**Pre-Biologic Therapy Assessment Panels**

American College of Rheumatology recommends screening for Hepatitis B and C, as well as tuberculosis, before starting biologic therapy.

The immunomodulating activity of biologic therapies may be associated with direct liver toxicity and may adversely affect the outcome of viral hepatitis. In Hepatitis B, viral reactivation resulting in acute hepatitis is more common in HBsAg positive patients, such as those with an active infection or inactive carriers. The risk of reactivation in occult carriers (HBsAg negative, anti-HBc positive) is significantly lower but has still been reported. The majority of short term studies suggest that biologic therapy is not detrimental to Hepatitis C infected patients, however, long term safety is not completely known.

Substantiation for latent Tuberculosis testing is based on multiple studies showing higher incidence of TB following anti-TNFα therapy. Testing for latent TB is done via the T-Spot TB assay, which is an FDA approved Interferon Gamma Release Assay (IGRA). When compared to the QuantiFERON-TB Gold, multiple studies show a more favorable sensitivity, similar specificity and less indeterminate results.

**Pre-Biologic Therapy Assessment Panel**

RDL combines Hepatitis B, C and latent TB testing into one panel to provide more efficiency and cost-savings.

- Hepatitis C Ab
- Hepatitis B Surface Ag
- Hepatitis B Surface Ab
- Hepatitis B Core Ab, IgM and Total
- T-Spot TB Test

**Pre-Biologic Therapy Assessment Panel + Coccidioidomycosis**

For physicians in endemic areas, RDL now offers Coccidioidomycosis Ab, IgM and IgG screening by immunodiffusion. Using an immunodiffusion technique allows us to provide a reliable single test with high specificity and sensitivity.

- Hepatitis C Ab
- Hepatitis B Surface Ag
- Hepatitis B Surface Ab
- Hepatitis B Core Ab, IgM and Total
- T-Spot TB Test
- Coccidioidomycosis Ab, IgM and IgG by Immunodiffusion
Coccidioidomycosis is a common infection in the southwestern United States that has been increasing in incidence over the last decade. It is endemic to the San Joaquin Valley of California, southern Arizona, southern New Mexico, western Texas, and areas of Mexico as well as Central and South America. There have been numerous case reports of coccidioidomycosis in patients on TNFα antagonists. One study showed that in endemic areas, patients with inflammatory arthritis who were undergoing anti-TNFα treatment had a RR of 5.23, 95% CI 1.54–17.71 (P< 0.01) of developing symptomatic coccidioidomycosis as compared to those not on anti-TNFα therapy.

Specimen Requirements

3 mL serum, ambient, refrigerated or frozen and 2 lithium heparin tubes at room temperature

For the T-SPOT TB Test:
1. Patients can only be drawn Monday – Thursday. Please do not draw on Friday. Before drawing, call RDL for special supplies with gel pack.
2. Draw two lithium heparin [green top] tubes [6 mL each]. Invert ten times to mix. Do not centrifuge. Time of draw must be written on both tubes. Keep them at room temperature. NEVER REFRIGERATE OR FREEZE.
3. Keep the specimen ambient, at room temperature until the FEDEX courier picks it up. The specimen must be picked up the same day of draw.

References


Mazurek GH et al. Updated Guidelines for Using Interferon Gamma Release Assays to Detect Mycobacterium tuberculosis Infection --- United States, 2010 http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5905a1.htm#tab4
