

Approval Date: [September 16, 2016](#)

Product: DAPTACEL

Proper Name: Diphtheria and Tetanus Toxoids and Acellular Pertussis Vaccine Adsorbed

Manufacturer: Sanofi Pasteur, Ltd.

Indication: Indicated for active immunization against diphtheria, tetanus and pertussis as a five-dose series in infants and children 6 weeks through 6 years of age (prior to 7th birthday).

Description: DAPTACEL is a sterile isotonic suspension of pertussis antigens and diphtheria and tetanus toxoids adsorbed on aluminum phosphate, for intramuscular injection.

BLA: 103666

Regulatory Milestone: No data available

PDUFA Goal Date: September 16, 2016

Package Insert: [Package Insert - DAPTACEL](#)

Summary Basis for Regulatory Approval: [September 16, 2016 Summary Basis of Regulatory Action - DAPTACEL](#)

European Public Assessment Report: No data available

Advisory Committee:

Did not require input from Vaccines and Related Biological Products Advisory Committee.

Safety:

There were no primary endpoints for safety; however, safety was evaluated as secondary (descriptive) endpoints and included 7 days post-vaccination assessment of solicited local and systemic reactions, 30 days post-vaccination assessment of unsolicited AEs, and monitoring of serious adverse events throughout the study duration. The most frequently reported solicited local reaction at either the Menactra or DAPTACEL injection site across all groups was pain, reported in 52% to 72% of subjects at the DAPTACEL site and 52% to 61% of subjects at the Menactra site. The most frequently reported solicited systemic reaction across all groups was myalgia across all study groups, reported in 25.8% to 46.2% of subjects following administration of DAPTACEL alone or with a concomitant vaccine, and in 24.2% to 37.3% subjects following administration of Menactra alone or with a concomitant vaccine. The reported rates and types of unsolicited AEs are similar to that seen in the general population for children 4 to 6 years of age. None of the three reported SAEs were considered related to study vaccination and there were no deaths reported during the study.

NCT Numbers:

- NCT00662870
- NCT02447978
- NCT00315055
- NCT02274285
- NCT00258895
- NCT04054882
- NCT00655148
- NCT00404651
- NCT00802867
- NCT00831753
- NCT04053010
- NCT00362336
- NCT01346293
- NCT01983540
- NCT00313911
- NCT00133445
- NCT00467519
- NCT04636827
- NCT00401531
- NCT00355121
- NCT01948193
- NCT01177722
- NCT02817451
- NCT00355121
- NCT02118961
- NCT04638985
- NCT00343889
- NCT01105559
- NCT01346293
- NCT00619502
- NCT00534833
- NCT01062477
- NCT00289913
- NCT00831311
- NCT04535037
- NCT02428491
- NCT02477995
- NCT00348881
- NCT00654901
- NCT01250756
- NCT04618640
- NCT00514709
- NCT02094833
- NCT01896739
- NCT03142139
- NCT01444781
- NCT02458183
- NCT01200368

- | | | | |
|---------------|---------------|---------------|---------------|
| • NCT00467519 | • NCT03530124 | • NCT03180034 | • NCT00262028 |
| • NCT02089347 | • NCT00488826 | • NCT01436396 | • NCT00806195 |
| • NCT02610348 | • NCT00146835 | • NCT01984879 | • NCT04300192 |
| • NCT00319852 | • NCT00855855 | • NCT02482636 | • NCT02587520 |
| • NCT03165981 | • NCT01298544 | • NCT00954499 | • NCT00282295 |
| • NCT00482781 | • NCT00255047 | • NCT02518555 | • NCT01629589 |
| • NCT04468802 | • NCT00258895 | • NCT00594347 | • NCT00258882 |
| • NCT00303316 | • NCT00908115 | • NCT00310856 | • NCT01480258 |
| • NCT00263692 | • NCT00474526 | • NCT00343421 | • NCT01049035 |
| • NCT00148941 | • NCT02808637 | • NCT01027351 | • NCT03537508 |
| • NCT00169728 | • NCT03557463 | • NCT01026974 | • NCT01933776 |
| • NCT02697474 | • NCT00446875 | • NCT03820752 | • NCT01694108 |
| • NCT00804284 | • NCT00457249 | • NCT01651247 | • NCT03934008 |
| • NCT01411241 | • NCT01839175 | • NCT01711645 | • NCT00802867 |
| • NCT00625677 | • NCT01896596 | • NCT03909867 | • NCT02783170 |
| • NCT00662870 | • NCT04099303 | • NCT02215863 | • NCT01659996 |
| • NCT02447718 | • NCT01689324 | • NCT02712177 | • NCT03673462 |
| • NCT01028326 | • NCT01839188 | • NCT01993173 | • NCT02643472 |
| • NCT00197236 | • NCT01000311 | • NCT03311659 | • NCT00385255 |
| • NCT03205371 | • NCT01003431 | • NCT04056117 | • NCT02589678 |
| • NCT04398706 | • NCT00712959 | • NCT00777257 | • NCT02199691 |
| • NCT02062385 | • NCT00381615 | • NCT02992418 | • NCT00553228 |
| • NCT02432430 | • NCT00488683 | • NCT02765126 | • NCT00006066 |
| • NCT00707148 | • NCT01890850 | • NCT03589768 | • NCT04490018 |
| • NCT01129362 | • NCT00362427 | • NCT01642589 | |
| • NCT03547271 | • NCT02213341 | • NCT00347958 | |

EudraCT Numbers:

- 2015-003500-23
- 2011-004095-10

Publications:

- Ben Jmaa, W., Hernández, A. I., Sutherland, M. R., Cloutier, A., Germain, N., Lachance, C., Martin, B., Lebel, M. H., Pladys, P., & Nuyt, A. M. (2017). Cardio-respiratory Events and Inflammatory Response After Primary Immunization in Preterm Infants < 32 Weeks Gestational Age: A Randomized Controlled Study. *The Pediatric infectious disease journal*, 36(10), 988–994. <https://doi.org/10.1097/INF.0000000000001647>

- Newell, K. W., Dueñas Lehmann, A., LeBlanc, D. R., & Garces Osorio, N. (1966). The use of toxoid for the prevention of tetanus neonatorum. Final report of a double-blind controlled field trial. *Bulletin of the World Health Organization*, 35(6), 863–871.
- Enders-Ruckle, G., Spiess, H., & Wolf, H. (1966). Erste Ergebnisse mit einem Fünffachimpfstoff gegen Masern, Diphtherie, Pertussis, Tetanus, Poliomyelitis [1st results with a quintuple vaccine against measles, diphtheria, whooping cough, tetanus and poliomyelitis]. *Deutsche medizinische Wochenschrift* (1946), 91(13), 575–580.
<https://doi.org/10.1055/s-0028-1110618>
- Butler, N. R., Voyce, M. A., Burland, W. L., & Hilton, M. L. (1969). Advantages of aluminium hydroxide adsorbed combined diphtheria, tetanus, and pertussis vaccines for the immunization of infants. *British medical journal*, 1(5645), 663–666.
<https://doi.org/10.1136/bmj.1.5645.663>
- Vesikari, T., Wysocki, J., Beeslaar, J., Eiden, J., Jiang, Q., Jansen, K. U., Jones, T. R., Harris, S. L., O'Neill, R. E., York, L. J., & Perez, J. L. (2016). Immunogenicity, Safety, and Tolerability of Bivalent rLP2086 Meningococcal Group B Vaccine Administered Concomitantly With Diphtheria, Tetanus, and Acellular Pertussis and Inactivated Poliomyelitis Vaccines to Healthy Adolescents. *Journal of the Pediatric Infectious Diseases Society*, 5(2), 180–187. <https://doi.org/10.1093/jpids/piv064>
- Hansen, J., Timbol, J., Lewis, N., Pool, V., Decker, M. D., Greenberg, D. P., & Klein, N. P. (2016). Safety of DTaP-IPV/Hib vaccine administered routinely to infants and toddlers. *Vaccine*, 34(35), 4172–4179. <https://doi.org/10.1016/j.vaccine.2016.06.062>
- Robertson, C. A., Greenberg, D. P., Hedrick, J., Pichichero, M., Decker, M. D., & Saunders, M. (2016). Safety and immunogenicity of a booster dose of meningococcal (groups A, C, W, and Y) polysaccharide diphtheria toxoid conjugate vaccine. *Vaccine*, 34(44), 5273–5278. <https://doi.org/10.1016/j.vaccine.2016.09.003>
- Kovac, M., Kostanyan, L., Mesaros, N., Kuriyakose, S., & Varman, M. (2018). Immunogenicity and safety of a second booster dose of an acellular pertussis vaccine combined with reduced antigen content diphtheria-tetanus toxoids 10 years after a first booster in adolescence: An open, phase III, non-randomized, multi-center study. *Human vaccines & immunotherapeutics*, 14(8), 1977–1986.
<https://doi.org/10.1080/21645515.2018.1460292>
- Brandon, D., Kimmel, M., Kuriyakose, S. O., Kostanyan, L., & Mesaros, N. (2018). Antibody persistence and safety and immunogenicity of a second booster dose nine years after a first booster vaccination with a reduced antigen diphtheria-tetanus-acellular pertussis vaccine (Tdap) in adults. *Vaccine*, 36(42), 6325–6333.
<https://doi.org/10.1016/j.vaccine.2018.08.051>
- Klein, N. P., Abu-Elyazeed, R., Cheuvart, B., Janssens, W., & Mesaros, N. (2019). Immunogenicity and safety following primary and booster vaccination with a hexavalent diphtheria, tetanus, acellular pertussis, hepatitis B, inactivated poliovirus and Haemophilus influenzae type b vaccine: a randomized trial in the United States. *Human vaccines & immunotherapeutics*, 15(4), 809–821. <https://doi.org/10.1080/21645515.2018.1549449>