Disclosures. All authors: No reported disclosures.

1763. The Use of Haploidentical Donors Compared with HLA-Matched Unrelated Donors is Associated with Increased Risk of BK Viruria and Hemorrhagic Cystitis
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Background. BK virus-associated hemorrhagic cystitis (BK-HC) is a common and often serious complication of hematopoietic cell transplantation (HCT). Studies have suggested a higher incidence of BK-HC in patients receiving haploidentical (haplo) HCTs compared with those receiving matched unrelated donor (MUD) transplants.

Methods. We retrospectively identified all adult patients receiving HCT from MUD or haplo donors at Washington University School of Medicine between January 1, 2011 and January 1, 2016. Via informatics queries, we obtained the results of every urine BK test performed on these patients. Patients with BK viruria were then evaluated for BK-HC and graded according to established criteria. The last day of follow-up was April 31, 2017.

Results. 503 MUDs and 140 haplos were identified for inclusion in the study. Patients with BK viruria were then evaluated for BK-HC and graded according to established criteria. The last day of follow-up was April 31, 2017.

Disclosures. All authors: No reported disclosures.

Table 1. Species, type and clinical manifestations of Human Adenovirus isolates (patients not under surveillance)  

| ID | Species/Type | Transplant type | Disease | Days from detection to disease | Decreased (within 180 days post transplant) |
|----|--------------|-----------------|---------|-------------------------------|------------------------------------------|
| 1  | C2           | Haplo           | Hepatitis | 0                             | N                                        |
| 2  | C2           | Haplo           | Cytopath | 0                             | N                                        |
| 3  | C2           | Haplo           | Pyelonephritis | 0 | N                            |
| 4  | C2           | Haplo           | Pyelonephritis | 0 | N                            |
| 5  | C2           | Haplo           | Pyelonephritis | 0 | N                            |
| 6  | C2           | Haplo           | Pyelonephritis | 0 | N                            |
| 7  | C2           | Haplo           | Pyelonephritis | 0 | N                            |
| 8  | C2           | Haplo           | Pyelonephritis | 0 | N                            |
| 9  | C2           | Haplo           | Pyelonephritis | 0 | N                            |

Table 2. Specific type and clinical manifestations of Human Adenovirus isolates (patients not under surveillance)  

| ID | Species/Type | Transplant type | Disease | Days from detection to disease | Decreased (within 180 days post transplant) |
|----|--------------|-----------------|---------|-------------------------------|------------------------------------------|
| 1  | C2           | Haplo           | Hepatitis | 0                             | N                                        |
| 2  | C2           | Haplo           | Cytopath | 0                             | N                                        |
| 3  | C2           | Haplo           | Pyelonephritis | 0 | N                            |
| 4  | C2           | Haplo           | Pyelonephritis | 0 | N                            |
| 5  | C2           | Haplo           | Pyelonephritis | 0 | N                            |
| 6  | C2           | Haplo           | Pyelonephritis | 0 | N                            |
| 7  | C2           | Haplo           | Pyelonephritis | 0 | N                            |
| 8  | C2           | Haplo           | Pyelonephritis | 0 | N                            |
| 9  | C2           | Haplo           | Pyelonephritis | 0 | N                            |

Table 3. Specific type and clinical manifestations of Human Adenovirus isolates (patients not under surveillance)  

| ID | Species/Type | Transplant type | Disease | Days from detection to disease | Decreased (within 180 days post transplant) |
|----|--------------|-----------------|---------|-------------------------------|------------------------------------------|
| 1  | C2           | Haplo           | Hepatitis | 0                             | N                                        |
| 2  | C2           | Haplo           | Cytopath | 0                             | N                                        |
| 3  | C2           | Haplo           | Pyelonephritis | 0 | N                            |
| 4  | C2           | Haplo           | Pyelonephritis | 0 | N                            |
| 5  | C2           | Haplo           | Pyelonephritis | 0 | N                            |
| 6  | C2           | Haplo           | Pyelonephritis | 0 | N                            |
| 7  | C2           | Haplo           | Pyelonephritis | 0 | N                            |
| 8  | C2           | Haplo           | Pyelonephritis | 0 | N                            |
| 9  | C2           | Haplo           | Pyelonephritis | 0 | N                            |

Table 4. Specific type and clinical manifestations of Human Adenovirus isolates (patients not under surveillance)  

| ID | Species/Type | Transplant type | Disease | Days from detection to disease | Decreased (within 180 days post transplant) |
|----|--------------|-----------------|---------|-------------------------------|------------------------------------------|
| 1  | C2           | Haplo           | Hepatitis | 0                             | N                                        |
| 2  | C2           | Haplo           | Cytopath | 0                             | N                                        |
| 3  | C2           | Haplo           | Pyelonephritis | 0 | N                            |
| 4  | C2           | Haplo           | Pyelonephritis | 0 | N                            |
| 5  | C2           | Haplo           | Pyelonephritis | 0 | N                            |
| 6  | C2           | Haplo           | Pyelonephritis | 0 | N                            |
| 7  | C2           | Haplo           | Pyelonephritis | 0 | N                            |
| 8  | C2           | Haplo           | Pyelonephritis | 0 | N                            |
| 9  | C2           | Haplo           | Pyelonephritis | 0 | N                            |

1764. Use of Intravesical BCG for Treatment of Bladder Cancer in a Renal Transplant Recipient, with Subsequent Resolution of Chronic BK Viremia
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Methods. The New England BK Consortium (NEBKCON), a collaboration of 12 transplant centers in the northeastern United States, has adopted a standard BKPyV screening protocol (screening monthly for the first 6 months followed by screening every 3 months until 2 years after transplantation). Participating members implemented this screening protocol at their centers, and later measured adherence to the protocol as part of a NEBKCON quality improvement project. This study retrospectively analyzes BKPyV-specific outcomes in association with adherence to this protocol.

Results. Six centers reported data on 472 subjects who received a renal transplant between January 2016 and December 2017. Adherence to the screening protocol during the first 12 months (71–76.7%, mean 76.1%) and 24 months (29.6–52.5%, mean 36.8%) after transplant varied between centers. Rates of BKPyV viremia (3.6–28.2%, mean 20.6%) as well as BKAN (0–4.5%, mean 3.2%) also varied among centers. Adherence to the screening protocol was associated with a decrease in the magnitude of the initial viral load detected (3.29 vs. 3.74 log10 copies/mL, P = 0.065), but was not associated with peak viral load (3.95 vs. 4.14 log10 copies/mL, P = 0.47), viremia duration (179 vs. 196 days, P = 0.74), or incidence of BKAN among viremic subjects (15.3% vs. 16.0%, P = 0.91).

Conclusion. Even with a uniform screening protocol for BKPyV in place, adherence to this protocol varied widely among centers. More research is needed to determine patient-level and center-level barriers to adherence, as well as to determine optimal screening practices to further reduce the incidence of BKAN.

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1765. Osimertinib-Associated Progressive Multifocal Leuкоencephalopathy
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Background. Progressive multifocal leukoencephalopathy (PML) is a rare demyelinating disease of white matter in the central nervous system (CNS) caused by reactivation of John Cunningham (JC) virus. Drug-induced PML is increasingly reported with the widely used biological immunosuppressant drugs and molecular targeted antineoplastic agents. Monoclonal antibodies were the pioneer drugs to be associated with PML including the prototypical natalizumab.

Methods. Epidermal growth factor receptor (EGFR) tyrosine kinase inhibitors (TKI) have been rarely described in this context with few case reports ofibrutinib-associated PML. Osimertinib, a third-generation EGFR TKI, was recently FDA approved for the first-line treatment of metastatic non-small-cell lung cancer (NSCLC), and to the best of our knowledge has never been associated with PML. We describe a case report of a rapidly progressive PML likely associated with osimertinib therapy.

Results. A 85-year-old female with history of NSCLC, on osimertinib, was admitted with progressively worsening left hemiparesis, facial palsy, unsteady gait, recurrent falls, and episodic confusion over a period of month. Brain magnetic resonance imaging revealed foci of non-enhancing increased T2 and fluid-attenuated inversion recovery (FLAIR) signal intensity in the periventricular and bilateral cerebral subcortical white matter. MRI cervical spine was unremarkable for acute enhancing lesions. Cerebrospinal fluid (CSF) was unremarkable for infectious etiology, oligoclonal bands, and cytology. The patient was readmitted 2 weeks later with worsening neurological deficits and new lesions in the bilateral middle cerebellar peduncles, pons, and medulla. Positron emission tomography (PET) with 18F-2-fluoro-2-deoxy-D-glucose (18F-FDG) PET/CT showed increased uptake in the brain lesions.

Conclusion. Inhibition of tyrosine kinase-dependent pathways can potentially aid in the replication of JC virus per previously reported ibrutinib-associated PML. Clinicians should be aware of PML risk in patients on osimertinib and TKI therapy, especially those with positive serum JC virus serology.