



## PerkinElmer Immunoassay Helps NIH NCATS Team Identify Therapeutic Compounds Capable of Disrupting the SARS-CoV-2 Spike Protein/ACE2 Interaction

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*Findings shared on open data portal to help in global pursuit of drug repurposing candidates for COVID-19*

WALTHAM, Mass.--(BUSINESS WIRE)--Oct. 20, 2020-- [PerkinElmer, Inc.](#) (NYSE:PKI), a global leader committed to innovating for a healthier world, today announced that a research team at the National Center for Advancing Translational Sciences (NCATS), an arm of the National Institutes of Health (NIH), is working with [PerkinElmer's AlphaLISA® immunoassay](#) to help support the global search for effective COVID-19 therapeutics.

The NCATS research project is focused on studying small molecule drug compounds that are already approved and in use as treatments but could potentially be repurposed for COVID-19.

The goal of the project is to quickly and reliably identify which small molecule compounds can best disrupt key proteins that bind together to allow for SARS-CoV-2 infection -- the S1 spike protein and the host ACE2 receptor.

Using PerkinElmer's AlphaLISA assay, the NCATS team has been able to efficiently and accurately screen 3,384 molecular entities and narrow them down to a field of 25 quality therapeutic compounds or "hits". The whole process, from assay development and optimization through screening, has been achieved in just a few months.

The AlphaLISA technology is a homogeneous (no-wash) assay that works by generating a light emission in response to a biomolecular interaction which results in proximity of the bead-binding complex. The platform can be used to detect and quantitate biomolecules of almost any size in both simple and complex sample types. Its bead-based, luminescent, signal amplification provides increased sensitivity, a wide dynamic range and potential assay miniaturization.

Speaking to the aim and contribution of the NCATS project, Dr. Quinlin Hanson, co-leader of the research effort and a Postdoctoral Fellow at NCATS said, "Our immediate goal was to develop a sensitive and robust assay platform that scientists could use as a template for screening small molecule compounds that might lead to further drug development. To share our learnings and support collaboration, we've posted our work on the [NCATS Open Data Portal](#). Now our team will conduct additional testing on select molecules and make that information available to the scientific community as well when ready."

Commenting on the importance of leveraging innovative approaches to help tackle COVID-19, Alan Fletcher, Vice President and General Manager, Life Sciences, PerkinElmer, added, "COVID-19 is inspiring research teams around the world to work in new ways -- both individually and collectively -- to tackle this universal health crisis. The research being done by the NCATS team around therapeutic compounds and the SARS-COV-2 spike protein is an important contribution to discovery efforts and we are delighted that our AlphaLISA technology is playing a role."

The AlphaLISA technology is part of PerkinElmer's testing and analysis portfolio that helps scientists around the globe fight COVID-19. From virus detection and therapeutic and vaccine discovery analysis to hand sanitizer testing, PerkinElmer's innovations include research and diagnostics kits, assay platforms, instrumentation, automation solutions, informatics and custom services.

For more information, visit [www.perkinelmer.com](http://www.perkinelmer.com).

### About PerkinElmer

PerkinElmer enables scientists, researchers and clinicians to address their most critical challenges across science and healthcare. With a mission focused on innovating for a healthier world, we deliver unique solutions to serve the diagnostics, life sciences, food and applied markets. We strategically partner with customers to enable earlier and more accurate insights supported by deep market knowledge and technical expertise. Our dedicated team of about 13,000 employees worldwide is passionate about helping customers work to create healthier families, improve the quality of life, and sustain the wellbeing and longevity of people globally. The Company reported revenue of approximately \$2.9 billion in 2019, serves customers in 190 countries, and is a component of the S&P 500 index. Additional information is available through 1-877-PKI-NYSE, or at [www.perkinelmer.com](http://www.perkinelmer.com).

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