Appendix I -Intravenous (IV) TO Oral (PO) Dose Conversion - Adults

Oral therapy may not be appropriate for all patients. Clinical assessment is required prior to any changes in medication route. Consult pharmacist for any questions about appropriate conversion doses.

Drug	Usual IV Dose*	Approximate PO Dose*	PO to IV Considerations/Comments	Reference
digoxin	0.1-0.4 mg IV Q24H	0.125-0.5 mg PO Q24H	Oral bioavailability about 80% for tablets and liquid	1,2
dimenhyDRINATE	25-50 mg IV	25-50 mg PO	Conversion of IV to PO is 1:1	
enalaprilat	1.25 mg IV Q6H	enalapril 5 mg once daily	Concomitant diuretic use increases risk for hypotension If no diuretic: initiate at 5mg orally daily and titrate as needed; If on diuretic and responding to 0.625 mg intravenously Q6H: initiate at 2.5 mg orally daily and titrate as needed	1,4,5
famotidine	20 mg IV	ranitidine 150 mg PO at same interval	Exception: use IV for active GI bleeding Dosing based on AHS Therapeutic Interchange	6
folic acid	1 mg IV daily	1 mg PO daily	Oral bioavailability 75-90%	3
furosemide	20-40 IV mg/dose	20-80 PO mg/dose	Exception: use IV furosemide for acute fluid overload Conversion of IV to PO ranges from 1:1 to 1:1.5 Oral bioavailability about 60% for tablets and oral solution.	1,4,5
hydrocortisone	variable	variable	Suggest consulting pharmacist for appropriate conversion Oral bioavailability greater than 90%	2,4
HYDROmorphone	2 mg IV	4 mg IR oral formulation	Opioid IV to oral requires clinical assessment. Equianalgesic dose is approximate. Titrate to patient response.**	1
ketorolac	10-30 mg IV Q6H	ibuprofen 400 mg PO Q6H	Patient assessment is required before changing from IV ketorolac to oral ibuprofen Oral ketorolac is non-formulary and interchanged to ibuprofen 400 mg at the same interval Oral bioavailability greater than 90%	2,6
metoclopramide	10 mg IV Q6H PRN	10 mg PO Q6H PRN	Oral bioavailability 80%	3,4
morphine	10 mg	30 mg IR formulation	Opioid IV to oral requires clinical assessment. Equianalgesic dose is approximate. Titrate to patient response. **	1,7
multivitamins	10 mL IV daily	multivitamins with minerals 1 tablet PO daily	Oral multivitamins plain are non-formulary Current formulary contract brand of multivitamin with mineral PO preparation will be supplied	3, 6
ondansetron	4 mg IV Q6H PRN	4 mg PO Q6H PRN	Conversion of IV to PO is 1:1	6

Drug	Usual IV Dose*	Approximate PO Dose*	PO to IV Considerations/Comments	Reference
pantoprazole	40 mg IV daily or BID	Able to swallow: pantoprazole magnesium (Tecta®) 40 mg PO daily or BID Unable to swallow: consult pharmacist for options	Exception: Non-variceal upper gastrointestinal bleeding Refer to AHS Therapeutic Interchange for more information Pharmacokinetics of same PO and IV doses are similar. Oral bioavailability about 80%.	1,6
phenyTOIN	100 mg IV Q8H	300 mg PO daily	When converting to PO give total IV daily dose once daily Oral bioavailability greater than 90%	1,2
methylPREDNISolone sodium succinate	variable	predniSONE variable dose PO daily	Convert to predniSONE using appropriate dose for the indication	1,4
ranitidine	50 mg IV Q6-8H	150 mg PO BID	Exception: use IV for active GI bleeding	6
	50 mg IV Q12-24H	150 mg PO daily		

NOTES:

* Doses in this chart do not take into consideration adjustments for renal or liver dysfunction.

** Inter-individual variability (e.g., age, organ function), clinical status, patient response, tolerance, drug interactions, and side effects should be considered when performing opioid dose conversions. Equianalgesic doses are based on single dose studies and lower doses may be required with repeated administration. For patients on chronic opioid therapy, reduce the calculated dose of the new opioid by 25% to 50% for incomplete cross tolerance. For further information, refer to the Opioid Class Review in the Drugs and Therapeutics Backgrounder Issue 5 September 2014 (7)

References

(1) Professional Resource #320842, Considerations for PO to IV Dose Conversions. Pharmacist's Letter/Prescriber's Letter. August 2016

(2) Cyriac J.M., James E. Switch over from intravenous to oral therapy: A concise overview. J Pharmacol Pharmacother. 2014 Apr-Jun; 5(2): 83–87. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4008927/?report=printable

(3) Stanford Health Care. Medication Monitoring: Intravenous to Oral Therapy Interchange Program Pharmacy Department Policies and Procedures (Issue Date: 05/2012 Review/Revise Date: 03/2017). Accessed: November 2, 2017. Available from: http://med.stanford.edu/bugsanddrugs/guidebook/_jcr_content/main/panel_builder_0/panel_0/download_1/file.res/IV_to_PO_Conversion_Policy.pdf

(4) Lexicomp Online®, Lexi-Drugs®, Hudson, Ohio: Lexi-Comp, Inc.; date accessed: 2 Nov 2017

(5) Dasta J.F., Boucher B.A., Brophy G.M., Cohen H., Hassan E., MacLaren R., Muzykovsky K., Martin S.J., Pass S.E., Seybert A.L. Intravenous to oral conversion of antihypertensives: A toolkit for guideline development. Annals of Pharmacotherapy 2010; 44 (9): 1430-1447 http://www.ncbi.nlm.nih.gov/pubmed/?term=20702758
(6) AHS Provincial Formulary Alberta Health Services (AHS) Provincial Drug Formulary. AHS Pharmacy Services Drug Utilization; c2010 – Accessed on: 01-Nov-2017 http://webappsint.albertahealthservices.ca/Pharmacy/AHS_FORMULARY/search_formulary
(7) AHS Drugs and Therapeutics Committee. Opioid Class Review. Drugs and Therapeutics Backgrounder 2014 (5) Date Accessed: November 3, 2017. Available from: https://share.ahsnet.ca/teams/PSPP/ppublications/Drugs%20%20Therapeutics%20Backgrounder/Drugs%20and%20Therapeutics%20Backgrounder-Opioid%20Class%20Review.pdf