CONSIDERATIONS FOR PATIENTS STARTING TREATMENT FOR LATENT TB INFECTION (LTBI)

The following information is provided as a summary of current guidelines and should not be used as a substitute for reading the below document and other current recommendations.

Targeted Tuberculin Testing and Treatment of Latent Tuberculosis Infection, 2000
http://www.cdc.gov/mmwr/PDF/rr/rr4906.pdf

- **Recommended Therapy:** The recommended regimen is Isoniazid (INH) daily for 9 months.
  - Adults: 5 mg/kg daily (300 mg maximum dose)
  - Children: 10-20 mg/kg daily (300 mg maximum dose)
  Pyridoxine (Vitamin B-6) is recommended with INH in patients who are pregnant or breast feeding and in those with nutritional deficiencies or illnesses which predispose them to neuropathy such as diabetes, alcoholism and HIV infection. Pyridoxine is also recommended for use with INH in exclusively breastfed infants.

- **Alternative Therapy:** For patients who cannot tolerate INH, an alternative regimen is Rifampin daily for 4 months for adults and 6 months for children. The dosage is as follows:
  - Adults: 10 mg/kg daily (600 mg maximum dose)
  - Children: 10-20 mg/kg daily (600 mg maximum dose)

- **Adverse reactions:** INH: rash, hepatic enzyme elevation, hepatitis, peripheral neuropathy, mild central nervous system effects, drug interactions (i.e. Dilantin). Rifampin: rash, hepatitis, fever, thrombocytopenia, flu-like symptoms, orange-colored body fluids, drug interactions (i.e. oral contraceptives).

- **Clinical monitoring:** Clinical monitoring is indicated for all patients. This includes education of patients about the symptoms that can result as adverse effects of the drug being prescribed and the need for prompt cessation of treatment and clinical evaluation should symptoms occur. These symptoms include any of the following: unexplained anorexia, nausea, vomiting, dark urine, icterus, rash, persistent paresthesias of the hands and feet, persistent fatigue, weakness or fever lasting 3 or more days, abdominal tenderness, easy bruising or bleeding and arthralgia. Clinical monitoring begins at the first visit and should be repeated at each monthly visit. At monthly visits, patients should be instructed to interrupt therapy and contact their providers immediately upon the onset of such symptoms or any unexplained illness occurring during treatment.

- **Pretreatment laboratory evaluation:** Baseline laboratory testing is not routinely indicated for all patients at the start of treatment for LTBI. Patients whose initial evaluation suggests a liver disorder should have a baseline hepatic measurements of serum AST (SGOT) or ALT (SGPT) and bilirubin. Baseline testing is also indicated for patients infected with HIV, pregnant women and those in the immediate postpartum period (i.e. within 3 months of delivery), persons with a history of liver disease, persons who use alcohol regularly and others who are at risk for chronic liver disease. Testing should be considered on an individual basis. Active hepatitis and end-stage liver disease are relative contraindications to the use of isoniazid for treatment of LTBI.

- **Laboratory monitoring during treatment:** Routine laboratory monitoring during treatment of LTBI is indicated for patients whose baseline liver function tests are abnormal and for other persons at risk for hepatic disease. Laboratory testing should also be used to evaluate possible adverse effects that occur during treatment. Some experts recommend that isoniazid be withheld if a patient’s transaminase level exceeds 3 times the upper limit of normal if associated with symptoms and five times the upper limit of normal if the patient is asymptomatic.

- **Completion of therapy:** Completion of therapy is based on the total number of doses administered, not on duration of therapy alone.
  - **INH:** The 9 months daily regimen of INH should consist of 270 doses administered within 12 months time. The 6 month daily regimen of INH should consist of 180 doses administered within 9 months time. Children should complete a minimum of 9 months.
  - **Rifampin:** The regimen of daily Rifampin alone should consist of at least 120 doses administered within 6 months. Children should complete a minimum of 6 months.