



**Molecular Modeling Studies on Series of A-Aminoacid Functionalized
4-Quinazoline Derivatives Based on Cytotoxic Activity Data
Against U 937 Cell Lines**

**P. Mani Chandrika^{1*}, T. Yakaiah², B. Narsaiah², S. Gururaj³, T. Parthasarathy³
and A. Raghu Ram Rao⁴**

1. Medicinal Chemistry Division, Bojjam Narasimhulu Pharmacy College for Women, Saidabad, Hyderabad, **INDIA**
2. Fluoroorganic Division, Indian Institute Chemical of Technology, Tarnaka, Hyderabad, **INDIA**
3. Department of Chemistry, Nizam College, Hyderabad, **INDIA**
4. University College of Pharmaceutical Sciences, Kakatiya University, Warangal, **INDIA**

Email: principalbnpcw@gmail.com

Accepted on 9th May 2015

ABSTRACT

*In continuation of our efforts on synthesis and in vitro anticancer activity evaluation against U937 cell lines of series of 2-phenyl-6-substituted quinazolin-4-yl amino acetic acid derivatives **6a-6o**, the data was compared with structure-based investigations using Docking studies with the crystal structure of caspase-1 protein (1BMQ). The binding energies estimated by scoring functions were found to have a good correlation with the experimental inhibitory potencies.*

Keywords: Cytotoxic activity; amino acids; quinazolines; cell lines; modeling studies.
