

Safeguarding medicine for life

Tridentify is a medtech company providing a patented and certified system for securing the quality and permanence of sensitive vaccine, blood, and other valuable biomedicine-products in the cold supply chain.

Our medical device technology support our customers in making instants decisions about their products remaining shelf life. By doing so the outcome is safe and effective use and decreased wastage of every valuable bio-medical product such as vaccine and blood for example.











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VALUABLE VACCINE WASTED

Currently, companies manufacturing biopharma see product loss and shelf-life reductions in up to 25% of total manufactured products.¹

The World Health Organization estimates that more than **50% of vaccines may** be wasted globally every year because of temperature control, logistics and shipment-related issues.²

BI OOD DOWN THE DRAIN

1 unit of blood can save up to 3 lives and can only be aggregated through human donors.³

In Europe there are approximately 17 million units of blood donated on a yearly basis.⁴

Around 900.000 units of transfusion blood is wasted yearly in Europe. Globally around 1-4% of all donated blood is wasted

TRADITIONAL COLD CHAIN MONITORING EQUIPMENT NOT ENOUGH

The lifespan of a product is typically not affected by a single short temperature peak. When a basic temperature logger indicates that a pharmaceutical product has exceeded a set temperature limit, the product is discarded. Hence, traditional cold chain monitoring equipment is not enough - it still leads to waste of product with remaining shelf-life.

WE GO BEYOND CURRENT LIMITATIONS

Tridentify delivers an advanced tracer system able to overcome the limitations of available logging technologies.

Unlike all other solutions, Tridentify's patented tracer is programmed to the exact specifications of the biopharma. This gives it the ability to communicate the shelf life of the actual individual package it is attached to in real-time

Tridentify becomes part of the medicine - it becomes its voice.

- Immediately tells if the medicine is usable.
- Easy to use for untrained staff
- ▲ Enables geographic traceability.
- Easy use in any logistics system.
- Fully digitalised cloud/Bluetooth.
- ▲ Strong patient adherence imperative.
- Highly suitable for Home Delivery logistics requiring cold chain.
- ▲ User friendly mobile and desktop applications (iOS and Android).
- Fully customisable medical device class IIa solution.

IP CERTIFIED AND PROTECTED TECHNOLOGY

INTELLECTUAL PROPERTY

- 1 PCT/SE2011/051366 - MEDICAL PACKAGE, SYSTEM AND METHOD FOR MANAGING MEDICAL PACKAGE 2
- MANAGING MEDICAL PACKAGE VALAP0120WOUSA MEDICAL PACKAGE, SYSTEM AND METHOD FOR MANAGING MEDICAL PACKAGE Patent 1001195-5 (Sweden); PCT/SE2011/051366 Patent in Canada nr. 2,822,078
- 3
- 4
- Design Registration nr 002019497-0001, QTA-TRACER International trademark (1141105) "QTA Tracer System" that is valid 5. 6.
- until 2022
- Two additional patents pending finalisation. Swedish IP Expert firm: Valea, in Gothenburg. 7.

REGULATORY REOUIREMENTS

- Medical Device Directive 93-42EEC as amended by 2007/47/EC 1 (MDD2A)
- ISO 13485:2016 Quality management system for medical devices 2
- 3
- ISO 9001:2015 Quality management System Tridentify is a member of Naturvårdsverkets battery register (Swedish Environmental Protection Agency, EPA)
- 5 CE-marked

1. Elsevier. Vaccine instability in the cold chain: Mechanisms, analysis and formulation strategies (Jul 1, 2014) 2. https://info.evaluate.com/rs/607-YGS-364/images/EvaluatePharma_World_Preview_2019.pdf 3. https://www.grandviewresearch.com/industry-analysis/cold-chain-monitoring-market 4. https://www.redcrossblood.org/donate-blood/how-to-donate/how-blood-donations-help/blood-needs-blood-











SOME OF OUR VALUED CLIENTS



Interregionale Blutspende SRK (IRB) is a Swiss non-profit organization. Together with 10 other regional blood donation services in Switzerland, they are a members of the blood donation service of the Swiss Red Cross. Yearly IRB gets 95 000 units of donated blood which then is manufactured at their own facilities to different blood products.

Tridentify supports IRB in the distribution process by monitoring and calculating shelf life of surplus blood bags from one hospital making sure it can be reused at other hospitals.

octapharma

Octapharma, Norway is the largest privately owned and independent plasma fractionator in the world. Our medicines are high-quality human proteins sourced from human plasma and human cell lines.

Thawed plasma has a very short shelf life (max 24 hrs). In various parts of Octapharma's fractioning and production process Tridentify is adding value by monitoring and calculating the shelf-life of the valuable substance and hence securing the permanence and quality of the the plasma being used for extraction but also to the final product it self.

Osakidetza

OSI Ezkerraldea Enkarterri Cruces, Spain (Osi) is a public institution of the Basque Health Service (Osakidetza). It provides primary and hospital care, with highly specialized and reference services.

Osi and Tridentify work closely together with a clear ambition to decrease the wastage number on blood bags handled at the hospitals blood bank. Tridentify supports Osi in monitoring approximately 3 500 blood bags on a yearly basis leading to improved wastage numbers due to close monitoring leading to optimized handling of blood between the blood bank and different areas within the hospital.

• SYKEHUSET I VESTFOLD

The hospital in Vestfold, Norway (SiV) is an area hospital for Vestfold county and is responsible for providing specialist health services to the population in Vestfold. The tasks of the specialist health service are patient treatment, education of health personnel, research and training of patients and relatives. Within SiV's operating area there is also a major blood bank.

This collaboration is an ongoing Proof of Concept project that looking at how the use of Tridentify's solutions can provide increased quality and traceability related to the storage and durability of the blood bags. Ultimately, Tridentify is being compared to other solutions on site with a clear mission to prove that the use of the tracer system will affect the number of discarded erythrocyte concentrates.



The John Radcliffe Hospital, UK (JR) is Oxfordshire's main accident and emergency site. The JR provides acute medical and surgical services including trauma, intensive care and cardiothoracic services. It is situated in Headington, about three miles east of Oxford city centre. It is the largest of the Trust's hospitals, covering around 66 acres.

For JR Tridentify's solution creates value in two ways. Tridentify assists JR's blood establishment in improving handling and helping to deliver quality protected blood products to the patient along with the ease to fulfil guidelines from JPAC. Secondly, the solution helps to bring transparency and eases inspections by for example MHRA, with the cloud powered user interface. It enables a swift and objective view of the handled blood products.







