

# MSD Hong Kong tackles counterfeit Gardasil 9 vaccines with blockchain

With Asia accounting for the largest share of counterfeit medicine trade, MSD Hong Kong knew they had to act quickly in 2019, when authorities exposed clinics who were administering counterfeit Gardasil 9 vaccines (HPV vaccines).

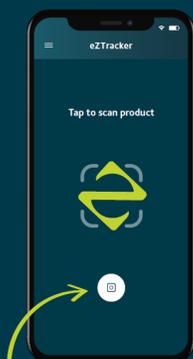
Counterfeit medicines are a serious and ever-growing threat to the health-care industry. With wrong or incorrect amounts of active ingredients, counterfeit medicines can have seriously damaging effects on public safety.

In addition, this incident was a risk to MSD and Gardasil 9's brand image and trust;

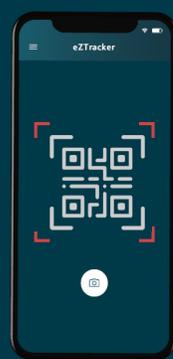
causing panic and serious concerns among patients who were worried about receiving a potentially unsafe vaccine.

By introducing eZTracker, Zuellig Pharma's SaaS solution which uses blockchain technology and is deployed on the ever-trusted Microsoft Azure, MSD is now able to tackle counterfeiting of Gardasil 9 HPV vaccine and ease patients' worries over product authenticity.

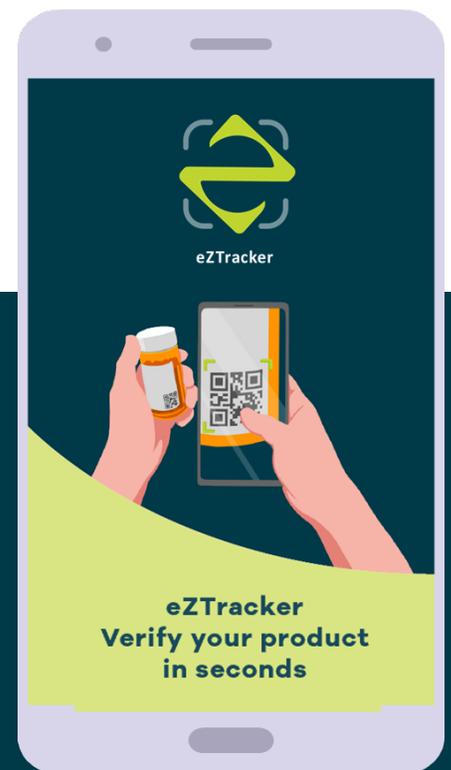
## Just 3 simple steps:



.....



.....



## The challenge

When the 2019 Gardasil-9 counterfeit vaccine was exposed, MSD's main solution was to urge customers not to use vaccines that did not carry its local registration details on packaging. With counterfeiters growing increasingly sophisticated, the ability to verify the legitimacy of vaccines on a supply chain level became paramount.

To safeguard their patients from counterfeit vaccines, MSD needed the ability to track and trace their vaccines along the supply chain, from the manufacturer to the patient receiving it.

Authentication on the supply chain level would usually take weeks and involve many parties. This process had to be simplified, in a highly secured and user-friendly way.

## The solution

With the power of Microsoft Azure & Blockchain, Zuellig Pharma deployed eZTracker, a non-intrusive method of information exchange that protects data ownership and ensures data accuracy with virtual queries.

As a vaccine moves through the supply chain, every data point on its movement is uploaded in real-time onto a secure ledger and database that cannot be manipulated or tampered with. MSD is now able to track each product down to a box, rather than to a batch level with traditional barcodes.

To reassure patients and regain the trust of the general public, end-users (patients and health care practitioners) are also able to use the eZTracker mobile app to verify the authenticity of their product by scanning the unique code on each box.

## The Outcomes



### TRACE

*Manufacturer,  
Country of origin*

Using blockchain technology, eZTracker is able to identify the manufacturer and country of origin, helping to address falsified and cross-border products. This information is instantly available upon scanning the unique product code. In 2020, eZTracker recorded 6400 scans of Gardasil 9 vaccines.



### STRENGTHEN

*Supply Chain,  
Patient Trust*

eZTracker sends automatic alerts to the manufacturer and Zuellig Pharma upon detection of an unregistered pharmaceutical.

To date, 1 in 4 clinics in Hong Kong dispensing Gargasil-9 vaccine have adopted eZTracker to scan the Gardasil 9 products before administering the vaccine.



### EDUCATE

*Patients, Manufacturers,  
Doctors, Public Opinion*

40% of consumers will stop buying from a brand if it suffers controversy.

With 24.5K active users of the mobile app, eZTracker raises awareness about the dangers of unregistered pharmaceuticals and provides more accessible information about medicine.