

Supplementary Material 1. A Survey of Infection Prevention Protocol in Solid Organ Transplantation

Transplant Infection Control Committee, the Korean Society for Transplantation

※ Complete one copy of the questionnaire by organ, change the next to the appropriate answer to , multiple answers available if needed

Kidney Liver Heart Lung Pediatric Adult

(If the protocols of children and adults are different, please fill them out separately.)

The number of beds -300 301-500 501-1,000 >1,000

Name of the person replying (), Department (), E-mail ()

1. Antibacterial prophylaxis

(Preventive antibacterial agents used in non-infected and non-high-risk situation)

(1) Name of antibacterial agents, interval, duration ()

※ Example; cefotaxime 2 g iv q 8 hr + metronidazole 500 mg iv q 8 hr for 5 days

2. Prevention of cytomegalovirus (CMV)

(1) CMV D+/R-

If CMV disease occurs while observing without any prevention, it is treated

As a preemptive strategy, () tests are performed at () after transplantation and treatment is performed if () or higher

※ Example; (quantitative PCR for CMV) tests are performed at (0, 1, 2, 3, 4, 6, 8, 12, 16, 20, 24 week) after transplantation and treatment is performed if (4 logIU/mL) or higher

Prophylactic administration of acyclovir iv or po for () months after transplantation

Prophylactic administration of valacyclovir po for () months after transplantation

Prophylactic administration of ganciclovir iv or valganciclovir po for () months after transplantation

After the prophylaxis period is over, as a preemptive strategy, the () tests are performed at () after the end of prophylaxis and treatment is performed if () or higher

※ Example; (quantitative PCR for CMV) tests are performed at (0, 4, 6, 12 week) after the end of prophylaxis and treatment is performed if (4 logIU/mL) or higher

Other methods not in the above options ()

(2) CMV R+

If CMV disease occurs while observing without any prevention, it is treated

As a preemptive strategy, () tests are performed at () after transplantation and treatment is performed if () or higher

※ Example; (quantitative PCR for CMV) tests are performed at (0, 1, 2, 3, 4, 6, 8, 12, 16, 20, 24 week) after transplantation and treatment is performed if (4 logIU/mL) or higher

Prophylactic administration of acyclovir iv or po for () months after transplantation

Prophylactic administration of valacyclovir po for () months after transplantation

Prophylactic administration of ganciclovir iv or valganciclovir po for () months after transplantation

After the prophylaxis period is over, as a preemptive strategy, the () tests are performed at () after the end of prophylaxis and treatment is performed if () or higher

※ Example; (quantitative PCR for CMV) tests are performed at (0, 4, 6, 12 week) after the end of prophylaxis and treatment is performed if (4 logIU/mL) or higher

Other methods not in the above options ()

(3) When using a preemptive strategy

While treating with ganciclovir iv or valganciclovir po, () tests are performed every () weeks, and if the treatment is continuously () negative, the treatment is terminated.

※ Example; (quantitative PCR for CMV) tests are performed every (1) weeks, and if the treatment is continuously (2) negative, the treatment is terminated.

3. Prevention of herpes zoster virus

- If shingles occurs while observing without any prevention, it is treated
- Prophylactic administration of acyclovir iv or po for () months after transplantation
- Prophylactic administration of valacyclovir po for () months after transplantation
- Other methods not in the above options ()

4. Prevention of Epstein-Barr virus (EBV) associated PTLD

(PTLD = Post-transplant lymphoproliferative disease)

(1) Pre-transplant tests

- All patients are tested for EBV serology
- All patients are tested for blood EBV quantitative PCR
- Blood EBV quantitative PCR tested only in () at high risk
- ※ Example; only in (pediatric patients) at high risk
- Other methods not in the above options ()

(2) Post-transplant follow-up tests

- If PTLD is clinically suspected while observing without any action, it is tested
- Blood EBV quantitative PCR tested only in () at high risk and regularly tested in ()
- ※ Example; tested only in (pre-transplant positive of blood EBV quantitative PCR) at high risk and regularly tested in (1W, 2W, 3W, 4W, 3M, 6M, 12M)
- ※ Example; tested only in (EBV sero-positive donor / sero-negative recipient) at high risk and regularly tested in (1W, 2W, 3W, 4W, 3M, 6M, 12M)
- Other methods not in the above options ()

5. Prevention of BK virus (only in kidney transplantation)

- If BKV nephropathy is clinically suspected while observing without any action, it is tested
- Test if serum Cr rises ()% above baseline
- Blood BKV RT-PCR is regularly tested at () after kidney transplantation
- ※ Example; at (0, 3, 6, 9, 12 months) after kidney transplantation
- Urine BKV RT-PCR is regularly tested at () after kidney transplantation
- Blood and urine BKV RT-PCR is regularly tested at () after kidney transplantation
- Other methods not in the above options ()

6. Prevention of *Pneumocystis jirovecii* pneumonia

(1) Name of prophylactic antibiotics, interval, duration ()

※ Example; TMP/SMX 2T po qod for 6 months

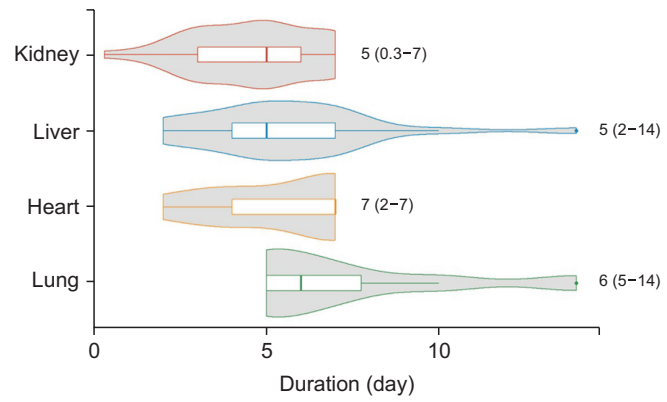
7. Prevention of fungal infection

- If fungal disease occurs while observing without any prevention, it is treated
- Prophylactic administration of () for () months after transplantation

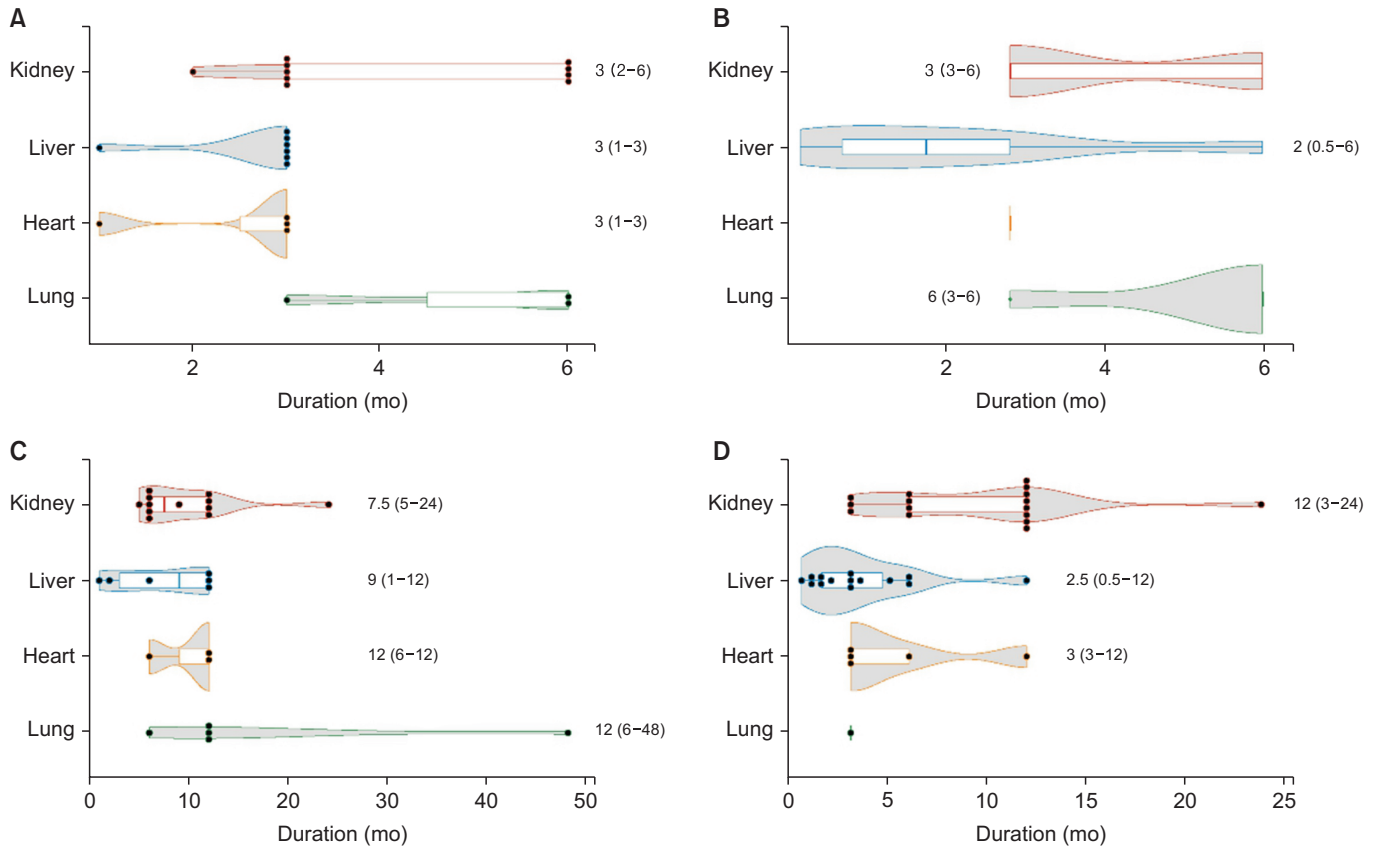
- After the prophylaxis period is over, the () tests are performed at () after the end of prophylaxis
- ※ Example; (serum galactomannan) tests are performed at (0, 4, 6, 12 week) after the end of prophylaxis
- Other methods not in the above options ()

8. Surveillance and treatment of latent tuberculosis infection (LTBI)

- If tuberculosis occurs while observing without any prevention, it is treated
- LTBI is treated if IGRA test is positive
- LTBI is treated if tuberculin skin test (TST) is positive
- Both IGRA and TST are performed and LTBI is treated if even one test is positive
- Both IGRA and TST are performed and LTBI is treated if both tests are positive
- Other methods not in the above options ()



Supplementary Fig. 1. Duration of antibacterial prophylaxis after transplantation. Bold line, median; each end of the boxes, interquartile range; gray area, the number of transplant programs. The numbers denote the median (range).



Supplementary Fig. 2. Duration of different strategies for the prevention of cytomegalovirus (CMV) disease. (A) Prophylaxis for CMV D+/R- recipients. (B) Prophylaxis in a hybrid strategy for CMV D+/R- recipients. (C) Post-prophylaxis viral load monitoring for CMV D+/R- recipients. (D) Preemptive viral load monitoring for CMV R+ recipients. Bold line, median; each end of the boxes, interquartile range; gray area and dots, the number of transplant programs. The numbers denote the median (range).