Development of new drug – peptide conjugates for targeted tumor therapy

Mező Gábor¹, Csámpai Antal², Bánóczi Zoltán¹, Jernei Tamás¹, Bárány Péter², Murányi József³

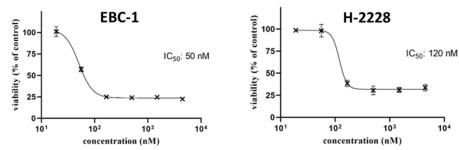
¹MTA-ELTE Research Group of Peptide Chemistry, ²ELTE Department of Organic Chemistry, ³MTA-SE Pathobiochemistry Research Group,

Budapest, Hungary

Synthesis / method / protocol: Preparation of conjugates comprising drug candidates synthetized on the basis of rational design, readily cleavable linkers and tumour specific carrier peptides, evaluation of their antiproliferative activity and selectivity.

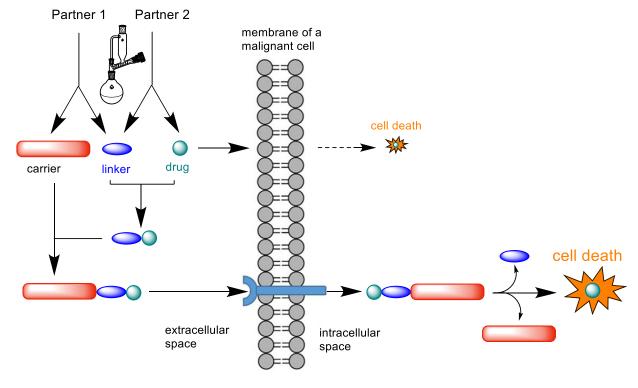
Scientific Goal: The structure-activity relationships resulted from the tests of the conjugates and the drug components will be explored for the development of novel products, suitable for targeted tumour therapy, having enhanced activity and selectivity.

Result: We prepared novel chalchones and heterocyclic amines. The secondary amines were published¹, the primary amines are to be included in a patent application. We have also prepared and studied the potential metabolites of Daunomicine conjugates.



IC₅₀ curves measured in the tests of a highly active primary amine measured on lung cancer cell lines.





1.) K.J. Fodor, D. Hutai, D., Jernei, T. et al. *Molecules* **2020**, *25*, paper 1599. https://doi.org/10.3390/molecules25071599