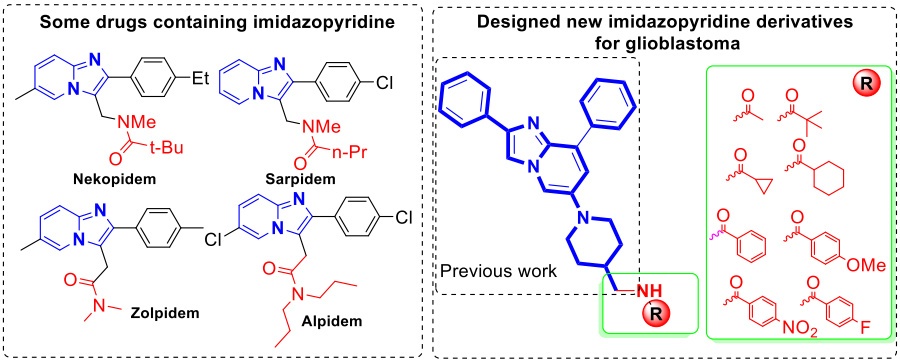
Synthesis of Imidazopyridines Containing Amide Functionality and Investigation of Their Antiproliferative Activities in the Glioblastoma Cell Line

Ömer KOÇ, Sergen GÜL, Burak KUZU, Nurettin MENGEŞ

Pharmaceutical Chemistry Section, Faculty of Pharmacy, Van Yuzuncu Yıl University, Van, Turkey

omerkoc_81@hotmail.com

Glioblastoma is a devastating malignancy that continues to prove resistant to a variety of therapeutics. For almost two decades, no new systemic therapy has been approved for use against glioblastoma. This observation is particularly troubling given the amount of money invested in identifying new treatments for this disease. Therefore, relatively faster and more economical drug repositioning for the treatment of glioblastoma has recently gained importance.[1] Heterobicyclic systems continue to be very interesting structures in medicinal chemistry in the development of new drugs. Among them, the imidazopyridine skeleton is the main structure of the active substance in many drug classes such as sedative, antipsychotic, anti-inflammatory, cardiovascular, and anti-neoplastic.[2] Especially in commercial drugs such as nekopidem, sarpidem, zolpidem, and alpidem amide group substituted imidazopyridine structures are remarkable.



In addition, it was determined that imidazopyridine derivatives developed by our research group in previous studies have antiproliferative activity in glioblastoma cell lines.[3] In this study, we have aimed to synthesize amide derivatives of imidazopyridines which were examined on glioblastoma cell line. For this aim, acyl chlorides and free amine unit on imidazopyridine will be reacted under basic conditions. Then, newly synthesized molecules will be tested against glioblastoma cell line.

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