Specific combinations of human and viral genetic variants explain a cancer predisposition in southern China

- In this article, they discuss how genetic variants are linked to disease outcomes in Southern China, specifically, on the genome referring to HLA genes. These HLA genes are linked to a certain type of cancer, which affects the head and neck regions called Nasopharyngeal carcinoma or NPC. According to the article, there are two variants that stood out to scientists. The first one refers to HLA A 11:01, which provides safety and protection against cancer and another variant which is its exact opposite HLA A 2:07 which is prone to cancer(Colm O'hUigin & Mary Carrington, 2026). Epstein-Barr Virus affects over ninety percent of human adults in the world. EBV has some variants that have the ability to change DNA sequences, which can later on lead to the formation of Nasopharyngeal cancer, which is called 85841G. They came to the conclusion that this variant gene, combined with HLA A2:07, makes a person eighteen times more likely to contract the NPC disease than a patient who has 85841G + HLA A 11:01. On a sidenote on all of this, why should the reader even believe all of this information? This peer-reviewed research article was published by Nature, one of the most decorated journals to date. It is decorated and also highly credible due to the fact that they only select about seven percent of articles or manuscripts to be accepted and published. With all this context, it is important to recognize the history as it is crucial to understanding why certain conditions are set in place to this day. The author made a claim stating that the genetic material of the EBV being transported back and forth between North and Southern China is the cause for the current Epstein-Barr Virus residing in the current day(85841G). Touching back into the variant that is protective, there is a component called an epitope that is attached to HLA 11:01 called VVILENVSR. For combating NPC in patients who have EBV, scientists theorized that making a vaccine with the VVILENVSR epitope could be the best way to eliminate the NPC potential entirely in people with EBV. What do you think?

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