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(54) Title: NOVEL BIOCONJUGATES AS THERAPEUTIC AGENT AND SYNTHESIS THEREOF

(57) Abstract: The present disclosure relates to a novel enzymatic approach according to the invention using an unprecedented sortase-catalyzed transpeptidation reaction between a substrate comprising LPXTG peptide motif and biomolecules such as aminosugars, hydroxyamino acids, hydroxyamino acid esters, aminolipids, polyamines; nucleic acids or derivatives thereof; or any molecule having such moieties; or any compound having such moieties to obtain a bioconjugates useful for target delivery of a compound. The present disclosure provides bioconjugates obtained by the novel sortase catalysed transpeptidedation reaction.

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