

Flu Vaccine Breakthrough: A Game-Changer in the Battle Against Cardiovascular Diseases

The Power of Flu Vaccines in Preventing Cardiovascular Diseases

GALVESTON, TEXAS, US, May 30, 2023 /EINPresswire.com/ -- <u>Cardiovascular diseases</u> (CVDs) are the leading cause of global mortality, resulting in an estimated 17.9 million deaths annually [1]. In the United States alone, CVDs have been the primary cause of death since the 1950s, with one person succumbing to its grasp every 33 seconds [2]. However, a recent groundbreaking study has uncovered a potential solution to combat these devastating diseases.

Previous epidemiological investigations have suggested a connection between seasonal influenza virus infections and an increased risk of major adverse cardiovascular events (MACE) and CVD mortality [3]. Building upon this knowledge, a large-scale clinical trial was conducted to delve deeper into the correlation and assess the efficacy of influenza vaccination as a preventive measure.

The clinical trial, known as the IAMI trial (Trial Identifier: NCT02831608) [4], was the largest randomized trial to date to evaluate whether influenza vaccination improves outcomes following myocardial infarction or percutaneous coronary intervention in high-risk patients with coronary artery disease. The trial was conducted at 30 hospitals and included 2,571 participants from eight countries (Sweden, Denmark, Norway, Latvia, the UK, Czech Republic, Bangladesh and Australia) over four influenza seasons spanning October 2016 through February 2020. The study revealed that influenza vaccination within 72 hours of hospitalization for myocardial infarction led to a significant 28% reduction in MACE and a 41% reduction in cardiovascular mortality, without any excess in serious adverse events [5].

In this landmark trial, participants received Vaxigrip Tetra, an influenza vaccine manufactured by Sanofi [6]. The vaccine, widely recognized for its safety and effectiveness, has shown promise in shielding individuals from adverse cardiovascular outcomes, paving the way for further exploration and development.

These findings align with earlier research, which established that the <u>flu vaccine</u> activates the immune system to produce antibodies that trigger crucial protective processes within cells, guarding the heart against potential harm [6]. These insights were derived from a comprehensive analysis of the interaction between the influenza virus and host proteins, utilizing the Electronic Biology tool [7] based on the molecular descriptor electron-ion interaction

potential (EIIP) [8].

Despite CVD being the leading cause of death worldwide and strong evidence supporting the significant reduction of major cardiovascular events through vaccination for seasonal influenza virus infections, the biotech industry's interest in developing a CVD vaccine remains disappointingly low. However, there is optimism that this situation will change in the future as substantial research and financial resources are expected to be allocated towards the development of a vaccine specifically targeting CVD.

The breakthrough IAMI study signifies a significant step forward in the fight against CVD and has the potential to revolutionize preventive measures. Biomed Protection welcomes inquiries from interested parties seeking more information on optimizing the flu vaccine as a protective measure against CVDs. For further details, please contact veljko@biomedprotection.com.

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References:

1. World Health Organization. Cardiovascular Diseases. Available at: <u>https://www.who.int/health-topics/cardiovascular-diseases#tab=tab_1</u>

2. Centers for Disease Control and Prevention. Heart Disease Facts. Available at:

https://www.cdc.gov/nchs/hus/topics/heart-disease-deaths.htm

3. Study published in JAMA Network. Available at:

https://jamanetwork.com/journals/jama/fullarticle/1758749

4 Clinical trial details on ClinicalTrials.gov. Available at:

https://clinicaltrials.gov; Unique identifier: NCT02831608

5. Results of clinical trial. Available at:

https://link.springer.com/article/10.1007/s11886-022-01748-8

https://www.sciencedirect.com/science/article/abs/pii/S0002870322001983

6. Information on Vaxigrip Tetra by Sanofi. Available at:

https://www.sanofi.co.za/dam/jcr:5f8ec644-1637-4f80-a81f-

38444dd7f17a/Vaxigrip%20Tetra%20Professional%20Package%20Insert%202021.pdf

7. Research on the interaction between influenza virus and host proteins. Available at: <u>http://www.sciencedirect.com/science/article/pii/S0264410X14009335</u>

8. Electronic Biology tool for study of proteins and DNA/RNA. Available at: http://electronicbiology.org/

9. Description of the molecular descriptor electron-ion interaction potential (EIIP). Available at: https://journals.aps.org/prl/abstract/10.1103/PhysRevLett.29.105

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