Primary infection
• systemic infection

Reactivated infection

Reinfection
• high-grade virus replication: systemic infection, tissue invasive disease, immunosuppression
• low-grade local virus replication: graft rejection

Normal host

Cross reactive antigens
Polyclonal B cell activation

Transplant recipient

Inhibition of APC, NK cell and T cell activity

Inhibition of bone marrow myelopoiesis

Patient with autoimmune disorder

Chronic virus stimulation

Genetic predisposition to autoimmunity/inability to control CMV replication

Development of autoimmune disorder

Trigger of autoimmune phenomena (autoantibody production)

Vascular damage

Graft rejection

Immunosuppression

Amplification of inflammation

Worsening/progression of autoimmune disorder

Development of autoimmune disorder