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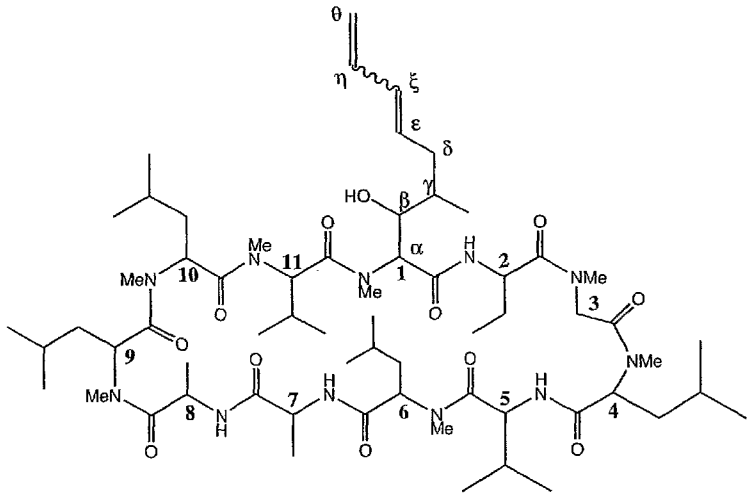
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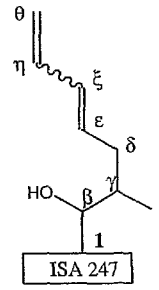
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[Continued on next page]

(54) Title: METABOLITES OF CYCLOSPORIN ANALOGS



II



E, Z ISA 247

(57) Abstract: Isolated metabolites of the cyclosporine analog ISA247 are disclosed, including in vitro methods for their preparation. The metabolites comprise a chemical modification of ISA247, wherein the modification is at least one reaction selected from the group consisting of hydroxylation, N-demethylation, diol formation, epoxide formation, and intramolecular cyclization phosphorylation, sulfation, glucuronide formation and glycosylation. Methods of preparation include semi-synthetic methods, wherein metabolites of ISA247 are produced from the microsomal extracts of animal liver cells, or.from cultures using microorganisms, and completely synthetic methods, such as chemically modifying the parent compound or isolated metabolites using organic synthetic methods.

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