

Dose Counting Salma Lerma, MSN, RN

A Deeper Dive into TB Nurse Case Management San Antonio, Texas October 25th-27th, 2022 *Salma Lerma, MSN, RN* has the following disclosures to make:

- No conflict of interests
- No relevant financial relationships with any commercial companies pertaining to this educational activity



Goals for Treatment Our goals

Primary goal is to cure the patient of TB disease
 Ensure adequate treatment is met to avoid relapse
 Patient goals

Cure TB disease with minimal adverse drug reactions
Avoid disruptions in everyday life while on treatment

Complete treatment as fast as possible



Most asked question by patients WHEN WILL I BE DONE WITH TREATMENT?

◆Answer depends on :
◆Extent of disease
◆Response to therapy
◆Adherence
◆Location of disease



Be honest with patient that length of treatment is variable

Standard Dosing Concepts

Treatment should be completed 365 days from initiation of therapy (if applicable)

- Count doses and weeks not just months of therapy
- Months are counted in weeks and days, not all months are 4 weeks
- 5 days/week is shown to be as effective as 7 days/week of directly observed therapy, either is provider-dependent
- Any interruption of treatment in initial phase longer than 14 days means treatment should be restarted

Standard Dose Counting

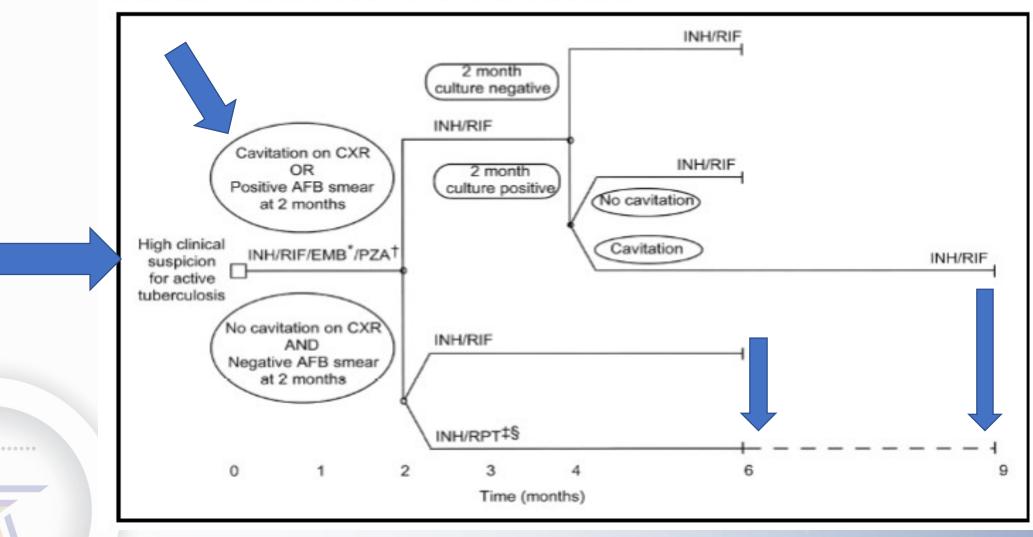
Typical duration for pulmonary tuberculosis is:

- 2-month *initial phase* + 4month equivalent *continuation phase* = 6 months of therapy Or
 2-month *initial phase* + 7
 - month equivalent continuation phase
 - = 9 months of therapy



Treatment Algorithm for TB Disease

FIGURE 1. Treatment algorithm for tuberculosis.



https://www.cdc.gov/mmwr/preview/mmwrhtml/rr5211a1.htm#tab1

able 2.

rug Regimens for Microbiologically Confirmed Pulmonary Tuberculosis Caused by Drug-Susceptible Organisms

Regimen	Intensiv	/e Phase	Contin	uation Phase	Range of Total Doses	Comments ^{c,d}	Regimen Effectiveness
	Drug ^a	Interval and Dose ^b (Minimum Duration)	Drugs	Interval and Dose ^{b,c} (Minimum Duration)			
	INH RIF PZA EMB	7 d/wk for 56 doses (8 wk), or 5 d/wk for 40 doses (8 wk)	INH RIF	7 d/wk for 126 doses (18 wk), or 5 d/wk for 90 doses (18 wk)	182-130	This is the preferred regimen for patients with newly diagnosed pulmonary tuberculosis.	Greater
		7 d/wk for 56 doses (8 wk), or 5 d/wk for 40 doses (8 wk)	INH RIF	3 times weekly for 54 doses (18 wk)	110-94	Preferred alternative regimen in situations in which more frequent DOT during continuation phase is difficult to achieve.	
	INH RIF PZA EMB	3 times weekly for 24 doses (8 wk)	INH RIF	3 times weekly for 54 doses (18 wk)	78	Use regimen with caution in patients with HIV and/or cavitary disease. Missed doses can lead to treatment failure, relapse, and acquired drug resistance.	
	INH RIF PZA EMB	7 d/wk for 14 doses then twice weekly for 12 doses ^e	INH RIF	Twice weekly for 36 doses (18 wk)	62	Do not use twice-weekly regimens in HIV-infected patients or patients with smear-positive and/or cavitary disease. If doses are missed, then therapy is equivalent to once weekly, which is inferior.	
		htt	<u>:ps:/</u>	//www.idsociety	/.org/pra	ctice-guideline/treatment-of-drug-susceptible-tb/	

Drug Regimens

								_					
							TB Treatme	nt Regime	ns				
Regimen	Intensiv Drug ^a	e Phase Interval and De	ose ^b (Minimu	m Duration)	<u>Continuat</u> Drugs I		dinimum Duration)	Range of Total Doses	Comments ^{cd}				Regia Effectiv Grea
1	INH RIF PZA EMB	(8 wk)	or 40 doses		INH RIF	7 d/wk for 12 doses (18 w 5 d/wk for 90 doses (18 w	vk), or	182-130	This is the preferred regir pulmonary tuberculosis.	nen for patien	ts with newly diagnose	1	1
2	INH RIF PZA EMB	(8 wk)	or 40 doses	0	INH RIF	3 times week 54 doses (1	ly for 8 wk)	110-94	Preferred alternative regis DOT during continuation	nen in situatic 1 phase is diffi	ons in which more frequent to achieve.	ient	
3	INH RIF PZA EMB	3 times v doses	reekly for 24 [8 wk.)		INH RIF	3 times week 54 doses (1	8 wk)	78	Use regimen with caution disease. Missed doses car acquired drug resistance.	lead to treatr	nent failure, relapse, an	d	Less
a Other combin b When DOT is per week c Based on expe	utions may b s used, drugs ret opinion, p	e appropriate in certain ci may be given 5 days per v stients with cavitation on	rcumstances eck and the necessar initial chest radiogra	ry number of doses a sph and positive cult	djusted accord is ures at completic	ngly. Although there are no	studies that compare 5 with should receive a 7-month (31	7 daily doses, extensive week) continuation p	experience indicates this would be	an effective prac	tice. DOT should be used wh	en drugs an	e administer
d Pyrdoxine (v neurop sthy maj	vanun 186), 2 7 require a di	5–50 mg/day, is given wit se in crease of pyr idoxine DO	n INH to all persons to 100 mg daily. T-Directly Obser	at risk of neuropath	y (eg. pægnarit v	-Ethambutol	GI-Gastrointestinal	its with diabetes, acon INH-Isonia	sase olism, malnutrition, or cheonic ren zicl PZA-Pyrazin arr	al failure; or path	mts with advanced age). Son UF -Rifampin	ie patients w	with peripher
					Do	sing Recom	mendations	and Fred	uency				
Drug		Preparation		Daily	20	Special Circum		unu meq	uene y		Renal Dose	Hepa	atic Dose
Ethambut		100 mg tablets		Standard dos	p+	Dreman cy/breastf	feeding: Safe in pregna	ncy: can be used w	hile breatfeeding		Adjustment Est cr cl < 30 ml/min		istment ose adjustm
Ethambut		100 mg tablets, coate 400 mg tablets, score	1	15-20 mg/kg d	laily	Renal disease: Us	e with caution; increase Safe in liver disease				20-25 mg/kg 3x/week (not daily) (maximum 2400 mg		ose aujustii
Isoniazid		400 mg tablets, coate 50 mg, 100 mg, or 30					feeding: Safe during pr				3x/weekly) No dose adjustment		
Isoniazid		so mg, 100 mg, or 30 scored or unscored 50 mg/5 ml oral susp sorbitol		Standard dos 5 mg/kg daily and Vitamin E daily	(max 300 mg)		reedung: Sate during profession of the second se				No dose adjustment	Avoid	<u>e liver dises</u> 1 use <u>le hepatic d</u> 1 if possible
		100 mg/ml for IV or	IM injection	Intermittent of 15 mg/kg (mat High dose the 13-18 mg/kg of	x 900 mg) :rapy:							Close	monitorin dic liver fu
Pyrazinan	nide ²	500 mg tablet, scored	4	Standard dos 25-35 mg/kg d	21	in drug-resistant '	feeding: Risk/benefit sh I'B when the isolate is s eared by the kidneys; de	usceptible to pyraz	with pregnant women but al inamide; can be used while it	ould be used preastfeeding	Est crcl <30 ml/min: 25-35 mg/kg (not daily)	Consi monit	erate impai ider use wit toring, TDP dic liver fur
					\square	Hepatic disease: Upatients; can be se	Use with caution; pyrazi were and worsen off tre	inamide is associat satment	ed with hepatotoxicity in ab		(maximum 3000 mg 3x/weekly)	testin	ıg
Rifabutin		150 mg capsule		Standard dos 300 mg daily	ez			/	aknown effects from breastfe		Est cr cl <30 ml/min: Consider standard	Const	erate impai ider use wit
	Δ			X			e, the usual dose may b		r drug concentrations to avo		dose, but monitor dru concentrations to avoi toxicity	g monit d perio testin	toring, TD dic liver fu
								tment may be requ	ired, particularly with anti-r	etroviral use	Hemodialysis: Standa dosing	rd	
Rifampin		150 mg or 300 mg ca may be suspended fo administration	osules, powder r immediate oral	Standard dos 10 mg/kg daily 20 mg/kg or g	r	Renal disease: Saf	feeding: Safe during pr fe in renal disease	egnancy; can be us	ed while breastfeeding		No dose adjustment	Consi monit	erate impai ider use wit toring, TDb
		500 mg/vial lyophiliz njection	ed powder for	Meningitis	reater with 11	Concomitant med	lications: Dosage adjus n; concurrent treatment	t with most anti-re	ired for concurrent medicat roviral drugs is not recomm	ions, iended, as		testin	dic liver fur
Ethambut	ol Standar	d Dose Adjustmen		V	Veight	most and red ovin	al drug concentrations		andard Dose Adjustment		Weigh		_
			40-55 k	g 56	i-75 kg	76-90 kg				40-55	kg 56-75 l	g	76-90
		Daily Twice-Weekly	800 mg 2000 mg		200 mg 800 mg	1600 mg 4000 mg			Daily Twice-Weekly	1000 m 2000 m			2000
	-	Thrice-Weekly	1200 mg		500 mg 000 mg	2400 mg			Thrice-Weekly	2000 n 1500 n			30001
					_	Adverse Re	eactions and	Monitori	ng				
Drug		verse Reactions				Indiverse Ind		Clinical Monite	0				
Ethambut	tol Oc		uritis (often man Peripheral neuro	lifested as decrea	ised visual act	uity or decreased red-p	green color		llen)/color-discrimination (lshihara) asses	sment, baseline and mo	nthly; ask	k about visio
Isoniazid	pe	ripheral neurotoxicity	; rash, arthralgia	, drug induced b	apus Rare: H	omatic or symptomatic hypersensitivity reactions	ons		al signs of hepatotoxicity (n		nel pain, jaundice, etc.)	and neuro	opathy
Pyrazinar	nide Po	varthralgia (non-gou	ty), asymptomat	ic hyperuricemi:	a, hepatotoxic	ity, GI upset, self-limi y in patients with pre-	ited transient		pain, GI adverse effects, and al signs of hepatotoxicity (na		nel pain, jaundice, etc.)		11
Rifabutin	th	ombocytopenia), uvi	itis, arthralgias, t	fever Note: Rit	fabutin may p	ologic (leukopenia, neu roduce an orange disc ve after treatment com	coloration of body	Monitor for GI ad	verse effects, rash, and evide r drug-drug interactions				4

Heartland National TB Center 1-800-TEX-LUNG

https://www.heartlandntbc.org/wp-content/uploads/2021/12/Treatment of Drug-Susceptible Culture Confirmed Tuberculosis for Adults.pdf

.....

Dose Counting: 6 MONTHS

6 months of treatment = 26 weeks of therapy total (8 weeks initial phase + 18 weeks in continuation phase) Total doses: 7 days a week = 182 doses **OR** 5 days a week = 130 doses

Daily dosing initial phase: 7 days a week in 8 weeks = 56 doses (7 days X 8 weeks)
Daily dosing continuation phase: 7 days a week in 18 weeks = 126 doses
Total therapy: Daily dosing for 26 weeks and a total of 182 doses

Daily dosing initial phase: 5 days a week in 8 weeks = 40 doses (5 days X 8 weeks)
Daily dosing continuation phase: 5 days a week in 18 weeks = 90 doses
Total therapy: Daily dosing for 26 weeks and a total of 130 doses



Question

61 y.o male started TB treatment with **RIPE five days a week** on January 3rd, 2022 - February 25th, 2022

How many <u>doses</u> did this patient take?

2022

	-J,	A٨	IU.	AR	Y -			-Fl	EBI	RU	A	RΥ	-		-	M	AR	CH	I-	
s	м	т	w	Ŧ	F	Ś	S	м	т	w	τ	F	8	s	М	Ŧ	w	т	F	S
						1			1	2	3	4	5 kak.15			1	2	З	÷	5
WEL 2	3	4	- 5	6	- 7	8	6	7	8	9	10	11	12.WKJ#	6	7	8	9	10	'11	12
W629	10	11	12	13	14	12	13	14	15	16	17	18	1940k-7	13	14	15	16	i 7	19	19
101316	17	18	19	20	21	22	20	21	22	23	24	25	26 WK.8	20	21	22	23	24	25	26
WR423	24	25	26		28		27	28		C,	Ose	s: 4	0	27	2B	29	30	31		
UL 5 30	31			Qu	503	21														
		-A	PR	IL-	•				-N	1 A	Y-					- J i	UN	IE-		
s	м	т	w	т	F	Ş	\$	м	т	w	т	F	s	\$	м	т	w	Ť	F	s
					1	2	1	2	3	4	5	6	7				1	2	3	4
3	4	5	6	7	8	9	8	9	10	11	12	13	14	5	6	7	8	9	1D	91
.10	11	12	13	14	15	16	15	16	17	18	19	20	21	12	13	14	15	16	v	18
17	18	19	20	21	22	23	22	23	74	25	26	27	28	19	20	21	22	23	24	25
24	25	26	27	28	29	30	29	30	31					26	27	28	29	30		
		-J	UL	Y-				-4	AU	Gl	JST	Г-			SE	PT	ΕŇ	ĺΒ	ER	-
S	м	т	w	т	F	s	S	м	Т	w	Т	F	s	s	м	T	w	т	F	s
					1	2		1	2	з	4	5	6					1	2	3
3	4	5	é	7	8	9	7	8	9	10	11	12,	13	4	5	6	7	8	9	1.0
10	11	12	13	14	15	16	14	25	16	97	18	19	20	11	\$2	13	14	15	15	17
17	18	19	20	21	22	23	21	22	23	24	25	26	27	18	19	20	21	22	23	24
24	25	26	27	28	29	3C	29	29	30	31				25	25	27	29	29	30	
31																				
	-C	C]	[O]	BE	R-		-	N	vc	EN	1B	ER	-		-DI	EC	EM	B	ER	-
s	м	Ţ	W	Т	F	s	5	м	т	w	т	F	s	S	м	т	w	T	F	ŝ
						1			1	2	3	4	5					1	2	3
2	3	4	5	6	7	8	ć	7	8	9	10	11	12	4	5	5	7	2	9	10
9	10	1(12	13	14	15	13	-04	15	16	17	18	19	11	12	12	1 4	15	16	17
16	17	18	19	20	21	22	20	21	22	23	24	25	26	18	19	2D	21	22	23	24
23 30	24 31	25	26	27	28	29	27	2 B	29	30				25	26	27	28	29	30	31
00	01																Раре	:Trail	Design	LCDTB

Initial:

Self-Admin:

Hospital: Missed: Continuation:

Dose Counting: 9 MONTHS

9 months of treatment = 39 weeks of therapy total (8 weeks initial phase + 31 weeks in continuation phase) Total doses: 7 days a week = 273 doses **OR** 5 days a week = 195 doses

Daily dosing initial phase: 7 days a week in 8 weeks = 56 doses (7 days X 8 weeks)
Daily dosing continuation phase: 7 days a week in 31 weeks = 217 doses
Total therapy: 7 days/wk Daily dosing for 39 weeks and a total of 273 doses

Daily dosing initial phase: 5 days a week in 8 weeks = 40 doses (5 days X 8 weeks)
Daily dosing continuation phase: 5 days a week in 31 weeks = 155 doses
Total therapy: 5 days/wk Daily dosing for 39 weeks and a total of 195 doses



Question

61 y.o male continued TB treatment with INH/RIF five days a week on February 28th, 2022 - April 1st, 2022

How many doses has this patient completed all together since January 3rd, 2022?

		-J,	AN	U	A۶	۲ ۲			-Fl	EB	RU		RY	_		-	M	AR	CF	I-	
	s	м	Т	w	т	F	\$	\$	м	Т	w	Т	Г	s	S	М		W	Т	F	s
uks:				5		7	1	WK 5	-0	1	2	3	4	5	(มาะ.9 ผมะ.19	7	1	2	3	4	5
NLJ.	12	3	4	12	6	7	9 15	WELF 6 WE 913	14	8	16	17	11	12 19	AUK II 13	14	-8 -15	9 16	10	21 18	12 19
	3 16	18	19	20	21	22	UB 820	-	22	23	24	25	26	Mat 2 30		22	23	24	25		
	4 23	24	25	26	27	28		km 927	28			0	Doseu		Wak(1327		29	30	31		cs : G
	5 30	31	5	ase	a:(2	0		100		Do:	ses :	99	vuge.	w.						0.4	0.6
			-A	PR	IL	-				-Þ	1 A	Y -					-J ⁻	UN	JE-		
	5	м	т	w	Т	F	\$	s	м	τ	w	Ť	F	s	S	м	T	w	т	F	s
			6	5 diw	a→	1		WK (3 1	S	3	4	5	6	7				1	2	3	4
	Э	4	5	6	7	Я	Ą	8	9	10	11	12	13	·2	5	- 6	7	8	Ģ	10	11
	10 17	11 18	12 19	13 20	14 21	15 22	16 23	15 22	16	17	1B 25	19	20	21	12 19	13	14	15	16	17	18
	21	1d 25	26		28	22	30	22		24 31	ъ	26	27	25	19	20	21 28	22 29	- 23 - 30	24	25
	2011	6-1	20	41	20	27	00	27	30	21					20	21	40	27	30		
			-J	υ	Y-				-1	AU	GU	JS	F-			SE	ΡT	EN	4B	ER	-
	\$	м	Т	W	т	F	s	S	м	т	w	т	F	s	ŝ	м	т	w	Ť	F	s
			_		_	1	2		1	2	Э	4	5	5					1	3	3
	3	4	5	6	2	e	9	7	ĥ	9	10	11	17	13	1	5	5	7	8	9	10
	10 17	11 18	12 19	13 20	14 21	15 22	16 23	24 21	15 22	16 23	17 24	18 25	19 26	20 22	11 18	12 19	13 20	14 21	15 22	16 23	17 24
	24	25	26	20	28	29	30	21	22	30	31	20	26	2)	25	26	27	28	20	30	24
	31	ner.		6	20	57	~~	20		~~	01				2			2			
		-0	C]	10	BE	R-			N	ov	EN	1B	ER	-		-D	ECI	EM	(B)	ER	
	s	м	Ţ	w	Т	F	s	\$	м	Т	w	T	F	S	s	м	т	w	т	F	s
							1			1	2	3	4	5					1	2	3
	2	3	4	5	ć	7	в	6	7	8	9	10	1:	12	1	5	ń	7	в	9	10
	2	10	11	12	13	14	15	10	-14	15	16	17	18	19	11	12	13	14	12	16	97
	16	17	18	19	20	21	22	20	21	22	23	24	25	26	1E.	19	20	21	22	23	24
	23 30	24 31	25	26	27	28	29	27	28	29	30				25	26	27	28	29	30	31
	50	31																Pape	oʻTradi	Design	ream.

2022

Dose Counting: Alternate Regimens

Regimen 2

6 months of treatment = 26 weeks of therapy total (8 weeks initial phase + 18 weeks in continuation phase)

Daily dosing **initial phase**: **7 days a week** in 8 weeks = 56 doses (*7 days X 8 weeks*) Daily dosing **continuation phase**: **3 days a week** in 18 weeks = 54 doses **Total therapy:** 7 days/wk (*initial phase*) 3 days a week (*continuation phase*) for **26 weeks** and a total of **110 doses**

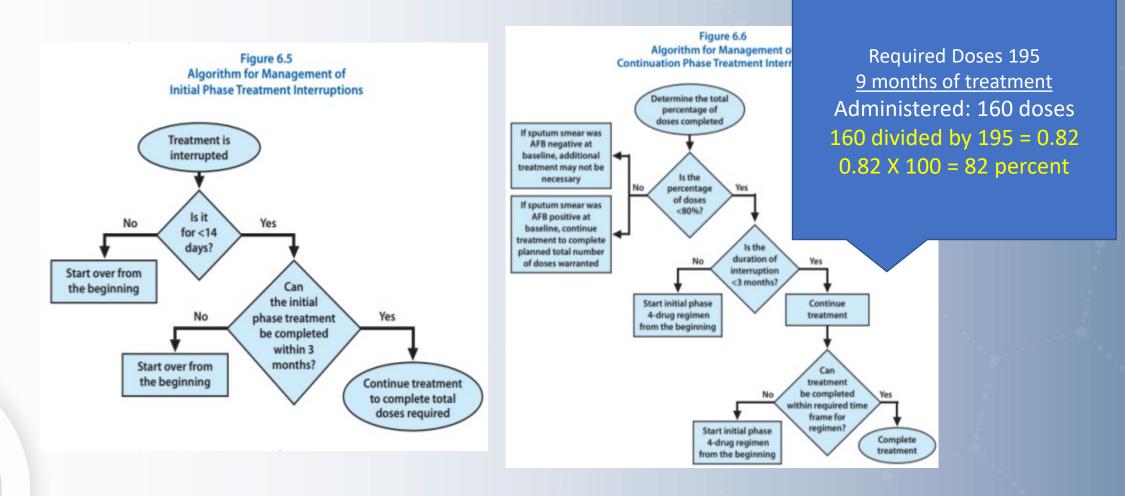
OR

Daily dosing **initial phase**: **5 days a week** in 8 weeks = 40 doses (*5 days X 8 weeks*) Daily dosing **continuation phase**: **3 days a week** in 18 weeks = 54 doses **Total therapy:** 5 days/wk (*initial phase*) 3 days a week (*continuation phase*) for **26 weeks** and a total of **94 doses**

Regimen 3

Tri- weekly (3) dosing initial phase in 8 weeks = 24 doses Tri- weekly (3) dosing continuation phase in 18 weeks = 54 doses Total therapy: 26 weeks and 78 doses

Managing Interruptions



http://www.cdc.gov/tb/education/corecurr/pdf/chapter6.pdf

Question

• This patient is a 40 y/o male who started TB treatment with RIPE and is on the <u>initial phase</u> of treatment. Patient has missed a total of <u>14 doses</u> in the initial phase.

Does this patient have to re-start treatment?



Acknowledgements

Elizabeth Foy RN from DSHS Matthew Whitson RN from DSHS - Region 8



Let's Practice!

EXERCISE DOSE COUNTING

Using Case Study

Case Study

- 65 y/o male started TB treatment on 7/1/2022. On home visit #10 for DOT on 7/14/2022, the nurse notes the patient's eyes are jaundiced, and he complains of abdominal bloating and nausea.
- Medications are placed on hold, and labs were drawn.
- LFTS were significantly elevated, and patient was placed on hold.

Exercise

- Treatment was taken 5 days/week
- How many doses did the patient take from 7/1/2022 to 7/14/2022 before being placed on hold on 7/14/2022?

2022

	-J/	AN	IU.	AR	Y-			-FI	EB	RU	A	RY	•		-]	M	٩R	CH	I-	
s	м	т	w	т	F	S 1	s	м	Т 1	w 2	Т 3	F 4	s 5	S	м	Ť 1	w 2	т 3	F 4	\$ 5
2	з	4	5	6	7	8	6	7	8	9	10	11	12	6	7	9	9	10	11	12
9	10	11	12	13	14	15	13	14	15	15	17	18	19	13	14	15	16	17	18	19
16	17	18	19	20	23	22	20	21	22	23	24	25	26	20	21	22	23	24	25	26
23	24	25	26	27	28	29	27	28						27	28	29	30	31		
30	31																			
		-A	PR	IL-					-N	1A	Y -					-л	UN	E-		
s	м	т	w	T	F	5	s	м	т	w	т	F	s	5	м	т	w	т	F	s
					1	2	1	2	з	4	5	6	7				1	2	3	4
з	4	5	6	7	8	9	8	9	10	11	12	13	14	5	6	7	8	9	10	11
10	11	12	13	14	15	16	15	16	17	18	19	20	21	12	13	14	15	16	17	18

17 18 19 20 21 22 23 22 23 24 25 26 27 28 19 20 21 22 23 24 25

-AUGUST-

27 30 31

24 25 26 27 28 29 30

-JULY-

SMTWTF

3 🖪 🗔 🕢 🖊 8 10 🕦 😰 🚺 14 15 17 18 19 20 21 22 24 25 26 27 28 29

-SEPTEMBER-

26 27 28 29 30

-	w	т	F	S	5	м	т	w	т	F	S	S	м	т	w	Т	F	s	
			1	2		1	2	3	4	5	6					1	2	3	
)	6	7	8	9	7	8	9	10	11	12	13	4	5	6	7	8	9	10	
2	13	14	15	16	14	15	16	17	18	19	20	31	12	13	14	15	16	17	
					21							18	19	20	21	22	23	24	
5	27	28	29	30	28	- 29	30	31				25	26	27	28	29	30		
	9 D	os	ES																

	-C) C]	ΓO	BE	R-		-	N	VC	EN	/B	ER	-		-DI	EC	ЕM	IBI	ĒR	-
s	м	т	w	т	F	s	S	м	т	w	т	F	5	s	м	т	w	т	F	s
						1			1	2	з	4	5					1	2	3
2	3	4	5	6	7	8	6	7	8	9	10	21	12	4	5	ó	7	8	9	10
9	10	11	12	13	14	15	13	14	15	16	17	18	19	11	12	13	14	15	16	17
16	17	18	19	20	21	22	20	21	22	23	24	25	26	18	19	20	21	22	23	24
23	24	25	26	27	28	29	27	2B	29	30				25	26	27	28	29	30	31
30	31																Pape	rTrall	Design	n.com

Hospital:

31

Missed: Continuation: Initial: Self-Admin:

Exercise

- Patient resumed TB treatment.
- Treatment resumed on 7/26/2022 8/26/2022
- How many doses did the patient take from 7/26/2022 to 8/26/2022?

2022

	-J/	AN	U	AR	Y-			-FI	B	RU	AI	۲Y	•		-]	M	٩R	CH	[-		
s	м	т	w	т	F	s	s	м	т	w	т	F	s	S	м	Ť	w	т	F	Ś	
						1			1	2	3	4	5			1	2	3	4	5	
2	3	4	5	6	7	8	6	7	8	9	10	11	12	6	7	9	9	10	11	12	
9	10	11	12	13	14	15	13	14	15	15	17	18	19	13	14	15	16	17	18	19	
16	17	18	19	20	21	22	20	21	22	23	24	25	26	20	21	22	23	24	25	26	
23	24	25	26	27	28	29	27	28						27	28	29	30	31			
30	31																				
		- 4	PR	п.					-N	۲A	v -					- TI	IN	E-			

		-A	PR						-14	1A	1 -						-31	0IV	- E			
s	м	т	w	т	F	5	\$	м	т	w	т	F	s		5	м	т	w	т	F	s	
					1	2	1	2	з	4	5	6	7					1	2	3	4	
3	4	5	6	7	8	9	8	9	10	11	12	13	14		5	6	7	8	9	10	11	
10	11	12	13	14	15	16	15	16	17	18	19	20	21	-	12	13	14	15	16	17	18	
17	18	19	20	21	22	23	22	23	24	25	26	27	28	:	19	20	21	22	23	24	25	
24	25	26	27	28	29	30	29	30	31					2	26	27	28	29	30			

		-J	UL	Y -				-4	AU	IGU	JS	Г-		-	SE	РТ	EN	/B	ER	-
\$	м	Т	w	т	F 1	5 2	S	M 1	T 2	w C	T T	F	5 6	s	м	Т	w	Т 1	F 2	s 3
з	4	5	6	7	н	9	7	8	9	ា	11	2	13	4	5	6	7	8	9	10
10	11	2	13	14	15	16	14	5	16	17	18	19	20	$\underline{31}$	12	13	14	15	16	17
17	18	19	20	21	22	23	21	22	23	24	25	26	27	18	19	20	21	22	23	24
24	25	26	27	28	29	30	28	29	30	31	20 D	OSE	s	25	26	27	28	29	30	
31			9 D	OS	SES					2	4 T	оти	٩L							
	-C	C 7	ro)	BE	R-		-	NC	v c	EN	B	ER	-		D	ECI	EM	B	ER	•
s	м	т	w	т	F	s	S	м	т	w	т	F	5	s	м	Т	w	Т	F	s

						1			1	2	з	4	5					1	2	3
2	3	4	5	6	7	8	6	7	8	9	10	21	12	4	5	ó	7	8	9	10
9	10	11	12	13	14	25	13	14	15	16	17	18	19	11	12	13	14	15	16	17
16	17	18	19	20	21	22	20	21	22	23	24	25	26	18	19	20	21	22	23	24
23	24	25	26	27	28	29	27	2B	29	30				25	26	27	28	29	30	31
30	31																Pape	rTrall	Design	n.com

Hospital: Missed: Continuation: Initial: Self-Admin:

Exercise

- How many doses has the patient taken all together from 7/1/2022 8/26/2022?
- How many weeks has this patient taken off treatment?

2022

	-J/	٩N	IJ	AR	Y-			-FI	B	RU	A	۲Y	•		-]	M	٩R	CH	[-		
s	м	Т	w	Т	F	s	s	м	т	w	т	F	s	s	м	Ť	w	Т	F	Ś	
						1			1	2	3	4	5			1	2	3	4	5	
2	3	4	5	6	7	8	6	7	8	9	10	11	12	6	7	8	9	10	11	12	
9	10	11	12	13	14	15	13	14	15	15	17	18	19	13	14	15	16	17	18	19	
16	17	18	19	20	21	22	20	21	22	23	24	25	26	20	21	22	23	24	25	26	
23	24	25	26	27	28	29	27	28						27	28	29	30	31			
30	31																				
		-A	PR	IL-					-N	ίA	Y -					-Л	JN	E-			
s	м	т	w	Т	F	5	\$	м	Ţ	w	Т	F	s	5	м	Т	W	Т	F	s	

					1	2	1	2	з	4	5	6	7				1	2	3	4
3	4	5	6	7	8	9	8	9	10	11	12	13	14	5	6	7	8	9	10	11
10	11	12	13	14	15	16	15	16	17	18	19	20	21	12	13	14	15	16	17	18
17	18	19	20	21	22	23	22	23	24	25	26	27	28	19	20	21	22	23	24	25
24	25	26	27	28	29	30	29	30	31					26	27	28	29	30		

-JULY-								-AUGUST-								-SEPTEMBER-							
Ś	м	т	w				5								s	м	Т	w	т	F	s		
		_					3 WK												-	_	-		
							4.1.4.444																

1 WK 3	(4) (5) (6 7	н	9	4 WK	8	9	10.	11	12	13	4	5	6	7	8	9	10
10	01 🖸 (13 辩	15	16	5 WK	5	16	17	18	19	20	$\underline{31}$	12	13	14	15	16	17
17	40 -19 - 4	2024	22	23	6 WK	22	23	24	25	26	27	18	19	20	21	22	23	24
2 WK 24	-25- 126- 1	27 28	29	30	28	29	30	31	20 D	OSE	s	25	26	27	28	29	30	
31	1	I3 DO	SES	5				3	3 Т(ота	٨L							

-OCTOBER-								-NOVEMBER-									-DECEMBER-								
S	м	т	w	т	F	s	S	м	т	w	т	F	5		s	м	Т	W	т	F	s				
						1			1	2	з	4	5						1	2	3				
2	3	4	5	6	7	8	6	7	8	9	10	11	12		4	5	ó	7	8	9	10				
9	10	11	12	13	14	15	13	14	15	16	17	18	19		11	12	13	14	15	16	17				
16	17	18	19	20	21	22	20	21	22	23	24	25	26		18	19	20	21	22	23	24				
23	24	25	26	27	28	29	27	2B	29	30					25	26	27	28	29	30	31				
30	31				PaperTrallDedgn.com																				

Hospital: Missed: Continuation: Initial: Self-Admin:



THANK YOU!

Deservation of the second



Case Study Summary & Open-Floor Q&A