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## ACCEPTED MANUSCRIPT

# Facile one-pot synthesis, antibacterial activity and *in silico* ADME prediction of 1-substituted-1*H*-1,2,3,4-tetrazoles

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#### **ABSTRACT**

Facile one-pot synthesis of 1-substituted-1*H*-1,2,3,4-tetrazoles **7(a-l)** were presented from various aromatic amines, triethyl orthoformate and sodium azide using silver oxide as reusable catalyst and screened for their *in vitro* antibacterial activity. Compounds **7c** (MIC range= 80.30-  $184.50 \,\mu\text{g/mL}$ ) and **7i** (MIC range= 94.60-  $179.40 \,\mu\text{g/mL}$ ) were shown potent antibacterial activity when compared with standard ampicillin (MIC range= 100.00-  $250.00 \,\mu\text{g/mL}$ ). *In silico* ADME parameters were predicted and suggest the potential of **7(a-l)** to develop oral drug like candidate.

Keywords: Tetrazoles; Silver oxide; Antibacterial activity; In silico studies

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