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## Aryl sulphonamide based indoloquinazolinones as potential anticancer agent: Rational drug design studies

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In pursuit for better anticancer drug, and the significance of indoles and quinazolines as anticancer pharmacophore prompted us to perform the synthesis of some novel quinazolines for their anticancer activity. A series of novel Indolo[2,1-b]-quinazolinone derivatives fused with aryl sulphonamide nucleus were synthesized for their anticancer activity. The chemical structures of the compounds were elucidated by spectral (IR, <sup>1</sup>H-NMR and MS) analyses. The anticancer activities of the compounds were investigated using MCF-7 (Breast) and A-549 (Lung) cell lines. The observed results were promising. The efforts were also made to accomplish structure-activity relationships among synthesized compounds. A novel series of indoloquinazolinone possessing benzene sulphonamides were synthesized for their potential anticancer activity. These results indicate that these compounds may constitute a new class of anticancer agents.

### Biography

Rajak H is a Senior Assistant Professor of Pharmaceutical Medicinal Chemistry at SLT Institute of Pharmaceutical Sciences, Guru Ghasidas University, Bilaspur (CG) India. In 2008, he received the Doctorate in Pharmaceutical Sciences from Dr. H S Gour University, Sagar (MP) India. His current research interest resides in synthesis and biological evaluation of small heterocyclic molecules for their anticancer activity. He has published 54 peer-reviewed articles in international scientific journals. He is dealing with several research projects funded by Government of India UGC, DST and AICTE.

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