SYNTHESIS OF DI(HETERO)ARYLAMINES AND ETHERS IN THE THIENO[3,2-b]PYRIDINE SERIES BY METAL-CATALYZED COUPLINGS

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Thienopyridine derivatives including di(hetero)arylamine and ethers have attracted much attention because of their potential biological activities namely as antitumoral and anti-angiogenic agents.[1-3]

Here we present the synthesis of several di(hetero)arylamines by Pd catalyzed Buchwald-Hartwig C-N coupling using BINAP as the ligand and of several di(hetero)arylethers by Cu catalyzed C-O coupling using a N,N-dimethylglycine as the ligand, in good yields, from the 7-bromothieno[3,2-b]pyridine also prepared by us from the commercial thieno[3,2-b]pyridin-7-ol and POBr₃ and methoxy or fluoroanilines and phenols (Scheme).

The compounds obtained will be studied in human tumor cell lines to evaluate their inhibitory growth effect.

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