Appendix 1. Equations for calculating renal function

Cockcroft–Gault equation using actual body weight (CG-ABW)

Adult males: $$\text{CrCl} = \frac{(140 - \text{age [years]}) \times \text{weight (kg)} \times 1.23}{\text{Serum creatinine (μmol/L)}}$$

Adult females: $$\text{CrCl} = \frac{(140 - \text{age [years]}) \times \text{weight (kg)} \times 1.04}{\text{Serum creatinine (μmol/L)}}$$

Modified Cockcroft–Gault equation (modified CG)

Adult males: $$\text{CrCl} = \frac{(140 - \text{age [years]}) \times 90}{\text{SCr (μmol/L)}}$$

Adult females: $$\text{CrCl} = \frac{(140 - \text{age [years]}) \times 90}{\text{SCr (μmol/L)}} \times 0.85$$

Appendix 2. Dosing recommendations based on Canadian drug monographs

Apixaban[10]
- 5 mg BID *or*
- 2.5 mg BID if TWO or more of the following apply: age ≥ 80 years, body weight ≤ 60 kg, SCr ≥ 133 μmol/L
- Not recommended if CrCl < 25 mL/min

Dabigatran[9]
- 150 mg BID *or*
- 110 mg BID if age ≥ 80 years; consider this dose if age > 75 years and CrCl 30–49 mL/min
- Not recommended if CrCl < 30 mL/min

Rivaroxaban[8]
- 20 mg once daily if CrCl ≥ 50 mL/min *or*
- 15 mg once daily if CrCl 30–49 mL/min
- Not recommended if CrCl < 30 mL/min

Appendix 3. Criteria for comparison of dosing determined by Cockcroft–Gault equation based on actual body weight (CG-ABW) and by modified Cockcroft–Gault (CG) equation

Dosing is appropriate if:
- CG-ABW and modified CG equations resulted in the same dosing recommendation

Dosing is supratherapeutic if:
- CG-ABW equation resulted in the same dosing recommendation at discharge, but modified CG equation resulted in recommendation for a higher dose at discharge
- CG-ABW equation resulted in recommendation for a lower dose at discharge, but modified CG equation resulted in the same dosing recommendation at discharge
- CG-ABW equation resulted in recommendation against use of direct oral anticoagulant at discharge (based on renal function), but modified CG equation resulted in a recommendation for any dose at discharge

Dosing is subtherapeutic if:
- CG-ABW equation resulted in recommendation for a higher dose at discharge, but modified CG equation resulted in the same dosing recommendation at discharge
- CG-ABW equation resulted in recommendation for same dose at discharge, but modified CG equation resulted in recommendation for lower dose at discharge

Supplemental material for Kucey M, Bolt J, Albers L, Bell A, Iroh N, Toppings J. Prescribing of direct oral anticoagulants in atrial fibrillation based on estimation of renal function using standard and modified Cockcroft–Gault equations: a retrospective analysis. *Can J Hosp Pharm*. 2016;69(5):409-14.