

| Type            | Doses  | Age Injected                     | Brand              | Company <sup>1</sup> | Control                                                                         | Placebo? | Safety Review After Injection <sup>2</sup>                              | Long | Source                                                                                                      | Note                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------------|--------|----------------------------------|--------------------|----------------------|---------------------------------------------------------------------------------|----------|-------------------------------------------------------------------------|------|-------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| HepB            | 3      | Birth<br>1M<br>6M                | Recombivax HB      | M                    | None                                                                            | NO       | 5 days                                                                  | NO   | <a href="#">Package insert</a> at § 6.1                                                                     | Note that to license a vaccine for children, the FDA relies upon the clinical trial conducted with children, not adults, because as the <a href="#">FDA</a> explains, “It’s important that the public recognize that, because young children are still growing and developing, it’s critical that thorough and robust clinical trials of adequate size are completed to evaluate the safety and the immune response to a ... vaccine in this population. Children are not small adults[.]”                                                                                                                                                              |
|                 |        |                                  | Engerix B          | G                    | None                                                                            | NO       | 4 days                                                                  | NO   | <a href="#">Package insert</a> at § 6.1                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| DTaP            | 15     | 2M<br>4M6M<br>15M<br>4Y          | Infanrix           | G                    | DTP                                                                             | NO       | 30 days                                                                 | NO   | <a href="#">Package insert</a> at § 6.1                                                                     | DTP was also not licensed based on a placebo controlled trial and it <a href="#">increases mortality</a> .<br><br>The 6-month Daptacel trial had no control, 1,454 children and “[w]ithin 30 days following any dose of DAPTACEL, 3.9% subjects reported at least one <a href="#">serious adverse event</a> .”                                                                                                                                                                                                                                                                                                                                          |
|                 |        |                                  | Daptacel           | S                    | DT or DTP                                                                       | NO       | Up to 2 months + 1 trial 6 months                                       | NO   | <a href="#">Package insert</a> at § 6.1                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| PCV             | 4      | 2M<br>4M<br>6M<br>12M            | Prevnam 13, PCV-13 | P                    | Prevnam 7                                                                       | NO       | 6 months                                                                | NO   | <a href="#">Package insert</a> at § 6.1                                                                     | Prevnam 7 trial’s control was an “[i]nvestigational meningococcal group C conjugate vaccine.” In Prevnam 13 trial, “[s]erious adverse events reported following vaccination in infants and toddlers occurred in 8.2% among Prevnam 13 recipients and 7.2% among Prevnam 7 recipients.” In Vaxneuvance trial, “serious adverse events...were reported by 9.6% of VAXNEUVANCE recipients and by 8.9% of Prevnam 13 recipients” but deemed “safe” because “no notable patterns or numerical imbalances between vaccination groups.” Prevnam 20 had similar result split into “serious adverse events” and “newly diagnosed chronic medical conditions.”    |
|                 |        |                                  | Vaxneuvance PCV-15 | M                    | Prevnam 13                                                                      | NO       | 6 months                                                                | NO   | <a href="#">Package insert</a> at § 6.1                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|                 |        |                                  | Prevnam 20, PCV-20 | P                    | Prevnam 13                                                                      | NO       | 6 months                                                                | NO   | <a href="#">Package insert</a> at § 6.1; <a href="#">Clinical Review</a>                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| IPV             | 4      | 2M4M<br>6M 4Y                    | IPOLE              | S                    | None                                                                            | NO       | 3 days                                                                  | NO   | <a href="#">Package insert</a> at 14-17                                                                     | IPOLE is <a href="#">very different</a> than the polio vaccine created by Jonas Salk in the 1950s (used until 1960s). Hence, trials of Salk’s vaccine from the 1950s were not relied upon to license IPOLE.                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Hib             | 3 or 4 | 2M<br>4M<br>6M<br>12M            | ActHIB             | S                    | HepB                                                                            | NO       | 30 days                                                                 | NO   | <a href="#">Package insert</a> at § 6.1; <a href="#">Basis of Approval</a> at 8                             | Within 30 days of injection in the ActHIB trial, 3.4% experienced a serious adverse event but “[n]one was assessed by the investigators [Sonafi] as related to the study of vaccines.”<br><br>Lyophilized PedvaxHIB vaccine, used as the control for Liquid PedvaxHIB, was tested in a trial in which controls were given placebo, OPV, and DTP but there is no indication Lyophilized PedvaxHIB was ever licensed.                                                                                                                                                                                                                                     |
|                 |        |                                  | Hiberix            | G                    | HibTITER or other vaccine                                                       | NO       | 31 days                                                                 | NO   | <a href="#">Package insert</a> at § 6.1; <a href="#">Clinical review</a> at 20-21                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|                 |        |                                  | Liquid PedvaxHIB   | M                    | Lyophilized PedvaxHIB                                                           | NO       | 3 days                                                                  | NO   | <a href="#">Package insert</a> at 6-8                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| RV <sup>3</sup> | 2 or 3 | 2M<br>4M<br>6M                   | Rotarix            | G                    | Dextran, Sorbitol, Amino Acids, Dulbecco’s Modified Eagle Medium, and Xanthan   | NO       | 31 days + 1 year for intussusception                                    | NO   | <a href="#">Package insert</a> at § 6.1; <a href="#">Clinical review</a> at 23-24                           | “[T]here were 68 (0.19%) deaths following...ROTARIX...and 50 (0.15%) deaths following placebo.... The most common...cause...was pneumonia...observed in 19 (0.05%) recipients of ROTARIX and 10 (0.03%) placebo recipients.” Its clinical review admits “[t]he placebo consisted of all components of Rotarix, but without any RV particles.” The package insert for RotaTeq similarly admits its “placebo” contains multiple ingredients as seen to the left.                                                                                                                                                                                          |
|                 |        |                                  | RotaTeq            | M                    | Polysorbate-80, Tissue Culture Medium, Fetal Bovine Serum, and Sodium Phosphate | NO       | 42 days + 1 year for intussusception                                    | NO   | <a href="#">Package insert</a> at § 6.1; <a href="#">Clinical reports</a> at 445 etc.                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Covid19         | 3      | 6M<br>7M<br>10M                  | Comirnaty          | P                    | Placebo                                                                         | YES      | 6 months                                                                | NO   | <a href="#">Package insert</a> at § 6.1                                                                     | Comirnaty licensed for only 12+ (Spikevax, Moderna, only 18+). Placebo controls unblinded and most vaccinated during the trial. All data 16+ is combined but 12-15 data is separate, had 1,131 vaccinated children, and <a href="#">one participant</a> shows how this trial was conducted.                                                                                                                                                                                                                                                                                                                                                             |
| Flu             | 19     | 6M<br>7M<br>Yearly               | Various            | Various              | Flu shots change annually without any clinical trial                            | NO       | Flu shots change annually without any clinical trial                    | NO   | <a href="#">CDC 22-23 Flu Shots; FDA Flu Shots</a>                                                          | The trials of the original flu shot formulations for children also did not have a placebo control ( <a href="#">see pp. 13-14</a> ) even though some adult trials did. The one inhaled influenza vaccine had a placebo but, again, it changes every year and is not safety tested in any trial.                                                                                                                                                                                                                                                                                                                                                         |
| MMR             | 6      | 12M<br>4Y                        | M-M-R-II           | M                    | None                                                                            | NO       | 42 days                                                                 | NO   | <a href="#">Clinical reports</a>                                                                            | M-M-R-II trials totaled only 834 children and a third developed gastrointestinal issues and a third respiratory issues. In Priorix trial, both vaccine groups had high rate of serious adverse events, emergency room visits, and new chronic diseases (e.g., autoimmune disorders, asthma, type I diabetes, celiac, and allergies). See Table 6 of the Supplementary Materials.                                                                                                                                                                                                                                                                        |
|                 |        |                                  | Priorix            | G                    | M-M-R-II                                                                        | NO       | 6 months                                                                | NO   | <a href="#">Package insert</a> at § 6.1; <a href="#">Sup materials</a> at 12                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| VAR             | 2      | 12M<br>4Y                        | Varivax            | M                    | 45 mg of neomycin per milliliter                                                | NO       | 70 days                                                                 | NO   | <a href="#">Package insert</a> at § 6.1; <a href="#">Merck study</a> at 2; <a href="#">Clinical reports</a> | One controlled trial with 956 children, half Varivax and half neomycin, and one trial with 32 vaccinated and another 29 vaccinated 8 weeks later, during which the first group had double the ear infections and 50% more respiratory infections.                                                                                                                                                                                                                                                                                                                                                                                                       |
| HepA            | 2      | 12M<br>18M                       | Havrix             | G                    | Engerix-B                                                                       | NO       | 6 months                                                                | NO   | <a href="#">Package insert</a> at § 6.1                                                                     | Trials for both occurred at the same time when there was no licensed Hep A vaccine and hence no excuse for not using a placebo control. It is also startling Engerix-B, see above, was the control for Havrix, and an injection of cyto-and-neuro toxic substances, AAHS and thimerosal, were used as a control for Vaqta instead of a saline injection.                                                                                                                                                                                                                                                                                                |
|                 |        |                                  | Vaqta              | M                    | AAHS and Thimerosal                                                             | NO       | 42 days                                                                 | NO   | <a href="#">Package insert</a> at § 6.1; <a href="#">Merck study</a> at 454                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Tdap            | 3      | 11Y                              | Adacel             | S                    | Td, for adults                                                                  | NO       | 6 months                                                                | NO   | <a href="#">Package insert</a> at § 6.1                                                                     | Due to reactions, Tdap (Adacel) given at 11Y has 12.5 times less diphtheria toxin (25Lf v 2Lf) and 10 times less pertussis toxin (25mcg v 2.5mcg) than DTaP (Infanrix) given to babies.                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|                 |        |                                  | Boostrix           | G                    | Decavac or Adacel                                                               | NO       | 6 months                                                                | NO   | <a href="#">Package insert</a> at § 6.1                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| HPV             | 2 or 3 | 9Y<br>9 ½Y                       | Gardasil 9         | M                    | Gardasil 4 (see note)                                                           | NO       | 1 month in five trials, 6 months in one trial, and 4 years in one trial | NO   | <a href="#">Clinical review</a> at 17-19                                                                    | Gardasil 9 trial gave 306 people placebo after full series of Gardasil 4. In Gardasil 4’s trial, controls received aluminum adjuvant, AAHS, except 320 people labeled “Saline Placebo” that actually received <a href="#">all vaccine ingredients</a> except antigens and AAHS. Across trials, 2-3% receiving vaccine or aluminum adjuvant (used to induce <a href="#">autoimmunity</a> ) had a suspected autoimmune disorder.                                                                                                                                                                                                                          |
| Men4            | 2      | 11Y<br>16Y                       | Menactra           | S                    | Menomune                                                                        | NO       | 6 months                                                                | NO   | <a href="#">Package insert</a> at § 6.1                                                                     | Incredibly, the safety section of the package insert for Menomune lists the trial in which it was used as a control for the trial of Menactra. This provides another good example of the safety pyramid scheme in which Menomune is licensed without a placebo-controlled trial and then used as the control to license Menactra; Menactra is then used as the control to license Menveo; and then Menveo is used as the control to license MenQuadfi. What is the actual safety profile? Putting aside the limited 6-month safety period, it is unknown since Menomune’s safety baseline was never established in a placebo-controlled clinical trial. |
|                 |        |                                  | Menveo             | G                    | Menactra or other vaccine                                                       | NO       | 6 months                                                                | NO   | <a href="#">Package insert</a> at § 6.1                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|                 |        |                                  | MenQuadfi          | S                    | Menveo or other vaccine                                                         | NO       | 6 months                                                                | NO   | <a href="#">Package insert</a> at § 6.1                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| MenB            | 0 or 2 | 10Y+ if indicated                | Bexsero            | G                    | See note                                                                        | NO       | 30 days                                                                 | NO   | <a href="#">Summary basis</a> at 14-15; <a href="#">Clinical review</a> at 40                               | Bexsero’s controls injected with aluminum hydroxide and, in one trial with 120 adolescents, saline injection followed by injection of Menveo and hence FDA labels this an “active control,” not a “placebo control” trial. Trumenba’s trials had no placebo control group other than 12 people in a dose ranging phase II study; otherwise, the controls were injected with Gardasil+placebo, dTaP-IPV+placebo, HepA+placebo, or Menactra+Adacel+placebo.                                                                                                                                                                                               |
|                 |        |                                  | Trumenba           | P                    | See note                                                                        | NO       | 30 days in 3 trials + 11M in 2 trials                                   | NO   | <a href="#">Summary basis</a> at 4; <a href="#">Clinical review</a> at 9-10                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| PPSV23          | 0 to 2 | 2Y+ if indicated                 | Pneumovax 23       | M                    | See note                                                                        | NO       | See note                                                                | NO   | <a href="#">FDA documentation</a>                                                                           | Licensed for children 2 years and older but there is no indication that there was any clinical trial involving anyone younger than 16 years of age that the FDA relied upon to license this vaccine. See all FDA documentation for this vaccine linked.                                                                                                                                                                                                                                                                                                                                                                                                 |
| DEN             | 0 or 3 | 6Y+ prior infected endemic areas | Dengvaxia          | S                    | Placebo                                                                         | YES      | 5 years                                                                 | YES  | <a href="#">Statistical review</a> at 10; <a href="#">Package insert</a> at 4                               | Finally, a longer-term placebo-controlled trial (35k+ children). Children under 6 had severe harm and death – harms the above trials would likely miss – and older children “not previously infected are at increased risk for severe dengue.” Hence, it is only given in <a href="#">endemic areas</a> (not in <a href="#">U.S.</a> ) to children 6+ who had dengue (Note: 5 years insufficient for vaccine for babies.)                                                                                                                                                                                                                               |

<sup>1</sup> M=Merck; G=GSK; S=Sanofi; P=Pfizer.

<sup>2</sup> Note that for many trials with “6 months,” the review was typically around 30 days after injection with a phone call at 6 months.

<sup>3</sup> Note that RV is given by oral drops and one influenza vaccine is given by nasal spray.