SUMMARY OF RIFAMPIN (RIF) FOR TREATMENT OF LATENT TB INFECTION (LTBI)

The following information is provided as a summary of current guidelines and should not be used as a substitute for review of current treatment recommendations including the following:

1) Targeted Tuberculin Testing and Treatment of Latent Tuberculosis Infection, 2000
http://www.cdc.gov/mmwr/PDF/rr/rr4906.pdf
2) Guidelines for the Treatment of Latent Tuberculosis Infection: Recommendations from the National Tuberculosis Controllers Association and CDC, 2020
https://www.cdc.gov/mmwr/volumes/69/rr/pdfs/rr6901a1-H.pdf

- **RIF (Rifampin) Therapy:** The recommended regimen is Rifampin daily for 4 months.

Daily Rifampin	Adults	10 mg/kg daily	*600 mg maximum dose*
	Children	15-20 mg/kg daily	*600 mg maximum dose*

- **Medication Formulation**: Rifampin is formulated into 150 mg and 300 mg capsules.

- **Adverse reactions:** Rash, pruritus, GI upset, flu-like symptoms, hepatotoxicity, hematologic abnormalities (thrombocytopenia, hemolytic anemia), drug interactions (i.e. oral birth control, methadone) and orange staining of body fluids and soft contact lenses.

- **Clinical monitoring:** All patients receiving treatment for LTBI should be seen in person by healthcare personnel at least monthly. Clinical monitoring is the most effective strategy for reducing drug toxicity and is an essential element in all LTBI treatment regimens, regardless of other monitoring efforts. Clinical evaluations during LTBI treatment should assess for; adverse drug reactions, especially hepatotoxicity, adherence to therapy, signs and symptoms concerning for active TB disease and the need for continued patient education.

- **Baseline laboratory evaluation**: Baseline complete blood count (CBC) and serum creatinine should be obtained in patients who will be treated with Rifampin. The following patients with an elevated risk of hepatotoxicity should receive baseline liver function tests (LFT's): pre-existing liver disease, history of alcohol abuse, HIV infection, concurrent treatment with other hepatotoxic medications, current or recent pregnancy (within 3 months of delivery) and individuals who were born in areas with high rates of viral hepatitis (e.g. countries in Asia and Africa). Testing should be considered on an individual basis.

- **Laboratory monitoring during treatment:** Routine LFT's during LTBI treatment is not necessary for most patients however serial LFT's (at least monthly) should be obtained in the following circumstances: history of liver disease, alcohol use or concomitant use of other potential hepatotoxic drugs, pregnancy and abnormal baseline LFT's. In addition to LFT's, patients treated with Rifampin who have lab abnormalities identified on baseline testing are recommended to have periodic CBC checks during therapy. Decisions regarding the frequency of testing and threshold for discontinuation of Rifampin are individualized. Indications to stop LTBI treatment due to drug induced liver injury include transaminases ≥ 5 times normal in an asymptomatic patient, transaminases ≥ 3 times normal in a symptomatic patient or total bilirubin ≥ 2.

- **Completion criteria for Rifampin therapy:** Completion of therapy is based on the total number of doses administered, not duration of therapy alone**.**

Daily Rifampin	4 months	120 daily doses completed within 6 months