**National Center for Immunization & Respiratory Diseases** 

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## **Work Group Considerations**

Jennifer Collins MD, MSc

Co-Lead, ACIP Hib/Meningococcal Vaccines Work Group

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## Policy question

Should Vaxelis (DTaP-IPV-Hib-HepB) be included with PedvaxHIB in the preferential recommendation for American Indian and Alaska Native infants?

## Work Group Considerations

- 574 federally recognized tribes in the United States
  - Listening to tribal communities is very important
  - CDC's Office of Tribal Affairs and Strategic Alliances (OTASA) is helping facilitate
- ACIP preferential recommendations must be evidencebased

# CDC/NCIRD held a listening session with tribal communities in January 2024

- 80 attendees, including
  - 9 from tribes or tribal serving organizations
  - 46 from Indian Health Service (IHS)
- Key questions and concerns raised by participants
  - Will Vaxelis offer the same protection as PedvaxHIB?
  - Need to monitor for possible breakthrough cases
  - Safety and side effects

Key considerations regarding post-dose 1 immunogenicity of Vaxelis among American Indian and Alaska Native populations

# Study enrollment included Navajo Nation and Alaska Native infants

### **Study Enrollment**

- Enrollment began in Jan 2022 in Anchorage, AK and four sites in the Navajo Nation (Southwest US)
- All study visits competed by Oct 2023

Total enrollment	333
Anchorage, AK	26
<u>Chinle</u> , AZ	61
Fort Defiance, AZ	115
Gallup, NM	81
Shiprock, NM	50





### Anti-Hib GMC 30 days post-dose 1 was non-inferior after Vaxelis vs. PedvaxHIB

#### Primary Outcome: Anti-Hib IgG Geometric Mean Concentration (GMC) 30 Days Post-Dose 1

		PedvaxHIB®	Vaxelis®
Anti-Hib Antibody GMC µg/mL (95% CI)	Observed Data	0.39	0.41
		(0.31- 0.50)	(0.33 - 0.52)
	Modeled by	0.40	0.41
	cLDA	(0.31 - 0.50)	(0.33 - 0.51)

CI: confidence interval; cLDA: constrained longitudinal data analysis

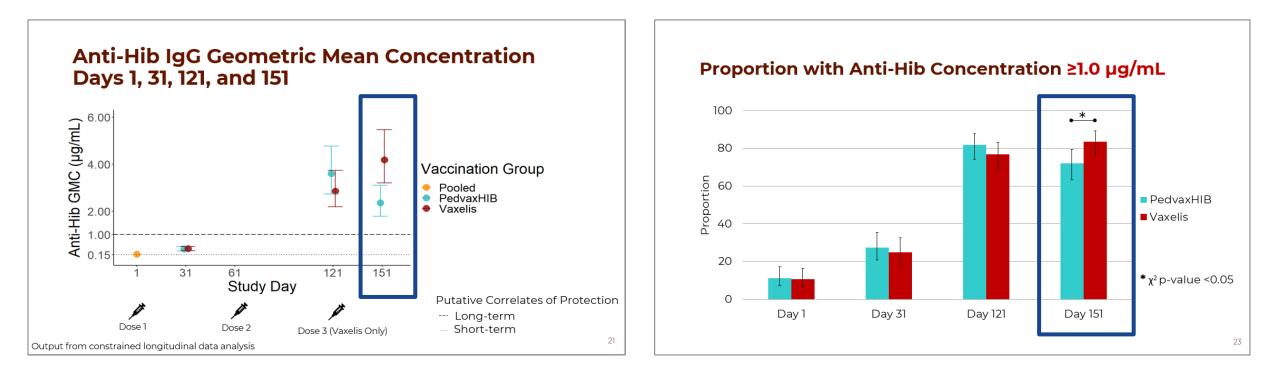
#### **Ratio of GMCs (Vaxelis : PedvaxHib)** 1.03 (0.75 - 1.41)

The pre-specified non-inferiority criterion was met based on the lower bound of the 95% confidence interval (CI) around the antibody concentration ratio [Vaxelis / PedvaxHIB] being > 0.67

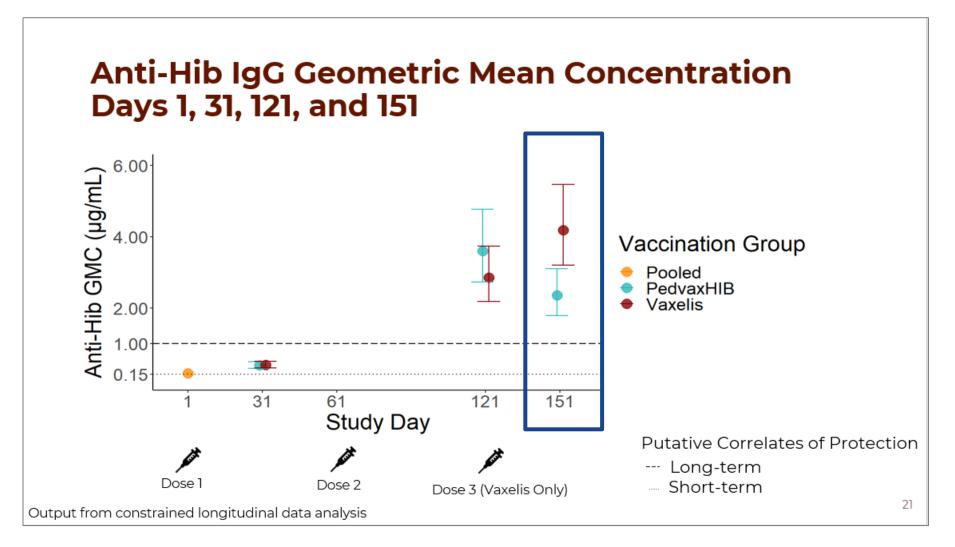
The use of trade names is for identification purposes only and does not imply endorsement by CDC. 7

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# GMC differences on day 151 post-dose 1 likely reflect the 3<sup>rd</sup> primary series dose of Vaxelis



# GMC titers not available beyond day 151 to assess longer-term protection in this population



## **Additional Work Group Considerations**

- Having a second preferred Hib vaccine option that is a combination vaccine may improve equity and reliability of vaccine supply
- Immunologic data are reassuring, however
  - Some concern about generalizing to broader AI/AN populations, though precedent for this with preferential recommendation for PedvaxHIB
  - Lack of direct vaccine effectiveness data
  - Study did not collect titers beyond infancy re: whether Vaxelis might better prevent residual cases occurring pre-booster
  - Some uncertainty as to why AI/AN populations are particularly affected by changes in vaccination type; potentially more than just antibody response?

### Final reflections and next steps

- Including Vaxelis as a second preferred option for AI/AN populations may improve equity and reliability of vaccine supply
- Post-dose 1 GMCs of Vaxelis appear non-inferior to that of PedvaxHIB among Navajo Nation and Alaska Native populations
- Data gaps
  - Studies in broader AI/AN populations
  - Short-term efficacy
  - Longer-term immunogenicity and efficacy
- Next steps
  - GRADE/EtR framework to be presented in June
  - Plan for vote in June

## Acknowledgments

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  - Amra Resic (AAFP)
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  - David Stephens (Emory)

- CDC Contributors
  - Lucy McNamara (DBD/NCIRD)
  - Sarah Schillie (DBD/NCIRD)
  - LeAnne Fox (DBD/NCIRD)
  - Susan Hariri (DBD/NCIRD)
  - Amy Rubis (DBD/NCIRD)
  - Noele Nelson (DBD/NCIRD)
  - Alison Albert (DBD/NCIRD)
  - Angela Jiles (DBD/NCIRD)
  - Marc Fischer (DIDRI/NCEZID)
  - Jonathan Duffy (DHQP/NCEZID)
  - Pedro Moro (DHQP/NCEZID)
  - Tanya Myers (DHQP/NCEZID)
  - Liz Velazquez (ISD/NCIRD)
  - Jessica MacNeil (ACIP Secretariat)
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Thank you! Questions?