SYNTHESIS AND BIOLOGICAL EVALUATION OF NEW TERPENYLFURANES

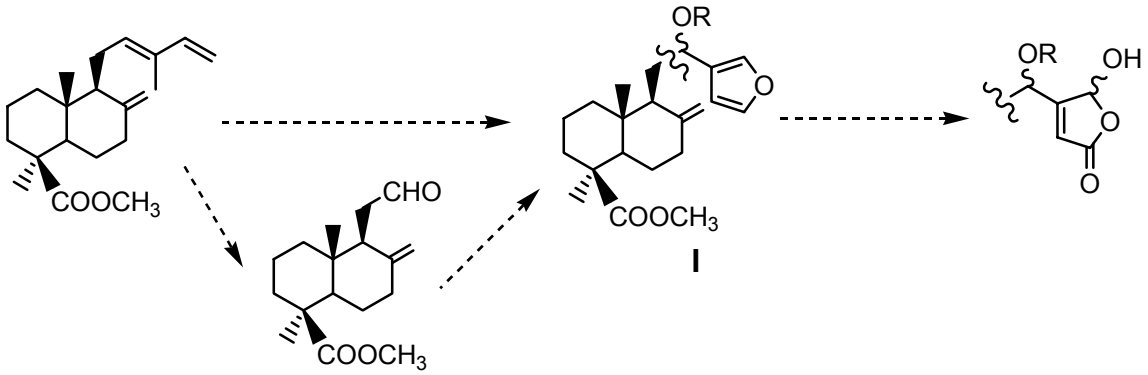
Leyla Delgado Gómez[a], José Mª Miguel del Corral[a], Mª Angeles Castro[a], Mª Concepción Grande[a], Pablo A. García[a], Marina Gordaliza[a], Carmen Cuevas[b] and Arturo San Feliciano[a]

[a]Pharmaceutical Chemistry Department. Faculty of Pharmacy. Campus Miguel de Unamuno 37007, Salamanca, Spain
[b]PharmaMar SA, Avda de los Reyes, 1, P.I. La Mina-Norte 28770, Colmenar Viejo, (Madrid) Spain

There is a large number of secondary metabolites isolated from marine sources that present very interesting cytotoxic properties. They have been isolated from sponges, tunicates, algae, etc and show great structural diversity [1]. Among these cytotoxic natural products, we have focused our attention on terpenoid derivatives bearing a furane ring such as thorectandrols or dysidiolide, sesterterpenoids with cytotoxicity values in the μM level [2, 3]. Thus, we have designed the estructures of new terpenylfuranes and planned their synthesis starting from labdane diterpenoids which are readily available in large quantities from *Cupressaceae* species.

Our group has wide experience on the isolation and characterization of this kind of natural products [4] and we have chosen *trans*-communic acid as starting material for the synthesis of the derivatives included in this communication.

Trans-communic acid was isolated from the berries of *Cupressus sempervirens* [5] and its methyl derivative was transformed into the furylderivate **I** by two procedures. The first one was based on the fotooxidation of the conjugate diene and the second involved the degradation of the side chain to the *tetranor*-aldehyde and the further condensation with furyllithium. The furylderivatives were also transformed into the corresponding lactols, fragments also present in many cytotoxic marine natural products.



The prepared compounds are being tested as cytotoxics against several neoplastic cell lines and the results will be presented in this communication.

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