

Poster: Epoxidation is Preferred Way of First-stage Metabolism of Abiraterone Acetate in Brown Bullhead (*Ameiurus Nebulosus*)

Samuel Mach^{*1,3}, Alexandr Jegorov¹, Marek Kuzma², Jakub Zápál², Zdeněk Šimek³, Jan Čejka⁴, Václav Eigner⁴

* corresponding author: samuel.mach@tevapharm.cz, tel: +420553642640

¹ Teva Czech Industries, s.r.o., Ostravská 29, 747 70 Opava Komárov, Czech Republic

² Academy of Sciences of the Czech Republic, Inst. of Microbiology, Videňská 1083, 142 20 Prague 4

³ Masaryk University Brno, RECETOX, Kamenice 126/3, 625 00 Brno, Czech Republic

⁴ Prague Institute of Chemical Technology, Technická 5, 166 28 Prague 6

Abstract: Expected both primary (products of hydroxylation) and secondary (products of glucuronidation and sulphatation) metabolites of abiraterone acetate prodrug were identified in aquarium water containing excreted metabolites from brown bullhead (*Ameiurus nebulosus*) by means of HPLC/MS. NMR measurement of a prevailing metabolite presumed to be one of possible hydroxy-abiraterones discovered that it is not hydroxy-abiraterone but abiraterone-16,17-epoxide. Closer analysis of MS² and MS³ spectra revealed that also some secondary metabolites are probably 16,17-epoxides.