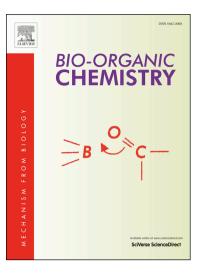
## Accepted Manuscript

Biological evaluation of New imidazole derivatives tethered with indole moiety as Potent  $\alpha$ -Glucosidase Inhibitors

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# ACCEPTED MANUSCRIPT

### Biological evaluation of New imidazole derivatives tethered with indole moiety as Potent α-Glucosidase Inhibitors

Sadia Naureen<sup>1,3\*</sup>, Faryal Chaudhry<sup>1,4</sup>, Munawar Ali Munawar<sup>1</sup>, Muhammad Ashraf<sup>2</sup>, Sujhla Hamid<sup>2</sup> and MisbahulAin Khan<sup>1,2</sup>

<sup>1</sup>Institute of Chemistry, University of the Punjab, Quaid-e-Azam Campus, Lahore, Pakistan.

<sup>2</sup>Department of Chemistry, The Islamia University of Bahawalpur, Bahawalpur – 63100, Pakistan.

<sup>3</sup>Govt Post Graduate Islamia College for Women Cooper Road Lahore, Pakistan,

<sup>4</sup>Kinnaird College for Women, Lahore, Pakistan.

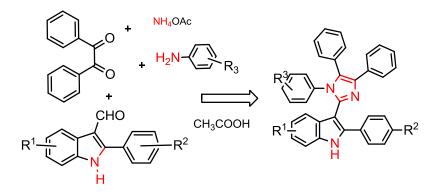
Keywords Diabetes; a-Glucosidase inhibition; Multicomponent reactions; 2-Arylindoles; NMR spectra

#### Abstract

A series of triarylimidazoles substituted with 2-arylindoles (**4a-4j**) were prepared and evaluated for their *in vitro*  $\alpha$ -Glucosidase inhibition.  $\alpha$ -Glucosidase inhibition assay displayed a new class of highly potent agents The new compounds showed significant  $\alpha$ -glucosidase inhibitory activity as compared to the standard inhibitor acrabose. Structures of synthesized compounds were determined by using Mass spectrometry FT-IR,<sup>1</sup>H NMR and <sup>13</sup>C NMR.

#### **Graphical Abstract:**

α-Glucosidase inhibition by triarylimidazoles substituted with 2-arylindoles



 $R^1 = H, Cl, F$ 

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