

BPaL Clinical Pathway

Patient Name/DOB _____ Tx Start Date _____ Tx Regimen _____ Cult Conv _____

Activity	Week 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
Date																											
Clinical Monitoring																											
Sputa per Schedule	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				<input type="checkbox"/>				<input type="checkbox"/>				<input type="checkbox"/>
Weight	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				<input type="checkbox"/>				<input type="checkbox"/>				<input type="checkbox"/>				<input type="checkbox"/>				<input type="checkbox"/>		
Symptom Review	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CXR (PA and Lateral)	<input type="checkbox"/>																										<input type="checkbox"/>
DSTs Molecular and Conventional	<input type="checkbox"/>																										
Lab Monitoring																											
CBC with Diff and PLT & CMP	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>				<input type="checkbox"/>				<input type="checkbox"/>				<input type="checkbox"/>				<input type="checkbox"/>				<input type="checkbox"/>		
HIV	<input type="checkbox"/>																										
Viral Hepatitis Serology	<input type="checkbox"/>																										
HbA1c	<input type="checkbox"/>																										
Pregnancy	<input type="checkbox"/>				<input type="checkbox"/>				<input type="checkbox"/>				<input type="checkbox"/>				<input type="checkbox"/>				<input type="checkbox"/>				<input type="checkbox"/>		
TDM			<input type="checkbox"/>																								
Neuropathic Monitoring																											
Sensory Assessment*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Depression/anxiety screening*	<input type="checkbox"/>				<input type="checkbox"/>				<input type="checkbox"/>				<input type="checkbox"/>				<input type="checkbox"/>				<input type="checkbox"/>				<input type="checkbox"/>		
Cardiac Monitoring																											
EKG	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>				<input type="checkbox"/>				<input type="checkbox"/>				<input type="checkbox"/>				<input type="checkbox"/>				<input type="checkbox"/>		
Cardiac Symptoms																											
Treatment Regimen *Regimen and dosages per TB Medical Consultant recommendations																											
Review treatment tolerance and adherence					<input type="checkbox"/>				<input type="checkbox"/>				<input type="checkbox"/>				<input type="checkbox"/>				<input type="checkbox"/>				<input type="checkbox"/>		
BDQ intermittent dosing, per TB MD				<input type="checkbox"/>																							

Drug Abbreviations: Bedaquiline (BDQ) Pretomanid (PMD) Linezolid (LZD)

BPAL Clinical Pathway

Medication and Dosages (for patients > 40 kg):

Bedaquiline (100 mg tablet)	400 mg once daily* for 2 weeks, then 200 mg 3 times per week afterwards
Pretomanid (200 mg tablet)	200 mg once daily*
Linezolid (600 mg tablet)	600 mg once daily* (adjustable based on drug levels)

*5 days per week of treatment is considered sufficient for “daily” treatment.

Clinical Monitoring: Monitor for symptoms, medication tolerance and adherence during DOT visits, and at monthly clinical visits over the continuum of care.

- Follow sputum collection schedule until culture conversion, then monthly. Considered potentially infectious until **Culture Negative x 3**.
- Molecular and Conventional Drug Susceptibility Testing at baseline. Repeat if cultures are still positive after 3 months treatment or revert after 4 months of treatment.
- Baseline CXR (PA and Lateral) and as clinically indicated. Repeat at end of treatment for new baseline.
- Weight every week for the first month, then monthly

Laboratory Monitoring:

- Baseline and monthly CBC with PLT and Diff to monitor for effects of linezolid on blood counts
- Baseline and monthly CMP (includes LFTS [Pretomanid and Bedaquiline], electrolytes [calcium, potassium, and magnesium appropriate for QT prolongation], creatinine [monitor renal function while on linezolid])
- HIV testing at baseline
- Viral Hepatitis Serology at baseline

Therapeutic Drug Monitoring

- TDM should be routinely obtained 2 weeks after initiating the regimen, and repeated if dosage adjustments were made or the patient reports signs or symptoms of drug toxicity.
*Drug levels: Administer the medication. Draw Linezolid level immediately before the next dose (trough), and then 2h after the dose, and again 5-6h after the dose. Draw Bedaquiline and Pretomanid levels immediately before the dose (trough), 2h and 5-6 hours after the dose.

Neuropathic Monitoring:

- Sensory Assessment:
 - Peripheral Neuropathy (i.e., numbness, tingling, pain in hands, feet, mouth, tongue, other)
 - Decrease taste
 - Changes in vision
 - Changes in hearing
- Monitor for depression/anxiety, agitation, or mental changes
- Use caution if the patient is taking linezolid with Monoamine Oxidase Inhibitors (MAOIs), serotonergic antidepressants, or any drug known to induce myelosuppression.

Cardiac Monitoring

- EKG (or Kardia QTc measurement) at baseline, 2 weeks then monthly. Stop Bedaquiline if QTc > 500 and monitor EKGs frequently until QTc returns to normal.
- Monitor for cardiac symptoms such as change in heartbeat, dizziness, or palpitations while on BDQ
- Risk for cardiac complications is increased in patients taking other drugs known to prolong QTc interval (including, but not limited to, Amiodarone, bepridil, chloroquine, chlorpromazine, cisapride, cyclobenzaprine, clarithromycin, disopyramide, dofetilide, domperidone, droperidol, erythromycin, , halofantrine, haloperidol, ibutilide, levomethadyl, mesoridazine, methadone, pentamidine, pimozone, procainamide, quinidine, sotalol, sparfloxacin, thioridazine).

Post treatment Monitoring

- Schedule a routine monthly follow-up phone call with the client for the first 3 months to complete a Review of Systems/Symptom Screening, followed by a combination of telephone and clinic follow-up visits to screen for symptoms every 3 months thereafter for at least 2 years. Sputum collection (2-3 specimens), CXR and medical evaluation should be completed at the 6 month, 12 month, 18 month, and 24 month visits.
- Incentives and Enablers may be offered to promote adherence to post-treatment follow-up visits.