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ASIA EDITION

Soon, a single flu shot may offer universal immunity!

May 19, 2015 | News | By BioSpectrum Bureau

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Singapore: A single vaccine that immunizes against all types of influenza may soon be a reality, after a team of scientists from Australia and China have discovered how the body's immunity cells remember flu viruses. The study published in the journal Nature Communications elaborated that body's CD8 cells can memorize strains of influenza and destroy them.

The teams from Australia's University of Melbourne and Shanghai's Fudan University had worked together during the first outbreak of avian flu in China in 2013. University of Melbourne's associate professor Ms Katherine Kedzierska recently said that during the outbreak, 99 percent of people with the H7N9 virus were hospitalized, while 30 percent died.

"After collecting samples from infected patients, we found that people who couldn't make these T-cell flu assassins were dying," she told the Australian Broadcasting Corporation. Researchers said that the breakthrough could lead to the development of a vaccine that can fight all new influenza viruses.

Professor Xu, who co-led the study from Fudan University, China, said this study would significantly enlighten T-cell based vaccine development and immune intervention during severe influenza infection in the future.

Professor Elizabeth Hartland, head of the department of Microbiology and Immunology at the University of Melbourne added that the international collaboration has brought together the immunological expertise in Melbourne and the clinical knowledge in Shanghai to produce a study of much higher impact than could be achieved individually. "It exemplifies the approach we are taking at the Peter Doherty Institute for Infection and Immunity," she said.