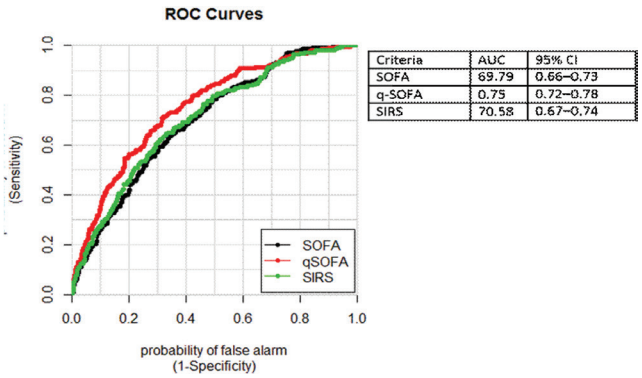
was developed and the area under ROC (AUROC) was calculated. Sensitivities of SOFA ≥ 2, qSOFA ≥ 2, and SIRS ≥ 2 for predicting in-hospital mortality were calculated.

Results. A total of 2,917 patients with a mean age of 57.0 ± 15.7 were included; 57% were male and 84% white. The most common immunocompromising conditions were solid-organ transplantation (45%), lymphoma (24%), acute leukemia (17%) and hematopoietic stem cell transplantation (6%). Two hundred and seventeen patients died during index admission (7.4%). The sensitivities of SOFA ≥ 2, qSOFA ≥ 2 and SIRS ≥ 2 for predicting in-hospital mortality were 94.9, 64.1 and 91.7%, respectively ($P < 0.001$ for each score ≥2 compared with <2). In the mortality risk model, the AUROCs for qSOFA, SOFA and SIRS were 0.75, 0.70 and 0.71, respectively (Figure). The AUROC for qSOFA ≥2 was significantly higher than for SIRS ≥2 and SOFA ≥2 ($P = 0.004$, $P < 0.001$, respectively).

Conclusion. qSOFA ≥2 was the strongest predictor of mortality in immunocompromised patients and may aid in risk stratification and clinical decision-making. Additional analyses are needed to evaluate alternative and potentially improved scoring systems for sepsis in immunocompromised populations.



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

1568. Implementation of a Standard Diet Regimen for Neutropenic High-Risk Cancer Patients: Effects on Incidence of Infections, Foodborne Diseases, and Outcome

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Background. Neutropenia is a major risk factor for infections in cancer patients. Even though evidence to support a germ-free neutropenic diet (ND) is missing, many oncology departments still maintain ND regimens. While benefits of an ND remain uncertain, restrictions of food and rigorous preparation rules impact quality of life and may further increase malnutrition rates in cancer patients.

Methods. Based on the Cologne Cohort of Neutropenic Patients database, we conducted a retrospective analysis of high-risk hematological/oncological patients with a confirmed period of neutropenia (neutrophils < 500/mm^3) which lasted longer than 5 days. The interval of four years before and after replacing the ND by a standard hospital diet (SD) in January 2008 was compared. Patients undergoing allogenic stem-cell transplantation were excluded. The relative days of febrile neutropenia (relFN) before (neutropenic diet group, NDG) and after (standard diet group, SDG) the change of diet were analyzed in a propensity score-matched cohort. Secondary outcomes were the incidence of food borne disease, bloodstream infections (BSI), antibiotic treatment, diarrhea, weight change, nausea, and death.

Results. A total of 774 neutropenic episodes of each NDG and SDG were included into the analysis. The median days of neutropenia were 11 (IQR 8–16) in the NDG and 10 (IQR 8–16) in the SDG ($P = 0.320$). The rate of acute leukemia for NDG and SDG was 47% ($P = 0.839$). The mean relFN was 0.20 in the NDG and 0.22 in the SDG ($P = 0.270$). In our multivariate model, no association between diet and relFN was identified (OR 0.03; IQR −0.04–0.09; $P = 0.410$). Diarrhea occurred in 52% in the NDG and 40% in the SDG ($P < 0.001$), nausea in 72% and 66% ($P < 0.001$). No significant changes in frequency of gastrointestinal infections (NDG: 2; SDG: 1; $P = 0.719$) or BSI related to foodborne disease (NDG: 0; SDG: 3 $P = 0.248$) were detected after change of diet. The detected BSI (NDG: 29%; SDG: 30%; $P = 0.867$), antibiotic treatment (NDG: 78%; SDG: 77%; $P = 0.760$), weight gain (NDG: 11%; SDG: 14%; $P = 0.121$), and median 28-day mortality (NDG: 13.5 (IQR 8.8–32.5); SDG: 17 (IQR 10–29); $P = 0.118$) were equally distributed after change of diet (see Figure 1).

Conclusion. We did not detect a change in relFN after replacing the ND with an SD. In our population, an SD was safe for neutropenic high-risk patients.

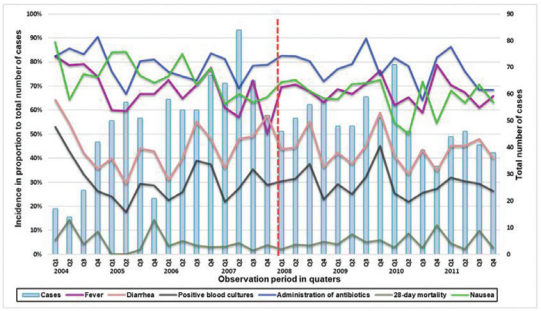

Figure 1: Infection related observations in neutropenic and standard diet group during study period for the propensity score-matched cohort. The red dashed line highlights the replacement of the germ-free neutropenic diet by a standard hospital diet in Jan 2008.

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

1569. Incidence, Risk Factors, and Impact of Antiviral Prophylaxis Duration on Cytomegalovirus (CMV) Disease in High-Risk Donor Seropositive/Recipient Seronegative [D+R−] Orthotopic Heart Transplant Recipients (OHTR)

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Background. CMV disease is a major cause of morbidity and mortality in OHTR, especially among D+R− patients. Clinical trials of longer antiviral prophylaxis have shown reduced CMV disease incidence in kidney and lung transplant recipients but have not been done in OHTR. We aimed to characterize risk factors and impact of antiviral prophylaxis duration on CMV disease in high-risk CMV D+R− OHTR.

Methods. We performed a retrospective cohort study of consecutive adult first OHTR at a single US transplant center from 5 July 2005 through 30 December 2016 with at least one year of follow-up. Standard immunosuppression included ATG induction followed by maintenance with tacrolimus, mycophenolate, and prednisone. Valganciclovir (VGCV) was given for 3 months for all R+ and for 3–6 months for D+R− at clinician discretion. CMV syndrome and end-organ disease were defined using consensus definitions. Chi square and Mann–Whitney tests were used to compare categorical and continuous variables, respectively, with $P < 0.05$ considered significant, and logistic regression was used for multivariate analysis.

Results. Key cohort ($n = 310$) characteristics included: 73% male, median age 55, 98% ATG induction, 1-year survival of 92%, and median follow-up of 44 months (IQR 22–88). Proven/probable CMV disease occurred in 27/310 (9%: syndrome 22%, end-organ 78%), and more frequently in D+R− (22/83, 27%) vs. either R+: 5/180 (2.8%) or D−R−: 0/47, $P < 0.01$. Among D+R− recipients who survived to hospital discharge, CMV disease occurred >1 year post-OHT in 10/22 (45%), and was genotypicallyconfirmed as ganciclovir-resistant in 4/22 (18%). Duration of VGCV prophylaxis ranged from 0 to 8.9 months (median 3.6, IQR 3.3–5.6). In a multivariable model that assessed baseline and time-dependent factors, longer durations of prophylaxis (analyzed continuously or discretely) were not associated with protection against CMV disease ($P > 0.05$ for all comparisons).

Conclusion. CMV disease remains a major clinical problem in D+R− OHTR, and longer durations of antiviral prophylaxis do not appear to be protective. Prophylaxis duration should be studied specifically in OHTR, rather than extrapolated from other organ transplant populations. Novel strategies to prevent CMV disease in D+R− OHTR are warranted.