DESIGN, SYNTHESIS AND BIOLOGICAL ACTIVITY OF *N*- SUBSTITUTED INDOLES AND BENZIMIDAZOLES AS POTENTIAL HYPNOTIC DRUGS

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Among the known non-benzodiazepine hypnotic drugs, Zolpidem, Zaleplon and Indiplon have shown high affinity and selectivity on the α1 subunit of the GABA-A receptor [1-2]. Our group has performed pharmacophoric studies and ADMET-prediction to evaluate a virtual library of new molecules based on privileged structures [3]. Among these, we have synthesized a library of *N*-substituted indoles and a library of *N*-substituted benzimidazoles. Afterwards, in vitro screening and in vivo spontaneous motor activity in mice has revealed molecules with good in vitro affinities for the α1 receptor and potent in vivo induction of sedation.

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