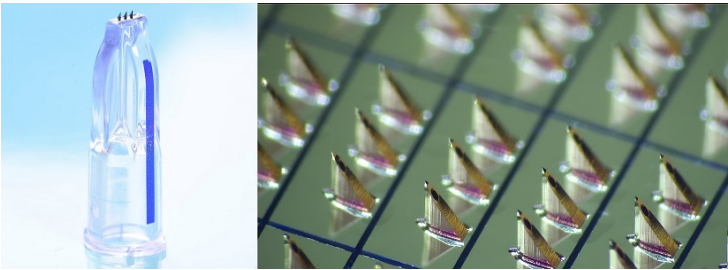


NanoPass joins pharma partners for COVID-19 vaccine development

27 April 2020 | News | By Hithaishi CB

NanoPass MicronJet microneedle device to enable the development of a safe, effective and affordable COVID-19 vaccine



Novel Coronavirus presents a global pandemic with unprecedented medical, economic and social scales. Since there is currently no proven antiviral therapy and herd immunity is likely months away, the race for finding a vaccine is in full swing on a global level. Considering this urgent need, NanoPass is joining forces with leading vaccine and immunotherapy companies around the world and is sharing its proprietary MicronJet microneedle device to enable development of a safe, effective and affordable vaccine.

The NanoPass device targets immune cells of the skin by harnessing the skin's potent immune system to improve vaccines and/or to dramatically reduce the dose while achieving the same immunity. "The human skin is our first layer of defense against many infectious diseases," says Yotam Levin, MD, CEO of NanoPass, "The skin contains specialized Dendritic Cells that process and induce strong immune responses – that's why microneedle injections enable reduction of vaccine doses by 5 fold, thereby reducing overall cost, required capacity and production time. We believe a reliable injection into the skin is critical for successful activation of broad and effective immune responses, which should be explored for most injectable vaccines."

The company's technology is backed up by over 55 completed/ongoing clinical studies with various vaccines and vaccine platforms, including pandemic (H1N1, H5N1) and seasonal flu, live attenuated VZV vaccine, that have shown improved immunogenicity and significant dose-sparing. Pre-clinical evidence with mRNA and DNA vaccines showed promising results.

NanoPass has previously supported US CDC in a Phase 3 infant polio vaccination trial; with ITRC on PPD skin testing; in Type 1 Diabetes immunotherapy; and supported NIAID with devices to evaluate immunogenicity of a pandemic flu vaccine; and multiple vaccine pharma.

Caption: MicronJet microneedle device, that have shown improved immunogenicity and reduction of vaccine doses by 5 fold with various vaccines and vaccine platforms.