

Sustained Elevation of Toxic Methotrexate Concentration Leads to Increasing Rates of Complications

In a study of over 600 adult lymphoma patients receiving HDMTX, **MTX concentrations $>1.28 \mu\text{M}$ at 48 hours led to increased¹:**



↑ 5x
**Risk of Acute
Kidney Injury**



↑ 3.37
**Days Longer
Hospital LOS**



↑ 5x
**ICU
Admissions**



↑ 4x
**30-Day
Mortality**



Data compiled from a Mayo Clinic retrospective analysis of 642 patients with lymphoma who received 2804 cycles of HDMTX between Jan 2002 – Dec 2018. Median age was 66 years and primary endpoints included nephrotoxicity, ICU admission, hospital LOS, and 30-day mortality after HDMTX.

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“Elevated 48-hour MTX levels, particularly $> 1.28 \mu\text{mol/L}$, should alert clinicians for complications.”¹

Anticipate and detect delayed MTX clearance early with MTXPK.org²:

a Free, Open-Access, Clinical Decision-Making Tool
that monitors plasma MTX clearance in both
adult and pediatric patients



No login
required



No patient
data stored
on website*



Visually displays
MTX clearance
curve



Allows users to
download or
print reports



Visit **MTXPK.org** to see if your patient is clearing
MTX as expected. You can start with just a single
MTX and serum creatinine lab value.

*Input data can be stored to a local device and browser so additional measurements can be added later.

LOS: length of stay; ICU: Intensive Care Unit; MTX: Methotrexate; HDMTX: High-Dose Methotrexate

1. O'Donoghue DF et al. JCO Oncol Pract. 2022;1:1-7. 2. Taylor ZL et al. Clin Pharmacol Ther. 2020;108(3):635-643.