

# Renal Replacement Therapy

#### **Adults:**

## → Dose in patients undergoing renal replacement therapy:

<u>Hemodialysis, intermittent (thrice weekly):</u> Dialyzable. *Initial:* Administer 50% to 100% of the indication-specific dose. When scheduled dose falls on a dialysis day, administer after hemodialysis. If not administered after hemodialysis, provide a 50% supplemental dose. [1]

<u>Peritoneal dialysis:</u> *Initial:* Administer 50% to 100% of the indication-specific dose. [2]

<u>CRRT:</u> Drug clearance is dependent on the effluent flow rate, filter type, and method of renal replacement. *Initial:* Administer 75% to 100% of the indication-specific dose. [2]

<u>PIRRT (eg, sustained, low-efficiency diafiltration):</u> Drug clearance is dependent on the effluent flow rate, filter type, and method of renal replacement. *Initial:* Administer 75% to 100% of the indication-specific dose. Administer the dose after PIRRT therapy ends on PIRRT days

#### **Pediatrics:**

## → Dose in patients undergoing renal replacement therapy:

Hemodialysis: Administer 50% of normal dose once daily.

CAPD: Administer 50% of normal dose once daily.

CRRT: Administer 75% of normal dose once daily. [3]

[1] - Schusziarra V, Ziekursch V, Schlamp R, Siemensen HC. Pharmacokinetics of azathioprine under haemodialysis. Int J Clin Pharmacol Biopharm. 1976;14(4):298-302.[PubMed 1002367]

[2]- Nemecek BD, Hammond DA, eds. Demystifying Drug Dosing in Renal Dysfunction. American S of Health-System Pharmacists; 2019.

[3]- Aronoff GR, Bennett WM, Berns JS, et al, Drug Prescribing in Renal Failure: Dosing Guidelines Adults and Children, 5th ed. Philadelphia, PA: American College of Physicians; 2007, p 97, 177.