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
- 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
- Adenovirus vector
- Recombinant protein + adjuvant
- Recombinant protein + adjuvant
- Adjuvanted recombinant protein: not as fast to manufacture but scalable, several approved vaccines use this approach

Adapted from Avneet Kaur/NIAID

Pediatric COVID-19 Vaccines

- The New York Times
  - Covid Vaccines for Kids Are Coming, but Not for Many Months
    - A. Mandavilli

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

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

Adapted from NIH/NIAID