

**Approval Date:** [September 9, 2016](#)

**Product:** None

**Proper Name:** Influenza A (H5N1) Virus Monovalent Vaccine, Adjuvanted

**Manufacturer:** ID Biomedical Corporation of Quebec

**Indication:** For active immunization for the prevention of disease caused by the influenza A virus H5N1 subtype contained in the vaccine. Influenza A (H5N1) Virus Monovalent Vaccine, Adjuvanted is approved for use in persons (6 months and older) at increased risk of exposure to the influenza A virus H5N1 subtype contained in the vaccine.

**Description:** Influenza A (H5N1) Virus Monovalent Vaccine, Adjuvanted, for intramuscular injection, is a non-infectious, 2-component monovalent, AS03-adjuvanted vaccine.

**BLA:** 125419

**Regulatory Milestone:** e. In November 2013, Q-Pan H5N1 was licensed for use in adults 18 years of age and older for the prevention of disease caused by the influenza A virus H5N1 subtype contained in the vaccine. On September 8, 2014, a meeting was held between CBER and GSK to address GSK's overall pediatric study plan that was part of the post-marketing pediatric requirements for the Q-Pan H5N1 BLA

**PDUFA Goal Date:** September 9, 2016

**Package Insert:** [Package Insert -Influenza A \(H5N1\) Virus Monovalent Vaccine, Adjuvanted](#)

**Summary Basis for Regulatory Approval:** [September 9, 2016 Summary Basis of Regulatory Action - Influenza A \(H5N1\) Virus Monovalent Vaccine, Adjuvanted](#)

**European Public Assessment Report:** No data

**Advisory Committee:**

The supplements did not require input from the Vaccines and Related Biological Products Advisory Committee.

**NCT Numbers:**

- NCT01788228
- NCT00616928
- NCT03701061
- NCT01416571
- NCT00695669
- NCT01310413
- NCT00742885
- NCT00719043
- NCT02213354
- NCT01910519
- NCT02719743
- NCT03318315

**EudraCT Numbers:**

- 2015-003458-42
- 2008-003871-32
- 2006-005477-22
- 2016-001898-32
- 2006-001168-22
- 2011-003512-23
- 2015-001979-46
- 2012-001683-29
- 2007-000115-28
- 2006-004041-42
- 2006-001281-16

**Publications:**

- Ihara T. (2010). *Uirusu*, 60(1), 69–78. <https://doi.org/10.2222/jsv.60.69>
- Prabakaran, M., He, F., Meng, T., Madhan, S., Yunrui, T., Jia, Q., & Kwang, J. (2010). Neutralizing epitopes of influenza virus hemagglutinin: target for the development of a

universal vaccine against H5N1 lineages. *Journal of virology*, 84(22), 11822–11830.

<https://doi.org/10.1128/JVI.00891-10>

- Baras, B., de Waal, L., Stittelaar, K. J., Jacob, V., Giannini, S., Kroeze, E. J., van den Brand, J. M., van Amerongen, G., Simon, J. H., Hanon, E., Mossman, S. P., & Osterhaus, A. D. (2011). Pandemic H1N1 vaccine requires the use of an adjuvant to protect against challenge in naïve ferrets. *Vaccine*, 29(11), 2120–2126. <https://doi.org/10.1016/j.vaccine.2010.12.125>
- Vela, E. M., Buccellato, M. A., Tordoff, K., Stark, G., & Bigger, J. E. (2012). Efficacy of a heterologous vaccine and adjuvant in ferrets challenged with influenza virus H5N1. *Influenza and other respiratory viruses*, 6(5), 328–340. <https://doi.org/10.1111/j.1750-2659.2011.00321.x>
- Gasparini, R., Amicizia, D., Lai, P. L., & Panatto, D. (2012). Aflunov®: a pre-pandemic influenza vaccine. *Expert review of vaccines*, 11(2), 145–157. <https://doi.org/10.1586/erv.11.170>
- Lopez, P., Caicedo, Y., Sierra, A., Tilman, S., Clemens, R., & Banzhoff, A. (2013). Combined administration of MF59-adjuvanted A/H5N1 pre-pandemic and seasonal influenza vaccines: long-term antibody persistence and robust booster responses 1 year after a one-dose priming schedule. *Clinical and vaccine immunology : CVI*, 20(5), 753–758. <https://doi.org/10.1128/CVI.00626-12>
- Chen, W. H., Jackson, L. A., Edwards, K. M., Keitel, W. A., Hill, H., Noah, D. L., Creech, C. B., Patel, S. M., Mangal, B., & Kotloff, K. L. (2014). Safety, Reactogenicity, and Immunogenicity of Inactivated Monovalent Influenza A(H5N1) Virus Vaccine Administered With or Without AS03 Adjuvant. *Open forum infectious diseases*, 1(3), ofu091. <https://doi.org/10.1093/ofid/ofu091>
- Chada, K. E., Forshee, R., Golding, H., Anderson, S., & Yang, H. (2017). A systematic review and meta-analysis of cross-reactivity of antibodies induced by oil-in-water emulsion adjuvanted influenza H5N1 virus monovalent vaccines. *Vaccine*, 35(24), 3162–3170. <https://doi.org/10.1016/j.vaccine.2017.04.029>
- Standaert, B., Dort, T., Linden, J., Madan, A., Bart, S., Chu, L., Hayney, M. S., Kosinski, M., Kroll, R., Malak, J., Meier, G., Segall, N., & Schuind, A. (2019). Usability of daily SF36 questionnaires to capture the QALD variation experienced after vaccination with AS03<sub>A</sub>-

adjuvanted monovalent influenza A (H5N1) vaccine in a safety and tolerability study. *Health and quality of life outcomes*, 17(1), 80. <https://doi.org/10.1186/s12955-019-1147-4>