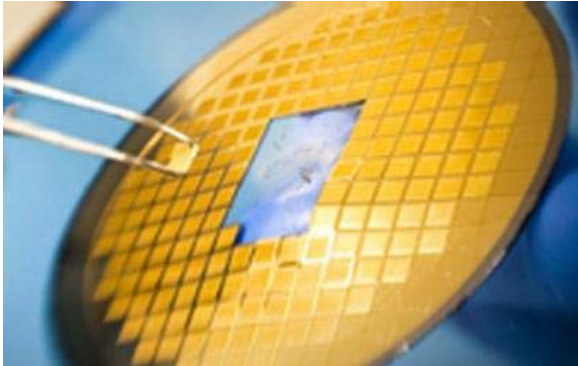


Vaxxas gets \$15m injection to develop needle-free vaccine

Biotech start-up Vaxxas has received a \$15m venture capital kick start to commercialise needle-free vaccine delivery system Nanopatch.

[Tim Dean](#) (Australian Life Scientist) | 02 August, 2011 12:04



Nanopatches.

Say “hello” to Australia’s newest biotechnology start-up, Vaxxas. With a fresh \$15m boost of venture capital, Vaxxas will seek to develop and commercialise a needle-free vaccine delivery system, Nanopatch.

Nanopatch, which is the brainchild of Professor Mark Kendell of the University of Queensland’s Australian



Institute for Bioengineering and Nanotechnology (AIBN), is a patch smaller

than a postage stamp with thousands of small projections designed to deliver a vaccine to abundant immune cells in the skin.

This is more effective than traditional syringes that inject the vaccine into the muscle, which has a lower density of immune cells.

Early stage testing in animals has shown that a Nanopatch delivered flu vaccine was effective with only 1/150th of the dose compared to a syringe and that the adjuvants currently required to boost the immunogenicity of vaccines may not be needed.

Nanopatch also has the advantage of not requiring refrigeration, which makes transportation and storage significantly cheaper and aids in the distribution of vaccines through the developed world.

Professor Kendell received the [2010 Translational Research Excellence Commercialisation Award^{\[1\]}](#) for Nanopatch last year. Vaxxas was also a finalist in the Enterprize Business Plan Competition in 2010.

The \$15m investment was led by OneVentures, with co-investors Brandon Capital, the Medical Research Commercialisation Fund (MRCF), and US-based HealthCare Ventures.

OneVentures General Partner Dr Paul Kelly said the significance of this investment was not just in its size.

“This investment syndicate includes both local and international investors which is a real vote of confidence in the Nanopatch approach and an appreciation of the potential of the technology to revolutionise vaccine delivery worldwide,” he said.

References

http://www.lifescientist.com.au/article/366200/uq_researchers_awarded_syringe-free_vaccination_technology/