

Cancer Development

Genetic Factors

Cancer cell

Aging

**Immune Function
Decline**

X

Environmental Factors

cigarette

chemicals

Mal-nutrition

Lack of
sleep

alcohol

virus

Overwork

radiation

Mental stress

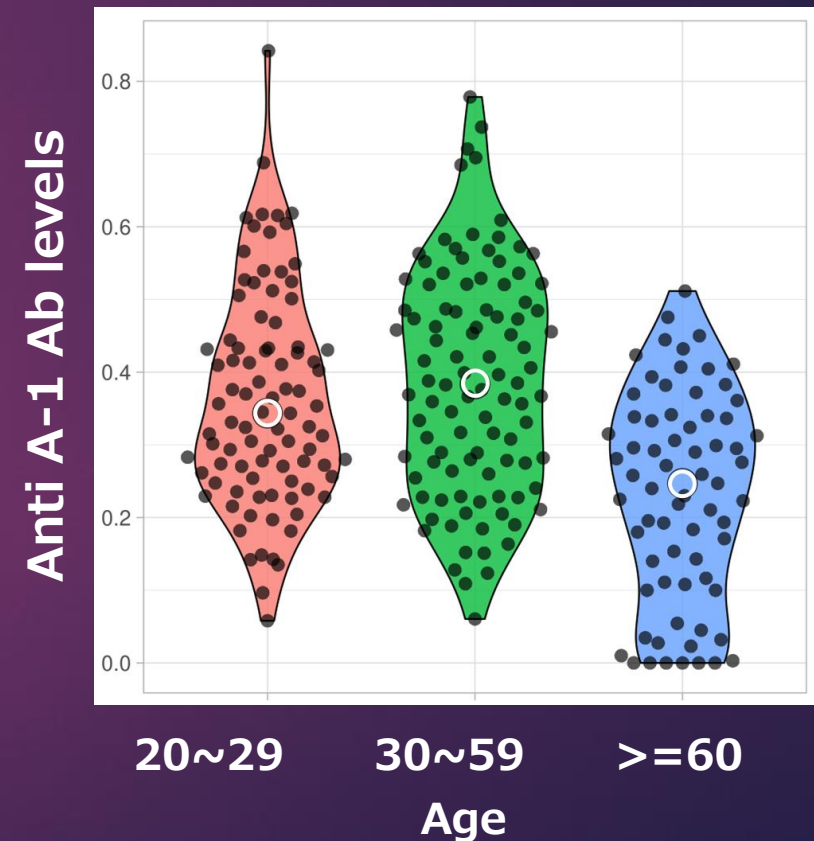
Cancer Risk Prediction via detection of preceding immune function decline

ImmGenk

Latently infected virus-associated protein

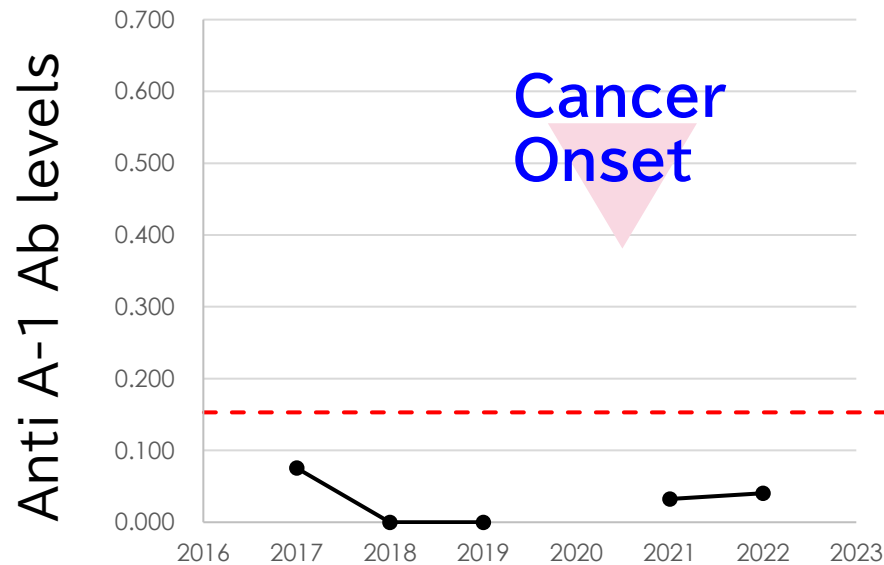
▶ **anti A-1 antibody**

We focused on a **virus** that latently infects nearly all **humans**. Its viral proteins continuously stimulate the host's immune system. This biomarker evaluates **the immune response-specifically antibody production-against the virus-associated protein A-1**(undisclosed), providing insight into host immune function. When immune function is compromised, cancer cells can proliferate unchecked, increasing **the risk of cancer development**.

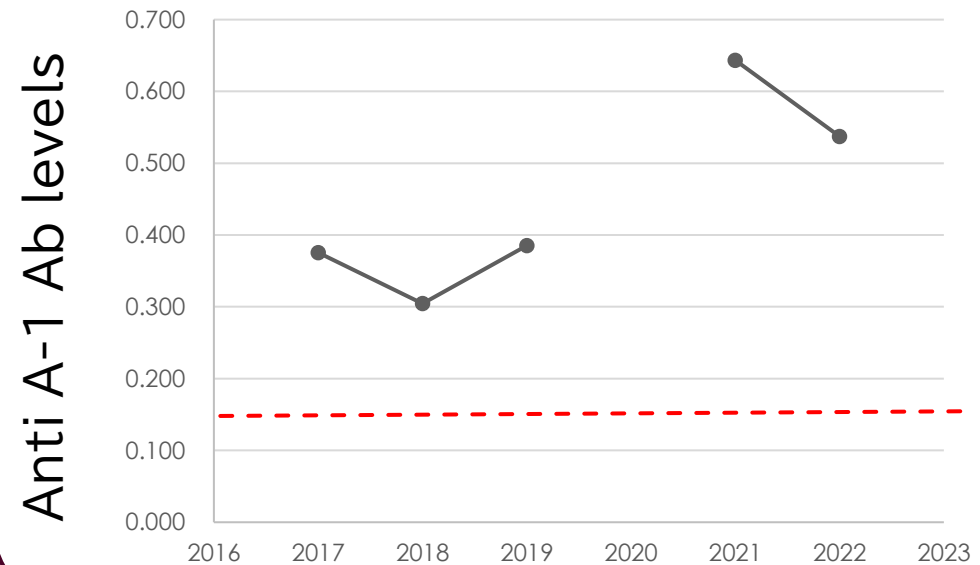


Decrease in anti A-1 Ab levels before cancer onset

Gastric cancer

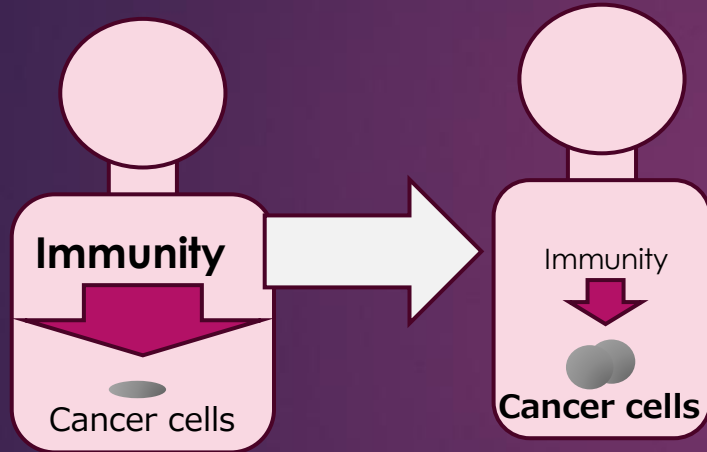


Healthy individual



Examples include colon cancer and melanoma.

Cancer Risk Prediction via detection of immune function decline



Immune Function
Decline



Early detection
→ better prognosis



Primary cancer prevention