





Smart Tags on Pills Set to Improve Supply Chain Security and Patient Adherence

Technology Coalition Prove Out the Mass Digitalization of Pharma Pills

HARLEYSVILLE, PA and EMERYVILLE, CA - 10 December, 2019 — A coalition of technology partners announced today that they have demonstrated the mass digitalization of pharmaceutical tablets and their linkage to a Trillian based trust ledger. They believe this will provide a major step forward in ensuring supply chain integrity and addressing the growing problem of patient non-adherence

The supply chain simulation run by PwC Australia, Colorcon and TruTag Technologies created a secure, direct link between a physical tablet (placebo) and a digital backend, without having to rely on the traditional approach of authenticating traditional packaging barcodes.

The solution demonstrated has three components. The first is an intelligent coating system from Colorcon that is infused with spectrally-encoded particles, or TruTags, which act as edible barcodes. The second is an authentication application that can be used on commonly available cell phones that decodes and verifies the embedded TruTags. This application provides a link between the physical tablet and the third component of the solution, a Trillian based distributed-ledger operated by PwC Australia.

"Verifiable data ledger technology offers a new means of securing and sharing information. However, these systems are still reliant on ensuring a secure link via a crypto-anchor between the physical and digital world," said Trent Lund, Partner at PwC Australia New Ventures. "TruTags are a perfect crypto-anchor for directly marking pharmaceuticals and foods."

To date, the digitalization of medicines has been inhibited by the economic, regulatory and technical limitations. The breakthrough represents a major step forward in the fight against unauthorized and illegitimate pharmaceutical production and a true opportunity for regulators and industry to safeguard patients and improve supply-chain efficiency.

"This technology represents a new era of security and transparency for the pharmaceutical industry in which patients can be empowered to authenticate their own medicines," said Michael Bartholomeusz, Chief Executive Officer of TruTag Technologies.

Beyond improved supply-chain integrity, this innovation could drive better communication and engagement between healthcare providers and patients with the potential to improve patient adherence.

"Intelligent coatings represent an incredible opportunity for patient communication and data

collection" said Kelly Boyer, General Manager, Film Coatings of Colorcon. "This technology represents a new era of security and transparency for the pharmaceutical industry in which patients can be empowered to authenticate their own medicines".

To download a copy of the white paper on the digitalization of medicine simulation – please go to https://trutags.com/whitepaper-trusted-tablet/

About PwC Australia

A team of more than 8,000 people in Australia, working together to build trust in society and solve important problems. We're a part of a network of firms in 158 countries with more than 250,000 people who are committed to delivering quality in assurance, advisory and tax services. Find out more at https://www.pwc.com.au/

About Colorcon

Colorcon is a world leader in the development, supply and technical support of specialty excipients: formulated film coating systems, modified release technologies, and functional excipients for the pharmaceutical industry. Our best-in-class products and technologies are complemented by our extensive application data and value-added services to support all phases of solid oral dose design, development and manufacture. Our focus on market issues and technology development has earned Colorcon an international reputation as a pharmaceutical supplier of choice. Colorcon currently has 11 manufacturing facilities (including seven film coating sites), 21 technical service laboratories globally and more than 1200 employees exclusively dedicated to its customer base.

About TruTag Technologies

TruTag Technologies, Inc. is a leading security and technology solution provider serving businesses and governments around the world. TruTag has the most advanced precision-fabricated, cGMP nano-porous silica manufacturing operation in the world for a variety of applications and security solutions, including product identity for food, medicine, secure labels and documents. Learn more at www.TruTags.com.

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