COVID-19 Vaccine Safety Technical (VaST) Work Group

Assessment
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Advisory Committee on Immunization Practices
April 23, 2021
Dynamic decision-making process

ACIP VaST Work Group ➔ Risk assessment ➔ Benefit-risk assessment ➔ Recommendations for use

ACIP COVID Vaccines Work Group ➔

ACIP
COVID-19 Vaccine Safety Technical (VaST) Work Group

Objectives

- Review, evaluate, and interpret post-authorization/approval COVID-19 vaccine safety data
- Serve as the central hub for technical subject matter expertise from federal agencies conducting post-authorization/approval safety monitoring
- Advise on analyses, interpretation, and data presentation
- Provide updates to the ACIP COVID-19 Vaccines Work Group and the ACIP on COVID-19 vaccine safety
## VaST Activities

<table>
<thead>
<tr>
<th>Pre-authorization</th>
<th>ACIP Recommendations</th>
<th>Post-authorization</th>
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<tbody>
<tr>
<td>Jun-Dec 2020</td>
<td>• Dec 12 – Pfizer/BioNTech</td>
<td>Dec 21-present</td>
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<td>• 14 meetings to prepare for vaccine safety surveillance in the U.S.</td>
<td>• Dec 14 – 1st dose administered in U.S.</td>
<td>• 17 independent meetings to review vaccine safety data across multiple surveillance systems</td>
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<td>• Dec 19 – Moderna</td>
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<td>• Feb 28 – Janssen</td>
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CVST with thrombocytopenia

- 6 cases of CVST with thrombocytopenia identified as a rare, but serious adverse event following Janssen vaccine
- Risk factors for CVST with thrombocytopenia not well understood
- Timely and transparent communication with healthcare providers and the public is crucial to maintain confidence in the vaccination program
HAN Communication – April 13

Recommendations for Clinicians: diagnosis and treatment
- Evaluate patients with a screening PF4 enzyme-linked immunosorbent (ELISA) assay as would be performed for autoimmune HIT. Consultation with a hematologist is strongly recommended.
- Do not treat with heparin, unless HIT testing is negative

Recommendations for Public Health: case reporting through VAERS
- Encourage healthcare providers and the public to report all serious and life-threatening adverse events and deaths following receipt of COVID-19 vaccines to VAERS

Recommendations for the Public: clinical signs and symptoms to monitor
- Contact healthcare provider, or seek medical care if you develop severe headache, abdominal pain, leg pain, or shortness of breath within three weeks after vaccination with the J&J COVID-19 vaccine
ACIP Meeting – April 14
CVST with thrombocytopenia

- Review of reported cases of CVST with thrombocytopenia after COVID-19 vaccines
- Discussion about the need for additional information to support evidence-based decision making, including
  - Age and gender-specific risk estimates
  - Evaluation of the benefit-risk balance of using Janssen vaccine in specific subgroups
VaST Meeting - April 19
Thrombosis with Thrombocytopenia Syndrome

- Review of new Brighton Collaboration definition of Thrombosis with Thrombocytopenia Syndrome (TTS)
  - Will facilitate investigation across surveillance systems
- Health Network Alert (HAN) supported enhanced case finding
  - Age and gender-specific rates of TTS following Janssen vaccine requested for risk assessment
- Review of data from VSD RCA and VA RCA
  - No safety signal identified for CVST, other thromboembolic disease, or thrombocytopenia identified following Janssen vaccine (>200,000 doses)
- Update from Global Advisory Committee on Vaccine Safety (GACVS) on TTS cases following AstraZeneca vaccine
VaST and CVWG Meeting - April 22

- Risk for TTS following Janssen vaccine
  - 7 per million doses in females <50 years* (highest in 30-39 years)
  - <1 per million doses in female 50+ and males*

- Other potential risk factors
  - Obesity (BMI>30), OCP use, hypothyroidism, hypertension

- Outcomes
  - 3 deaths, 7 remain hospitalized (4 in ICU), 5 discharged home

- Benefit-risk assessment and Evidence-to-Recommendation framework discussed

*Includes all doses (not adjusted for follow-up time)
VaST Summary

- Risk of TTS appears to be highest in female <50 years
  - Other risk factors for TTS not well established yet
- Risk mitigation strategies
  - Minimize exposure in high-risk populations
  - Increase awareness & ensure timely diagnosis and management of TTS
  - Educate patients about benefits and risks of available vaccines
- VaST will continue to monitor TTS, thromboembolic disease, and thrombocytopenia in all available vaccine safety surveillance systems
- VaST will update the ACIP COVID-19 vaccines workgroup, ACIP secretariat and ACIP on a regular basis
VaST Members

VaST Members
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Robert Hopkins (NVAC)
Matt Daley
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