SHORTER TERM REGIMEN FOR THE TREATMENT OF DRUG RESISTANT TUBERCULOSIS
Drug-resistant tuberculosis (DR-TB) is a public health crisis and a global health security risk. In 2016, there were 600,000 new cases with resistance to Rifampicin (RR TB), the most effective first-line TB drug, of which 490,000 had multidrug resistant TB (MDR-TB).

A total of 129,689 people were started on treatment for drug-resistant TB, a small increase from 125,629 in 2015 but only 22% of the estimated incidence. Treatment success remains low at 54% globally (WHO Global Report 2017).

DR-TB cannot be treated with the standard six-month course of first-line medication which is effective for most TB patients. Patients with RR-TB or MDR-TB are treated with a different combination of second-line drugs, usually for 20 months or more. The treatment journey for these patients is not only difficult with a high-pill burden and significant side effects, but it also brings with it high treatment related costs to the patient and the household.

Following successful studies, a shorter standardized treatment regimen has shown promising results and based on data from these studies, the World Health Organisation (WHO) recently updated its treatment guidelines for drug-resistant TB, recommending the use of the shorter MDR-TB regimen under specific conditions. If used appropriately, this shorter-term regimen is expected to greatly benefit majority of the MDR-TB patients.

### WHO QUALIFIES FOR THE SHORTER TERM REGIMEN

- Patients with Rifampicin-Resistant/Multidrug-Resistant TB (RR/MDR-TB)
- Patients not previously treated with second-line drugs (New)
- Patients with no resistance to fluoroquinolones and second-line injectable agents

### EXCLUSIONS FOR THE SHORTER-TERM REGIMEN

- Patients with extra-pulmonary TB
- Patients with confirmed resistance to drugs in the shorter-term regimen except resistance to Isoniazid (INH)
- Patients on second line drugs in the shorter MDR-TB regimen for a period of more than one month
- Patients with intolerance to one or more drugs in the shorter-term regimen
- Patients with known potential for drug-drug interactions
- Close contacts of pre-XDR/XDR TB patients who present with signs and symptoms of TB
- Pregnant women
**TREATMENT MONITORING OF PATIENTS ON THE MDR-TB SHORTER TERM REGIMEN**

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<thead>
<tr>
<th>Month</th>
<th>Baseline</th>
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<th>3</th>
<th>4</th>
<th>5</th>
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<th>10</th>
<th>11</th>
<th>12</th>
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<tbody>
<tr>
<td>Clinical review</td>
<td>X</td>
<td>Every 2 weeks</td>
<td>X</td>
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</tbody>
</table>

Sputum smear and culture should be carried out monthly until the end of treatment.

- 1st line DST: X
- 2nd line DST: X
- LFTs (AST, ALT, Bilirubin): X
- Creatinine, Potassium, Magnesium: X
- Full Hemogram: X
- CD4: X
- RBS: X
- Pregnancy Test: X
- CXR: X
- ECG: X
- TSH: X

**MANAGING PATIENTS NOT ELIGIBLE FOR THE SHORTER-TERM REGIMEN/WITH ONE OR MORE EXCLUSIONS**

RR TB and MDR-TB patients excluded from using the shorter-term regimen should be initiated on a conventional/individualised regimen constructed using drugs that are thought to be effective.

Treatment providers can also use new/re-purposed (Delamanid and Bedaquiline) drugs to ensure effectiveness of treatment.
TREATMENT MONITORING OF PATIENTS ON THE MDR-TB SHORTER TERM REGIMEN

INTENSIVE PHASE (4 – 6 MONTHS)

MONTH 1

MONTH 2

MONTH 3

MONTH 4

High dose Isoniazid
Ethambutol
Pyrazinamide
Kanamycin
Moxifloxacin
Prothionamide
Clofazimine

If smear Negative at the end of month four, switch to continuation phase

MONTH 5

MONTH 6

If smear positive at the end of month four, extend intensive phase and send sample for 2nd line DST

If DST results show resistance to any STR drug, stop STR and change to individualised/conventional regimen

CONTINUATION PHASE (5 MONTHS)

Ethambutol
Pyrazinamide
Clofazimine
Moxifloxacin

Culture results at end of treatment will determine treatment outcome

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