

# Lab Tests, Vaccinations Key in Biologic Therapy

BY MARY ELLEN SCHNEIDER  
New York Bureau

NEW YORK — Psoriasis patients taking biologic therapies require careful monitoring, including a number of lab tests and vaccinations, Dr. Mark Lebwohl said at a meeting on medical and surgical dermatology sponsored by the Mount Sinai School of Medicine.

Seasonal flu vaccines, for example, are not mandated but are widely received by patients taking all five of the top biologics to treat psoriasis—alefacept (Amevive), efalizumab (Raptiva), adalimumab (Humira), etanercept (Enbrel), and infliximab (Remicade).

Dr. Lebwohl outlined the current consensus on proper monitoring and vaccination based on package inserts, medical literature, a survey of the medical advisory board members of the National Psoriasis Foundation, and the best practices from colleagues in other specialties.



Ideally, psoriasis patients on biologics should be given the influenza vaccine and the pneumococcal vaccine, if indicated by age, before treatment begins. However, studies have shown that there is still a healthy immune response after therapy begins, so they can be given after treatment is initiated as well, said Dr. Lebwohl, professor and chairman of the department of dermatology at Mount Sinai, in New York.

Tuberculosis tests are not mandated but are widely performed at baseline for alefacept and efalizumab and are recommended by most physicians at baseline for etanercept. TB tests are mandatory at baseline when treating patients with adalimumab and infliximab, Dr. Lebwohl said. The current recommendations from the Centers for Disease Control and Prevention call for TB testing before starting patients on all tumor necrosis factor- $\alpha$  blockers.

At follow-up, TB tests are widely performed annually for those on adalimumab, etanercept, and infliximab.

For patients who have had a bacille Calmette-Guérin (BCG) vaccine that could mask the presence of TB, Dr. Lebwohl recommends foregoing the standard purified protein derivative (PPD) TB skin test and instead using the QuantiFERON-TB Gold test. It specifically excludes the antigens that are in BCG.

"BCG does not interfere with this test," he said.

The QuantiFERON test eliminates the reading bias, does not require a 48-hour follow-up visit, and has no booster effect. The downside is that it does require a blood draw and costs about \$90. The test is not more specific or sensitive than the PPD test, he said, but with BCG-treated patients it is certainly more specific.

Obtaining CD4 counts is mandatory for alefacept at baseline and every 2 weeks thereafter.

A complete blood count plus platelet counts are mandatory at baseline for alefacept and efalizumab and are recommended by most physicians for adalimumab, etanercept, and infliximab. At follow-up, the test is generally recommended for all five.

The package insert for efalizumab shows that 8 out of 2,700 patients taking the drug experienced significant thrombocytopenia, which resolved in most patients in 35-112 days. Overall, the onset of platelet decline occurred 2-3 months after

**Patients should be given the influenza vaccine and the pneumococcal vaccine before treatment begins.**

DR. LEBWOHL

the first dose of efalizumab. In his practice, Dr. Lebwohl checks platelet counts monthly for the first 3 months and every 3 months thereafter. Some evidence suggests the need to check

platelets more often—every month for the first 6 months—"but the bottom line is that if you check your bloods for the first 3 months you're not likely to run into trouble with this," he said. Chemistry panels plus liver function tests are mandatory at baseline for infliximab and are widely performed but not mandated for alefacept, efalizumab, adalimumab, and etanercept. Annual follow-up is widely performed for most of the biologics and is recommended before infusions of infliximab, but there was not agreement about how often the follow-up should be performed.

Antinuclear antibody (ANA) tests are recommended at baseline by many physicians for adalimumab, etanercept, and infliximab.

The consensus among psoriasis experts, however, is that there is no reason to check ANA at follow-up because patients are supposed to develop ANAs over the course of treatment and it should not be a reason to stop the drug, he said.

"We know that autoimmunity occurs," Dr. Lebwohl said. "There is no question that we get more ANAs in patients treated with TNF- $\alpha$  blockers."

Of the few patients who have developed drug-induced lupus, the ANA is the most common change. But a fair number of papers also are emerging on the treatment of lupus with TNF- $\alpha$  blockers (Arthritis Rheum. 2002;46:1408-9).

If there are no other signs of lupus, a positive ANA should not prevent physicians from treating the patient with a TNF- $\alpha$  blocker, Dr. Lebwohl said.

Over the past year, Dr. Lebwohl has been a consultant and speaker for, or had pending consulting agreements with, a number of drug companies, including Abbott, Amgen, Astellas, Centocor, Connetics, Genentech, Novartis, and Warner Chilcott. He also has served as a speaker for Allergan. ■

# Methotrexate Trumped by Adalimumab for Psoriasis

BY HEIDI SPLETE  
Senior Writer

WHISTLER, B.C. — Adalimumab was significantly more effective against psoriasis than both methotrexate and placebo were in a double-blind, double-dummy, randomized, controlled phase III trial, Dr. Richard Langley reported at a dermatology symposium.

The study is the first head-to-head comparison of a biologic and a standard systemic treatment for psoriasis, said Dr. Langley of Dalhousie University, Halifax, N.S., who participated in the multisite study. Dr. Langley has received funding to conduct the study from Abbott Laboratories, which manufactures adalimumab.

The Comparative Study of Humira vs. Methotrexate vs. Placebo in Psoriasis Patients included 271 patients with moderate to severe psoriasis from eight European countries and Canada. The patients were randomized into three groups to receive injections of adalimumab (108 patients), methotrexate (110 patients), or placebo (53 patients). The patient demographics were similar among the three groups.

The adalimumab group received the standard dosage given for other indications: a single subcutaneous injection of 80 mg, followed by a 40-mg subcutaneous injection every other week for 16 weeks.

After 16 weeks of treatment, 79.6% of the adalimumab patients achieved a Psoriasis Area and Severity Index (PASI) score of 75, which indicates a 75% reduction in symptoms of psoriasis. This improvement was statistically significant, compared with the other patients' scores: 35.5% of the methotrexate group and 18.9% of the placebo group achieved a PASI score of 75.

In addition, 88.0% of adalimumab patients achieved a PASI score of 50, compared with 61.8% of methotrexate patients and 30.2% of placebo patients, Dr. Langley reported.

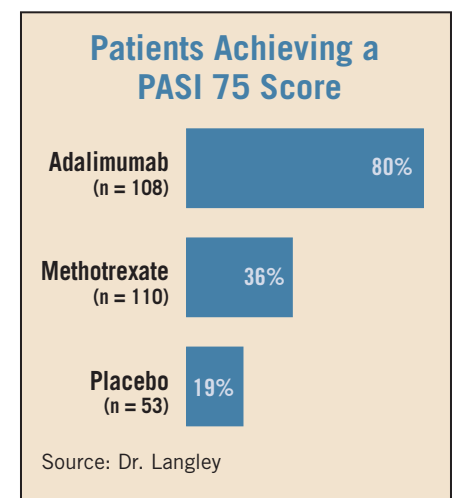
Using the Physician's Global Assessment, psoriasis was judged to be clear or minimal in 73% of the adalimumab patients, compared with 30% of the methotrexate patients and 11% of placebo patients.

The mean methotrexate dosage was approximately 15 mg/kg by week 6, but it had been increased to approximately 20 mg/kg by week 12, whereas the adalimumab dose remained consistent, Dr. Langley noted.

The nature and incidence of adverse events were similar across the three groups. One placebo patient developed a kidney stone, one case of hepatitis occurred in a methotrexate patient, and one case of pancreatitis occurred in an adalimumab patient who had a history of heavy alcohol use, he said.

Nasopharyngitis was the most common of the adverse events that occurred in more than 5% of patients. Other reported adverse events included injection site reactions, hepatic events, arthralgia, and headache.

Adalimumab is currently approved in the United States for the treatment of adults with rheumatoid arthritis, psoriatic arthritis, and ankylosing spondylitis. Abbott plans to apply for a psoriasis treatment indication for adalimumab in the United States and Europe this year, Dr. Langley said. ■



# Consider PHACES Syndrome in Patients With Facial Hemangiomas

WILLIAMSBURG, VA. — A segmental plaque-like facial hemangioma should be a tip-off to evaluate an infant for PHACES syndrome (posterior fossa malformations, hemangiomas, arterial anomalies, coarctation of the aorta and other cardiac defects, eye abnormalities, sternal defects), Dr. Sharon A. Glick said at a meeting sponsored by Skin Disease Education Foundation.

To date, there have been about 200 case reports of PHACES syndrome, with a "strikingly female preponderance," said Dr. Glick, director of pediatric dermatology at the State University of New York Downstate Medical Center in New York. The female to male ratio is 9:1.

Most patients (70%) have only one extracutaneous manifestation. "You do not need to have all the findings, you just need one extracutaneous. Of course, the common feature is a segmental plaque-like facial hemangioma," she said.

In a recently published prospective study, 25 out of 1,096 children seen with infantile hemangioma met the criteria for PHACES syndrome in 1 year—a 2.3% incidence. Of the 127 infants with segmental type facial infantile hemangioma, 25 had PHACES syndrome—a 20% incidence (Am. J. Med. Genet. 2006;140A:975-86).

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—Kerri Wachter