## OP-36
## Potentially life-threatening oral methotrexate dosing errors reported in Australian hospitals

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**Objective:** To determine the incidence of oral methotrexate dosing errors reported in Australian public hospitals located in New South Wales (NSW).

**Methods:** A retrospective analysis of records held by the Incident Information Management System (IIMS, the incident reporting system for NSW public hospitals). Entries involving methotrexate were extracted from 01-01-2010 to 21-04-2015, and manually reviewed. 'Incidents' were classified as oral methotrexate administered for three or more consecutive days. 'Near misses' were methotrexate charted or dispensed daily but the error was realised before three days elapsed.

**Results:** In total there were 63 near miss events and 4 incidents resulting in daily dosing for three or more days. Of the near misses, 24 were detected by pharmacy staff, two by nursing staff, two by medical staff and one by the patient (not stated in the remaining 34 cases). There was one death: an elderly patient given 10 mg of methotrexate for three consecutive days. Eight days later the patient died from neutropaenic sepsis. The frequency of these reports remained stable over the time period studied, with 11-13 reports/year.

**Conclusion:** Potentially fatal errors with oral methotrexate continue to occur in NSW hospitals despite several measures implemented to reduce the risk of error. This builds on previous data showing increased oral methotrexate dosing errors in the community, including several recent deaths. This highlights the role of the pharmacist in medication safety and the value of timely review by pharmacists. This should include weekend staffing of pharmacists, as methotrexate could be given daily Friday – Sunday before pharmacy becomes aware of it on Monday.