

4th Symposium of Young Researchers on Pharmacognosy

BOOK OF ABSTRACTS

(ed. Judit Hohmann)

Institute of Pharmacognosy, University of Szeged, Szeged, Hungary

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Indole derivatives as promising therapeutic agents for cancer and malaria

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Indole, a versatile heterocyclic moiety present in the structure of several molecules, has garnered significant attention in the realm of natural product research due to its broad range of biological activities, including anticancer and antimalarial activities. The structural diversity and pharmacological versatility of indole derivatives make them attractive candidates for drug discovery and development. This keynote aims to shed light on the design, synthesis, and evaluation of novel indole derivatives with enhanced efficacy against cancer and malaria, showcasing their potential as promising natural product-based therapeutics. Our most recent results on the development of new tryptophanol and spirooxindoles derivatives will be presented [1-2]. Moreover, we will disclose our most recent results on the development of hybrid compounds with selective toxicity against triple-negative breast cancer cells, obtained in the bilateral action in collaboration with the research group of Professor Hunyadi.

References

- [1] Santos, MMM, et al. *Eur J Med Chem* **2022**, 241:114637. doi: 10.1016/j.ejmech.2022.114637
[2] Santos, MMM, et al. *Pharmaceuticals* **2023**, 16(2):146. doi: 10.3390/ph16020146

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