



## TOOLS FOR PRACTICE



### CO-KID: Covid vaccine for kids

#### CLINICAL QUESTION

What are the benefits and harms of the available COVID-19 vaccines for children and adolescents?

#### BOTTOM LINE

**Pfizer/BioNTech vaccine is 91% effective in preventing symptomatic COVID-19 in children 5-11 years. Both Pfizer/BioNTech and Moderna are 100% effective in adolescents at ~2 months. Real world evidence might differ. Both vaccines appear safe with primarily injection site reactions.**

#### EVIDENCE

- Study participants mostly Caucasian and healthy, 2 doses given 21-28 days apart. Median follow-up ~2 months. Cases were symptomatic, laboratory confirmed COVID-19. Severe COVID-19 is defined as cardiac, respiratory, other end organ failure, or ICU admission.
  - **Children:**
    - Pfizer/BioNTech: Multi-country, blinded, randomized controlled trial (RCT) of 2268 children 5-11 years old.<sup>1</sup>
      - Efficacy:  $\geq 7$  days post second dose.
      - COVID-19 cases: 3 versus 16 (placebo), relative risk reduction (RRR): 91%.<sup>1</sup>
      - Severe COVID-19: None.<sup>1</sup>
      - Most cases occurred when Delta variant was predominant strain.<sup>1-3</sup>
    - Solicited adverse effects:<sup>1</sup> Similar between 1st and 2nd doses.
      - Localized pain ~73%; redness: ~17%.
      - Fatigue: ~37% versus 28% (placebo).
      - Myalgia: 10% versus 7% (placebo).
      - Serious adverse effects: 0 versus 1 (placebo).
      - Myocarditis or anaphylaxis: None.
  - Moderna: Enrolling 6-months to 11-year-olds.<sup>4</sup>
    - Only immunogenicity currently reported.<sup>5</sup>