

CBER Pediatric Study Deferrals and Deferral Extensions¹

This report provides the number of pediatric study deferrals requested², the number of deferrals granted³, the number of deferral extensions requested, the number of deferral extensions granted, and a table detailing the granted deferrals and deferral extensions, through 12/31/2024. The information in the table is presented in the order the deferrals were granted, with the most recently granted deferral listed first.

Total deferrals⁴ requested: 64

Total deferrals granted: 77

Total deferral extensions⁵ requested: 47

Total deferral extensions granted: 41

| BLA/ND A Number | Sponsor | Product | Deferral Granted ⁶ | Reason for Deferral ⁷ | Deferral Extension Granted | Reason for Deferral Extension ⁸ | Study Due ⁹ | Study Complete ¹⁰ |
|-----------------|----------------------|---|-------------------------------|--|----------------------------|--|------------------------|------------------------------|
| 125812/0 | Humacyte Global Inc. | Human Acellular Vessel - SYMVESS | 12/19/2024 | Ready for approval for use in adults before pediatric studies are complete | n/a | n/a | 6/30/2029 | |
| 125796/0 | ModernaTX, Inc. | Respiratory Syncytial Virus Vaccine, mRNA (mRNA-1345) - MRESVIA | 5/31/2024 | Ready for approval for use in adults before pediatric studies are complete | n/a | n/a | 12/31/2025 | |
| | | | | | n/a | n/a | 2/28/2028 | |
| | | | | | n/a | n/a | 12/31/2026 | |
| | | | | | n/a | n/a | 3/31/2029 | |
| | | | | | n/a | n/a | 12/31/2031 | |
| | | | | | n/a | n/a | 12/31/2027 | |

| BLA/ND A Number | Sponsor | Product | Deferral Granted ⁶ | Reason for Deferral ⁷ | Deferral Extension Granted | Reason for Deferral Extension ⁸ | Study Due ⁹ | Study Complete ¹⁰ |
|-----------------|---|--|-------------------------------|---|----------------------------|---|-----------------------------------|---|
| 125743/0 | Green Cross Corporation | Original BLA for licensure for GCC 10% IGIV - Alyglo | 12/15/2023 | Ready for approval for use in adults before pediatric studies are complete Note: Deferral is for patients 2 to < 17 years of age | n/a | n/a | 11/30/2026 | |
| 125251/382 | Octapharma Pharmazeutika Produktionsgesellschaft s.m.b.H. | von Willebrand Factor/Coagulation Factor VIII Complex (Human) - Wilate | 12/1/2023 | Ready for approval for use in adults before pediatric studies are complete Note: Deferral is for patients 2 to < 6 years of age | yes | Because of delays involving study participants, study sites, and/or study management. | 5/31/2024 9/30/2025 | Deferral extension granted on 6/26/2024 |
| 125770/0 | Pfizer Ireland Pharmaceuticals | Meningococcal Groups A, B, C, W and Y Vaccine - PENBRAYA | 10/20/2023 | Ready for approval for use in adults before pediatric studies are complete | n/a | n/a | 5/31/2027 | |
| | | | | | n/a | n/a | 11/30/2030 | |
| 125742/276 | BioNTech Manufacturing GmbH | COVID-19 Vaccine, mRNA - COMIRNATY | 9/11/2023 | Ready for approval for use in adults before pediatric studies are complete | n/a | n/a | 4/30/2025 | released & replaced [sBLA.686] |
| | | | | | n/a | n/a | 9/30/2026 | |

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|-----------------|-----------------------------|--|-------------------------------|---|----------------------------|--|-----------------------------------|------------------------------|
| 125769/0 | Pfizer Inc. | Respiratory Syncytial Virus Vaccine - ABRYSVO | 5/31/2023 | 0 to <2yo: additional safety or effectiveness data have not been collected; 2 to <18 yrs of age: ready for approval in adults and pediatric studies have not been completed. | 3/26/2025 | delays due to safety and/or pharmacokinetic issues | 9/30/2024 6/30/2025 | 5/6/2025 (submitted) |
| | | | | | n/a | n/a | 6/30/2025 | 6/5/2025 (submitted) |
| | | | | | n/a | n/a | 6/30/2026 | |
| | | | | | n/a | n/a | 6/30/2028 | |
| 125775/0 | GlaxoSmithKline Biologicals | Respiratory Syncytial Virus Vaccine Recombinant, Adjuvanted - AREXVY | 5/3/2023 | Ready for approval for use in adults before pediatric studies are complete | n/a | n/a | 5/30/2026 | |
| | | | | | n/a | n/a | 5/30/2028 | |
| 125777/0 | Valneva Austria GmbH | Chikungunya Vaccine, Live - IXCHIQ | 11/9/2023 | Ready for approval for use in adults before pediatric studies are complete | n/a | n/a | 11/30/2024 | 3/14/2025 (submitted) |
| | | | | | n/a | n/a | 1/31/2026 | |
| | | | | | n/a | n/a | 6/30/2027 | |
| | | | | | n/a | n/a | 2/28/2029 | |
| | | | | | n/a | n/a | 10/31/2030 | |

| BLA/ND A Number | Sponsor | Product | Deferral Granted ⁶ | Reason for Deferral ⁷ | Deferral Extension Granted | Reason for Deferral Extension ⁸ | Study Due ⁹ | Study Complete ¹⁰ |
|-----------------|-----------------------------|---------------------------------|-------------------------------|--|----------------------------|--|---|---|
| 125752/0 | ModernaTX, Inc. | COVID-19 Vaccine, mRNA | 1/31/2022 | Ready for approval for use in adults before pediatric studies are complete | 9/13/2024 | Delays involving study participants, sites, and/or management | 12/31/2024 6/30/2030 | |
| n/a | | | | | n/a | 7/31/2024 | 3/28/2023 (fulfilled) | |
| 125752/68 | | | | | 9/11/2023 | Ready for approval for use in >12yo before pediatric studies in 2y to <12yo are complete | 1 st DE: 9/13/2024 2 nd DE: 12/17/2024 | Delays involving study participants, sites, and/or management |
| 125742/0 | BioNTech Manufacturing GmbH | COMIRNATY COVID-19 mRNA Vaccine | 8/23/2021 | Ready for approval for use in adults before pediatric studies are complete | n/a | n/a | 10/31/2023 | 7/8/2022 (fulfilled) |
| | | | | | n/a | n/a | 10/31/2024 | (closed/released) |
| | | | | | 5/20/2022 | Delays involving study participants, sites, and/or management | 10/31/2024 12/31/2024 | Released and replaced with 2 new PMRs [sBLA.656] |

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|-----------------|---|---|-------------------------------|--|----------------------------|--|------------------------|------------------------------|
| 125741/0 | Merck Sharp & Dohme Corp. | VAXNEUVANCE Pneumococcal 15-valent Conjugate Vaccine [CRM197 Protein], adsorbed - | 7/16/2021 | Ready for approval for use in adults before pediatric studies are complete | n/a | n/a | 4/30/2022 | 6/17/2022 (fulfilled) |
| | | | | | n/a | n/a | 12/31/2021 | 6/17/2022 (fulfilled) |
| | | | | | n/a | n/a | 7/31/2021 | 6/17/2022 (fulfilled) |
| | | | | | n/a | n/a | 12/31/2022 | 6/17/2022 (fulfilled) |
| 125731/0 | Wyeth Pharmaceuticals LLC | PREVNAR 20 20-valent Pneumococcal Conjugate Vaccine | 6/8/2021 | Ready for approval for use in adults before pediatric studies are complete | n/a | n/a | 12/31/2022 | 10/26/2022 (fulfilled) |
| | | | | | n/a | n/a | 12/31/2022 | 10/26/2022 (fulfilled) |
| | | | | | n/a | n/a | 12/31/2022 | 10/26/2022 (fulfilled) |
| 125587/70 | Octapharma Pharmazeutika Produktionsges. m.b.H. | PANZYGA Immune Globulin Intravenous (Human)-ifas | 2/11/2021 | Ready for approval for use in adults before pediatric studies are complete | n/a | n/a | 6/30/2025 | |

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|-----------------|----------------------------|---|-------------------------------|--|----------------------------|--|------------------------------------|------------------------------|
| 125701 /0 | Sanofi Pasteur Inc. | MenQuadfi Meningococcal (Groups A, C, Y, W) Polysaccharide Tetanus Toxoid Conjugate Vaccine | 4/23/2020 | Ready for approval for use in adults before pediatric studies are complete | 9/19/2022 | delays involving study participants, sites, and/or management due to the COVID-19 pandemic. | 8/31/2023 10/31/2024 | 5/23/2025 (fulfilled) |
| | | | | | 9/19/2022 | delays involving study participants, sites, and/or management due to the COVID-19 pandemic. | 8/31/2024 10/31/2024 | 5/23/2025 (fulfilled) |
| | | | | | 9/19/2022 | delays involving study participants, sites, and/or management due to the COVID-19 pandemic. | 2/28/2023 10/31/2024 | 5/23/2025 (fulfilled) |
| 125696 /0 | Aimmune Therapeutics, Inc. | Palforzia Peanut (Arachis hypogaea) Allergen Powder | 1/31/2020 | Ready for approval for use in adults before pediatric studies are complete | 6/22/2021 (125696/110) | because of delays involving study participants, sites, and/or management due to the COVID-19 pandemic. | 6/30/2022 | 7/26/2024 (fulfilled) |

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|-----------------|--|--|-------------------------------|--|----------------------------|--|---|-----------------------------------|
| 125692 /0 | Seqirus Inc. | AUDENZ Influenza A (H5N1) Monovalent Vaccine, Adjuvanted | 1/31/2020 | Ready for approval for use in adults before pediatric studies are complete | n/a | n/a | The product is in the Strategic National Stockpile (SNS) and pediatric studies are contingent on on H5N1 pandemic | |
| 125510 /143 | Seqirus Inc. | FLUAD Influenza Vaccine, Adjuvanted | 2/21/2020 | Ready for approval for use in adults before pediatric studies are complete | n/a | n/a | 4/30/2019 | 4/28/2020 (fulfilled/released) |
| 125641 /0 | Laboratoire Francais du Fractionnement et des Biotechnologies S.A. | SEVENFACT Coagulation Factor VIIa (Recombinant) | 4/1/2020 | Ready for approval for use in adults before pediatric studies are complete | n/a | n/a | 7/10/2020 | 5/25/2022 (fulfilled) |

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|-----------------|---------------------|--|-------------------------------|---|----------------------------|--|-----------------------------|------------------------------|
| 125682 /0 | Sanofi Pasteur Inc. | DENGVAxia Dengue Tetravalent Vaccine (Live, Attenuated) | 5/1/2019 | Ready for approval for use in individuals 9 through 16 years of age before studies in pediatric subjects 2 years to <9 years are complete | 8/29/2019 | (125682/5) | 10/1/2020 | 7/27/2023 (fulfilled) |
| | | | | | 8/29/2019 | (125682/5) | 10/1/2020 | 7/27/2023 (fulfilled) |
| | | | | | 8/29/2019 | (125682/5) | 10/1/2020 | 7/27/2023 (fulfilled) |
| | | | | n/a | n/a | 3/31/2028 | 6/30/2023 (released) | |

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|-----------------|---|--|-------------------------------|---|----------------------------|--|------------------------|------------------------------|
| 125690/0 | Merck Sharp & Dohme Corp | ERVEBO Ebola Zaire Vaccine | 12/19/2019 | Ready for approval for use in adults and the pediatric study has not been completed | 4/16/2021 | delays involving study participants, sites, and/or management; additional time required to prepare the study report and/or submission. | 6/30/2022 | 7/27/2023 (fulfilled) |
| 103914/6290 | Sanofi Pasteur Inc. | Fluzone; Fluzone High Dose; Fluzone Intradermal; Fluzone Quadrivalent Influenza Virus Vaccine | 11/4/2019 | Ready for approval for use in adults and the pediatric study has not been completed | n/a | n/a | 4/30/2021 | 6/9/2022 (submitted) |
| | | | | | n/a | n/a | 6/30/2025 | |
| | | | | | n/a | n/a | 1/31/2024 | 7/1/2020 (released) |
| | | | | | n/a | n/a | 1/31/2025 | 7/1/2020 (released) |
| | | | | | n/a | n/a | 1/31/2025 | 7/1/2020 (released) |
| 125251/244 | Octapharma Pharmazeutika Produktionsges.m. b.H. | Wilate von Willebrand Factor/Coagulation Factor VIII Complex (Human) | 9/25/2019 | Ready for approval for use in adults and the pediatric study has not been completed | n/a | n/a | 12/31/2019 | 3/22/2024 (fulfilled) |

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|-----------------|---|--|-------------------------------|---|----------------------------|--|-------------------------------------|-------------------------------|
| 125590/0 | ADMA Biologics, Inc. | ASCENIV Immune Globulin Intravenous (Human), 10% Liquid | 4/1/2019 | Ready for approval for use in adults and the pediatric study has not been completed | 5/11/2023 | 1). Delays involving study participants, sites, and/or management 2). Recruitment challenges. COVID-19 pandemic impacted the start-up activities at every clinical site | 6/30/2023 6/30/2026 | |
| 125668/0 | Octapharma Pharmazeutika Produktionsges. m.b.H. | CUTAQUIG Immune Globulin Subcutaneous (Human) - hipp | 12/12/2018 | Ready for approval for use in adults before pediatric studies are complete | n/a | n/a | 12/31/2020 | 11/19/2021 (fulfilled) |
| 125587/0 | Octapharma USA, Inc. | Panzyga Immune Globulin Intravenous (Human) – ifas | 8/2/2018 | Ready for approval for use in adults before pediatric studies are complete | 9/9/2022 | Delays involving study participants, sites, and/or management. | 10/31/2022 12/31/2028 | |
| 125640/0 | Instituto Grifols, S.A. | VISTASEAL Fibrin Sealant (Human) | 11/1/2017 | Ready for approval for use in adults before pediatric studies are complete | n/a | n/a | 9/27/2024 | |
| 125201/728 | CSL Behring AG | Privigen Immune Globulin Intravenous (Human), 10% Liquid | 9/14/2017 | Ready for approval for use in adults before pediatric studies are complete | 2/3/2023 | Delays involving study participants, sites, and/or management and acknowledge the particular enrollment and recruitment challenges | 7/31/2030 | |

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|-----------------------|--|--|----------------------------------|---|----------------------------------|---|------------------------|---------------------------------|
| 125613/ 0 | Kamada Ltd. | KEDRAB Rabies Immune Globulin (Human) | 8/23/2017 | Ready for approval for use in adults before pediatric studies are complete | n/a | n/a | 1/15/21 | 5/17/2021 (fulfilled) |
| 125612/ 0 | Octapharma Pharmazeutika Produktionsges. m.b.H. | FIBRYGA Fibrinogen (Human) | 6/7/2017 | Ready for approval for use in adults before pediatric studies are complete | n/a | n/a | 6/30/21 | 12/23/2020 (fulfilled) |
| 125592/ 0 | ALK – Abello A/S | Odactra House Dust Mites Allergenics Extract | 3/1/2017 | Ready for approval for use in adults before pediatric studies are complete | n/a | n/a | 7/1/22 | 12/22/2021 (released) |
| | | | | | n/a | n/a | 7/1/22 | 12/22/2021 (released) |
| 125603/ 0 | Vericel Corporation | MACI Autologous Cultured Chondrocytes Seeded on a Porcine Collagen Membrane | 12/13/16 | Ready for approval for use in adults before pediatric studies are complete | 4/8/2023 | Delays involving study participants, sites, and/or management | 12/31/2025 | |

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|-----------------|------------------------------|---|-------------------------------|--|----------------------------|---|---|--|
| 125392/163 | Ethicon, Inc. | EVARREST Fibrin Sealant Patch | 10/7/16 | Ready for approval for use in adults before pediatric studies are complete | 1/29/2019 1/30/2024 | Delays involving study participants, sites, and/or management due to difficulty recruiting eligible pediatric subjects The 2 nd DE (125392/449) received on 12/10/2020, and granted On Jan 29, 2021 delays involving study participants, sites, and/or management. | 3/31/2024 3/31/2024 12/31/2025 | Deferral extension granted 1/30/2024 |
| 125285/433 | Protein Sciences Corporation | FluBlok Influenza Vaccine | 7/15/2020 | replace PREA PMR #1 (125285/194) pediatric study PSC17 with VAP0004; Due to the ongoing COVID-19 pandemic and low rates of influenza virus circulation during the last two seasons, conduct of an efficacy study of Flublok Quadrivalent is infeasible. | n/a | n/a | 12/31/2023 | 4/18/2022 (released/replaced with 2 new PMRs) |

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|-----------------|---|--|-------------------------------|---|----------------------------|---|---------------------------------|----------------------------------|
| 125285/194 | Protein Sciences Corporation | FluBlok Influenza Vaccine | 10/7/16 | Ready for approval for use in adults before pediatric studies are complete | n/a | n/a | 6/30/20 | 7/15/2020 (released/replaced) |
| 125285/471 | Protein Sciences Corporation | FluBlok Influenza Vaccine | 4/18/2022 reissued new PMR #1 | Replaced 125285/433 | n/a | Delays involving study participants, sites, and/or management due to COVID-19 pandemic | 12/31/2023 | 3/31/2025 (fulfilled) |
| 125285/471 | Protein Sciences Corporation | FluBlok Influenza Vaccine | 4/18/2022 reissued new PMR #2 | Replaced 125285/433 | 11/13/2023 | Delays involving study participants, sites, and/or management; due to COVID-19 pandemic | 12/31/2023 | 3/31/2025 (fulfilled) |
| 125254/565 | bioCSL Pty Ltd | AFLURIA Influenza Vaccine | 8/26/16 | Ready for approval for use in adults before pediatric studies are complete | n/a | n/a | 12/31/16 | 8/31/2027 (fulfilled) |
| | | | | | n/a | n/a | 12/31/17 | 10/4/2028 (fulfilled) |
| 125597/0 | PaxVax Bermuda Ltd | Vaxchora Cholera Vaccine Live Oral | 6/10/16 | Ready for approval for use in adults before pediatric studies are complete | 5/2/2019 | Due to continuing interaction between applicant and FDA | 6/30/19 9/30/2020 | 12/23/2020 (fulfilled) |
| 125408/127 | Novartis Vaccines and Diagnostics, Inc. | Flucelvax Quadrivalent Influenza Vaccine | 5/23/16 | Ready for approval in persons 4 yrs to <18 yrs of age and the pediatric study in children 6 mons to <4 yrs of age has not been initiated. | n/a | n/a | 2/28/21 | 10/14/2021 (fulfilled) |

| BLA/ND A Number | Sponsor | Product | Deferral Granted ⁶ | Reason for Deferral ⁷ | Deferral Extension Granted | Reason for Deferral Extension ⁸ | Study Due ⁹ | Study Complete ¹⁰ |
|-----------------|---|--|-------------------------------|--|----------------------------|--|------------------------|---|
| 125408/101 | Novartis Vaccines and Diagnostics, Inc. | Flucelvax Influenza Vaccine | 5/23/16 | Ready for approval in persons 4 yrs to <18 yrs of age and the pediatric study in children 6 mons to <4 yrs of age has not been initiated. | n/a | n/a | 2/28/21 | 3/3/2021 (released) |
| 125549/17 | Wyeth Pharmaceuticals Inc. | TRUMENBA Meningococcal Group B Vaccine | 4/14/16 | Two-dose regimen is ready for approval for use in persons 10 through 25 years of age and the study in children 1 year to less than 10 years of age has not been completed. | n/a | n/a | 5/31/21 | 5/24/2022 (released) |
| 125549/773 | Wyeth Pharmaceuticals Inc. | TRUMENBA Meningococcal Group B Vaccine | 5/24/2022 | Request for Release of PREA PMR #5 (125549/0) and PREA PMR #2 (125549/17) (both Study B1971051); and to Replace with new PREA PMR Study C3511005. | n/a | n/a | 4/26/2026 | 2-dose regimen: partial waiver granted 6/18/2024 3-dose: released/replaced 6/30/2025 |
| 125549/827 | Wyeth Pharmaceuticals Inc. | TRUMENBA Meningococcal Group B Vaccine | 5/24/2022 Reissued new PMR | 3-dose regimen is ready for approval for use in individuals 10yo - 25yo before pediatric studies in 1 to <10yo are complete | n/a | n/a | 5/31/2027 | |

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|-----------------|--|--|-------------------------------|--|----------------------------|--|------------------------|------------------------------|
| 125510/0 | Seqirus (previously Novartis Vaccines and Diagnostics, Inc.) | FLUAD Influenza Vaccine, Adjuvanted | 11/24/15 | Ready for approval for use in adults before pediatric studies are complete | n/a | n/a | 4/30/19 | 3/29/2019 (fulfilled) |
| | | | | | n/a | n/a | 4/30/19 | 3/29/2019 (fulfilled) |
| | | | | | n/a | n/a | 2/28/23 | 1/22/2019 (released) |
| | | | | | n/a | n/a | 2/28/23 | 1/22/2019 (released) |
| 125566/0 | Baxter Healthcare Corporation | ADYNOVATE Antihemophilic Factor (Recombinant), PEGylated | 11/13/15 | Ready for approval for use in adults before pediatric studies are complete | n/a | n/a | 6/30/16 | 2/25/2016 (fulfilled) |
| | | | | | n/a | n/a | 12/31/17 | 2/25/2016 (fulfilled) |
| | | | | | n/a | n/a | 9/30/19 | 6/14/2021 (fulfilled) |

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|-----------------|-----------------------------|---|-------------------------------|--|----------------------------|---|--------------------------------|---|
| 125523/0 | ProFibrix, BV. | Raplixa Fibrin Sealant (Human) | 4/30/15 | ineffective or impractical in pediatric patients ages 0 to 18 years | 9/8/16 | Because of delays involving study participants, sites, and/or management. | 3/31/16 12/31/18 | 10/11/2018 (released) |
| 125426/31 | Aptevo Bio Therapeutics LLC | IXinity Coagulation Factor IX (Recombinant) | 10/17/2018 | Ready for approval for use in adults before pediatric studies are complete | 10/17/2018 | Delays due to issues with the study drug and delays involving study participants, sites, and management | 12/14/2021 | (delayed) |
| | | | | | 7/26/2022 | Delays involving study participants, sites, and/or management | 1/30/2023 | (delayed) |
| | | | | | 7/23/2023 | Additional time required to prepare the study report and/or submission. | 6/30/2023 | 3/22/2024 (fulfilled) |
| 125426/0 | Cangene Corporation | IXinity Coagulation Factor IX (Recombinant) | 4/29/15 | Ready for approval for use in adults before pediatric studies are complete | n/a | n/a | 12/31/17 | 1/20/2016 (released & replaced with supplement # 31) |
| 125392/33 | Ethicon, Inc. | EVARREST Fibrin Sealant Patch | 3/26/15 | Ready for approval for use in adults before pediatric studies are complete | n/a | n/a | 3/31/17 | 3/31/2017 (released) |

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|-----------------|---|---|-------------------------------|---|--|---|--|------------------------------|
| 125546/0 | Novartis Vaccines and Diagnostics, Inc. | BEXSERO Meningococcal Group B Vaccine | 1/23/15 | The product is ready for approval for use in persons 10 through 25 years of age and the studies in children 6 weeks to less than 10 years of age have not been completed. | n/a | n/a | 12/31/15 | 3/15/2023 (submitted) |
| | | | | | 6/7/2018 2 nd granted 8/19/2024 | Due to continuing interaction between applicant and FDA delays due to continuing interaction between the applicant and the FDA; additional time required to prepare the study report and/or submission | 3/31/18 6/30/2024 6/30/2026 | |
| 125471/0 | Stallergenes, Inc. | Oralair Sweet Vernal, Orchard, Perennial Rye, Timothy, and Kentucky Blue Grass Mixed Pollens Allergen Extract | 4/1/14 | Ready for approval for use in adults before pediatric studies are complete | 7/15/16 | Because of delays involving study participants, sites, and/or management | 12/31/16 12/31/17 | 11/9/2018 (fulfilled) |

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|-----------------------|-------------------------------------|---|----------------------------------|---|----------------------------------|---|------------------------|---------------------------------|
| 125478/ 0 | Merck Sharp & Dohme Corp. | Ragwitek Short Ragweed Pollen Allergen Extract | 4/17/14 | Ready for approval for use in adults before pediatric studies are complete | n/a | n/a | 9/30/19 | 6/17/2020 (fulfilled) |
| | | | | | n/a | n/a | 9/30/19 | 6/17/2020 (released) |
| 125402/ 0 | Baxter Healthcare Corporation | HYQVIA Immune Globulin Infusion (Human), 10% with Recombinant Human Hyaluronidase | 9/12/2014 | The pediatric study should be delayed until additional safety data pertaining to Recombinant Human Hyaluronidase immunogenicity are available. | n/a | n/a | 7/31/27 | 4/7/2023 (fulfilled) |

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|-----------------|-------------------------------------|--|-------------------------------|---|----------------------------|--|--------------------------------|------------------------------|
| 125549/0 | Wyeth Pharmaceuticals Inc. | TRUMENBA Meningococcal Group B Vaccine | 10/29/14 | Ready for approval for use in adults before pediatric studies are complete | 1/30/2107 | Because of delays involving study participants, sites, and/or management | 2/28/17 12/31/17 | 10/12/2017 (submitted) |
| | | | | | 1/30/2017 | Because of delays involving study participants, sites, and/or management | 8/30/17 5/31/18 | 3/15/2018 (submitted) |
| | | | | | n/a | n/a | 5/31/21 | 5/24/2022 (released) |
| 125419/0 | ID Biomedical Corporation of Quebec | Influenza A (H5N1) Virus Monovalent Vaccine, Adjuvanted- | 11/22/13 | Ready for approval for use in adults before pediatric studies are complete. | n/a | n/a | 4/30/15 | 9/9/2016 (fulfilled) |
| | | | | | n/a | n/a | 06/30/19 | 9/9/16 (released) |
| | | | | | n/a | n/a | 10/31/20 | 9/9/16 (released) |

| | | | | | | | | |
|--|--|--|--|--|-----|-----|----------|--|
| | | | | | n/a | n/a | 12/31/22 | <p>Schedule revised under 125419/39 Final Protocol Submission: 2 weeks after notification by the FDA to finalize the protocol in the event of an imminent H5N1 influenza virus pandemic (human to human H5N1 transmission) Study Completion Date: 16 months after initiation of the study Final Report Submission: 4 months after completion of data collection</p> |
|--|--|--|--|--|-----|-----|----------|--|

| BLA/ND A Number | Sponsor | Product | Deferral Granted ⁶ | Reason for Deferral ⁷ | Deferral Extension Granted | Reason for Deferral Extension ⁸ | Study Due ⁹ | Study Complete ¹⁰ |
|-----------------------|--|--|----------------------------------|--|----------------------------------|---|---------------------------------|---------------------------------|
| 125163/ 254 | ID Biomedical Corporation of Quebec | FluLaval Quadrivalent Influenza Virus Vaccine | 08/16/13 | Ready for approval for use in adults before pediatric studies are complete. | n/a | n/a | 03/31/16 | 1/27/2016 (fulfilled) |
| 125163/ 253 | ID Biomedical Corporation of Quebec | FluLaval Quadrivalent Influenza Virus Vaccine | 08/15/13 | Ready for approval for use in adults before pediatric studies are complete. | n/a | n/a | 03/31/16 | 1/27/2016 (fulfilled) |
| 125446/ 0 | Baxter Healthcare Corporation | Rixubis Coagulation Factor IX (Recombinant) | 06/26/13 | Ready for approval for use in adults before pediatric studies are complete. | n/a | n/a | 01/31/14 | 11/13/2013 (fulfilled) |
| 125416/ 0 | Octapharma Pharmazeutika Produktionsges. m.b.H. | Octoplas Pooled Plasma (Human), Solvent/ Detergent Treated | 1/17/2013 | Ready for approval for use in adults before pediatric studies are complete. | 8/10/16 | Because of delays involving study participants, sites, and/or management | 9/30/16 7/31/18 | 7/31/2018 (fulfilled) |
| | | | | | 9/1/2017 | Because of delays involving study participants, sites, and/or management | 10/31/17 10/31/20 | 10/30/2020 (fulfilled) |

| BLA/ND A Number | Sponsor | Product | Deferral Granted ⁶ | Reason for Deferral ⁷ | Deferral Extension Granted | Reason for Deferral Extension ⁸ | Study Due ⁹ | Study Complete ¹⁰ |
|-----------------|-------------------------------------|---|-------------------------------|---|----------------------------------|--|---|---|
| 125285/0 | Protein Sciences Corporation | FluBlok Influenza Vaccine | 1/16/13 | Ready for approval for use in adults before pediatric studies are complete. | n/a | n/a | 11/30/15 | 2/2/16 (released and replaced with supplement # 194) |
| | | | | | n/a | n/a | 06/30/17 | 10/7/16 (released & replaced with supplement# 194) |
| 125389/0 | Biotest Pharmaceuticals Corporation | Bivigam (Immune Globulin Intravenous (Human)) | 12/19/12 | Ready for approval for use in adults before pediatric studies are complete. | 11/18/16 4/15/2021 | Because of delays due to issues with the study drug and/or comparator drug | 10/31/17 6/30/21 12/31/2022 | 12/8/2023 (fulfilled) |

| BLA/ND A Number | Sponsor | Product | Deferral Granted ⁶ | Reason for Deferral ⁷ | Deferral Extension Granted | Reason for Deferral Extension ⁸ | Study Due ⁹ | Study Complete ¹⁰ |
|-----------------------|--------------------------------|---|----------------------------------|--|--|---|--|--|
| 125127/ 513 | GlaxoSmithKline Biologicals | Fluarix Quadrivalent (Influenza Virus Vaccine) | 12/14/12 | Ready for approval for use in adults before pediatric studies are complete. | 8/23/13 (first extension) | Delays involving study participants, sites, and/or management | 3/31/14 42/31/15 6/14/2019 | 5/22/2020 (fulfilled) |
| | | | | | 11/16/15 2 nd extension | | Additional time required to prepare the study report and/or submission | |
| 125392/ 0 | Ethicon, Inc. | EVARREST (Fibrin Sealant Patch) | 12/5/12 | Ready for approval for use in adults before pediatric studies are complete. | n/a | n/a | 3/31/17 | 10/7/16 (released & replaced under supplement #163) |

| BLA/ND A Number | Sponsor | Product | Deferral Granted ⁶ | Reason for Deferral ⁷ | Deferral Extension Granted | Reason for Deferral Extension ⁸ | Study Due ⁹ | Study Complete ¹⁰ |
|-----------------------|--|--|----------------------------------|--|----------------------------------|---|------------------------|--|
| 125408/ 0 | Seqirus (previously Novartis Vaccines and Diagnostics GmbH) | Flucelvax (Influenza Vaccine) | 11/20/12 | Ready for approval for use in adults before pediatric studies are complete. | n/a | n/a | 11/30/2024 | 3/3/2021 (released) |
| | | | | | n/a | n/a | 11/30/14 | 5/23/2016 (fulfilled) |
| | | | | | n/a | n/a | 11/30/16 | 3/3/2021 (released) |
| | | | | | n/a | n/a | 11/30/18 | 5/23/16 (released & replaced with supplement# 101) |
| 125408/ 101 | Seqirus | Flucelvax (Influenza Vaccine) | 5/23/2016 | approval in persons 4 years to <18 years of age and the pediatric study in children 6 months to <4 years of age has not been initiated. | n/a | n/a | 2/28/2021 | 3/3/2021 (released) |

| BLA/ND A Number | Sponsor | Product | Deferral Granted ⁶ | Reason for Deferral ⁷ | Deferral Extension Granted | Reason for Deferral Extension ⁸ | Study Due ⁹ | Study Complete ¹⁰ |
|-----------------|---------------------------|---|-------------------------------|--|----------------------------|---|--|---|
| 125408/127 | Seqirus | Flucelvax Quadrivalent (Influenza Vaccine) | 5/23/2016 | ready for approval for use in persons 4 years of age and older and the pediatric study in children 6 months to <4 years of age has not been completed. | n/a | n/a | 2/28/2021 | 10/14/2021 (fulfilled) |
| 125400/0 | Organogenesis, Inc. | GINTUIT (Allogeneic Cultured Keratinocytes and Fibroblasts in Bovine Collagen) | 3/9/12 | Ready for approval for use in adults before pediatric studies are complete. | n/a | n/a | 3/31/17 | (delayed) PREA non compliance letter issued on 6/29/17 |
| 103738/5074 | SmartPractice Denmark ApS | T.R.U.E. Test (Multiple Products: Allergen Patch Test Kit - Thin Layer Rapid Use Epicutaneous Test) | 2/29/12 | Ready for approval for use in adults before pediatric studies are complete. | 12/30/13 | Delays involving study participants, sites, and/or management | 12/31/13 12/31/15 3/16/16 | 10/26/2016 (fulfilled on 8/25/2017) |
| 125384/0 | Kedrion, S.p.A. | Kedbumin (Albumin (Human)) | 6/3/11 | Ready for approval for use in adults before pediatric studies are complete. | 2/3/14 | Delays involving study participants, sites, and/or management | 12/31/13 5/31/15 | 7/15/2015 (released) |
| 125280/19 | Intercell AG | Ixiaro (Japanese Encephalitis Virus Vaccine Inactivated) | 10/14/10 | Ready for approval for use in adults before pediatric studies are complete. | n/a | n/a | 6/30/15 | 6/16/2017 (fulfilled in 4/13/2018) |

| BLA/ND A Number | Sponsor | Product | Deferral Granted ⁶ | Reason for Deferral ⁷ | Deferral Extension Granted | Reason for Deferral Extension ⁸ | Study Due ⁹ | Study Complete ¹⁰ |
|-----------------|----------------------------|---|-------------------------------|--|----------------------------|---|--------------------------------|---|
| 125046/619 | Grifols Therapeutics Inc. | Gamunex (Immune Globulin Intravenous (Human), 10%, Caprylate/Chromatography Purified (IGIV-C)) | 10/13/10 | Ready for approval for use in adults before pediatric studies are complete. | 12/27/13 | Delays involving study participants, sites, and/or management | 2/13/14 6/30/14 | 2/4/2015 (fulfilled on 12/4/2015) |
| 125351/0 | Takeda Pharma A/S | TachoSil (Fibrin Sealant Patch) | 4/5/10 | Ready for approval for use in adults before pediatric studies are complete. | 7/3/13 | Delays involving study participants, sites, and/or management | 12/31/12 2/28/14 | 6/20/2014 (fulfilled on 8/5/2015) |
| 125350/0 | CSL Behring AG | Hizentra (Immune Globulin Subcutaneous (Human), 20% Liquid) <i>Injectable</i> | 3/4/10 | Ready for approval for use in adults before pediatric studies are complete. | 6/28/13 | n/a | 8/31/10 | 8/20/2021 (fulfilled in 2/17/2011) |
| 125324/0 | Wyeth Pharmaceuticals Inc. | Prevnar 13 (Pneumococcal 13-valent Conjugate Vaccine (Diphtheria CRM197 Protein)) <i>Injectable</i> | 2/24/10 | Other - Ready for approval for routine immunization in infants and children 6 weeks through 5 years of age, and the pediatric study in children 6 through 16 years of age is not complete. | n/a | n/a | 12/31/11 | 3/28/2012 (fulfilled on 1/25/2013) |

| BLA/ND A Number | Sponsor | Product | Deferral Granted ⁶ | Reason for Deferral ⁷ | Deferral Extension Granted | Reason for Deferral Extension ⁸ | Study Due ⁹ | Study Complete ¹⁰ |
|-----------------|---|---|-------------------------------|---|----------------------------|---|--------------------------------|------------------------------|
| 125300/0 | Novartis Vaccines and Diagnostics, Inc. | Menveo (Meningococcal [Groups A, C, Y, and W 135] Oligosaccharide Diphtheria CRM197 Conjugate Vaccine) <i>Injectable</i> | 2/19/10 | Other - Ready for approval for use in adults and adolescents, and pediatric studies for younger age groups of 2 months through 10 years are not complete. | n/a | n/a | 3/31/10 | 4/1/10 |
| | | | | | n/a | n/a | 3/31/11 | 4/13/11 |
| | | | | | n/a | n/a | 3/31/11 | 4/13/11 |
| | | | | | 6/28/13 | Delays involving study participants, sites, and/or management | 42/34/14 1/30/13 | 1/30/13 |
| | | | | | 6/28/13 | Delays involving study participants, sites, and/or management | 7/31/12 1/30/13 | 1/30/13 |
| 125297/0 | Novartis Vaccines and Diagnostics, Inc. | Agriflu (Influenza Vaccine) <i>Injectable</i> | 11/27/09 | Ready for approval for use in adults before pediatric studies are complete. | 7/9/13 | Delays involving study participants, sites, and/or management | 4/31/12 2/28/13 | 2/28/13 |
| | | | | | 7/9/13 | Delays involving study participants, sites, and/or management | 4/31/13 7/31/13 | 8/1/13 |
| 125259/0 | GlaxoSmithKline Biologicals | Cervarix (Human Papillomavirus Bivalent (Types 16 and 18) Vaccine, Recombinant) <i>Injectable</i> | 10/16/09 | Other - Ready for approval in females 10 through 25 years of age. | n/a | n/a | 6/30/10 | 6/17/2010 |

| BLA/ND A Number | Sponsor | Product | Deferral Granted ⁶ | Reason for Deferral ⁷ | Deferral Extension Granted | Reason for Deferral Extension ⁸ | Study Due ⁹ | Study Complete ¹⁰ |
|-----------------|-----------------------------|--|-------------------------------|---|----------------------------|---|---------------------------------|------------------------------|
| 125329/0 | Bio Products Laboratory | Gammplex (Immune Globulin Intravenous (Human), 5% Liquid) <i>Injectable</i> | 9/17/09 | Ready for approval for use in adults before pediatric studies are complete. | 9-25-13 | Delays involving study participants, sites, and/or management | 12/31/12 12/31/14 | 9/29/2014 |
| 125347/0 | GlaxoSmithKline Biologicals | Hiberix (Haemophilus b Conjugate Vaccine (Tetanus Toxoid Conjugate)) <i>Injectable</i> | 8/19/09 | Other - Ready for approval in children 15 months – 4 years of age and the study in patients 6 weeks – 14 months has not been completed. | n/a | n/a | 12/31/13 | 1/7/2014 |
| 125280/0 | Intercell AG | Ixiaro (Japanese Encephalitis Virus Vaccine Inactivated) <i>Injectable</i> | 3/30/09 | Ready for approval for use in adults before pediatric studies are complete. | n/a | n/a | 9/30/12 | 7/18/12 |
| | | | | | n/a | n/a | 9/30/12 | 7/18/12 |
| 125248/0 | ZymoGenetics, Inc. | Recothrom (Thrombin topical (Recombinant)) <i>Solution</i> | 1/17/08 | Ready for approval for use in adults before pediatric studies are complete. | n/a | n/a | 12/31/10 | 7/13/10 |

| BLA/ND A Number | Sponsor | Product | Deferral Granted ⁶ | Reason for Deferral ⁷ | Deferral Extension Granted | Reason for Deferral Extension ⁸ | Study Due ⁹ | Study Complete ¹⁰ |
|-----------------------|---------------------------------------|--|----------------------------------|--|----------------------------------|---|------------------------|---------------------------------|
| 070012 | Fresenius Kabi Deutschland GmbH | Voluven (6% Hydroxyethyl Starch 130/0.4 in 0.9% Sodium Chloride Injection) <i>Injectable</i> | 12/27/07 | Ready for approval for use in adults before pediatric studies are complete. | n/a | n/a | 12/27/10 | 5/10/11 |
| 125254/ 0 | CSL Limited | Afluria (Influenza Virus Vaccine) <i>Injectable</i> | 9/28/07 | Ready for approval for use in adults before pediatric studies are complete. | n/a | n/a | 6/30/10 | 6/30/10 |
| | | | | | n/a | n/a | 6/30/10 | 6/30/10 |
| | | | | | n/a | n/a | 6/30/10 | 6/30/10 |

¹ This report is prepared annually in response to Sections 505B(f)(6)(D)(i), 505B(f)(6)(D)(ii), and 505B(f)(6)(I) of the Food, Drug and Cosmetic Act (“FD&C Act”), as amended by the Food and Drug Administration Safety and Innovation Act (“FDASIA”).

² Requests for deferrals were identified in NDAs and BLAs submitted to CBER. This number includes deferral requests contained in applications, some of which the Agency has not yet approved, or for which the Agency has determined that a deferral is not appropriate. This number does not include deferral requests for products exempt from PREA (e.g., orphan drugs).

³ Granted deferrals were identified in approval letters.

⁴ FDA began reporting deferral information in response to the Food and Drug Administration Amendments Act of 2007 (FDAAA), which was enacted 09/27/07.

⁵ Section 505B(a)(3)(B) of the FD&C Act outlines the process for deferral extensions. FDA began reporting deferral extension information in response to FDASIA, which was enacted 07/09/12.

⁶ The “Deferral Granted” date is the date the application is approved, since deferrals are granted within approval letters.

⁷ Section 505B(a)(3)(A) of the FD&C Act lists the appropriate reasons for granting deferrals.

⁸ Section 505B(a)(3)(B) of the FD&C Act discusses deferral extensions. Additional information about the reasons deferral extension were granted is included in this table:

| Reasons for deferral extensions | Examples of the types of scenarios associated with each reason |
|--|--|
| Delays due to issues with the study drug and/or comparator drug | <ul style="list-style-type: none"> • Delays developing an age-appropriate formulation • Product quality and stability issues • Comparator drug shortage |
| Delays involving study participants, sites, and/or management | <ul style="list-style-type: none"> • Difficulty recruiting study participants • High rate of site personnel turnover • Additional time needed to address expected issues in study conduct |
| Delays due to safety and/or pharmacokinetic issues | <ul style="list-style-type: none"> • Additional safety data are required • Must review new pharmacokinetic data before proceeding with the study • Study proceeding with a more cautious approach due to new potential safety signals |
| Delays due to continuing interaction between the applicant and the FDA | <ul style="list-style-type: none"> • The FDA placed the study on clinical hold • The FDA requested a change in the protocol • The applicant and the FDA are negotiating a different study to fulfill the PREA requirement |

| | |
|--|--|
| Additional time required to prepare the study report and/or submission | <ul style="list-style-type: none">• Delays collecting and compiling the study data• Additional time required to analyze the study data• Additional time required to prepare a supplemental NDA with appropriate pediatric labeling |
|--|--|

⁹ Each study due date represents one pediatric postmarketing study requirement (PMR). Where deferral extensions have been granted, the original study due date is struck through, and the new study due date is listed below the original date.

¹⁰ "Study Complete" dates indicate when the FDA received studies. If upon review of a study, the FDA determines that a PREA PMR requirement was not met, this date will be removed. If the FDA releases a PMR, it is deleted from this table unless the PMR is superseded by another PMR (the Study Complete date may be revised in this circumstance). Therefore, the total number of deferrals granted may be more than the number of rows in the table. Some deferred pediatric studies have been released/replaced with new studies and revised timelines. These are reflected in this table along with the supplement # that corresponds to the new study. These new studies may have design changes or, in the case of seasonal influenza, may replace the trivalent formulation with quadrivalent.