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Antitumor and antiangiogenic potential of solomonamide synthesis intermediates

**Paloma Carrillo**<sup>1</sup>, Iván Cheng-Sánchez<sup>2</sup>, M<sup>a</sup> Carmen Ocaña<sup>1</sup>, Beatriz Martínez-Poveda<sup>1</sup>, Miguel Ángel Medina<sup>3</sup>, Francisco Sarabia<sup>2</sup>, Ana R. Quesada<sup>3</sup>

<sup>1</sup>Universidad de Málaga, Andalucía Tech, Departamento Biología Molecular y Bioquímica, Facultad de Ciencias e IBIMA, Málaga, ES, <sup>2</sup>Universidad de Málaga, Andalucía Tech, Departamento de Química Orgánica, Facultad de Ciencias, Málaga, ES, <sup>3</sup>Universidad de Málaga, Andalucía Tech, Departamento Biología Molecular y Bioquímica, Facultad de Ciencias e IBIMA y U741 (CB06/07/0046) CIBER de Enfermedades Raras, Málaga, ES

In this work we developed a new synthetic strategy towards the solomonamides. a novel class of cyclopeptides of marine origin. The described synthetic approach utilized an olefin metathesis reaction to form the [15]-membered ring contained in these natural products. During the synthetic process, a diverse set of analogues was generated and we evaluated their potential antitumor activity *in vitro*. For this purpose we performed *in vitro* proliferation assays, determining the IC<sub>50</sub> values of the compounds in a panel of tumor cell lines. In addition, we evaluated the possible antiangiogenic effects of these solomonamide analogues by using *in vitro* endothelial cell differentiation assays. Our results showed that the potential antitumor and antiangiogenic activity of the studied analogues depended on their chemical structure, suggesting that the presence of specific functional groups could be responsible of their biological activity. Further studies are needed to understand the basis of the observed activities in endothelial and tumor cells.

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