One potentially life-threatening complication following solid organ transplantation and hematopoietic cell transplantation (HCT) is post-transplantation lymphoproliferative disorder (PTLD). The incidence of PTLD after HCT is relatively low (about 1%) (Al-Mansour, Nelson, & Evens, 2013). However, mortality rates in this population of patients are 70%–90% (Al-Mansour et al., 2013; Jagadeesh, Woda, Draper, & Evens, 2012; Zhong, 2012). About 50%–70% of PTLD cases are associated with Epstein-Barr virus (EBV), a common childhood virus that belongs to the family of herpes viruses and infects up to 95% of the American adult population (Jagadeesh et al., 2012; Zhong, 2012). Strategies for the prevention and treatment of PTLD remain a matter of debate; various approaches have been attempted to avoid the high morbidity and mortality associated with the diagnosis. Treatment may include manipulation of immunosuppressive therapies, surgery, radiation therapy, antiviral medications, chemotherapeutic agents, immunotherapy, or adoptive cellular therapies (Ahmad et al., 2009).

Post-Transplantation Lymphoproliferative Disorder Characteristics

EBV is associated with about 55%–65% of all PTLD cases (Al-Mansour et al., 2013). Latent EBV becomes a lifelong dormant