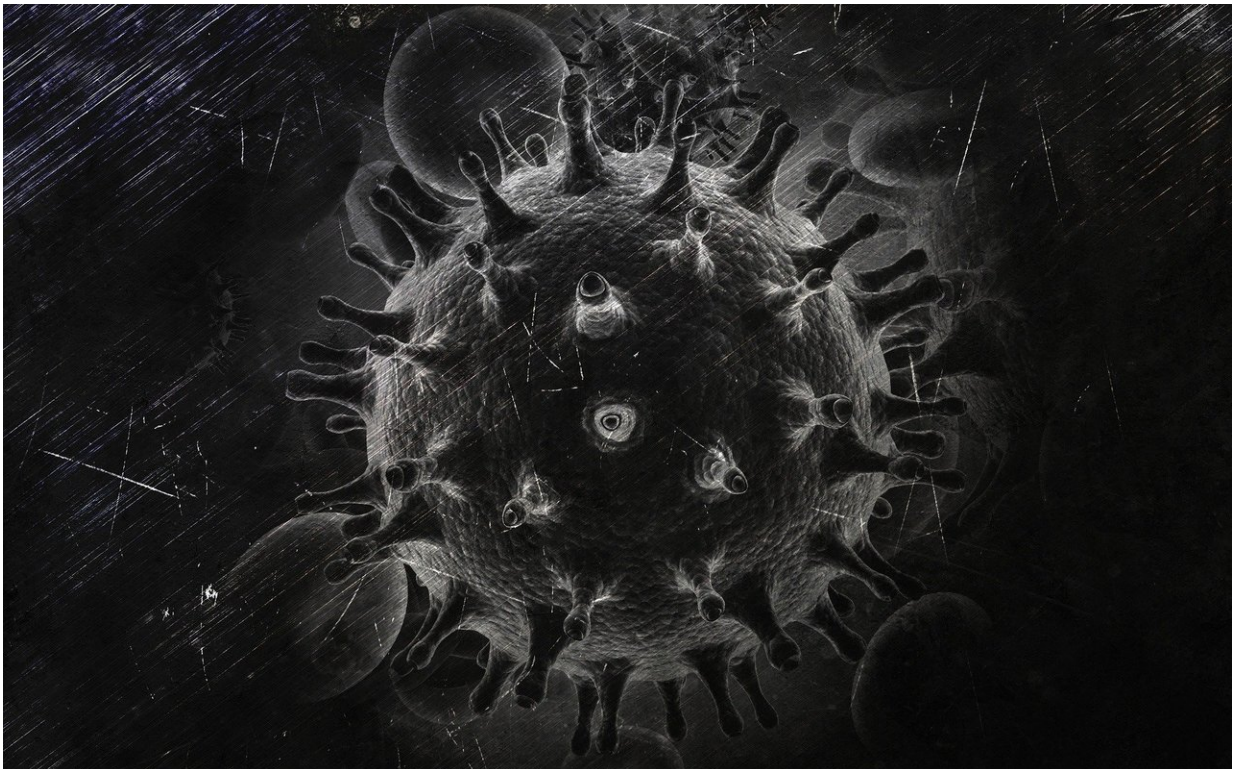


Team develops more accurate tool to track new HIV infections

December 21 2017



Credit: CC0 Public Domain

Researchers at the Duke Human Vaccine Institute have led an effort to develop a more accurate way to gauge the incidence of HIV infections in large populations, which will improve research and prevention strategies worldwide.

The new method more correctly identifies new vs. long-standing infections - an important distinction for determining where to target [public health](#) measures and research, and for evaluating whether interventions are successful at reducing HIV transmission.

"Recent advances—including effective anti-retroviral drugs that both treat and prevent HIV infections—have changed the landscape in the HIV field," said senior author Georgia Tomaras, Ph.D., professor in the Department of Surgery and director of research at Duke Human Vaccine Institute. The study is published online Dec. 21 in the journal *JCI Insight*.

"Improved methods for classifying recent infection from older infections are critically needed to help identify the most effective [prevention strategies](#)," Tomaras said.

Tomaras and colleagues worked to develop a way to measure HIV incidence that takes into account the unique features of the current epidemic while also capitalizing on recent insights into how the virus and the body interact during the early phases of infection.

The result was an assay that identifies new combinations of naturally occurring antibody biomarkers, resulting in a promising set of four biomarkers that could be used. The new assay has a longer, and thus more accurate, time-period that constitutes recent [infection](#), and fewer false classifications.

"Having a more accurate HIV incidence test could substantially reduce costs for researchers, because they would need a much smaller sample size to enroll in studies," Tomaras said.

"Additionally, from a public health standpoint, a more accurate HIV incidence test would help identify hot spots of recent infections, so that prevention efforts could be better targeted to where outbreaks are

happening," said Kelly Seaton, Ph.D., lead author on the study.

Provided by Duke University Medical Center

Citation: Team develops more accurate tool to track new HIV infections (2017, December 21)
retrieved 27 April 2024 from

<https://medicalxpress.com/news/2017-12-team-accurate-tool-track-hiv.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.