

Adjuvants and Waning Adult Immunity

What Are Adjuvants?

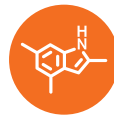
Ad·ju·vant

From Latin, *adiuvare*: To aid
n. an ingredient in a vaccine that helps improve your body's immune response to the vaccine.¹

Today, scientific research has led to the development of adjuvant systems known as “AS families.” These use a combination of substances to improve your body's immune response to the vaccine.²



Antigen: Elicits the immune response³



Adjuvants: Enhances the immune response¹

Different Types of Vaccines

Live-Attenuated

Many vaccines available today are known as live-attenuated and contain a weakened version of the active virus so that it does not cause serious disease in healthy people.⁴

Inactivated

Other vaccines contain an inactivated virus or a portion of the virus that can still help produce an immune response.⁵

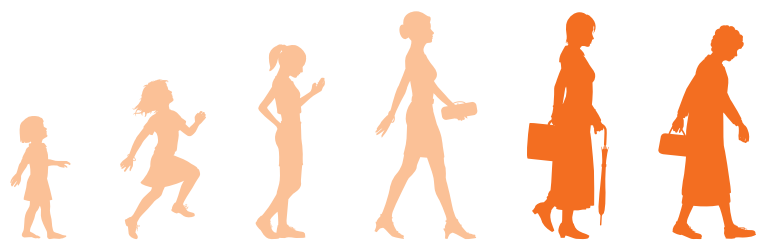
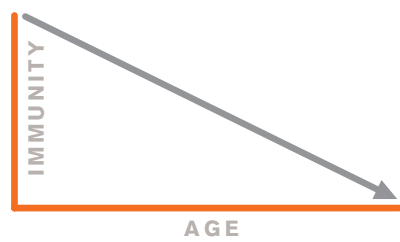
Subunit

Like inactivated whole-cell vaccines, subunit vaccines do not contain live components of the pathogen. They differ from inactivated vaccines by containing only the antigenic parts of the pathogen—the parts necessary to elicit a protective immune response.³

How Adjuvants Can Help

As we age, the ability of our immune system to mount a strong and effective response to infection declines. The body's ability to respond to vaccines also declines.⁶

Developing a vaccine using specially-designed adjuvants and adjuvant combinations can help improve the immune response to the vaccine.²



GSK's Work in Adjuvants

- GSK has been working in the area of adjuvant systems for more than 20 years and is the first to develop a shingles vaccine using an adjuvant system.^{7,8}
- SHINGRIX contains an antigen that triggers a targeted immune response in the body to the vaccine, which helps the body build its own protection against shingles. When that is combined with an adjuvant, the body's response to the vaccine is improved.
- SHINGRIX has been specifically formulated to address the age-related decline in immunity by helping your body build its own protection against shingles.⁹



About Shingles

Shingles typically presents as a painful, itchy rash that develops on one side of the body, as a result of reactivation of latent chickenpox virus (VZV).¹⁰ More than 90% of adults over 50 are infected with the virus.¹¹ Anyone who has been infected with VZV is at risk of developing shingles, with age and altered immune system being recognized as important risk factors.¹² The most common complication from shingles, occurring in up to 30% of shingles cases, is PHN, pain that lasts long after the rash and blisters heal.¹³ Other complications can include scarring, vision complications, secondary infection and nerve palsies.^{12,14}

SHINGRIX Important Safety Information

SHINGRIX is a vaccine that helps protect adults 50 years of age and older against shingles (herpes zoster). SHINGRIX may not fully protect all people who are vaccinated. SHINGRIX is not for prevention of chickenpox or for the treatment of herpes zoster (HZ) or postherpetic neuralgia (PHN). Very common adverse events (>10% of doses) reported in clinical trials were pain, redness, and swelling at the injection site, headache, stomach and digestive complaints, muscle pain, tiredness, chills, and fever. Most side effects were mild or moderate, lasting no more than 3 days. Allergic reactions may also occur. Ask your healthcare professional if SHINGRIX is right for you. Full product information can be found at www.ca.gsk.com/en-ca/products/shingrix/. To report an adverse event, please call 1-800-387-7374.

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