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**COX-INHIBITORS DOWN-REGULATE TCDD-INDUCED
cyp1a1 ACTIVITY IN C57BL/6 MOUSE AND Hepa- I CELLS**

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In order to understand the mechanism of action of TCDD, we have examined the effect of COX-inhibitors on cyp1a1 activity. We observed the effect of COX-inhibitor on EROD activity in C57BL/6 mouse in vivo. And we also evaluated the effect of COX-inhibitors on cyp1a1 mRNA, mouse cyp1a1 promoter activity and EROD activity in Hepa cell.

When Aspirin was pretreated with 3MC in vivo, the EROD activity that was stimulated by 3MC was inhibited. And Pretreatment of Aspirin, Celecoxib, Nimesulide and other several Cox-inhibitors in vitro, inhibited the TCDD stimulated EROD activity and Luciferase activity. In case of cyp1a1 mRNA level, Nimesulide and SB100 were able to decrease cyp1a1 mRNA that was stimulated by TCDD, but other tested COX-inhibitors were not decrease. We don't know this different result exactly.

For the action of Cox-inhibitors on the Cyp1a1, it seems to be important to do pretreatment of these chemicals as apposed to TCDD. In this study, thus, we have suggested that COX-inhibitors such as aspirin, celecoxib, Nimesulide and other several Cox-inhibitors decrease the TCDD induced Cyp1a1.

Keyword : cyp1a1, cox-inhibitor