**Materials and Methods**

**Immunosuppressive regimen and infection prophylaxis protocol**

The immunosuppressive regimen of the domestic patients consisted of 1.0 g methylprednisolone intraoperatively followed by the introduction of triple immunosuppressive therapy including a calcineurin inhibitor (cyclosporin or tacrolimus), corticosteroids, and an antiproliferative agent mycophenolate mofetil (MMF)/mycophenolate sodium (Myfortic). The patients received 1-2 g/day of MMF or 720-1440 mg/day of Myfortic. For highly sensitized patients, rituximab and plasmapheresis were given. Information on the induction therapy for the tourist group was unavailable. The maintenance immunosuppressive regimens used in both groups were the same. Tacrolimus was adjusted with trough levels targeted at 7–10 ng/ml during the first 3 months and 4-7 ng/ml thereafter. Cyclosporin dosing was adjusted to blood cyclosporin trough levels targeted at 250 to 350 ng/mL and 150 to 250 ng/mL in the first 2 months and 2 to 6 months post-transplant, respectively. All patients received prophylaxis for PJP with trimethoprim 80 mg/sulfamethoxazole 400 mg once daily for 6 months. Viral prophylaxis for CMV with antiviral therapy (valganciclovir or acyclovir) varied based upon the relative risk of CMV infection.

**Post-transplantation follow-up**
We routinely monitored kidney allograft function by measuring serum creatinine, urine protein excretion, urine for hematuria, and ultrasound of the allograft. A renal biopsy was performed in the patients with a clinically diagnosed allograft rejection with episodes of persistent, unexplained increases in serum creatinine and unexplained heavy proteinuria. Allograft rejection was diagnosed according to the Banff classification. CMV disease was considered in the presence of clinical symptoms such as fever, leukopenia, or organ involvement (including hepatitis, pneumonitis or colitis) and signs of disease coupled with evidence of CMV infection detected by blood tests including PCR or CMV serology. PJP infection was defined as microbiologically confirmed *Pneumocystis jiroveci* detected in bronchoalveolar lavage fluid. The estimated glomerular filtration rate (eGFR) was calculated using the abbreviated modification of diet in renal disease study equation. Allograft loss was defined as eGFR < 15 ml/min or recipients who reinitiated dialysis therapy.

**Quantitative real-time PCR for PV**

PCR amplifications were run in a reaction volume of 25 μl containing 12.5 μl of TaqMan Universal PCR Master Mix, 100 ng of DNA sample, 300 nM of each primer, and 200 pmole of TaqMan probe. The PCR cycling program was initiated with a 2 minutes of incubation at 50°C, followed by a first denaturation step of 10 minutes at 95°C and then 45 cycles at 95°C for 15 seconds and 60°C for 1 minute. According to
the amplification plot, the cycle number over the threshold line was defined as the threshold cycle (Ct). The number of BKV and JCV copies in the tested samples and Ct values were inversely proportional. Amplification was considered positive if the Ct was less than 35.

Table S1. The primer and probe list of JCV and BKV
<table>
<thead>
<tr>
<th>Virus type</th>
<th>target gene</th>
<th>Amplicon</th>
<th>Oligonucleotide sequence (5’–3’)</th>
<th>GenBank accession no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>JCV</td>
<td>late mRNA gene</td>
<td>123 bps</td>
<td>F: TGAACCAAAAAGCTACATAGGTAAGTAATG R: AATCCTGTGGCAGCAG P: TTCATGGGTGGCGCAGTGC</td>
<td>NC001699</td>
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<tr>
<td>BKV</td>
<td>VP3 gene</td>
<td>119 bps</td>
<td>F: TCTAGGCCTGTACGGGACTGTA       R: CACTTGACAGGGGTTCTTGGG P: TGAAGCATATGAAGATGCCCCAAC</td>
<td>V01108</td>
</tr>
</tbody>
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