363. PHARMACEUTICAL APPROACHES OF 1,3,4-OXADIAZOLE DERIVATIVES

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Introduction: 1,3,4-oxadiazole is a heterocyclic compound containing an oxygen atom and two nitrogen atoms in a five-membered ring. Derivatives of this structure are the key compunds with various and important biological activities which can be used in drug design. The objective of this study is to make an overview of pharmaceutical approaches and broad spectrum of pharmacological activities of 1,3,4-oxadiazole derivatives as reported over the past ten years.

Material and methods: This review is based on published studies in english providing relevant information on 1,3,4-oxadiazoles were identified by searching PubMed, Google Scholar, Embase and Springer, restricting the studies with biological information and the year of publishing from 2006 to february 2016.

Discussion results: Some of recent studies have shown that 1,3,4-oxadiazoles and its derivatives were reported to possess an excellent antimicrobial, antifungal, anti-inflammatory, analgesic, antioxidant activity. This research provide information about chemical properties, constants, assays and methods used for qualitative and quantitative analysis of 1,3,4-oxadiazoles and its derivatives. Also, we highlight pharmacophore groups which lead to specific pharmacological activities. The antimicrobial activity is the most reported biological effect. According to the F. Macaev's research, the new synthetized series of 5-aryl-2-thio-1,3,4-oxadiazole compunds appeared to be most active derivates presenting more than 90% of mycobacterial growth at 12,5 μg/ml.

Conclusion: This paperwork provides fundamental chemical and pharmacological information about 1,3,4-oxadiazole derivatives it proves to be significant for further research work on the bioactive oxadiazole ring containing compunds.

Key words: 1,3,4-oxadiazole, antimycobacterial, pharmacophore, assay, drug design.

364. THE INFLUENCE OF HYPERBARIC OXYGEN ON ATTRACTION TO ALCOHOL

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Introduction: Despite of the joint efforts of scientists worldwide during many years, the alcoholism continues to be a major medical and social problem. The effective method of treatment remains to be developed.