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**Aryl sulphonamide based indolo-quinazolinones as potential anticancer agent: Rational drug design studies****Rajak H<sup>1</sup>, Parmar P<sup>1</sup>, Singh A<sup>1</sup>, Raghuvanshi K<sup>1</sup> and Veerasamy R<sup>2</sup>**<sup>1</sup>Guru Ghasidas University, India<sup>2</sup>AIMST University, Malaysia

The pursuit of better anticancer drugs 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) analysis. The anticancer activities of the compounds were investigated using MCF-7 (Breast) and A-549 (Lung) cell lines. The promising results were observed and efforts were also made to accomplish structure-activity relationships among synthesized compounds. A novel series of indolo-quinazoline possessing benzene sulphonamides were synthesized for their potential anticancer activity. These results indicate that these compounds may constitute a new class of anticancer agents.

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