TICK-BORNE ENCEPHALITIS (TBE) VACCINE

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January 12, 2022
Immunogenicity of 1 or 2 doses of TBE vaccine
Seropositivity after doses 1, 2, and 3 of primary series in adults

Loew-Baselli A et al. Vaccine 2011;29:7307-19/FDA Memo
Seropositivity after doses 1, 2, and 3 of primary series in adults

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Seropositivity after doses 1, 2, and 3 of primary series in adults

Dose 1  Dose 2  Dose 3

Adults (N=311)

- 16-49 yrs
- 50-79 yrs

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Seropositivity after doses 1, 2, and 3 of primary series in adults

- **Dose 1**: Weeks 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27
- **Dose 2**: Weeks 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27
- **Dose 3**: Weeks 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27

Adults (N=311)

- 16-49 yrs
- 50-79 yrs

Loew-Baselli A et al. Vaccine 2011;29:7307-19/FDA Memo
Geometric mean titers (GMTs) after doses 1, 2, and 3 in adults

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Seropositivity and GMTs after doses 2 and 3 of primary series in children aged 1–11 years (N=129)

Summary of seropositivity rates and GMTs

- **After 1 dose**
  - Seropositivity rates and GMTs are low

- **After dose 2**
  - Seropositivity rates and GMTs initially increase then decrease in following months
  - Variability by age group with lower rates and GMTs in older age groups
  - Concerning that GMTs close to seropositivity cut off

- **After dose 3**
  - Increase in seropositivity rates and notable increase in GMTs
Work Group conclusions

▪ Important to recommend a 3-dose primary series be completed prior to departure, in line with FDA-approved schedule

▪ Include data on immunogenicity after 1 or 2 doses in MMWR to enable counseling of individual travelers unable to complete full series