

Characteristics	BK virus disease (n= 24)	Non BK virus disease (n= 30)	p	Multivariate analysis OR (95% CI)
Age, median (min-max)	42 (20-68)	42 (19-65)	0.875	
Male gender, n (%)	12 (50.0)	20 (66.7)	0.270	
Primary disease, n (%)				
Acute Myeloid Leukemia	15 (62.5)	11 (36.7)	0.099	
Myelodysplastic Syndrome	2 (8.3)	3 (10.0)	0.999	
Multible Myeloma	1 (4.2)	6 (20.0)	0.117	
Acute lymphoblastic Leukemia	3 (12.5)	4 (13.3)	0.999	
Lymphoma	3 (12.5)	6 (20.0)	0.715	
Stem cell transplantation, n (%)				
Autologous	5 (20.8)	9 (30.0)	0.540	
Allogeneic	19 (79.2)	21 (70.0)		
Hemorrhagic cystitis, n (%)	20 (83.3)	0 (0.0)	0.001	
Hematuria, Grade, n (%)				
Grade 1	4 (16.7)	2 (100.0)	0.123	
Grade 2	1 (4.2)	0 (0.0)		
Grade 3	19 (79.2)	0 (0.0)		
Grade 4	0 (0.0)	0 (0.0)		
Hematuria n (%)	24 (100.0)	2 (6.7)	0.001	
CMV infection, n (%)	13 (54.2)	4 (13.3)	0.003	
CMV treatment response , n (%)	12 (92.3)	4 (13.3)	0.999	
CMV viral load (copy/ml), before treatment ,median (min-max)	5665 (481-1977826)	44852 (5487-104492)	0.412	
CMV viral load (copy/ml), after treatment, median (min-max)	97 (0-1869015)	130 (0-130)	0.549	
CMV treatment, n (%)				
Ganciclovir	5(20.8)	4 (13.3)	0.489	
Cidofovir	5 (20.8)	0 (0.0)	0.013	
Ganciclovir+ Cidofovir	3 (12.5)	0 (0.0)	0.082	
No treatment	11 (45.8)	26 (86.7)		
GVHD, n (%)	14 (58.3)	10 (33.3)	0.099	
Types of GVHD, n (%)				
Skin	10 (71.4)	3 (30.0)	0.098	
Intestinal	3 (21.4)	3 (30.0)		
Liver	1 (7.1)	4 (40.0)		
Days to neutrophil engraftment, median (min-max)	15 (9-30)	15 (9-28)	0.999	
Time of BKPyV-HC occurring after HSCT, month, median (min-max)	2 (1-15)	15 (7-59)	0.001	
Mortality, n (%)	9 (37.5)	4 (13.3)	0.056	
Immunosuppressive therapy, n (%)	19 (79.2)	17 (56.7)	0.145	
GVHD prophylactic regimen, n (%)				
Cyclophosphamide	0 (0.0)	1 (3.3)	0.999	
Corticosteroids	15 (62.5)	4 (13.3)	0.001	
Methotrexate	17 (70.8)	4 (13.3)	0.001	10.93 (2.6-45.7)
MMF (Mycophenolate Mofethyl)	11 (45.8)	3 (10.0)	0.004	

Cyclosporine	19 (79.2)	11 (36.7)	0.002	
Tacrolimus	3 (12.5)	1 (3.3)	0.312	
Photophoresis	3 (12.5)	0 (0.0)	0.082	
CRE, pre-cidofovir , mean±sd	0.85 ±0.45	-		
GFR, pre-cidofovir , mean±sd	93.3 ±32.5	-		
CRE, post-cidofovir , mean±sd	0.97 ±0.44	-		
GFR, post-cidofovir , mean±sd	91.4 ±34.5	-		
Gross hematuria	20 (83.3)	0 (0.0)	0.001	
BK viremia , n (%)	5 (20.8)	0 (0.0)	0.013	
Nephrotoxicity , n (%)	1 (4.2)	-		
BK virus treatment , n (%)				
Cidofovir	18 (75.0)	-		
Ciprofloxacin	11 (45.8)			
Cidofovir use , n (%)				
Intravenous only	12 (50.0)			
Intravesical only	4 (16.7)	-		
Both	2 (8.3)			

CMV; Cytomegalovirus, **GVHD**; Graft versus host disease, **CRE**; Creatinine clearance, **GFR**; The glomerular filtration rate,

Table 1. Characteristics of Stem Cell Transplant patients with and without BK Polyomavirus

Table 2. Characteristics of BKPyV infection and Stem Cell Transplant patients with and without hemorrhagic cystitis

Characteristics	with HC (n=19)	without HC (n=5)	p
Urinary Viral load (copy/ml)	90000000 (21900-690000000)	938000 (1110-413000000)	0.103
Blood viral load (copy/ml)	126 (26-90000000)	76 (26-22800)	0.469
Treatment			
Quinolone antibiotics (ciprofloxacin)	10 (52.6)	1 (20.0)	0.327
Continuous bladder irrigation with water	0 (0.0)	3 (60.0)	0.005
Cidofovir treatment , n (%)	17 (89.5)	1 (20.0)	0.006
Intravenous only	12 (63.2)	0 (0.0)	0.037
Intravesical only	3 (15.8)	1 (20.0)	0.999
Both	2 (10.5)	0 (0.0)	0.999
Nephrotoxicity, n (%)	1 (5.3)	0 (0.0)	0.999
Outcome after initial therapy, n (%)			
Complete clinical response	10 (52.6)	3 (60.0)	0.999
No response	9 (47.4)	2 (40.0)	0.999