administration is prohibited by pharmacists does not mean that they are less important in the vaccination process. Key words: pharmacist, vaccination, adverse events, opinion, population.

343. EXPERIMENTAL DETERMINATION OF THE LOGP USING THE SPECTROPHOTOMETRIC METHOD

Natalia Savin, Oxana Vislouh, Andrei Uncu

Scientific adviser: Uncu Livia, PhD, Associate Professor, *Nicolae Testemitanu* State University of Medicine and Pharmacy, Chisinau, Republic of Moldova

Introduction: In order to estimate the bioavailability of drugs and their formulations together with the water solubility parameter, it is important to know the ability of a substance to pass through the cell membranes (lipid bilayer). For an approximate estimate of this capacity, it is used the term "lipophilicity", which represents the correlation between the dissolving of substance in water and n-octanol, considered to be a solvent with a polarity close to the phospholipid structure of the cell membrane [1,2]. The purpose of this study was to determine experimentally the lipophilicity of a molecule of a new compound, derivative of oxathiodiazole with antimycobacterial properties, using the spectrophotometric method.

Materials and methods: Spectrophotometer UV-VIS Agilent 8453, n-octanol, purified water, laboratory chemical dishes in accordance with requirements of Ph. Eur.

Results and discussion: It was prepared the solution of the analyte in n-octanol with an estimated concentration so that the absorbance of the solution to be in the range 1,5-1,8. The solution was analyzed at the wavelength between 220-400 nm, fixing the analytical maximum at 300 nm. It was recorded the absorbance of octane solution: 0,99915. Subsequently, it was recorded the absorbance of the solution after adding an equal amount of water and stirring at the ultrasonic bath (1,01500). It was calculated the lipophilicity, which was expressed by the value logP, working at a pH of the aqueous phase in which the substance has the unionized state (1,799).

Conclusion: The analyzed compound has an acceptable lipophilic level according to Lipinski's rules (less than 5), this value being confirmed by theoretical calculations and also by determinations of Thin-Layer Chromatography (TLC) method.

Keywords: lipophilicity, spectrophotometry, oxathiodiazole.