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COMPUTATIONAL ASSESSMENT OF ADME-TOX PROFILES OF SOME POLYLACTIC ACID OLIGOMERS

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ABSTRACT

Polylactic acid (PLA) is a compound widely used in human medicine especially for tissue engineering and drug delivery systems and in cosmetics for correction of scars and wrinkles. There are a few known side effects of PLA on humans, such as allergic reaction, angioedema, hypersensitivity reactions. In the human body, PLA is degraded to its oligomers that are metabolized and their effects are not known. In this study we have used Swiss Target Prediction, admetSAR, Toxtree and EndocrineDisruptome computational tools for predicting the molecular targets and respectively for assessing the ADME-Tox profiles and pharmacokinetic properties of small oligomers of polylactic acid.

Keywords: polylactic acid, ADME-Tox properties, pharmacokinetics.

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