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Synthesis, Characterization and Antimicrobial Activity of Hydrazone Derivatives of 2-(2,3-dihydrobenzofuran-5yl)acetic acid

Gowrisankar Rao kaki [1,2*], B.Sreenivasulu[1], Aminul Islam[1], Dussa Nageshwar[1], Raghubabu Korupolu[2] and B.Venkateshwara Rao[2]

1. Chemical Research and Development Department, Aurobindo Pharma Ltd, Survey No: 71&72, Indrakaran Village, Sangareddy Mandal, Medak district, Hyderabad -502329, Andhra Pradesh, **INDIA**
2. Department of Engineering Chemistry, A. U. College of Engineering (A), Andhra University, Visakhapatnam – 530 003, Andhra Pradesh, **INDIA**

Email: gowrisankarkaki2014@gmail.com

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ABSTRACT

*Hydrazone derivatives are molecules containing highly reactive azomethine group (CO-NH-N=CH) and are found to possess various biological activities such as anti-inflammatory, anti-convulsant etc., The present paper describes the synthesis, characterization and antibacterial activity of novel hydrazones (**4a – 4j**) from 2-(2,3-dihydrobenzofuran-5-yl)acetohydrazide coupled with various aromatic aldehydes (a - j). The synthesized hydrazide-hydrazone derivatives **4a-4j** was characterized by ^{1}H NMR, Mass and IR spectral data. The antibacterial activity results revealed that hydrazone derivatives **4e** (4-NO_2), **4g** (4-F) and **4i** (4-OCF_3) exhibited good antibacterial activity, while the compounds **4b** (4-OMe) and **4h** (4-CF_3) displayed moderate antibacterial activity against all the tested bacterial strains.*

Keywords: Antibacterial Activity, Atovaquone, Gram-positive bacteria, Hydrazones, Synthesis.