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Antitumor Activities of Pyran-Annulated Heterocycles

Fang LIU [1] *, Yong WU [2], Jing Li [3] &Ying-Jun ZHOU [4]

[1] *Department of Pharmacology, Changzhi Medical College, Changzhi, Shanxi, China*
[2] *Shandong Hongjitang Pharmaceutical Group Ltd., Jinan, Shandong, China*
[3] *School of Chemical Engineering, the Key Laboratory for Surface Engineering and Remanufacturing in Shaanxi Province, Xi'an University, Xi'an, China*
[4] *Department of Pharmacology, Central South University, Changsha, Hunan, China*

SUMMARY. Four novel pyran derivatives (**1-4**) were synthesized and characterized via IR, ^{1}H NMR, HRMS, and single crystal X-ray crystallography. The antitumor activities of these compounds were investigated against mouse leukemia L1210 cells, human oral epidermoid carcinoma KB cells, human promyelocytic leukemia cells (HL-60) and Bel-7402 liver cancer cells by MTT assay. It was found that compared with compounds **1** and **2**, compounds **3** and **4** exerted rather potent activities against all of these cell lines.

RESUMEN. Cuatro nuevos derivados de pirano (**1-4**) se sintetizaron y caracterizaron mediante IR, ^{1}H RMN, HRMS, cristalografía de rayos X monocristal. Las actividades antitumorales de estos compuestos se investigaron contra células de leucemia de ratón L1210, células KB de carcinoma epidermoide oral de humanos, células de leucemia promielocítica humana (HL-60) y células de cáncer de hígado Bel-7402 por ensayo MTT. Se encontró que, en comparación con los compuestos **1** y **2**, los compuestos **3** y **4** ejercen potente actividad contra todas estas líneas celulares.

KEY WORDS: antitumor, crystal, pyran.

* Author to whom correspondence should be addressed. *E-mail:* liu_fang66@163.com

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