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Abstract

Prospective Alangium salvifolium phytocompounds lead Discovery in Therapeutic Innovations for Tyrosine Kinase Inhibitors in Cancer; a computational approaches

Mohammad Nadeem Khan,
Sos in Biotechnology, Bastar University, India

Abstract:

In the ancient time, natural product extracts, particularly those derived from botanical species, provided the main source of folk medicines. Alangium salvifolium has been used by traditional healers in the treatment of skin cancers by means of local application of the root. In recent years ethno medicinal studies received much attention on natural resources to light the numerous medicines, which needs evaluation on modern scientific lines. Despite the enormous amount of research and rapid developments during the past decades, cancer continues to be a worldwide killer, and is the second most common cause of death after heart disease. Tyrosine kinase are important mediators of the signaling cascade, determining key roles in diverse biological processes like growth, differentiation, metabolism and apoptosis in response to external and internal stimuli. Recent advances have implicated the role of tyrosine kinase in the path physiology of cancer. In this study we development the computational (in silico) approaches were performed to explain the possible interactions between the inhibitors of tyrosine kinase receptor docking score and its binding pockets. Docking study exhibited that A1 compound showed the best glide docking score -9.1 kcal/mol and the RMSD lower 57.39%, upper and 54.39% lower value. Four of the tested compounds proved to be good inhibitors of tyrosine kinase receptor , but only compound A1 compound showed the best glide docking score -9.1 kcal/mol and the RMSD lower 57.39% ,upper and 54.39% lower value. Investigated compounds inhibit tyrosine kinase restricted to cancers with alterations in kinase targets, hence broad application of this treatment strategy are excellent applicative in near future.

Biography:

Mohammad Nadeem Khan has expertise in evaluation and passion in improving the health and wellbeing. His open and contextual evaluation model based on responsive constructivists creates new drug lead for improving health care especially chronic diseases. He has built this model after years of experience in research, evaluation, teaching and administration both in medical college and university. The foundation is based on computational approaches which is a methodology that utilizes the binding evaluation: measurement, description and elucidation of receptor and enzyme inhibition. It allows for value-pluralism. This approach is responsive rate high to screen novel drug discovery.

Recent Publications:

1. Mohammad Nadeem Khan, et al Int.J.Curr.Res.Aca. Rev, 2017.
2. Mohammad Nadeem Khan, et al Asian Journal of Medicine and Health, 2018.
3. Mohammad Nadeem Khan, et al International Journal of Research and Reports in Hematology, 2018.
4. Mohammad Nadeem Khan, et al Frontiers in Medicinal Chemistry and Drug Discovery, 2018.
5. Mohammad Nadeem Khan, et al Asian Journal of Research in Medical and Pharmaceutical Sciences, 2018.

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