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mofetil (MMF) starting day -1. On day +7, the patient received an accidental dose of HIDAC 3700 mg/m<sup>2</sup> (6000mg) over 3 hours instead of MMF. Patient developed worsening of her nausea and vomitting but was controlled with antiemetics. She engrafted her neutrophils with her absolute neutrophil count (ANC) >500/μl on day +33 and >1000/μl on day +35 post SCT. She engrafted her platelets with her untransfused platelet count > 20,000/µl on day +43 and  $>50,000/\mu l$  on day +54 post SCT. Patient did not develop any acute gvhd. On day +36 the patient was discharged from the hospital. Patient had CNS relapse on day +71 (positive CSF cytology and leptomeningeal enhancement on an MRI) but no systemic disease (bone marrow biopsy 99-100% donor chimerisim and normal cytogenetics). The patient's treatment included intrathechal liposomal cytarabine 50 mg on day +72 and +96, HIDAC 3000 mg/m2 every 12 hours for 10 doses from day +77 to +82 and dasatinib 140 mg orally daily from day +78 to +83. Tacrolimus was discontinued on day +77. The patient was neutropenic for 37 days (day +84 to +120) but achieved a remission in her CNS. At day +175 patient is alive, disease free, without gvhd off all immunosuppression with normal ANC with 100 percent donor chimerism.

**Discussion:** There is no literature on HIDAC infusion post allogeneic SCT. Published data suggests that the longer duration of cytarabine exposure is more cytotoxic to hematopoietic cells than the dose. Other chemotherapeutic agents including methotrexate and cyclophosphamide has been given posttransplantation for gvhd prophylaxis and graft enhancement. HIDAC infusion post CBSCT did not significantly delay neutrophil or platelet engraftment as compared to published literature but may have contributed to lack of gvhd in this patient inspite of withdrawl of all immunosuppression by day +77.

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### CIDOFOVIR USE IN THE ERADICATION OF POLYOMAVIRUS IN HEMATO-POIETIC STEM CELL TRANSPLANT RECIPIENTS

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Hemorrhagic cystitis caused by polyomavirus virus (BKV) is a common complication following high dose chemotherapy and hematopoietic stem cell transplant. Low dose cidofovir has been shown to be useful in the eradication of BKV post transplantation without significant side effects. Controversy exists over the effective dose, duration, and administration technique for cidofovir. Recent data shows utilization of a dose range of 0.25-1mg/kg IV weekly. The purpose of this review is to establish an optimal dose, duration, and monitoring standards for cidofovir use in a future prospective trial. This information will be further utilized at our institution to implement an evidence- based standard of practice. A retrospective review was completed on 13 patients with symptomatic BKV who received cidofovir during a 15-month period. Cidofovir dose was given without probenecid and initiated at 0.5mg/kg intravenously weekly. If no significant reduction in viral copies was seen, the dose was escalated to 1mg/kg. Patients were monitored for a molecular response in both urine and plasma for BK viral load. Molecular response was defined as a decrease in viral load by one log reduction with a consistent decreasing trend. Patients received cidofovir for an average of 7.6 weeks. Urinary response was shown in 7/13 (54%) and plasma response in 6/9 (67%) patients. Plasma PCR data was not measured in 5 patients. Transplant-related mortality occurred in 5 patients with 80% (4/5) not responding in the urine to treatment. Acute renal failure, defined as an increase of 0.5mg/dL from baseline, occurred in 1/13 (7.6%). Based on this data, we plan to enroll patients into a randomized study using 0.5mg/kg or 1mg/kg weekly intravenous cidofovir to determine the most effective treatment regimen for symptomatic patients while minimizing toxicity. Patients will have BKV PCR analysis weekly on blood and urine to determine eradication and optimal length of therapy. Data will be examined to determine if therapy can be discontinued based on clinical response or molecular response. Due to the renal dysfunction associated with cidofovir, serum creatinine will also be monitored. Results from this trial will be valuable since no current standard of care for BK viremia exist.

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# ADDITION OF URSODIOL IN ALLOGENEIC HEMATOPOIETIC STEM CELL TRANSPLANT TO REDUCE THE RISK OF VENOUS OCCLUSIVE DISEASE AND GRAFT VERSES HOST DISEASE

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Venous-occlusive disease (VOD) and graft-versus-host disease (GVHD) are devastating complications of allogeneic hematopoietic stem cell transplants (HSCT). Mortality has been estimated to be as high as 30% for VOD and 40% for GVHD, which remains the main cause of morbidity associated with HSCT. The use of prophylactic ursodiol is believed to provide protection against complications. However, clinical evidence for the use of this medication is limited and the duration of therapy has not been established in non-myeloablative pre-transplant regimens. The primary objective of this retrospective review is to determine the incidence and severity of VOD and GVHD in allogeneic HSCT patients not receiving prophylactic ursodiol. Thirty-four patients that underwent allogeneic HSCT in 2007 who did not receive ursodiol prophylaxis were evaluated. Acute GVHD was staged as level 0-4 based on quantification of skin rash, serum bilirubin, and gastrointestinal tract involvement. Chronic GVHD will be graded as level I-IV based on the degree of skin and organ involvement and clinical performance status. VOD will be graded based on the Baltimore criteria which include jaundice (bilirubin ≥ 2.0 mg/dL) and two of the following: hepatomegaly, ascites or ≥ 5% weight gain. Chronic GVHD and VOD data is yet to be determined. Stage of acute GVHD in patients that were evaluated is shown below in table 1.

#### Acute GVHD incidence in 34 patients

Grade 0	Grade I	Grade 2	Grade 3	Grade 4
26% (n=9)	29% (n=10)	32% (n=11)	8.8% (n=3)	3% (n=I)

Acute GVHD was seen more often in non-myeloablative (average grade 1.6, n=15) versus myeloablative protocols (average grade 1.2, n=19). The second phase of this trial will evaluate the incidence of VOD and GVHD in patients who receive prophylactic ursodiol. This data will be compared to the patient population that did not receive prophylaxis to determine the outcome. This data will be helpful in determining the effectiveness of prophylactic ursodiol in non-myeloablative HSCT.