustion Reduces T cell apoptosis Modulates myeloid cell interactions with the endothelium Potentially alters macrophage and neutrophil antimicrobial functions	Phase Ib/IIa	NCT02576457	Safety Tolerability Pharmacokinetics Pharmacodynamics