

# Born with Two Faces: Epstein–Barr virus and TET2 in Diffuse Large B-cell Lymphoma and Angioimmunoblastic T-cell Lymphoma

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## Abstract

There may be significant histopathological overlap between Epstein–Barr virus (EBV) -positive diffuse large B cell lymphoma (DLBCL) and other diagnoses, including angioimmunoblastic T-cell lymphoma (AITL). Herein, we report a rare case of EBV-positive AITL developing two years after the initial diagnosis of EBV-positive DLBCL. Histone deacetylase (HDAC) inhibitor, chidamide, in combination with COEP (cyclophosphamide, vindesine, etoposide, prednisone) were administrated to treat AITL, which appeared to prolong the survival of patient. Next-generation sequencing (NGS) was used to study the possible mechanisms by which this patient developed AITL after DLBCL. NGS revealed that TET2 mutated in both DLBCL and AITL. When EBV-positive DLBCL patients with the TET2 mutation, it is necessary to beware of lymphoma recurrence and note that it may be completely different from the previous type. Our case suggests that chidamide plus COEP may be a treatment option for AITL after DLBCL and may prolong patient survival, but this requires a larger sample size to confirm.

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