Short communication Received: March 14, 2010 Revised version: April 21, 2010 Accepted: April 30, 2010

In Vitro Cytotoxicity and Antibacterial Activities of Cephalosporin Tin(II) Complexes

Juan R. ANACONA* & Liangel BRITO

Universidad de Oriente, Departamento de Quimica, Apartado Postal 208, Cumaná, Venezuela

SUMMARY. Cytotoxicity and antibacterial activities of three novel tin(II) complexes containing cephalosporins: [Sn(cephalothin)Cl], $[Sn(cephradine)Cl].H_2O$ and $[Sn(cefotaxime)Cl].H_2O$ were investigated against $Artemia\ salina$ (brine shrimp) and four bacterial strains. The results were compared with the activity of free cephalosporins. The coordination of cephalothin and cephradine to tin(II) ion showed an enhancement of the antibacterial activity.

KEY WORDS: Antibacterial activity, Cytotoxicity, Metalloantibiotics, Tin complexes.

172 ISSN 0326-2383

^{*} Author to whom correspondence should be addressed. E-mail: juananacona@hotmail.com