

briefing on the program's launch. Researchers, clinicians, educators and members of both public and private health care agencies need to band together to make the program a success, said Dr. Fielding, chairman of the Secretary's Advisory Committee on Health Promotion and Disease Prevention Objectives for 2020.

In response to the growing elderly segment of the American population, the new program includes a topic area for dementias, including Alzheimer's disease. Other new areas in the initiative are early and middle childhood



and adolescent health; blood disorders and blood safety; genomics; global health; and health-related quality of life and well-being.

Like all children growing up in a technology-based society, Healthy People 2020 will incorporate the Internet and

other technology media in both its message and its method. The newly designed Web site allows users to tailor information to their individual needs and look for evidence-based ways to put the program's recommendations to work in their lives.

Developers are also issuing a challenge to encourage the tech-savvy to create easy-to-use applications for those who are working with Healthy People 2020 objectives and community health data. Winning ideas will reap financial rewards – \$4,000 in prize money is available.

“This milestone in disease prevention and health promotion creates an opportunity to leverage information technology to make Healthy People come alive for all Americans in their communities and work places,” said HHS Chief Technology Officer Todd Park.

“The ‘my HealthyPeople’ applications challenge will help spur innovative approaches to helping communities track their progress using Health People objectives and targets as well as develop an agenda for health improvement.”

abatacept was associated with a greater proportion of serious infections than the use of a TNF-blocker alone; and the combination therapy, compared to the use of a TNF-blocker alone, has not demonstrated improved clinical benefit in the treatment of RA. Therefore, the combination of TNF-blockers including SIMPONI[®] and abatacept is not recommended (see Drug Interactions). **Use with Anakinra** Concurrent administration of anakinra (an interleukin-1 antagonist) and another TNF-blocker, was associated with a greater portion of serious infections and neutropenia and no additional benefits compared with the TNF-blocker alone. Therefore, the combination of anakinra with TNF-blockers, including SIMPONI[®], is not recommended (see Drug Interactions). **Hematologic Cytopenias** There have been post-marketing reports of pancytopenia, leukopenia, neutropenia, aplastic anemia, and thrombocytopenia in patients receiving TNF-blockers. Although, there were no cases of severe cytopenias seen in the SIMPONI[®] clinical trials, caution should be exercised when using TNF-blockers, including SIMPONI[®], in patients who have significant cytopenias. **Vaccinations** Patients treated with SIMPONI[®] may receive vaccinations, except for live vaccines. No data are available on the response to live vaccination or the risk of infection, or transmission of infection after the administration of live vaccines to patients receiving SIMPONI[®]. In the Phase 3 PsA study, after pneumococcal vaccination, a similar proportion of SIMPONI[®]-treated and placebo-treated patients were able to mount an adequate immune response of at least a 2-fold increase in antibody titers to pneumococcal polysaccharide vaccine. In both SIMPONI[®]-treated and placebo-treated patients, the proportions of patients with response to pneumococcal vaccine were lower among patients receiving MTX compared with patients not receiving MTX. The data suggest that SIMPONI[®] does not suppress the humoral immune response to the pneumococcal vaccine. **ADVERSE REACTIONS** Because clinical trials are conducted under widely varying conditions, adverse reaction rates observed in the clinical trials of a drug cannot be directly compared to rates in the clinical trials of another drug and may not reflect the rates observed in clinical practice. **Clinical Studies Experience** The safety data described below are based on 5 pooled, randomized, double-blind, controlled Phase 3 trials in patients with RA, PsA, and AS (Studies RA-1, RA-2, RA-3, PsA and AS). These 5 trials included 639 control-treated patients and 1659 SIMPONI[®]-treated patients including 1089 with RA, 292 with PsA, and 277 with AS. The proportion of patients who discontinued treatment due to adverse reactions in the controlled Phase 3 trials through Week 16 in RA, PsA and AS was 2% for SIMPONI[®]-treated patients and 3% for placebo-treated patients. The most common adverse reactions leading to discontinuation of SIMPONI[®] in the controlled Phase 3 trials through Week 16 were sepsis (0.2%), alanine aminotransferase increased (0.2%), and aspartate aminotransferase increased (0.2%). The most serious adverse reactions were: Serious Infections; Malignancies. Upper respiratory tract infection and nasopharyngitis, were the most common adverse reactions reported in the combined Phase 3 RA, PsA and AS trials through Week 16, occurring in 7% and 6% of SIMPONI[®]-treated patients as compared with 6% and 5% of control-treated patients, respectively. **Infections** In controlled Phase 3 trials through Week 16 in RA, PsA, and AS, infections were observed in 28% of SIMPONI[®]-treated patients compared to 25% of control-treated patients. **Liver Enzyme Elevations** There have been reports of severe hepatic reactions including acute liver failure in patients receiving TNF-blockers. In controlled Phase 3 trials of SIMPONI[®] in patients with RA, PsA, and AS through Week 16, ALT elevations $\geq 5 \times$ ULN occurred in 0.2% of control-treated patients and 0.7% of SIMPONI[®]-treated patients, and ALT elevations $\geq 3 \times$ ULN occurred in 2% of control-treated patients and 2% of SIMPONI[®]-treated patients. Since many of the patients in the Phase 3 trials were also taking medications that cause liver enzyme elevations (e.g., NSAIDs, MTX), the relationship between SIMPONI[®] and liver enzyme elevation is not clear. **Autoimmune Disorders and Autoantibodies** The use of TNF-blockers has been associated with the formation of autoantibodies and, rarely, with the development of a lupus-like syndrome. In the controlled Phase 3 trials in patients with RA, PsA, and AS through Week 14, there was no association of SIMPONI[®] treatment and the development of newly positive anti-dsDNA antibodies. **Injection Site Reactions** In controlled Phase 3 trials through Week 16 in RA, PsA and AS, 6% of SIMPONI[®] treated patients had injection site reactions compared with 2% of control-treated patients. The majority of the injection site reactions were mild and the most frequent manifestation was injection site erythema. In controlled Phase 2 and 3 trials in RA, PsA, and AS, no patients treated with SIMPONI[®] developed anaphylactic reactions. **Psoriasis: New-Onset and Exacerbations** Cases of new onset psoriasis, including pustular psoriasis and palmoplantar psoriasis, have been reported with the use of TNF-blockers, including SIMPONI. Cases of exacerbation of pre-existing psoriasis have also been reported with the use of TNF-blockers. Many of these patients were taking concomitant immunosuppressants (e.g., MTX, corticosteroids). Some of these patients required hospitalization. Most patients had improvement of their psoriasis following discontinuation of their TNF-blocker. Some patients have had recurrences of the psoriasis when they were re-challenged with a different TNF-blocker. Discontinuation of SIMPONI[®] should be considered for severe cases and those that do not improve or that worsen despite topical treatments. **Immunogenicity** Antibodies to SIMPONI[®] were detected in 57 (4%) of SIMPONI[®]-treated patients across the Phase 3 RA, PsA and AS trials through Week 24. Similar rates were observed in each of the 3 indications. Patients who received SIMPONI[®] with concomitant MTX had a lower proportion of antibodies to SIMPONI[®] than patients who received SIMPONI[®] without MTX (approximately 2% versus 7%, respectively). Of the patients with a positive antibody response to SIMPONI[®] in the Phase 2 and 3 trials, most were determined to have neutralizing antibodies to golimumab as measured by a cell-based functional assay. The small number of patients positive for antibodies to SIMPONI[®] limits the ability to draw definitive conclusions regarding the relationship between antibodies to golimumab and clinical efficacy or safety measures. The data above reflect the percentage of patients whose test results were considered positive for antibodies to SIMPONI[®] in an ELISA assay, and are highly dependent on the sensitivity and specificity of the assay. Additionally, the observed incidence of antibody positivity in an assay may be influenced by several factors including sample handling, timing of sample collection, concomitant medications, and underlying disease. For these reasons, comparison of the incidence of antibodies to SIMPONI[®] with the incidence of antibodies to other products may be misleading. **Other Adverse Reactions** The adverse drug reactions that occurred at a rate of at least 1% in the combined SIMPONI[®] groups during the controlled period of the 5 pooled Phase 3 trials through Week 16 in patients with RA, PsA, and AS are summarized below. Patients may have taken concomitant MTX, sulfasalazine, hydroxychloroquine, low-dose corticosteroids (≤ 10 mg of prednisone/day or equivalent), and/or NSAIDs during the trials.

The numbers (percentages) of adverse drug reactions for Placebo \pm DMARDS-treated patients (n=639) and SIMPONI[®] \pm DMARDS-treated patients (n=1659), respectively, were: **Upper respiratory tract infection:** 37 (6%), 120 (7%); **Nasopharyngitis:** 31 (5%), 91 (6%); **Alanine aminotransferase increased:** 18 (3%), 58 (4%); **Injection site erythema:** 6 (1%), 56 (3%); **Hypertension:** 9 (1%), 48 (3%); **Aspartate aminotransferase increased:** 10 (2%), 44 (3%); **Bronchitis:** 9 (1%), 31 (2%); **Dizziness:** 7 (1%), 32 (2%); **Sinusitis:** 7 (1%), 7 (2%); **Influenza:** 7 (1%), 25 (2%); **Pharyngitis:** 8 (1%), 22 (1%); **Rhinitis:** 4 (<1%), 20 (1%); **Pyrexia:** 4 (<1%), 20 (1%); **Oral herpes:** 2 (<1%), 16 (1%); **Paraesthesia:** 2 (<1%), 16 (1%). **Less common clinical trial adverse drug reactions** Adverse drug reactions that occurred <1% during the SIMPONI[®] clinical trials included the following events listed by system organ class: **Nervous system disorders:** central nervous system demyelinating disorders (such as multiple sclerosis), peripheral demyelinating polyneuropathy; **Vascular disorders:** vasculitis (systemic); **Skin and subcutaneous tissue disorders:** vasculitis (cutaneous) **DRUG INTERACTIONS: Methotrexate.** For the treatment of RA, SIMPONI[®] should be used with MTX. Since the presence or absence of concomitant MTX did not appear to influence the efficacy or safety of SIMPONI[®] in the treatment of PsA or AS, SIMPONI[®] can be used with or without MTX in the treatment of PsA and AS. **Biologic Products for RA, PsA, and/or AS** An increased risk of serious infections has been seen in clinical RA studies of other TNF-blockers used in combination with anakinra or abatacept, with no added benefit; therefore, use of SIMPONI[®] with abatacept or anakinra is not recommended. A higher rate of serious infections has also been observed in RA patients treated with rituximab who received subsequent treatment with a TNF-blocker. There is insufficient information to provide recommendations regarding the concomitant use of SIMPONI[®] and other biologic products approved to treat RA, PsA, or AS. **Live Vaccines** Live vaccines should not be given concurrently with SIMPONI[®]. **Cytochrome P450 Substrates** The formation of CYP450 enzymes may be suppressed by increased levels of cytokines (e.g., TNF α) during chronic inflammation. Therefore, it is expected that for a molecule that antagonizes cytokine activity, such as golimumab, the formation of CYP450 enzymes could be normalized. Upon initiation or discontinuation of SIMPONI[®] in patients being treated with CYP450 substrates with a narrow therapeutic index, monitoring of the effect (e.g., warfarin) or drug concentration (e.g., cyclosporine or theophylline) is recommended and the individual dose of the drug product may be adjusted as needed. **USE IN SPECIFIC POPULATIONS: Pregnancy** Pregnancy Category B – There are no adequate and well-controlled studies of SIMPONI[®] in pregnant women. Because animal reproduction and developmental studies are not always predictive of human response, it is not known whether SIMPONI[®] can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. SIMPONI[®] should be used during pregnancy only if clearly needed. An embryofetal developmental toxicology study was performed in which pregnant cynomolgus monkeys were treated subcutaneously with golimumab during the first trimester with doses up to 50 mg/kg twice weekly (360 times greater than the maximum recommended human dose-MHRD) and has revealed no evidence of harm to maternal animals or fetuses. Umbilical cord blood samples collected at the end of the second trimester showed that fetuses were exposed to golimumab during gestation. In this study, *in utero* exposure to golimumab produced no developmental defects to the fetus. A pre- and post-natal developmental study was performed in which pregnant cynomolgus monkeys were treated with golimumab during the second and third trimesters, and during lactation at doses up to 50 mg/kg twice weekly (860 times and 310 times greater than the maximal steady state human blood levels for maternal animals and neonates, respectively) and has revealed no evidence of harm to maternal animals or neonates. Golimumab was present in the neonatal serum from the time of birth and for up to 6 months postpartum. Exposure to golimumab during gestation and during the postnatal period caused no developmental defects in the infants. **Nursing Mothers** It is not known whether SIMPONI[®] is excreted in human milk or absorbed systemically after ingestion. Because many drugs and immunoglobulins are excreted in human milk, and because of the potential for adverse reactions in nursing infants from SIMPONI[®], a decision should be made whether to discontinue nursing or to discontinue the drug, taking into account the importance of the drug to the mother. In the pre- and post-natal development study in cynomolgus monkeys in which golimumab was administered subcutaneously during pregnancy and lactation, golimumab was detected in the breast milk at concentrations that were approximately 400-fold lower than the maternal serum concentrations. **Pediatric Use** Safety and effectiveness of SIMPONI[®] in patients less than 18 years of age have not been established. **Geriatric Use** In the Phase 3 trials in RA, PsA, and AS, there were no overall differences in SAEs, serious infections, and AEs in SIMPONI[®]-treated patients ages 65 or older (N=155) compared with younger SIMPONI[®]-treated patients. Because there is a higher incidence of infections in the geriatric population in general, caution should be used in treating geriatric patients with SIMPONI[®]. **OVERDOSAGE** In a clinical study, 5 patients received protocol-directed single infusions of 10 mg/kg of intravenous SIMPONI[®] without serious adverse reactions or other significant reactions. The highest weight patient was 100 kg, and therefore received a single intravenous infusion of 1000 mg of SIMPONI[®]. There were no SIMPONI[®] overdoses in the clinical studies. **PATIENT COUNSELING INFORMATION Patient Counseling** Patients should be advised of the potential benefits and risks of SIMPONI[®]. Physicians should instruct their patients to read the Medication Guide before starting SIMPONI[®] therapy and to read it each time the prescription is renewed. **Infections** Inform patients that SIMPONI[®] may lower the ability of their immune system to fight infections. Instruct the patient of the importance of contacting their doctor if they develop any symptoms of infection, including tuberculosis, invasive fungal infections, and hepatitis B reactivation. **Malignancies** Patients should be counseled about the risk of lymphoma and other malignancies while receiving SIMPONI[®]. **Allergic Reactions** Advise latex-sensitive patients that the needle cover on the prefilled syringe as well as the prefilled syringe in the prefilled SmartJect[®] autoinjector contains dry natural rubber (a derivative of latex). **Other Medical Conditions** Advise patients to report any signs of new or worsening medical conditions such as congestive heart failure, demyelinating disorders, autoimmune diseases, liver disease, cytopenias, or psoriasis.

References: 1. SEER [database online]. U.S. Population Data—1969-2004. Bethesda, MD: National Cancer Institute. Release date: January 3, 2007. Available at: <http://www.seer.cancer.gov/popdata>.

©2010 Centocor Ortho Biotech Inc. License No. 1821
Horsham, PA 19044, US 1-800-457-6399 September 2010 25SM10224

Primary Care Pay Lower Than Specialty Care

FROM THE ARCHIVES OF INTERNAL MEDICINE

Primary care physicians receive the lowest reimbursement of all physician specialties, indicating a need for reforms that would increase incomes or reduce work hours for primary care physicians.

J. Paul Leigh, Ph.D., and his colleagues at the University of California, Davis, used data from 6,381 physicians providing patient care in the 2004-2005 Community Tracking Study.

Medical specialties were broken down into four broad categories: primary care; surgery; internal medicine subspecialists and pediatric subspecialists; and an “other” category with physicians practicing in areas such as radiation oncology, emergency medicine, ophthalmology, and dermatology.

Wages of procedure-oriented specialists were approximately 36%-48% higher than those of primary care physicians, the investigators found (Arch. Intern. Med. 2010;170:1728-34).

Specialties with statistically higher-than-average wages perform neurologic, orthopedic, or ophthalmologic surgery, use sophisticated technologies such as radiation oncology equipment, or administer expensive drugs such as oncology drugs in office settings, they found.

Lower-paid specialties were largely nonprocedural and relied instead on talking to and examining patients, they noted, adding that “the major exception is critical-care internal medicine.”

—Jane Anderson

Major Finding: Physicians practicing primary care medicine are paid at least \$20 per hour less than their colleagues who practice surgery and specialty medicine.

Data Source: Reimbursement data from 6,381 physicians providing patient care in the 2004-2005 Community Tracking Study.

Disclosures: The study was supported by grants from the National Institute for Occupational Safety and Health and the University of California, Davis, Office of the Vice Chancellor for Research.