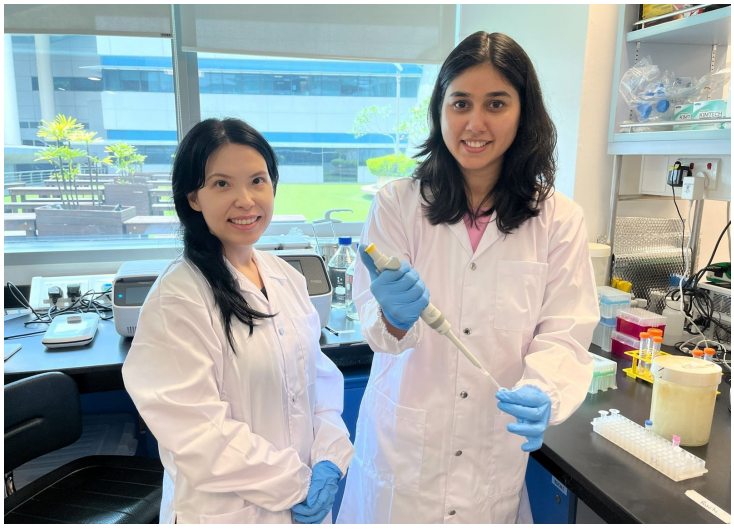
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ASIA EDITION

Singapore-Japan team finds common virus that triggers growth of nasopharyngeal cancer

June 6, 2024 | News

NTU-Chiba University team is in discussion with pharmaceutical companies



Scientists from Nanyang Technological University, Singapore (NTU Singapore) and Chiba University in Japan have shown how the Epstein-Barr virus (EBV) alters specific genes, making nasopharyngeal cancer tumours (NPC) grow faster.

The Epstein-Barr virus, also known as human herpesvirus 4, is one of the most common human viruses, causing infectious mononucleosis, also known as mono or glandular fever, and other illnesses.

The researchers found that EBV tricks human cells into turning on specific genes that promote cancerous growth. Studying cells from patients with NPC, scientists observed how the virus acts as it infects nasopharynx cells to 'switch on' genes that trigger the rapid multiplication of NPC cells. This new study provides additional insight into the link between EBV and NPC. Although previous research has associated the two diseases, researchers have not convincingly demonstrated a definitive interaction between the virus and disease until now.

More than 130,000 new cases of NPC are diagnosed worldwide annually, with the majority of cases occurring in South-east Asia, China, and Northern Africa3. Men are three times more commonly affected than women.

The NTU-Chiba University team is in discussion with pharmaceutical companies and hopes to develop therapies focussing on the genes that EBV targets in nasopharyngeal cells.