

July 12-13, 2018  
Paris, France

J Org Inorg Chem 2018, Volume: 4  
DOI: 10.21767/2472-1123-C2-006

# DESIGN, SYNTHESIS, ANTICANCER AND ANTIMICROBIAL ACTIVITY OF NEW CYCLOHEPTA[B]PYRIDINE AND CYCLOHEPTA[D]PYRIMIDINE SUGAR HYDRAZONES AND OXADIAZOLYL ACYCLIC C-NUCLEOSIDE ANALOGS

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**N**ew aryl substituted cyclohepta[b]pyridine and cyclohepta[d]pyrimidine derivatives were synthesized. The sugar hydrazones of both synthesized pyridine and pyrimidine were also prepared. In addition, the 1, 3, 4-oxadiazolyl acyclic C-nucleoside analogs of the pyridine system were synthesized. The anticancer and antimicrobial activities of some of the prepared compounds were studied. Two compounds showed high activity against MCF-7, HEPG-2, and HCT-116 cell lines. The predicted binding patterns of the three of the prepared compounds as possible antagonists against ER $\alpha$  were investigated.

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