**Materials and Methods**

Eleven patients diagnosed with AITL at Kaohsiung Chang Gung Memorial Hospital were identified between July 1, 2019, and December 31, 2020. We collected baseline data and follow-up information, including age, gender, B symptoms, survival, alive/dead endpoint status, extranodal involvement, Ann Arbor stage, laboratory examination of lactate dehydrogenase (LDH) levels, plasma EBV DNA, Ig levels, and immunofixation results. In situ hybridization was performed to detect EBV-encoded small RNAs (EBER) using an EBER DNA probe (PB0589, Leica Biosystems, Novocastra, Newcastle-upon-Tyne, United Kingdom) on a Bond III autostainer (Leica Biosystems). A panel of antibodies was used to define FDCs (CD21 and CD23), Tfhs (PD-1, ICOS, CD10, and BCL-6), T-cells (CD2, CD3, CD5, CD4, and CD8), B-cells (CD20 and CD79a), and HRS-like cells (CD30). We stimulated PB mononuclear cells with or without a leukocyte activation cocktail (BD GolgiPlug™, Heidelberg, Germany), followed by incubation with fluorochrome-conjugated lineage and IL-21 cytokine antibodies. Gated lymphocyte populations were assessed for the presence of intracellular cytokine-producing cells.

**Clinicopathologic Features**

For the 11 patients enrolled, the male-to-female ratio was 4.5, and the median age was 68.7 years (range: 48–81.4 years). Most patients presented with high-stage disease at diagnosis (stages III–IV, 90.9%), B symptoms (72.7%) and high PIT scores (Group 4, 54.5%). PIT score was estimated with (1) age > 60 years, (2) LDH levels > normal, (3) performance status > 1, and (4) bone marrow involvement, and each item scored 1. According to the scoring system, patients were stratified into four groups, and those with a PIT score > 2 were classified into group 4. Four patients (36.3%; cases 7, 8, 9, and 11) had skin lesions. Eight (72.7%) patients exhibited elevated levels of plasma EBV DNA (median: 1,877.5 copies/mL; range: 28-2,032,000 copies/mL). Cases 2 and 4 had elevated antibody levels of viral capsid antigen (VCA) IgM (68.7 U/mL and 51.8U/mL) and EBV DNA (2,677 copies/mL and 3,508 copies/mL, respectively) in the blood. Case 2 was diagnosed with cold agglutinin disease, which causes autoimmune hemolytic anemia during initial and relapsed episodes. Case 3 had multicentric Castleman’s disease with elevated serum IgG4 levels (814 mg/dL) two years before the diagnosis of AITL. Human herpes virus type 8 (HHV-8) was tested but was not detected in this case. All patients received chemotherapy with cyclophosphamide, doxorubicin, vincristine, and prednisolone (CHOP). Case 6 was treated with Rituximab in addition to CHOP. The 1-year, 2-year, and 5-year OS rates of the 11 patients were 60%, 37.5%, and 16.7%, respectively.