

# Considerations for Use of Herpes Zoster Vaccine in 50-59 Year Olds

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## **WG Conclusions on Burden of HZ**

- ❑ Burden of HZ increases rapidly after age 50**
- ❑ Incidence of HZ increases with age**
- ❑ Given occurrence of HZ, the following increase with age:**
  - Proportion of HZ progressing to PHN
  - Proportion of HZ with non-pain complications
  - Interference with activities of daily living (ADLs)
  - Proportion of HZ hospitalized

## Remaining Years of Risk after Vaccination

Age	Life Expectancy	
	Men	Women
50	29	33
60	21	24
70	14	16
80	8	10
90	4	5
100	2	2

The younger a person is at the time of vaccination, the longer period of time the vaccine needs to provide protection against zoster and its sequelae

## **WG Conclusions on Short Term Vaccine Protection**

- ❑ **HZ Vaccine provides protection against HZ and HZ-related complications in adults  $\geq 60$  years of age**
  - Vaccine effectiveness from large observational studies is consistent with vaccine efficacy from RCTs
  - Evidence from RCTs that efficacy against HZ lasts at least 5 years
- ❑ **HZ Vaccine is efficacious against HZ in adults 50-59 years of age**
  - Efficacy for preventing HZ from 1 RCT with mean follow up time of 1.3 years
  - No available evidence on efficacy for preventing PHN or other complications in 50-59 year olds
  - No available evidence on duration of protection against HZ or PHN for persons vaccinated at 50-59 years of age

## **WG Conclusions on Long Term Protection**

- ❑ LTPS results show waning protection over 11 years**
- ❑ Due to lack of concurrent control group, data from LTPS are insufficient to determine duration of protection**
- ❑ Effectiveness of HZ vaccine administered to persons  $\geq 60$  years of age for preventing HZ beyond 5 years remains uncertain**

## **WG Conclusions on Decision and Cost Effectiveness of HZ Vaccine**

- Substantially greater reduction of HZ burden, healthcare utilization, and costs achieved through vaccination of older adults who have higher incidence of HZ and HZ-related complications.**
- Cost per QALY saved is high with vaccination at age 50 because of limited impact on prevention of severe disease**

## Work Group Conclusions

- ❑ **The WG does not propose changes to existing recommendation for routine vaccination of persons 60 years of age and older**
- ❑ **Rationale:**
  - HZ vaccine administration should be timed to achieve the greatest reduction in burden of HZ and its complications
  - There is insufficient evidence for long term protection offered by the HZ vaccine
  - Persons vaccinated under 60 years of age may not be protected when the incidence of HZ and its complications are highest

## Other Work Group Considerations

- ❑ **WG recognized that some 50-59 year olds may wish to be vaccinated**
  - HZV approved for use in 50-59 year olds; providers can still offer vaccine to adults in this age group
  - Providers should counsel persons who are vaccinated under 60 years of age that the duration of protection offered by the vaccine is uncertain; therefore they may not be protected when the incidence of HZ and its complications are highest



## Other Work Group Considerations

### ❑ **WG discussed potential role of revaccination**

- WG reviewed partial results on safety and immunogenicity of a second dose
- Because duration of protection offered by the vaccine is uncertain, need for revaccination is not clear
- Second dose of vaccine not licensed

## Next Steps

- **HZ work group will continue to:**
  - Monitor data on duration of protection as it becomes available
  - Evaluate the optimal age for vaccination
  - Evaluate the need for revaccination

# DISCUSSION