## Herpes Zoster Vaccine's Safety Affirmed at 1 Year

BY HEIDI SPLETE Senior Writer

ATLANTA — The safety profile for herpes zoster vaccine Zostavax, manufactured by Merck & Co. was reinforced during its first year of widespread use, based on adverse event reports collected from clinicians, patients, and others.

Zostavax seems to have a very good safety profile, which was expected based on data from prelicensure trials," said Dr. Sandra Chaves of the Centers for Disease Control and Prevention's Division of Viral and Rickettsial Disease.

A total of 590 reports related to Zostavax (including 44 classified as serious) had been submitted as of June 1, 2007, to the Vaccine Adverse Event Reporting System (VAERS), a vaccine safety surveillance system operated by the CDC and the Food and Drug Administration. The overall reporting rate was 73.3/100,000 doses distributed, and the serious event reporting rate was 5.5/ 100,000 doses distributed. Two of the 44 serious events reported were deaths. Most (90%) of the reports referred to the Zostavax vaccine administered alone, and 82 reports involved possible off-label use or

Serious events were defined as instances of hospitalization, death, life-threatening conditions, disabling illness, or other medically important conditions, said Dr. Chaves, who presented the VAERS postlicensure safety data at the late June meeting of the CDC's Advisory Committee on Immunization Practices (ACIP). The herpes zoster vaccine was first licensed in May 2006 and recommended by ACIP for prevention of herpes zoster in adults aged 60 years and older in October 2006.

An injection site reaction—the most commonly reported adverse event—was reported in 307 cases. The next most frequent events were a rash (177 cases) and herpes zoster (145 cases). Some reports included more than one event.

The rate of serious adverse events was higher among vaccine recipients, compared with those who received a placebo, in an adverse event monitoring substudy of approximately 6,000 patients, but no specific pattern was observed, Dr. Chaves said. More than half (59%) of the 44 serious events occurred in women, and most (43%) occurred in patients aged 70-79 years.

Examples of nonfatal events included three cases of anaphylaxis in patients aged 71, 76, and 79 years, all of whom recovered fully, and one case of a woman who requested vaccination and discovered 10 days later that she was pregnant. No pregnancy outcome data are available, but the woman was being followed by the Pregnancy Registry for Varicella Zoster Virus-Containing Vaccines sponsored by

The two deaths that occurred within 6 months of vaccination occurred in female patients aged 80 and 83 years, who died from a heart attack and pneumonia with sepsis, respectively.

In addition, administration errors were reported in both adults and children, including 34 reports of Zostavax being given to children instead of Varivax, Merck's childhood varicella vaccine.

The adverse event reports suggest that the errors were simply human error and not caused by confusing medication labels,

One of the committee members expressed concern about the outcomes in children who received Zostavax instead of the children's varicella vaccine. Each dose of Zostavax contains 14 times the amount of varicella zoster virus as Varivax.

A Merck spokesperson who was present at the meeting said that the company had studied titers as high as 50,000 plaqueforming units in healthy children and found a plateau of response, so an accidental dose of Zostavax should not be dangerous in most cases and should not prevent a second dose of varicella vaccine in children who received Zostavax accidentally as the first dose.

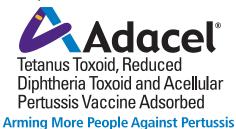
Safety surveillance for the zoster vaccine is challenging because of the many comorbid conditions that exist in the 60years-and-older population, Dr. Chaves

"More data are needed and postlicensure safety studies are expected, which will add to the information on the safety profile of this vaccine," he said.

Merck has agreed to conduct postlicensure studies including a randomized, placebo-controlled safety study with up to 6 months' follow-up to assess the rates of serious adverse events further.



Pertussis protection for both adolescents and adults 11 through 64 years of age





## **Safety Information**

ADACEL vaccine is indicated for active booster immunization for the prevention of tetanus, diphtheria, and pertussis as a single dose in

ADACEL vaccine is indicated for active booster immunization for the prevention of tetanus, diphtheria, and pertussis as a single dose in persons 11 through 64 years of age.

As with any vaccine, ADACEL vaccine may not protect 100% of vaccinated individuals. There are risks associated with all vaccines. The most common injection site adverse events include pain, erythema, and swelling. The most common systemic adverse events include headache, body ache, tiredness, and fever. ADACEL vaccine is contraindicated in persons with known systemic hypersensitivity to any component of the vaccine or a life-threatening reaction after previous administration of the vaccine or a vaccine containing the same substances. Because of uncertainty as to which component of the vaccine may be responsible, no further vaccination with the diphtheria, tetanus, or pertussis components found in ADACEL vaccine should be carried out. Because any intramuscular injection can cause injection site hematoma, ADACEL vaccine should not be given to persons with any bleeding disorder, such as hemophilia or thrombocytopenia, or to persons on anticoagulant therapy unless the potential benefits clearly outweigh the risk of administration. If the decision is made to administer ADACEL vaccine to such persons, it should be given with caution, with steps taken to avoid the risk of hematoma formation following injection. caution, with steps taken to avoid the risk of hematoma formation following injection.

Before administering ADACEL vaccine, please see brief summary of full Prescribing Information on following page. ADACEL vaccine is manufactured by Sanofi Pasteur Limited and distributed by Sanofi Pasteur Inc

To order ADACEL vaccine, log onto www.vaccineshoppe.com or call 1-800-VACCINE (1-800-822-2463) Learn about pertussis disease and prevention at www.ADACELVACCINE.com

1. Centers for Disease Control and Prevention (CDC). Preventing tetanus, diphtheria, and pertussis among adults: use of tetanus toxoid, reduced diphtheria toxoid and acellular pertussis vaccine: recommendations of the Advisory Committee on Immunization Practices (ACIP) and recommendation of ACIP, supported by the Healthcare Infection Control Practices Advisory Committee (HICPAC), for use of Tdap among health-care personnel. MM/WR. 2006;55(RR-17):21-22. 2. CDC. Preventing tetanus, diphtheria, and pertussis among adolescents: use of tetanus toxoid, reduced diphtheria toxoid and acellular pertussis vaccines: recommendations of the ACIP. MM/WR. 2006;55(RR-3):22.

\* Advisory Committee on Immunization Practices. † Tetanus, diphtheria, and acellular pertussis. ‡ 19-64 years of age. § 11-18 years of age sanofi pasteur. Discovery Drive. Swiftwater, Pennsylvania 18370. www.sanofipasteur.us

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