

New Clinical Study of Flublok® Influenza Vaccine Shows That Groundbreaking Flublok Is More Effective Than the Traditional Flu Shot

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Contact:

Courtney Goodwin
Communications Associate
Phone: (203) 592-7584

Meriden, CT — [Protein Sciences Corporation](#) announced today topline data showing that Flublok® Quadrivalent – the quadrivalent version of FDA-approved trivalent [Flublok® influenza vaccine](#) – outperformed a traditional influenza vaccine last season and was better at preventing the flu. The company presented the results of a clinical trial comparing Flublok Quadrivalent to a traditional egg-based quadrivalent inactivated vaccine. The data demonstrate superior performance of Flublok based on a significantly lower number of people contracting the flu after vaccination with Flublok Quadrivalent.

In this study of approximately 9,000 subjects aged 50 and older, half received Flublok Quadrivalent influenza vaccine and half received quadrivalent inactivated influenza vaccine produced in eggs. The results show that 31% more people were protected by Flublok than by the egg-derived vaccine.

“This study points out the advantages of using modern technology to overcome problems with traditional influenza vaccine manufacturing,” said Manon Cox, President and CEO of Protein Sciences. “Ten years ago we had the first evidence in clinical trial PSC01 that more antigen was beneficial even for healthy adults. Today with support from the Biomedical Advanced Research and Development Authority (BARDA) we were able to show statistically significant better performance than traditional egg-produced vaccines.”

Flublok is the only flu vaccine made without the use of eggs and therefore is not subject to the mutations that are sometimes introduced into the vaccine during the process of egg adaptation that can cause the traditional vaccines to be ineffective (see [Skowronski et al. \(2014\) PLOS ONE 9\(3\), e92153](#)). Flublok contains three times more active ingredients than traditional vaccines (3 or 4x45mcg hemagglutinin protein versus 3 or 4x15mcg hemagglutinin protein for trivalent or quadrivalent vaccine, respectively) and produced significantly higher immune responses to the A strains of influenza (especially H3N2) in the Flublok Quadrivalent study.* Flublok is highly purified and does not contain influenza virus, antibiotics, formaldehyde, preservatives, latex, gluten or gelatin unlike other flu vaccines.

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For more information about Flublok, please visit www.flublok.com.

About Protein Sciences

Protein Sciences specializes in vaccine development and protein production. Our mission is our inspiration: to save lives and improve health through the creation of innovative vaccines and biopharmaceuticals.

Flublok, the world's first recombinant protein-based vaccine for the prevention of seasonal influenza disease, was approved by FDA in January 2013. Flublok is the only flu vaccine made in a 100% egg-free system using modern cell culture technology, making it unnecessary to use an infectious influenza virus or antibiotics in manufacturing.

Healthcare professionals wishing to pre-order Flublok should contact one of the following distributors:

- FFF Enterprises: 800-843-7477 www.myfluvaccine.com
- Cardinal Health: 866-677-4844 <http://www.cardinal.com/us/en/SPD/Ordering>
- McKesson: 877-MCK-4FLU mms.mckesson.com
- Henry Schein Medical: 800-772-4346 www.henryschein.com/flu

Learn more at www.proteinsciences.com and www.flublok.com.

Flublok Safety Information

Trivalent Flublok is approved for people 18 and older to prevent influenza disease. The most common side effect from Flublok is pain at the site of injection. Headache, fatigue or muscle ache may occur.

Tell the doctor if you have ever experienced Guillain-Barré syndrome (severe muscle weakness) or have had a severe allergic reaction to any component of Flublok vaccine.

Vaccination with Flublok may not protect all individuals. Clinical effectiveness of trivalent Flublok in adults 50 and older is based on the immune response elicited by trivalent Flublok and not on demonstration of decreased influenza disease.

Please see the complete Package Insert available at www.flublok.com or call 203-686-0800 for more information.

*Trivalent Flublok demonstrated a higher antibody response to the A strains during 2 clinical trials in adults ≥50 years old. The B strain antibody response was comparable to traditional trivalent vaccines.