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Time to Develop a Vaccine Typhoid 1884 1989 1008 1008 1008 1008 1009 1008 1009 1047 1090

Pediatric
COVID-19 Vaccines

February 12, 2021

The New Hork Times

Covid Vaccines for Kids Are Coming, but Not for Many Months
A. Mandavilli

Pebruary 26, 2021

Science

Vaccine trials ramp up in children and adolescents
J. Couzin-Frankel

Phase 2 Clinical Trial Begins:
Testing Bexsero as a Gonorrhea Vaccine

- 2015: FDA licensed Bexsero vaccine to prevent Group B meningitis (Novartis/GSK)
- 2017: New Zealand study found effectiveness of Group B meningitis vaccine against gonorrhea
 - Vaccinated people were less likely to contract gonorrhea. (https://www.ncbi.nlm.nih.gov/pubmed/28705462)
- 2020: NIAID-supported Phase 2 clinical trial began in late 2020
 - In collaboration with NIAID-supported STI Clinical Trials Group, GSK, & Uniformed Services University of Health Sciences (USUHS)
 - Objective: To demonstrate efficacy of Bexsero in prevention of gonococcal infection
 - https://clinicaltrials.gov/ct2/show/NCT04350138

Adapted from E. Erbelding/NIAID



COVID-19 Vaccines in Operation Warp Speed Development mRNA: rapid manufacturing facilitating efficient move to clinic, highly immunogenic moderna BIONTECH Place mRNA Adenovirus: rapid manufacturing facilitating efficient move to clinic, vaccine using this platform is approved in Europe Adenovirus AstraZeneca 🕏 Janssen 🔭 Adenovirus vector Adjuvanted recombinant protein: not as fast to manufacture but scalable, several approved vaccines use this approach NOVAVAX Recombinant protein + adjuvant Recombinant protein + adjuvant 🐶 SANOFI 🧳

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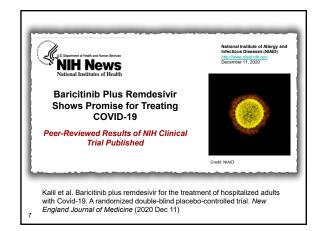
Multisystem Inflammatory Syndrome in Children (MIS-C)

- NIH launches Pediatric Research Immune Network on SARS-CoV-2 and MIS-C (PRISM)
- Purpose: To evaluate short- and long-term health outcomes of SARS-CoV-2 infection in children, including MIS-C
- Participants: At least 250 children and young adults ages 20 years or younger from diverse racial and ethnic backgrounds
- Locations: Approximately 20 sites nationwide
- NIH funds eight studies to uncover risk factors for MIS-C
 - Purpose: To explore how genetic, immune, viral, environmental, and other factors influence the severity of COVID-19 in children and the chances of progression to MIS-C and other long-term complications
- Participants: Children with diverse geographic, racial and ethnic backgrounds
- Locations: 30 U.S. States, Canada, the U.K. and South America

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