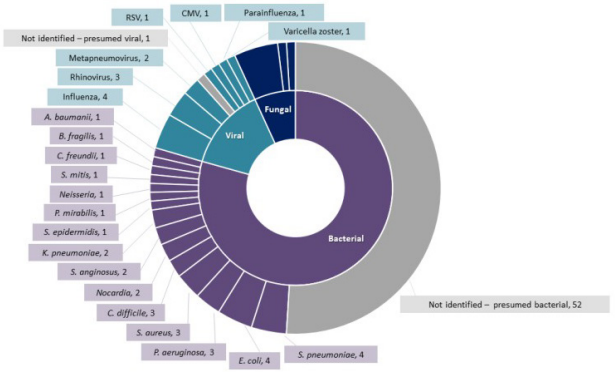
Figure 1. Identified Organisms in Serious Infection



Conclusion. Serious infections developed at a higher rate than previously reported in the literature, with IFI rates similar to those previously described. Prior allo-HSCT and steroid use were found to be risk factors for serious infection without pneumonia. Treating physicians should have a high index of suspicion for pneumonia, IFI, and PJP in this population.

Disclosures. **All Authors**: No reported disclosures

1088. Extracorporeal Photopheresis and Infectious Complications in Patients with Chronic Graft Versus Host Disease

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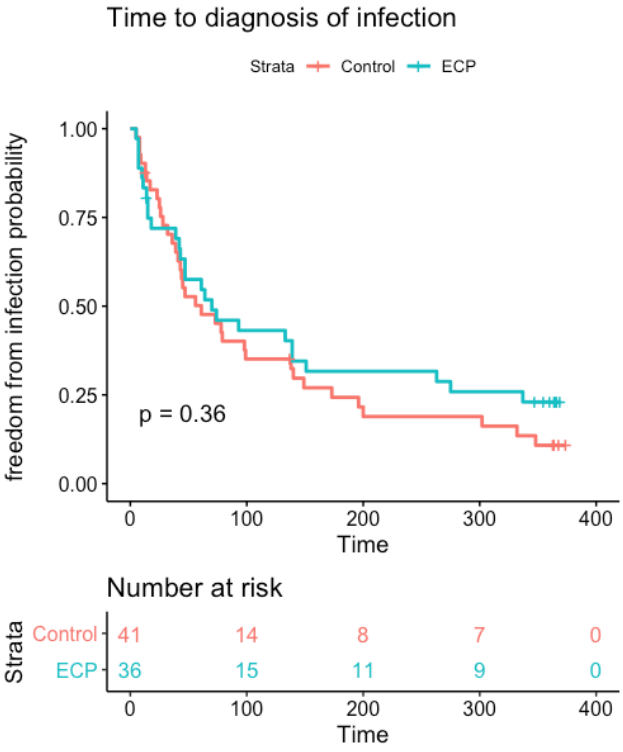
Session: P-49. Infections in Immunocompromised Individuals

Background. Extracorporeal photopheresis (ECP), is a cell-based immune-modulatory therapy used in the treatment of steroid refractory chronic graft versus host disease (cGHVD). It is unclear whether ECP is associated with an increased risk of infections compared to alternative treatment. We aimed to study the infectious complications in patients who are on ECP post allogeneic hematopoietic stem cell transplant (alloHSCT).

Methods. We conducted a retrospective cohort study of adult patients with cGVHD post alloHSCT who were initiated on ECP or second line immunosuppressive agents (SLIS). The study period was from March 1, 2014 to October 1, 2018. Each subject in the ECP arm was matched to the SLIS arm according to gender, age, underlying disease, and date of diagnosis of cGVHD. All subjects were followed for one-year post treatment. The main outcome was incidence of each type of infection (event rate/ person-years). Kaplan Meier analysis was used, evaluating time to infection with log rank test. The spectrum of infectious complications was described.

Results. Seventy-seven patients were included (36 in ECP and 41 in SLIS arm). Median age was 57.4 years (18.1 -73.4), and 59.7% of patients were male. The most common underlying diseases were acute myeloid leukemia (45.4%), myelodysplastic syndrome (20.8%) and non-Hodgkin's lymphoma (15.6%). A total occurrence of 94 infections was observed in the ECP arm, compared to 118 in SLIS arm. Bacterial infections accounted for majority of the infections in ECP arm (50%) compared to SLIS arm in which viruses were most common (49.2%). Bacterial pneumonia was the most common clinical syndrome (34% and 27.3%, in the ECP and SLIS arms, respectively). Bacteremia accounted for 12.8% of infections in the ECP arm compared to 16.4% in the SLIS arm. There was no difference in the event rates of infections among the two groups [2.58/ person-years in ECP group vs 3.60/person-years, p = 0.3766], or the probability of infection at any time between the ECP and SLIS group on Kaplan Meier (log rank test, p-value=0.36)(Figure 1).

Kaplan-Meier plot of time to the earliest infection diagnosis between ECP and control group



Conclusion. Bacterial and viral pneumonia were the most common infections in patients undergoing ECP. Overall, ECP does not confer an increased risk of infectious complications compared to second line IS agents.

Disclosures. **Wissam El Atrouni, MD**, **ViiV** (Advisor or Review Panel member)

1089. Health Resource Utilization and Costs Associated with Multi-Virus Infection after Allogeneic Hematopoietic Cell Transplantation

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Session: P-49. Infections in Immunocompromised Individuals

Background. Reactivation or infection with multiple double-stranded DNA (dsDNA) viruses after allogeneic hematopoietic cell transplant (allo-HCT) has been associated with increased morbidity in single center studies. We used a large US claims database to compare health care reimbursements and health resource utilization (HRU) between allo-HCT patients with no versus multiple infections due to CMV, BKV, EBV, JCV, AdV, and HHV-6.

Methods. We used the Decision Resources Group Real World Evidence Data Repository to identify allo-HCT recipients from 1/1/12-12/31/17. We grouped BKV, EBV and JCV due to lack of specific diagnosis codes and calculated reimbursements from submitted charges using a reimbursement to charge ratio of 0.425. We describe