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Effective tocotrienol dosage traceability system using blockchain technology (Article)

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Abstract

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Tocotrienol dosage, especially in vitamin E, is important for treatment and prevention of diseases. To date, the dosage is given based on the physician's knowledge and experience to suit the patient's needs. The alteration of the dosage is depending on the way the patient's body reaction and coping mechanism which is different from one to another. Hence, the optimal dosage is very difficult to achieve and may result in undesirable side effects. An alternative solution using blockchain technology to trace and chart the dosage of tocotrienol is proposed to capture the effective measure for the patient. With the advancement of the internet of things (IoT) and big data analytics technologies, an effective tocotrienol dosage is possible by utilizing the data gathered from the individual patient for tocotrienol dosage personalization profiling. Then, the output can be used to assist the physician to diagnose an appropriate amount of tocotrienol dosage for optimum effect. This paper discusses the theoretical framework of using blockchain technology to develop an effective tocotrienol dosage traceability system. It is envisaged that such an approach can be a guide to the health practitioners to administer the correct dosage for the patient and subsequently leads to a better quality of life. © 2020, Institute of Advanced Engineering and Science. All rights reserved.

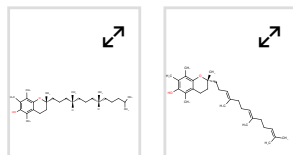
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Big data analytics Blockchain Internet of Things Tocotrienol Traceability system

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