

# 6/23 Follow-up

## Tasks

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- ☒ Change trough to AUC in monitoring form
- ☒ Denote maintenace dose in `Post Levels` maintenance dose table
- ☐ Add "Transfer to DMC Calculator" for `New Consult` userform =/

## Update summary

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- 1. Updated Monitoring Form
- 2. Updated MDTable for `New Consult`
  - Added patient context bar to the top of `maintenance table` userform
  - Separated PK paramaters into two frames
- 3. Updated MDTable for `Post Levels`
  - Added percent change, triangles with colors to denote significant changes > 5% from population-based PK parameters
  - Highlighted dosing regimen in maintenance dose table if patient already has a selected regimen

## Update Details

## 1. Updated Monitoring Form

- Monitoring form now copies sheet from workbook and makes a new workbook (I'm trying to keep the actual excel file from containing any patient information)
  - Patient information will be stored in db.accdB database
  - Monitoring form with patient information will pop up with new workbook

Vancomycin Monitoring Form							
<b>Identifiers</b>		<b>Characteristics</b>		<b>Diagnosis</b>			
MRN: 12345		Age: 41 F		Provider: Dr. John Jones			
Name: Smith, Jane		Ht: 157 cm		Indication: Osteomyelitis			
Location: 2W 214		Wt: 88.9 kg		Target:			
<b>Anthropomorphics</b>		<b>Kidney Function</b>		<b>Loading Dose</b>			
TBW: 88.9 TBW/IBW: 1.79		SCr: 0.5		Dose: 0 mg over 0 hrs			
IBW: 49.7 BMI: 36.1		Bun: 0		Scheduled: Sat, 12/30 00:00			
AdjBW: 65.4		CrCl: 152.8 mL/min		mg/kg 0 mg/kg			
		Drugs:					
<b>Day of Therapy /Date</b>	<b>Day 1</b> 6/23	<b>Day 2</b> 6/24	<b>Day 3</b> 6/25	<b>Day 4</b> 6/26	<b>Day 5</b> 6/27	<b>Day 6</b> 6/28	<b>Day 7</b> 6/29
Maintenance dose	1000 mg q8h						
Administration times per MAR							
Total Daily Dose (TDD)	3 g						
<b>AUC</b>							
Population Estimate	480						
Patient-Specific							
<b>Levels</b>							
Peak Level Ordered for: (date/time)	6/24 17:30						
Peak Level/Time Drawn							
Trough Level Ordered for: (date/time)	6/24 22:30						
Trough Level/Time Drawn							
<b>Labs</b>							
SCr (daily for adults)	0.5						
BUN (daily for adults)							
CrCl estimate (ml/min)	152.8						
WBC							
Procalcitonin							
Other nephrotoxic drugs: NSAIDs, ACE Inhibitor, diuretics, pip/tazo, vasopressors, etc.							
Culture & Sensitivity results / MRSA PCR results for respiratory and sepsis indications:	Nasal MRSA PCR ( ) Positive ( ) Negative						Date: _____
	Blood culture organism(s): _____ ( ) final						Date: _____
	Resp culture; organism(s): _____ ( ) final						Date: _____
	Other: _____; organism(s): _____ ( ) final						Date: _____
Evaluate for de-escalation		<input type="checkbox"/> MRSA PCR follow up if applicable	<input type="checkbox"/> Action on culture information if applicable				
<b>Comments:</b>							

- It still looks like it may need work, so any features, feedback, or design suggestions would be welcomed!

2. Overview MDTTable for New Consult.

Maintenance Dose Table

MRN: 12345  
Name: Smith, Jane  
Location: 2W 214

Age: 41F  
Ht: 157 cm  
Wt: 88.9 kg  
TBW/IBW: 1.79  
BMI: 36.1

SCR: 0.5 mg/dL  
CrCl: 152.8 mL/min  
Using AdjBW: True

Provider: Dr. John Jones  
Indication: Osteomyelitis  
DOT: Day 1

Maintenance Dose Table

Infusion RateGlobalRPh

\* TargetAUC/MIC range 400-600

MIC0.1 - 1.0

	750mg	1000mg	1250mg	1500mg	1750mg	2000mg	
	1 hr	1 hr	1 hr	1.5 hrs	1.5 hrs	2 hrs	<input checked="" type="checkbox"/> infusion times
Q6H	480 16						mg h / L mg/dL
Q8H		480 14	600 17				mg h / L mg/dL
Q12H				490 11	570 13		mg h / L mg/dL
Q18H						450 7	mg h / L mg/dL
Q24H							mg h / L mg/dL
Q36H							mg h / L mg/dL
Q48H							mg h / L mg/dL

\* AUC calculations are estimated and rounded to nearest 10's.

PK Parameters

Population-based

Vd: 57.8 L  
Ke: 0.1144  
t1/2: 6.1 hrs  
CLVanco: 6.5 L/hr  
^ Using for table

PK Parameters

Patient-Specific

Vd:  
Ke:  
t1/2:  
CLVanco:

Legend

AUC/MIC  
trough  
TDD  
dosing

Options

☒ Estimated trough  
☐ Total Daily Dose (TDD)  
☐ dosing in mg/kg

☐ Show all values

\*View AUC Calculation Steps

Exit

\* Click inside the blue box to view steps!

2a. Added patient context to top of userform

Maintenance Dose Table

MRN: 56789  
Name: Test, Patient1  
Location: Med/Surg

Age: 59 M  
Ht: 180.3 cm  
Wt: 63.3 kg  
TBW/IBW: 0.84  
BMI: 19.5

SCr: 0.8 mg/dL  
CrCl: 89 mL/min

Indication: Sepsis (Unknown Source)  
DOT: Day 1 (~13 min)

2b. Separated PK parameters into two frames

- highlighted the pk parameters, population-based or patient-specific that are being used for the table
- added label saying *^ using for table*

MIC 0.1 - 1.0

PK Parameters

Population-based

Vd: 41.1 L  
Ke: 0.0948  
t1/2: 7.3 hrs  
CLVanco: 3.9 L/hr  
*^ Using for table*

PK Parameters

Patient-Specific

Vd:  
Ke:  
t1/2:  
CLVanco:

3. Overview MDTable for Post Levels.

Maintenance Dose Table

MRN: 123456  
Name: Dean, Jimmy  
Location: ICU 314

Age: 72 M  
Ht: 180.3 cm  
Wt: 102.3 kg  
TBW/IBW: 1.36  
BMI: 31.5

SCr: 1.3 mg/dL  
CrCl: 62.6 mL/min  
Using AdjBW: True  
NephroToxic Drugs: Zosyn

Indication: Pneumonia  
DOT: Day 1 (1 hrs in)

Maintenance Dose Table

Infusion Rate: GlobalRPh

\* Target: AUC/MIC range 400-600

MIC: 0.1 - 1.0

	750mg	1000mg	1250mg	1500mg	1750mg	2000mg	
	1 hr	1 hr	1 hr	1.5 hrs	1.5 hrs	2 hrs	<input checked="" type="checkbox"/> infusion times
Q6H			490 15 5 g				mg h / L mg/dL
Q8H				460 12	540 14 5.2 g		mg h / L mg/dL
Q12H	150 3					420 8	mg h / L mg/dL
Q18H							mg h / L mg/dL
Q24H							mg h / L mg/dL
Q36H							mg h / L mg/dL
Q48H							mg h / L mg/dL

\* AUC calculations are estimated and rounded to nearest 10's.

\*\* Total daily doses > 4.5 g have been correlated with a higher incidence of AKI

PK Parameters

Population-based

Vd: 66.5 L  
Ke: 0.0572  
t1/2: 12.1 hrs  
CLVanco: 3.8 L/hr

PK Parameters

Patient-Specific

Vd: 74.4 L ▲ 10.7%  
Ke: 0.1459 ▲ 60.8%  
t1/2: 4.7 hrs ▼ -155%  
CLVanco: 10.9 L/hr ▲ 65%  
▲ Using for table

Legend

AUC/MIC  
trough  
TDD  
dosing

Options

☒ Estimated trough  
☐ Total Daily Dose (TDD)  
☐ dosing in mg/kg

☐ Show all values

\*View AUC Calculation Steps

Exit

\* Click inside the blue box to view steps!

3a. Added percent change, triangles with colors to denote significant changes > 5% from population-based PK parameters

PK Parameters	
Patient-Specific	
Vd: 74.4 L	▲ 10.7%
Ke: 0.1459	▲ 60.8%
t1/2: 4.7 hrs	▼ -155%
CLVenco: 10.9 L/hr	▲ 65%
^ Using for table	

3b. If there is a maintenance dose or dosing regimen already selected, that option will be highlighted in dosing table

		750mg	1000mg	1250mg	1500mg	1750mg
		1 hr	1 hr	1 hr	1.5 hrs	1.5 hrs
Q6H	Q6H	480 16				
	Q8H		480 14	600 17		
	Q12H				490 11	570 13