

TITLE	AUTHOR	OUTCOME
<b>Blockchain for drug traceability</b>  April 25, 2021	Mueen Uddin, Khaled Salah ,Raja Jayaraman SasaPestic Samer Ellahham	Pharmaceutical supply chain (PSC) consists of multiple stakeholders including raw material suppliers, manufacturers, distributors, regulatory authorities, pharmacies, hospitals, and patients. The complexity of product and transaction flows in PSC requires an effective traceability system to determine the current and all previous product ownerships. In addition, digitizing track and trace process provides significant benefit for regulatory oversight and ensures product safety. We propose two potential blockchain based decentralized architectures, Hyperledger Fabric and Besu to meet critical requirements for drug traceability such as privacy, trust, transparency, security, authorization and authentication, and scalability.
<b>A Blockchain-Based Approach for Drug Traceability in Healthcare Supply Chain</b>	Ahmad Musamih Khaled Salah Raja Jayaraman Junaid Arshad	Healthcare supply chains are complex structures spanning across multiple organizational and geographical boundaries, providing critical backbone to services vital for everyday life. The inherent complexity of such systems can introduce impurities including inaccurate information, lack of transparency and limited data an end-to-end product tracking system across the pharmaceutical supply chain is paramount to ensuring product safety and eliminating counterfeits. Most existing track and trace systems are centralized leading to data privacy, transparency and authenticity issues in healthcare supply chains.
<b>A semantic blockchain-based system for drug traceability</b>  May 09 ,2020	Khizar Abbas, Muhammad Afaq Talha Ahmed Khan	Drug traceability is currently a very challenging area given the complexity of several issues, including drug quality and counterfeit medications. The counterfeited drugs have a major impact on human life, treatment outcomes and economic burden. To deal with these issues, we propose a semantic blockchain-based system for drug traceability that aims at detecting counterfeit safety and quality of life as well as eliminating manufacturers' potential loss and increasing their revenue. Our proposal is based on blockchain and semantic web technologies to enhance the representation capability of data in the pharmaceutical supply chain.