for high-risk patients. AFP modification, D/C and treatment emergent adverse events (TEAE) regardless of causality were captured through D100. Standard definitions were used for invasive fungal infections (IFI).

Results. Of 215 patients, 42 had contraindications to VCZ at baseline. Of 173 patients included in the analysis, 65 (37.6%) received ex vivo T-cell depleted (TCD) peripheral blood (PB), 15% cord and 47.4% conventional PB or marrow allografts. All TCD recipients received myeloablative conditioning (MA) and all cord recipients received reduced intensity conditioning (RIC). For conventional transplant, 65.9 and 26.8% of the patients received RIC and MA, respectively. One hundred and sixty-eight (97%) patients had normal liver function tests (LFT) at VCZ initiation. One hundred and twenty-nine (74.6%) patients started VCZ by D7 and 95% started by D15. Median duration of VCZ AEP was 68D (IQR 22–91). Abnormal LFTs was the most frequently encountered TEAE (42/58, 72%), followed by neurologic/visual TEAE (11/58, 19%) leading to VCZ D/C. Median time to VCZ D/C due to neurologic/visual TEAE (4D, IQR 4–9) was significantly shorter than abnormal LFTs (25D, IQR 16–42) (P < 0.05). Eight (5%) breakthrough proven/probable IFIs were observed by D180, without significant difference based on transplant types or AFP duration. Duration and reasons for VCZ D/C were shown in Table 1 by HCT type.

Conclusion. 75% of the patients started VCZ per SOC and 95% by D15. Most TEAE leading to VCZ D/C were abnormal LFTs in all HCT types, and most commonly in cord HCT. 3) Neurologic/visual TEAE were similar across types. Rates of IFI were 3–4% in CONV and TCD and 12% in UCB.

Table 1. Duration and Reasons for Discontinuation of Voriconazole by Transplant Type

| Transplant Type | Total n=82 | Total n=26 | Total n=56 |
|-----------------|-----------|-----------|-----------|
| VCZ Start Day, D from HCT, Median (IQR) | 8 (7,12) | 7 (7,9) | 7 (7,7) |
| Duration of VCZ AFP, D from Median (IQR) | 63 (22–90) | 82 (19–94) | 77 (21–90) |
| Completed VCZ per SOC, N, % | 63 (77) | 15 (54) | 48 (74) |
| Discontinuation due to abnormal LFTs | 13 (16, 10, 38) | 19 (30) |
| Discontinuation due to CNS/Visual TEAE | 3 (4, 2, 7) | 6 (9) |
| Discontinuation due to DDI | 16 (20) | 0 | 1 (2) |
| IFF by D180 from HCT | 3 (4) | 3 | 2 (3) |
| IFF, D from HCT, Mean | 111 | 80 | 142 |

Figure 2. Reasons of Voriconazole Discontinuation Before Cessation of Immunosuppression or Day 100 Post-allo-HCT

Results. Of 215 patients, 42 had contraindications to VCZ at baseline. Of 173 patients included in the analysis, 65 (37.6%) received ex vivo T-cell depleted (TCD) peripheral blood (PB), 15% cord and 47.4% conventional PB or marrow allografts. All TCD recipients received myeloablative conditioning (MA) and all cord recipients received reduced intensity conditioning (RIC). For conventional transplant, 65.9 and 26.8% of the patients received RIC and MA, respectively. One hundred and sixty-eight (97%) patients had normal liver function tests (LFT) at VCZ initiation. One hundred and twenty-nine (74.6%) patients started VCZ by D7 and 95% started by D15. Median duration of VCZ AEP was 68D (IQR 22–91). Abnormal LFTs was the most frequently encountered TEAE (42/58, 72%), followed by neurologic/visual TEAE (11/58, 19%) leading to VCZ D/C. Median time to VCZ D/C due to neurologic/visual TEAE (4D, IQR 4–9) was significantly shorter than abnormal LFTs (25D, IQR 16–42) (P < 0.05). Eight (5%) breakthrough proven/probable IFIs were observed by D180, without significant difference based on transplant types or AFP duration. Duration and reasons for VCZ D/C were shown in Table 1 by HCT type.

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157. Natural History of Non-CNS Disseminated Coccidioidomycosis

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Background. The number of patients with coccidioidomycosis continues to increase yearly. Patients with CNS disease require lifelong antifungal therapy due to the high morbidity and mortality of this disease. However, the morbidity and mortality in non-CNS disseminated disease has not been well characterized.

Methods. We conducted a retrospective study of 373 VA-armed forces coccidioidomycosis patients diagnosed between 1955 and 1958 and followed to 1966. Groups were identified as non-disseminated disease, non-CNS disseminated disease with and without multisite dissemination, and disseminated disease to the CNS with and without multisite dissemination. Clinical variables including demographic information, duration and severity of symptoms, coccidioidal serologies, type of infection and complications, time to disseminated disease, and mortality were abstracted from patient charts.

Results. Mortality attributed to coccidioidomycosis in the non-disseminated group was 0.3% (1/297) compared with the non-CNS disseminated group of 8.5% (4/47, median survival 12 months, range 12–24 months, P = 0.0002). Mortality in the CNS disseminated group was 86% (19/22, median survival of 12 months, range 12–156 months, P < 0.0001 compared with non-CNS disseminated). The single site non-CNS disseminated group had a mortality of 4.1% (1/24, survival of 12 months) compared with the multiple site non-CNS disseminated group of 13% (3/23, median survival of 18 months, range of 12–24 months, P = 0.57).

Conclusion. This retrospective cohort study demonstrates significant mortality differences between different forms of disseminated coccidioidomycosis. CNS dissemination exhibited the highest mortality rate; however, non-CNS dissemination also exhibited an unacceptably high mortality rate. There was no significant difference in mortality between single site non-CNS disseminated disease and multiple site non-CNS disseminated disease.

Disclosures. All authors: No reported disclosures.
**Background.** Better treatment for HIV has led to the changing epidemiology of cryptococcosis. Important differences in outcomes have recently been demonstrated based on immune status. In this study, we describe the differences in presentation and outcome of cryptococcal infection by immune status in the post-HAART era.

**Methods.** We conducted a retrospective cohort study of patients diagnosed with cryptococcosis from 2002 through 2014 at our institution. Data included demographic, clinical features, diagnostics, and outcomes. Comparisons were made with chi-squared and one-way ANOVA. Survival analysis was performed with Cox regression with survival censored at 90 days.

**Results.** We enrolled 243 patients with cryptococcosis: 91 (37.4%) with HIV, 24 (9%) with prior organ transplantation, and 128 (52.6%) with non-HIV non-transplant (NHNT). Age analysis showed HIV patients were younger (40 years, SD ±11) than transplant patients (53 years, SD ±12) and NHNT patients (47 years, SD ±15, P < 0.001). Fever and headache were more common in HIV (71% and 52%, P < 0.001) than in transplant (33% and 25%, P < 0.001) and NHNT (51% and 39%, P < 0.001). Meningitis (71%) was more common in HIV+ than in transplant recipients (45%, P < 0.001). NHNT (37.5%) and transplant (45.8%) had more pulmonary cryptococcosis than HIV (10%, P < 0.001). Patients with NHNT had a higher risk of mortality (HR 2.642, 95% CI 1.481–4.713) as compared with HIV+. However, transplant recipients with cryptococcosis had risk of 90-day mortality (HR 0.99, 95% CI 0.33–2.99) similar to HIV+ patients.

**Conclusion.** Cryptococcosis in HIV+ and transplant recipients was less common than in NHNT in our institution and the presentation was different, with meningitis being less prominent. Cryptococcosis in NHNT was associated with higher risk of death than HIV+ patients or transplant recipients. NHNT patients comprise an important group that requires a high degree of clinical suspicion.

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**Disclosures.** A. Spec. Astellas Pharma US, Inc.: Grant Investigator, Research grant

**159. Invasive Mold Infections (IMI) among Liver Transplant Recipients (LTR): Is It Time to Reconsider the Risk Factors that Determine Antifungal Prophylaxis?**  
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**Session:** 44. Clinical Mycology  
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**Background.** IMI have high mortality among LTR. Prevention is critical. Data supporting guideline-recommended three-tiered approach to antifungal prophylaxis based on risk IMI are lacking.

**Methods.** Retrospective study of 534 adult LTR at the Cleveland Clinic (CCF) August 2010–December 2014. We analyzed the association between IMI and risk factors: retransplantation, hemodialysis, reoperation, and fulminant hepatic failure. Model of end-stage liver disease (MELD) was evaluated as novel risk factor. We compared the incidence of IMI among three subgroups: no antifungal prophylaxis, prophylaxis against yeast alone, and prophylaxis against yeast and mold.

**Results.** Mean age was 56 ± 11 years. 68% were male (n = 364). The most common underlying diseases were hepatitis C virus (32%), hepatocellular carcinoma (28%), alcoholic cirrhosis (19%), and nonalcoholic steatohepatitis (19%). The overall incidence of IMI was 0.9% (n = 5). The incidence of IMI among LTR with (n = 128) and without (n = 406) risk factors was 0.78 and 0.98%, respectively (see Figure). Table 1 details the risk factors and outcomes by subgroups. Only one patient with IMI had a risk factor for mold (reoperation). The other four had none. Incidence of IMI among LTR who did not receive antifungal prophylaxis was 1 and 0% in those who received yeast or mold prophylaxis. There was no association between MELD and IMI.

**Table 1. Risk factors and outcomes of 534 adult LTR at CCF, 2010–2014.**

| Risk factors                             | No prophylaxis N = 410 (%) | Prophylaxis against Candida N = 91 (%) | Prophylaxis against mold N = 33 (%) |
|-----------------------------------------|---------------------------|----------------------------------------|------------------------------------|
| Re-transplantation                      | 3 (0.7)                  | 9 (9)                                  | 7 (21)                             |
| Renal replacement                       | 25 (6)                   | 24 (26)                                | 11 (33)                            |
| Fulminant hepatic failure               | 28 (7)                   | 26 (29)                                | 14 (42)                            |
| Mean MELD (±SD)                         | 23 (6)                   | 29 (7)                                 | 32 (8)                             |
| MELD >22                                | 179 (44)                 | 73 (80)                                | 28 (85)                            |
| Any invasive fungal infection           | 51 (12)                  | 38 (42)                                | 20 (61)                            |
| One-year all-cause mortality            | 34 (8)                   | 12 (13)                                | 5 (15)                             |

**Conclusion.** Risk factors and MELD did not predict IMI. Because risks are used to recommend mold-active prophylaxis, antifungal agent overuse may be a concern. Additional studies are needed to reconsider risk factors so that transplant providers may target antifungal agents appropriately, practice antifungal stewardship and improve outcomes.

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

**160. Antifungal Resistance Patterns in Molds Isolated from Wounds of Combat-Related Trauma Patients**

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**Background.** An outbreak of trauma-related invasive fungal infections (IFI) occurred in US service members injured in Afghanistan. Empiric treatment included