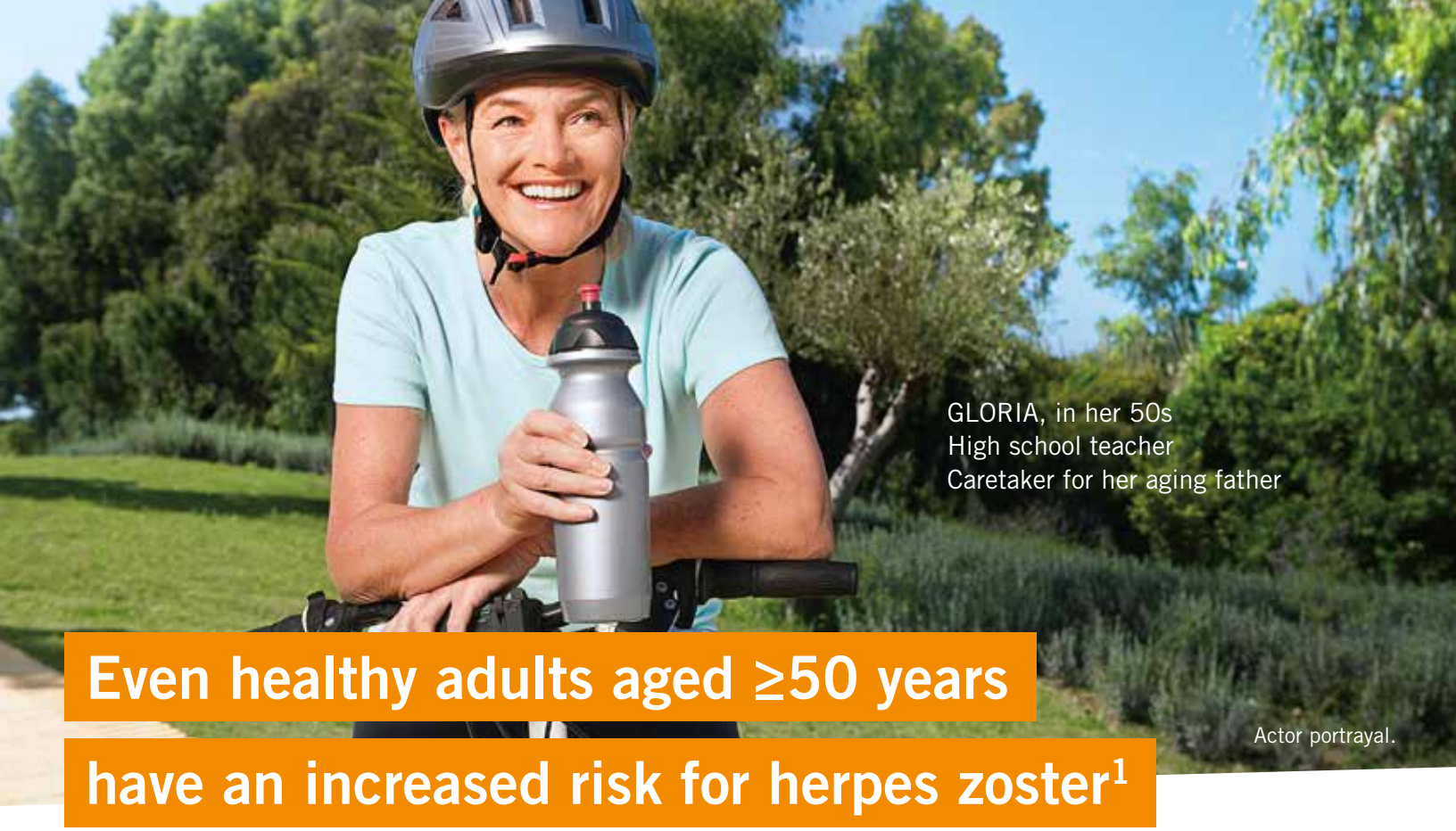


Actor portrayal.

Even healthy adults aged ≥50 years have an increased risk for herpes zoster[1]

Would you recommend ZOSTAVAX for patients like Gloria today?

// Gloria previously had chickenpox—like ~99.5% of adults aged ≥40 years.[2]

// According to the CDC, ~1 in 3 adults will experience zoster in their lifetime.[2]

About ZOSTAVAX

ZOSTAVAX is a live attenuated virus vaccine indicated for prevention of herpes zoster (shingles) in individuals 50 years of age and older. ZOSTAVAX is not indicated for the treatment of zoster or postherpetic neuralgia. ZOSTAVAX should not be used for prevention of primary varicella infection (Chickenpox).

Select Safety Information

Vaccination with ZOSTAVAX does not result in protection of all vaccine recipients.

ZOSTAVAX is contraindicated in: persons with a history of anaphylactic or anaphylactoid reaction to gelatin, neomycin, or any other component of the vaccine; persons with a history of primary or acquired immunodeficiencies; persons on immunosuppressive therapy; pregnant women or women of childbearing age.

A reduced immune response to ZOSTAVAX was observed in individuals who received concurrent administration of PNEUMOVAX®23 (Pneumococcal Vaccine Polyvalent) and ZOSTAVAX compared with individuals who received these vaccines 4 weeks apart. Consider administration of the two vaccines separated by at least 4 weeks.

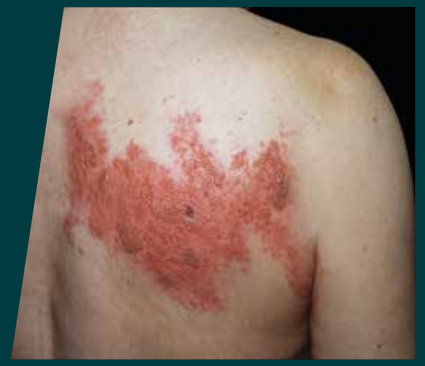
CDC=Centers for Disease Control and Prevention.

ZOSTAVAX®
Zoster Vaccine Live
Zoster prevention made possible

Zoster can strike at any time—You may never know which of your patients aged ≥50 years will be affected

A painful and unpredictable disease

There is no way to predict **when** VZV will reactivate, **who** will develop zoster, or **how severe** any case may be.[2]



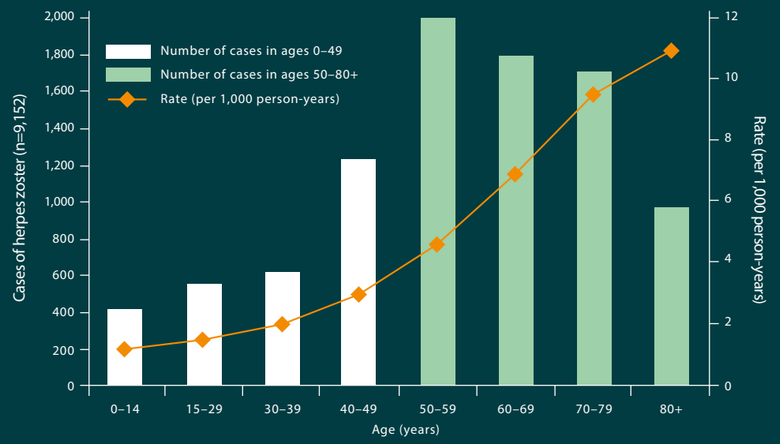
Zoster can be so much more than just a rash[3]

// About 1 in 5 people will experience chronic neuropathic pain, known as postherpetic neuralgia (PHN). PHN lasts for at least 3 months after rash onset and can continue for months or even years.[4,5]

// Other complications of zoster can include ophthalmicus, bacterial superinfection, hearing loss, scarring, and motor neuron palsies.[2]

Nearly all adults aged ≥50 are at risk for zoster

Zoster incidence by age group 2000–2001[1,a]

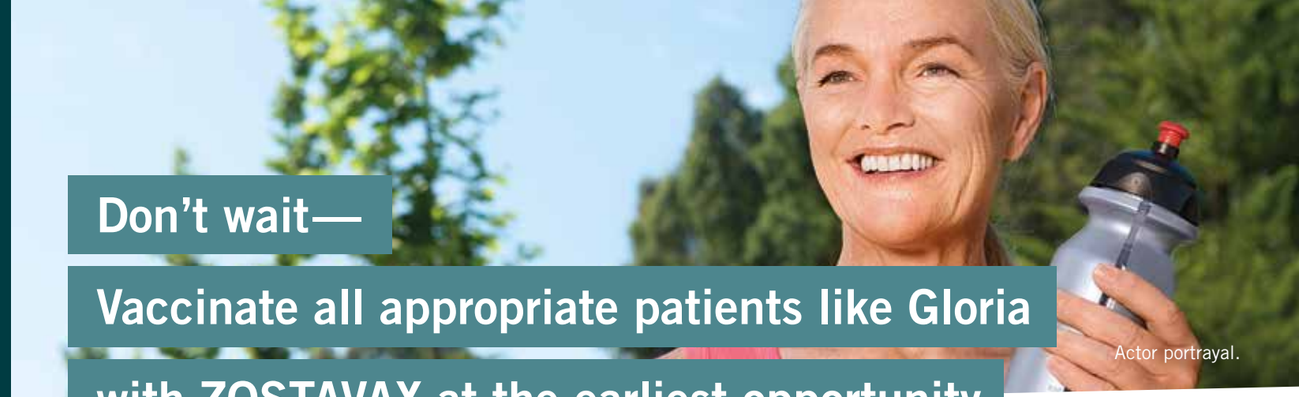


[a]**Study Design:** Data for the years 2000 to 2001 were obtained from the Medstat MarketScan database, containing health insurance enrollment and claims data from over 4 million US individuals. Incident HZ cases were identified through HZ diagnosis codes on health care claims. Overall incidence rates were age and sex adjusted to the 2000 US population.

Age-related decline in cell-mediated immunity means risk increases as patients age.[4]

Select Safety Information

Serious vaccine-related adverse reactions that have occurred following vaccination with ZOSTAVAX include asthma exacerbation and polymyalgia rheumatica. Other serious adverse events reported following vaccination with ZOSTAVAX include cardiovascular events (congestive heart failure, pulmonary edema). Common adverse reactions occurring in ≥1% of vaccinated individuals during clinical trials include injection-site reactions (erythema, pain/tenderness, swelling, hematoma, pruritus, warmth) and headache.



Actor portrayal.

Don't wait—Vaccinate all appropriate patients like Gloria with ZOSTAVAX at the earliest opportunity

The ZOSTAVAX Efficacy and Safety Trial (ZEST) assessed efficacy of ZOSTAVAX compared with placebo in 22,439 subjects aged 50 to 59 years[b]

ZOSTAVAX demonstrated significant reduction of the risk of zoster in patients aged 50 to 59

70%

Significant reduction of the risk of zoster

99 placebo group cases (n=11,228) vs 30 ZOSTAVAX group cases (n=11,211) [95% CI: 54–81]

// PHN was not evaluated in patients aged 50 to 59 years.

// The duration of protection beyond 4 years after vaccination with ZOSTAVAX is unknown. The need for revaccination has not been defined, but is currently under study.

[b]**Study Design for ZEST:** Efficacy was evaluated in a placebo-controlled, double-blind study of ZOSTAVAX. 22,439 subjects aged 50 to 59 years were randomized to receive a single dose of either ZOSTAVAX (n=11,211) or placebo (n=11,228) and were monitored for the occurrence of shingles for a median of 1.3 years postvaccination (range, 0 to 2 years).

Select Safety Information

Transmission of vaccine virus may occur between vaccinees and susceptible contacts.

Deferral should be considered in acute illness (for example, in the presence of fever) or in patients with active untreated tuberculosis.

Vaccination with ZOSTAVAX does not result in protection of all vaccine recipients.

HZ=herpes zoster; VZV=varicella-zoster virus.

ZOSTAVAX®
Zoster Vaccine Live
Zoster prevention made possible

Vaccinate all appropriate patients with proven ZOSTAVAX at the earliest opportunity

The Shingles Prevention Study (SPS) assessed efficacy of ZOSTAVAX in 38,546 subjects aged ≥60 years

Reduction of zoster incidence compared with placebo[a]

Percent Reduction By Age Groups

60–69 years	70–79 years	≥80 years	Overall in subjects aged ≥60 years
64%	41%	18%	51%
			Significant reduction of the risk of zoster
334 cases in the placebo group (n=10,356) vs 122 cases in the ZOSTAVAX group (n=10,370) [95% CI: 56–71]	261 cases in the placebo group (n=7,559) vs 156 cases in the ZOSTAVAX group (n=7,621) [95% CI: 28–52]	47 cases in the placebo group (n=1,332) vs 37 cases in the ZOSTAVAX group (n=1,263) [95% CI: -29 to 48; not significant]	642 cases in the placebo group (n=19,247) vs 315 cases in the ZOSTAVAX group (n=19,254) [95% CI: 44–58]

In a subset of patients aged ≥60 years who received ZOSTAVAX and developed zoster postvaccination...

39%

Overall lower incidence of PHN as compared to those in the placebo group

Age-adjusted estimate based on age strata (aged 60 to 69 years and ≥70 years) at randomization.

Vaccine efficacy for the prevention of zoster was highest for those subjects aged 60 to 69 years and declined with increasing age

[a]**Study Design for SPS:** Efficacy was evaluated in a placebo-controlled, double-blind clinical trial of ZOSTAVAX. 38,546 subjects aged 60 years or older were randomized to receive a single dose of either ZOSTAVAX (n=19,270) or placebo (n=19,276). Randomization was stratified by age, 60 to 69 and ≥70 years. All patients were monitored for the development of zoster for a median of 3.1 years (range, 31 days to 4.9 years).

Select Safety Information

ZOSTAVAX is contraindicated in: persons with a history of anaphylactic or anaphylactoid reaction to gelatin, neomycin, or any other component of the vaccine; persons with a history of primary or acquired immunodeficiencies; persons on immunosuppressive therapy; pregnant women or women of childbearing age.

A reduced immune response to ZOSTAVAX was observed in individuals who received concurrent administration of PNEUMOVAX®23 (Pneumococcal Vaccine Polyvalent) and ZOSTAVAX compared with individuals who received these vaccines 4 weeks apart. Consider administration of the two vaccines separated by at least 4 weeks.

ZOSTAVAX®
Zoster Vaccine Live
Zoster prevention made possible

The benefit of ZOSTAVAX in the prevention of PHN can be primarily attributed to the effect of the vaccination on the prevention of zoster

In the SPS, PHN was defined as clinically significant zoster-associated pain rated as ≥3 (on a 0–10 scale), persisting more than 90 days after rash onset.

// ZOSTAVAX reduced the incidence of PHN in individuals aged 70 years and older who developed zoster postvaccination.

// Vaccine efficacy against PHN in subjects who developed zoster postvaccination was 55% (95% CI: 18–76) in individuals aged 70 to 79 years; 5% (95% CI: -107 to 56; not significant) in individuals aged 60 to 69 years; and 26% (95% CI: -69 to 68; not significant) in individuals aged 80 years and older.

The duration of protection beyond 4 years after vaccination with ZOSTAVAX is unknown. The need for revaccination has not been defined, but is currently under study.

Select Safety Information

Serious vaccine-related adverse reactions that have occurred following vaccination with ZOSTAVAX include asthma exacerbation and polymyalgia rheumatica. Other serious adverse events reported following vaccination with ZOSTAVAX include cardiovascular events (congestive heart failure, pulmonary edema). Common adverse reactions occurring in ≥1% of vaccinated individuals during clinical trials include injection-site reactions (erythema, pain/tenderness, swelling, hematoma, pruritus, warmth) and headache.

Don't wait—Vaccinate all appropriate patients with single-dose ZOSTAVAX starting at age 50

Reasons to vaccinate against zoster:

1. RISK

Your patients' risk for zoster is substantial and increases with age.[2]

2. EFFICACY

The efficacy of ZOSTAVAX has been demonstrated in patients aged ≥50 years.

// Zoster can strike at any time—You may never know which of your patients will be affected.[2]

// Given as a single dose, ZOSTAVAX can help protect patients against zoster.

Select Safety Information

Transmission of vaccine virus may occur between vaccinees and susceptible contacts.

Deferral should be considered in acute illness (for example, in the presence of fever) or in patients with active untreated tuberculosis.

Before administering ZOSTAVAX, please read the accompanying Prescribing Information. The Patient Information also is available.

For additional copies of the Prescribing Information, please call 800-672-6372, visit MerckVaccines.com®, or contact your Merck representative.

Make ZOSTAVAX part of your routine preventive care discussions with appropriate patients aged ≥50 years

References: 1. Insinga RP, Itzler RF, Pellissier JM, et al. The incidence of herpes zoster in a United States administrative database. *J Gen Intern Med*. 2005;20(8):748–753. **2.** Centers for Disease Control and Prevention (CDC). Prevention of herpes zoster: recommendations of the Advisory Committee on Immunization Practices (ACIP). *MMWR Recomm Rep*. 2008;57(RR-55):1–30. **3.** Schmader KE, Dworkin RH. Natural history and treatment of herpes zoster. *J Pain*. 2008;9(1)(suppl 1):S3–S9. **4.** Johnson RW, Bouhassira D, Kassianos G, et al. The impact of herpes zoster and post-herpetic neuralgia on quality-of-life. *BMC Med*. 2010;8(37). doi:10.1186/1741-7015-8-37. **5.** Chua JV, Chen WH. Herpes zoster vaccine for the elderly: boosting immunity. *Aging Health*. 2010;6(2):169–176. doi:10.2217/ahe.10.5.

MERCK

ZOSTAVAX®
Zoster Vaccine Live
Zoster prevention made possible