Clinical Outcomes of Solid Organ Transplant Patients With EBV+ PTLD Who Fail First-line Rituximab or Rituximab Plus Chemotherapy: An Analysis of German PTLD Registry

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BACKGROUND

- Post-transplant lymphoproliferative disorder (PTLD) is a rare complication that occurs as a consequence of immunosuppression after solid organ transplantation (SOT).
- Most cases of PTLD are associated with Epstein-Barr virus (EBV) infection of B cells, either due to reactivation of the virus after transplantation, or from primary EBV infection.
- The optimal management of patients (pts) with PTLD after solid organ transplant failing initial therapy is not established.
- The PTLD-1 trials showed that risk-stratified sequential treatment with 4 doses of rituximab induction followed by rituximab consolidation or 4 cycles of CHOP or R-CHOP chemotherapy (CT) yields favorable treatment outcomes and tolerable treatment-related mortality.
- Outcomes for those pts failing the PTLD-1 treatment scheme remain unclear.

AIMS

- To characterize outcomes for patients (pts) diagnosed with EBV+ PTLD post-SOT who are refractory to or relapsed after first line rituximab or rituximab plus chemotherapy in a real-world setting in Germany.

METHODS

- The German PTLD registry database was screened for pts with EBV+ PTLD post-SOT who received rituximab or rituximab plus CT during 2000-2019, and who were refractory to complete CR or partial remission (PR) to rituximab or rituximab plus CT or relapsed at any point after such therapy.
- Patients with CNS PTLD at diagnosis were excluded.
- Medical charts were reviewed by an experienced physician and response to therapy was determined by computed tomography staging.
- Kaplan-Meier (KM) method was used to estimate the distribution of overall survival (OS) in this cohort and for the subgroup of patients who failed to respond to the first CT. The index date was defined as the date of last dose of first chemotherapy course.

RESULTS

- A total of 36 EBV+ PTLD patients were identified during the study period and included in the analysis with a median follow up time of 23.4 months (mo) from the date of PTLD diagnosis. Median age at PTLD diagnosis was 47.5 years (yr) (range 18-75); median time to PTLD onset from transplant was 2.4 yr (range 0.2-48). Patient characteristics are summarized in Table 1.
- Among the 36 patients, 24 (66.7%) died with a median overall survival (OS) of 24.8 months (95% CI: 10.3-67.6) from PTLD diagnosis. Median age at PTLD diagnosis was 47.5 years (yr) (range 18-75); median time to PTLD onset from transplant was 2.4 yr (range 0.2-48). Patient characteristics are summarized in Table 1.
- 32 of 36 patients received first CT regimen following rituximab (29 CHOP/CHOP-C or other) and 5 pts did not receive first CT. Eighty percent of patients died among those who did not receive first CT compared to 64.5% among those who received first CT regimen following rituximab (Figure 1).
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REFERENCES