and a P:F ratio of <100 at 72 h posttransplant. Most cases of PGD are mild and self-limiting, resolving with supportive care. However, if the PGD is severe and worsening despite maximal medical therapy, diuresis, inotropic therapy, maximal ventilation support, and paralysis of the patient, mechanical circulatory support with ECMO can become necessary. The incidence of severe PGD has been steady over the past two decades at approximately 10–15% in most programs.

Bacterial, viral, and fungal infections are leading causes of morbidity and mortality in lung transplantation. The lung is one of the few solid organs that is in continuous contact with the environment. Each breath has the potential to introduce new organisms, and the reduced lymphatic function and mucociliary clearance in the transplanted lung increase the risk of serious infection. The highest incidence of infection is early after lung transplant and coincides with the intensity of immune suppression. Early infections, occurring within the first month after transplantation, are commonly bacterial (especially gram-negative bacilli) and manifest as pneumonia, mediastinitis, urinary tract infections, catheter sepsis, and skin infections. Patients can develop pathogenic infections with organisms associated with pretransplant colonization, and perioperative antibiotic regimens are often deployed to address this. Viral infections, and CMV infections, in particular, can lead to severe recipient disease and early loss of graft and life. The majority of transplant programs employ antiviral prophylaxis in the early transplant period to avoid such complications. Invasive fungal infections peak in frequency between 10 days and 2 months after transplantation. Fungal prophylaxis regimens in the early posttransplant period vary widely. Treatment consists of inhaled amphotericin B in the setting of airway infection and/or azole therapy with more advanced or invasive disease. The institution of prophylaxis with oral trimethoprim-sulfamethoxazole (or inhalational pentamidine for sulfa-allergic patients) has effectively prevented *Pneumocystis* pneumonia. The risk of *Pneumocystis* infection is highest during the first year after transplant. However, as infections can also occur late after transplant, most centers recommend prophylactic therapy be continued for life.