

## Synthesis, biological, and antioxidant activities of Schiff base derivatives

Raed Jasim Mohammed\* and Hanan M. Ali

Department of Chemistry, College of Education for Pure Sciences, University of Basrah, Basrah, Iraq

**ABSTRACT** The condensation of 2-methylbenzaldehyde, 2-chlorobenzaldehyde and 2,4-dichlorobenzaldehyde with 2-amino-6-methoxybenzothiazole and 5-amino-2,3-dihydro-1,4-phthalazinedione led to the formation of corresponding Schiff bases (compound 1 [(*E*)-*N*-(6-methoxybenzo[*d*]thiazole-2-yl)-1-(*o*-tolyl)methanimine], compound 2 [(*E*)-1-(2-chlorophenyl)-*N*-(6-methoxybenzo[*d*]thiazole-yl)methanimine], and compound 3 [(*E*)-5-((2,4-dichlorobenzylidene)amino)-2,3-dihydrophthalazine-1,4-dione]). These compounds were evaluated for their biological activities, including anticancer, antibacterial, and antifungal, and as antioxidant. All the compounds showed a good result for perspective studies.

**KEYWORDS** Schiff base, Breast cancer, 2-Amino-6-methoxybenzothiazole, 5-Amino-2,3-dihydro-1,4-phthalazinedione.

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