

# Adherence to *Pneumocystis jirovecii* pneumonia prophylaxis guidelines in patients prescribed prednisolone for immune-related adverse effects

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## Background

Immunotherapy drugs have become integral in the treatment of many types of cancer, which has resulted in a greater number of patients experiencing immune-related adverse effects (irAEs). Management of irAEs often involves prolonged prednisolone use, increasing risk of infections such as *Pneumocystis jirovecii* pneumonia (PJP). Guidelines recommend PJP prophylaxis for immunocompromised patients taking prednisolone 20mg/day for 4 weeks or greater.

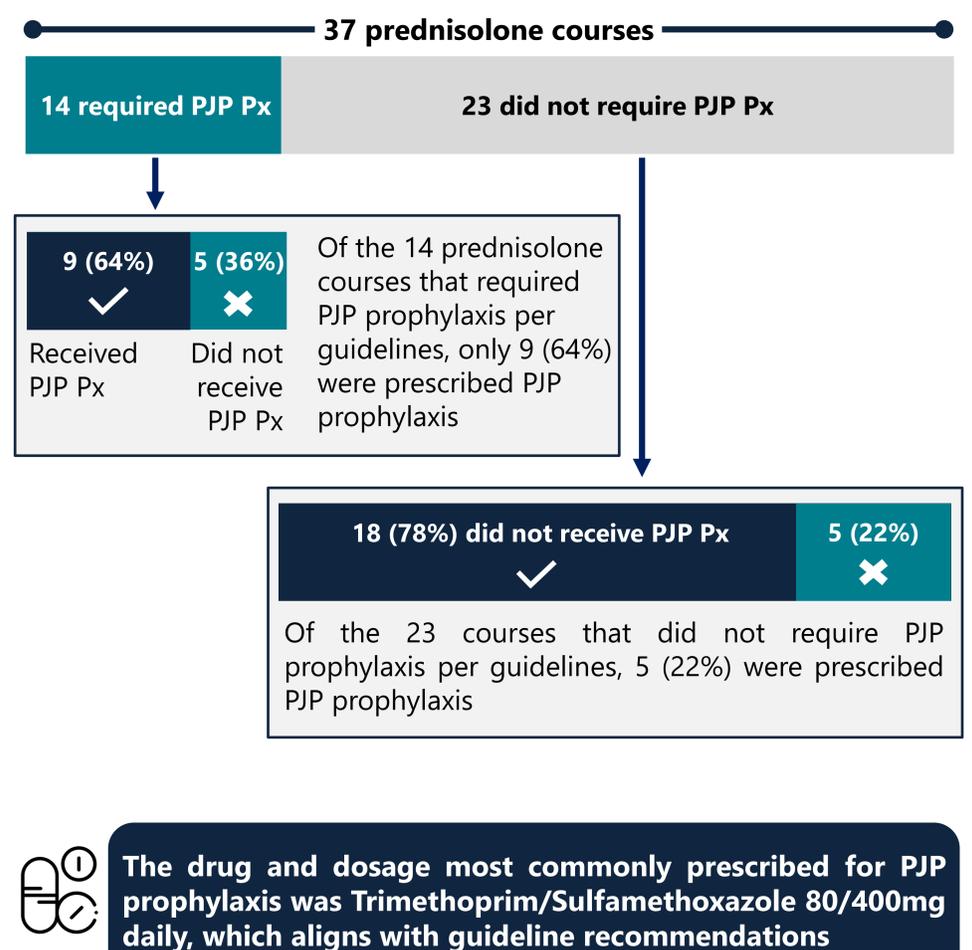
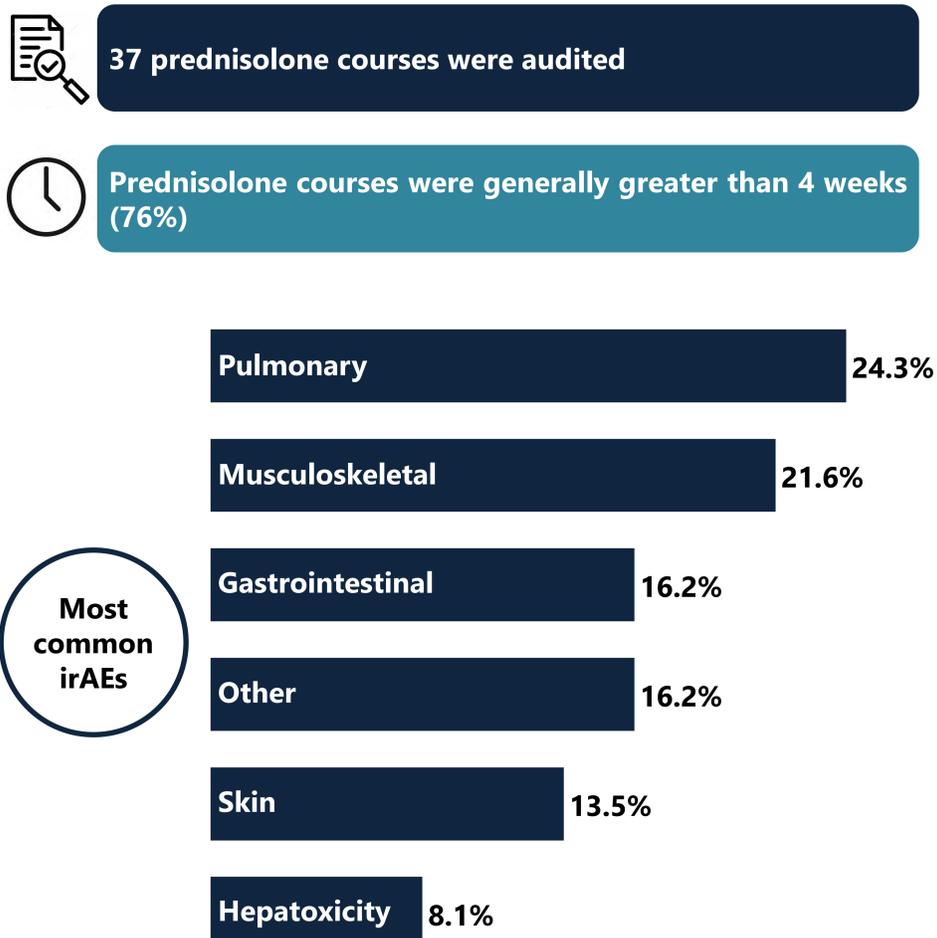
## Aim

To audit PJP prophylaxis in patients prescribed prednisolone for irAEs against guideline recommendations.

## Method

A retrospective audit of patients dispensed prednisolone between January 2020 and December 2021 who were concurrently receiving immunotherapy at a tertiary referral hospital was conducted using dispensing software and electronic medication lists. Patients were excluded if the prednisolone indication was not irAEs or if prednisolone was dispensed outside the hospital.

## Results



## Discussion

This audit highlighted inconsistent PJP prophylaxis prescribing, with only 64.3% of patients taking prednisolone for irAEs prescribed prophylaxis per guideline recommendations. The potential consequence of PJP infection is increased mortality and morbidity, delays to cancer treatment and associated healthcare costs. It is acknowledged that fluctuating prednisolone doses and extension of courses may have reduced compliance with PJP prophylaxis guidelines. Pharmacist review and prescriber education could improve adherence to guidelines and patient outcomes.

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