

## Synthesis, Crystal Structures and Anticancer Activities of Two Naphthol Derivatives

Ru-yi LIAO <sup>1</sup> & Yan ZHANG <sup>2</sup> \*

<sup>1</sup> *Department of Gastroenterology, the First Affiliated Hospital of Xinjiang Medical University, Urumchi 830054, China*

<sup>2</sup> *Department of Pathology, Basic Medical College, Xinjiang Medical University, Urumqi 830011, China*

**SUMMARY.** In this study, two novel naphthol derivatives (**1** and **2**) were synthesized and characterized via IR, <sup>1</sup>H NMR, HRMS, and single crystal X-ray crystallography. The *in vitro* anticancer activities of the two compounds against gastric cancer were evaluated by observing the inhibitory effect on the proliferation of the SGC7901 cells, and cells were predominantly induced to apoptotic cell death after compound **2** treatment.

**RESUMEN.** En este estudio fueron sintetizados dos nuevos derivados del naftol (**1** y **2**) y caracterizados a través de IR, <sup>1</sup>H RMN, HRMS y cristalografía de rayos X en monocristal. La actividad *in vitro* de los dos compuestos contra el cáncer gástrico se evaluaron mediante la observación del efecto inhibitor sobre la proliferación de las células SGC7901; las células fueron inducidas predominantemente a la muerte celular apoptótica después del tratamiento con el compuesto **2**.

**KEY WORDS:** anticancer, crystal, gastric cancer, naphthol.

\* Author to whom correspondence should be addressed. *E-mail:* zhang\_yan3157@163.com