

Automatic Dose Rounding in Epic for Antibiotics

Purpose: To utilize the approved dose rounding practices to implement as an automatic process in Epic orders. This will reduce dosing errors and decrease pharmacist time upon verification.

Weight (kg)
<ul style="list-style-type: none"> ▪ Actual Body Weight or Total body weight (TBW): current weight
<ul style="list-style-type: none"> ▪ Ideal Body Weight (IBW): <ul style="list-style-type: none"> ○ $IBW_{male}: 50 \text{ kg} + (2.3 \times \text{height in inches} > 60 \text{ inches})$ ○ $IBW_{female}: 45 \text{ kg} + (2.3 \times \text{height in inches} > 60 \text{ inches})$
<ul style="list-style-type: none"> ▪ Dosing Weight (DW) or "Adjusted Weight": $TBW \geq 120\%$ of IBW <ul style="list-style-type: none"> ○ $DW: IBW + 0.4 (TBW - IBW)$

Weight Classification

Normal weight: $TBW > IBW$, $TBW/IBW < 120\%$

Obese: $TBW/IBW \geq 120\%$

Underweight: $TBW < IBW$

Acyclovir	
Underweight: TBW	
Normal weight: IBW	
Obese: DW	
Doses ending in	Round by 50mg
1-49mg	Up to even 50mg
51-99mg	Up to even 100mg

Amikacin	
Underweight: TBW	
Normal weight: IBW	
Obese: DW	
Doses ending in	Round by 50mg
1-49mg	Up to even 50mg
51-99mg	Up to even 100mg

Amphotericin, liposomal	
Underweight: TBW	
Normal weight: TBW	
Obese: TBW vs DW	
Doses ending in	Round by 50mg
1-49mg	Up to even 50mg
51-99mg	Up to even 100mg

Daptomycin Underweight: TBW Normal weight: TBW Obese: DW	
Doses ending in	Round by 50mg
1-49mg	Up to even 50mg
51-99mg	Up to even 100mg

Eravacycline Underweight: TBW Normal weight: TBW Obese: TBW	
Doses ending in	Round by 10mg
1-4mg	Down to even 10mg
5-9mg	Up to even 10mg

Flucytosine Underweight: TBW Normal weight: TBW Obese: IBW vs DW	
Round up to the nearest 500mg capsule.	

Ganciclovir Underweight: TBW Normal weight: TBW Obese: TBW	
Doses ending in	Round by 50mg
1-49mg	Up to even 50mg
51-99mg	Up to even 100mg

Gentamicin Underweight: TBW Normal weight: IBW Obese: DW	
Doses ending in	Round by 10mg
1-4mg	Down to even 10mg
5-9mg	Up to even 10mg

Sulfamethoxazole/trimethoprim IV Based on trimethoprim component Underweight: TBW Normal weight: TBW Obese: DW	
Doses ending in	Round by 40mg
1-40mg	Up to even 40mg
41-80mg	Up to even 80mg
81-99mg	Down to even 80mg

Tobramycin Underweight: TBW Normal weight IBW Obese: DW	
Doses ending in	Round by 10mg
1-4mg	Down to even 10mg
5-9mg	Up to even 10mg

Vancomycin Underweight: TBW Normal weight: TBW Obese: TBW	
Doses	Round
Doses ≥ 375 mg to ≤ 624 mg	Round dose to 500mg
Doses ≥ 625 mg to ≤ 874 mg	Round dose to 750mg
Doses ≥ 875 mg to ≤ 1124 mg	Round dose to 1000mg
Doses ≥ 1125 mg to ≤ 1374 mg	Round dose to 1250mg
Doses ≥ 1375 mg to ≤ 1624 mg	Round dose to 1500mg
Doses ≥ 1625 mg to ≤ 1874 mg	Round dose to 1750mg
Doses ≥ 1875 mg to any dose higher than 2000 mg	Round dose to 2000mg

Voriconazole Underweight: TBW Normal weight: TBW Obese: DW	
Doses ending in	Round by 50mg
1-49mg	Up to even 50mg
51-99mg	Up to even 100mg

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