Compliance of Letermovir Prescribing at a London Oncology Referral Hospital

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Background

- Letermovir is licensed as prophylaxis of cytomegalovirus (CMV) reactivation in adult CMV- seropositive recipients of an allogeneic hematopoietic stem cell transplant (HSCT)[1]
- According to NICE TA591 (31/07/2019) appropriate use is deemed as meeting the following criteria:[1,2,3]
  - Initiation between day 0 and day 28 (D0-28)
  - Prescribed at the correct dose (240 mg daily in patients on concomitant cyclosporin; 480 mg daily in all other patients)
  - Stopped at D100 unless there is a documented, clinically indicated reason for continuation
- There is no clear guidance on what population should receive extended prophylaxis, though studies indicate patients with graft versus host disease (GVHD) on high dose immunosuppression may qualify[4]

Objectives

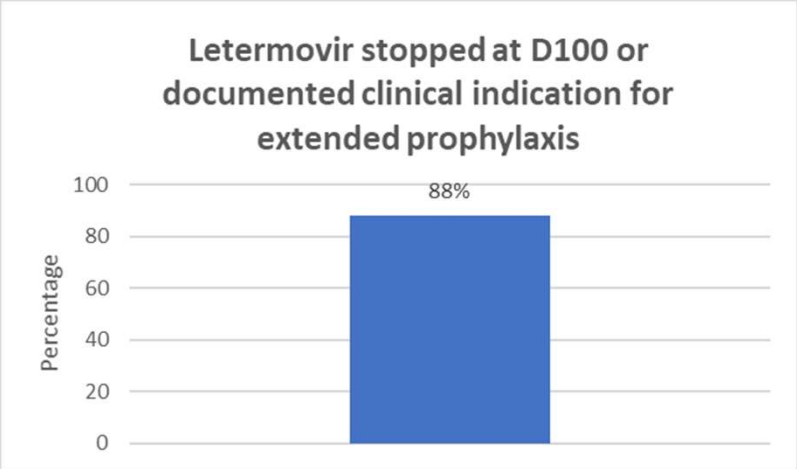
- To assess compliance of letermovir prescribing to guidelines as per NICE TA591, more specifically on course duration
- Standards and Target Compliance:
- 100% of letermovir stopped at D100 or there a documented reason for extension beyond D100

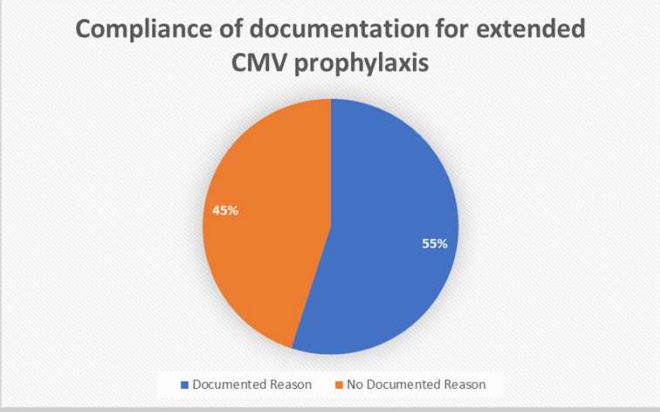
Methods

- To assess compliance of letermovir prescribing to guidelines as per NICE TA591, more specifically on course duration
- Standards and Target Compliance:
- 100% of letermovir stopped at D100 or there a documented reason for extension beyond D100
- Due to package size constraints dispensing up to a 112 day supply was considered stopping at D100

Results

- There were 46 patients, totaling 49 transplants, who were prescribed letermovir between July 2019 and March 2022. Patients who had two transplants were considered as two unique entries
- 42/49 transplants had concluded CMV prophylaxis at the time of the audit
- 88% (37/42) received <112 days of treatment or received >112 days with proper documentation
- The average prophylaxis duration was 128 days for patients without documentation





Discussion

- There is no clear guidance on what is considered an appropriate reason to continue letermovir, which affected assessing compliance in a quantitative manner
- 26% of the cases that have concluded CMV prophylaxis (11/42) received letermovir post D100, with only 55% (6/11) of those having a documented reason (100% reported as GVHD)

Limitations:

- Some patients in the audit received transplants prior to the implantation of electronic prescribing, which meant that start dates could not be ratified with an electronic drug chart. Start dates were inferred on inputted start dates on the chemotherapy prescribing software (ARIA) and dispensing data
- Physicians were not asked on and individual basis about their patients and reasoning for prescribing the letermovir post D100
- Some patients had not reached D100

Conclusion

- The prescribing of letermovir was predominantly in accordance with NICE guidance. The main area for improvement was documentation of prescribing letermovir post D100. Of those with reason 100% listed GVHD as cause for extended prophylaxis, which is in alignment with newer studies

Recommendations:

- Consider supplying all letermovir upfront
- Education for doctors and pharmacy staff on letermovir use
- Re audit in 6-12 months

References

1. National Institute for Health Care Excellence. Letermovir for preventing cytomegalovirus diseaseafter a stem cell transplant. Available at: www.nice.org.uk/guidance/ta591.
2. Electronic Medicines Compendium. PREVYMIS 240 mg film-coated tablets. Available at: https://www.medicines.org.uk/emc/product/11943/smpc#gref.
3. NHS England – Initial Funding Application – Letermovir for preventing cytomegalovirus disease after a stem cell transplant(TA591). https://www.bsatexsecure.co.uk/trust/default.htm
4. Bansal R, Gordillo CA, Abramova R, et al. Extended letermovir administration, beyond day 100, is effective for CMV prophylaxis in patients with graft versus host disease. Transpl Infect Dis. 2021;23(2):e13487. doi:10.1111/tid.13487