

*Supplementary Materials*

# Enantioselectivity of Pentedrone and Methylone on Metabolic Profiling in 2D and 3D Human Hepatocyte-like Cells

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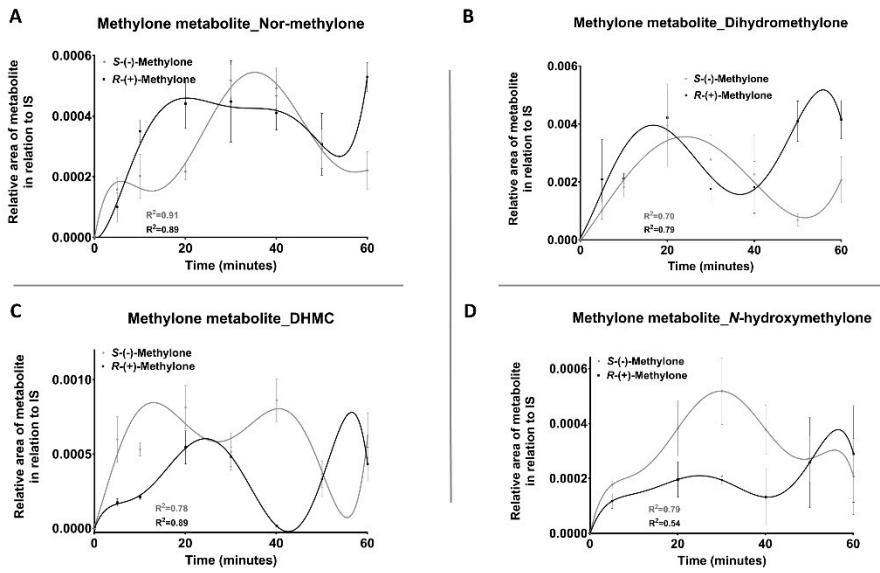
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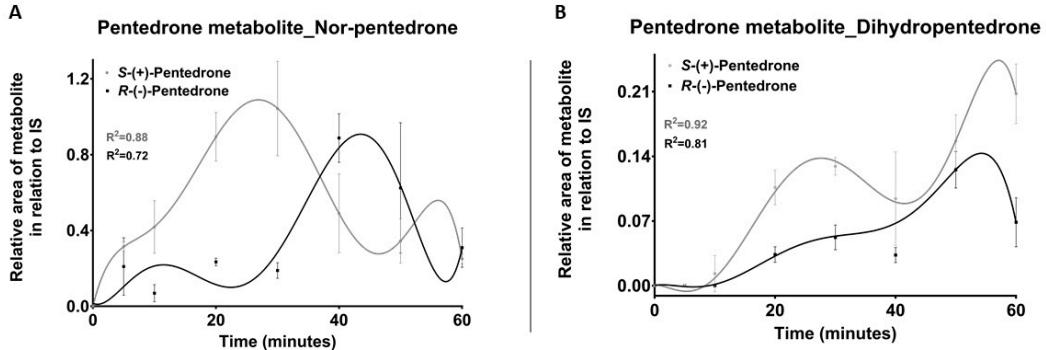
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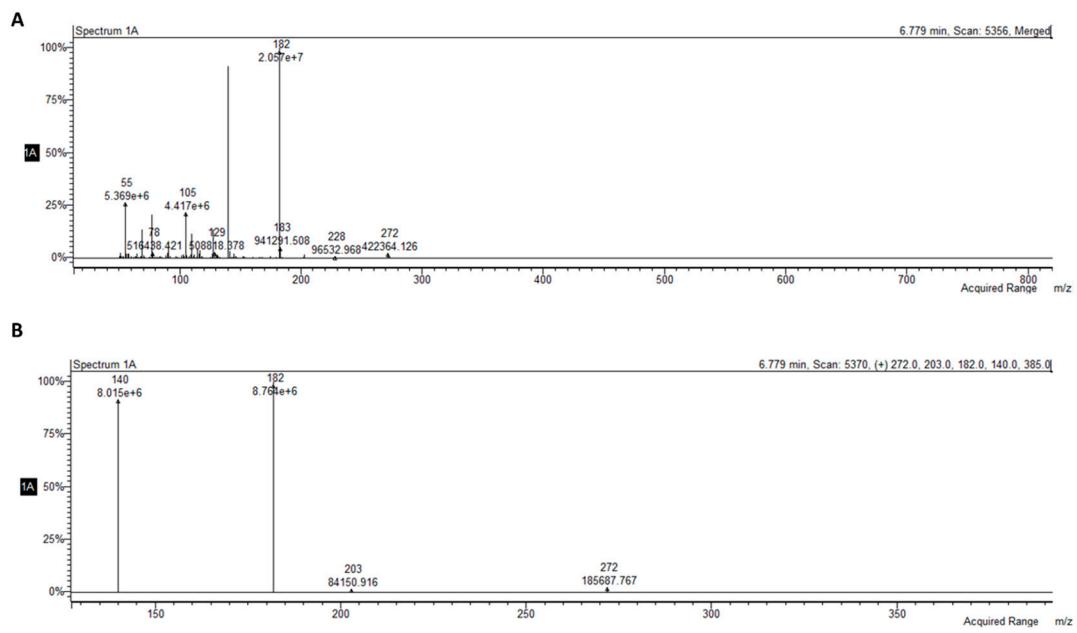
† These authors contributed equally to this work.



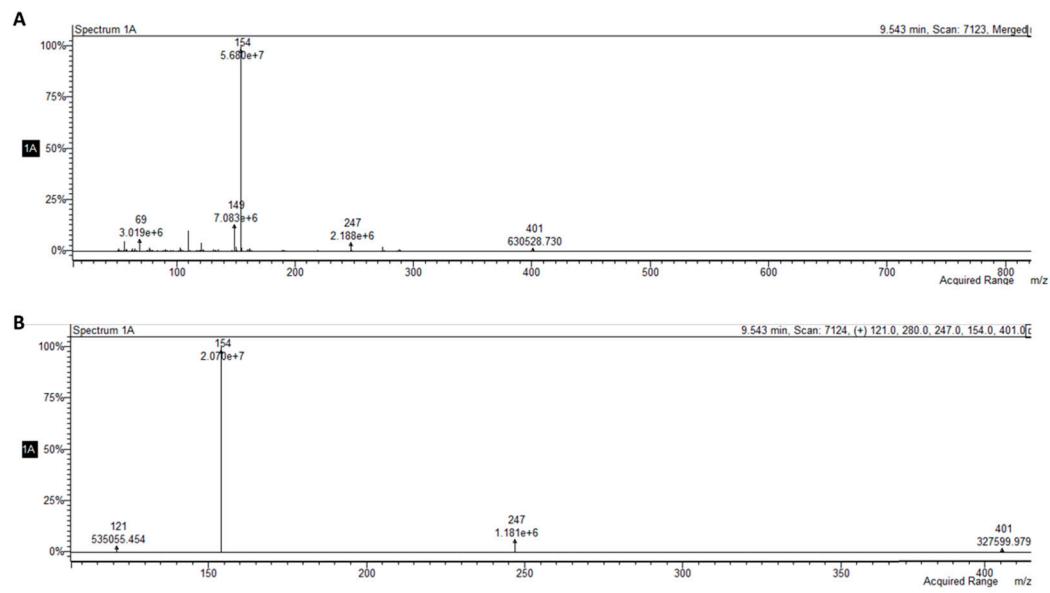
**Figure S1.** Methylone metabolites (nor-methylone, DHMC, *N*-hydroxymethylone and dihydromethylone) produced over the time after incubation with microsomes (1 mg/mL). Data is presented as average  $\pm$  SD ( $n=2$ ). Polynomial regression was used to fit the curves (Nor-methylone, DHMC and *N*-hydroxymethylone: Centered sixth order; Dihydromethylone: Centered fifth order).



**Figure S2.** Pentedrone metabolites (nor-pentedrone and dihydropentedrone) produced over the time after incubation with microsomes (1 mg/mL). Data is presented as average  $\pm$  SD ( $n=2$ ). Centered sixth order polynomial regression were used to fit the curves.

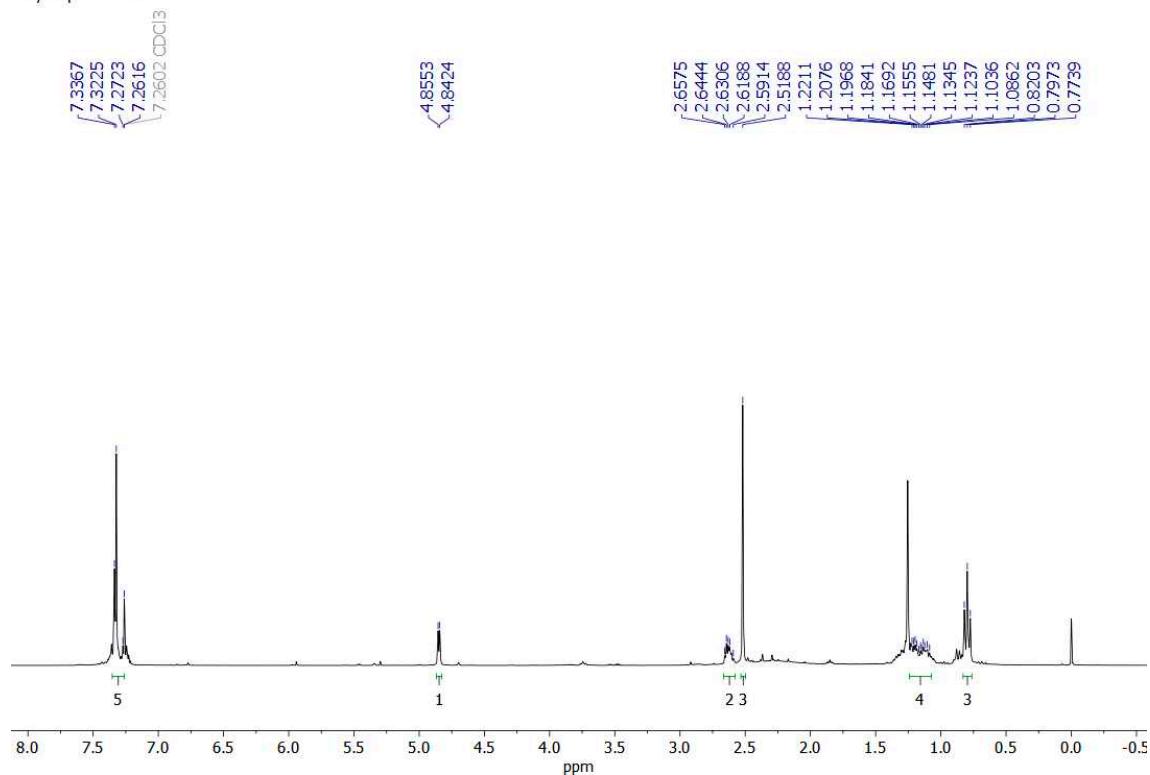


**Figure S3.** GC-MS spectrum of dihydropentedrone in (A) Full Scan and (B) SIM mode.

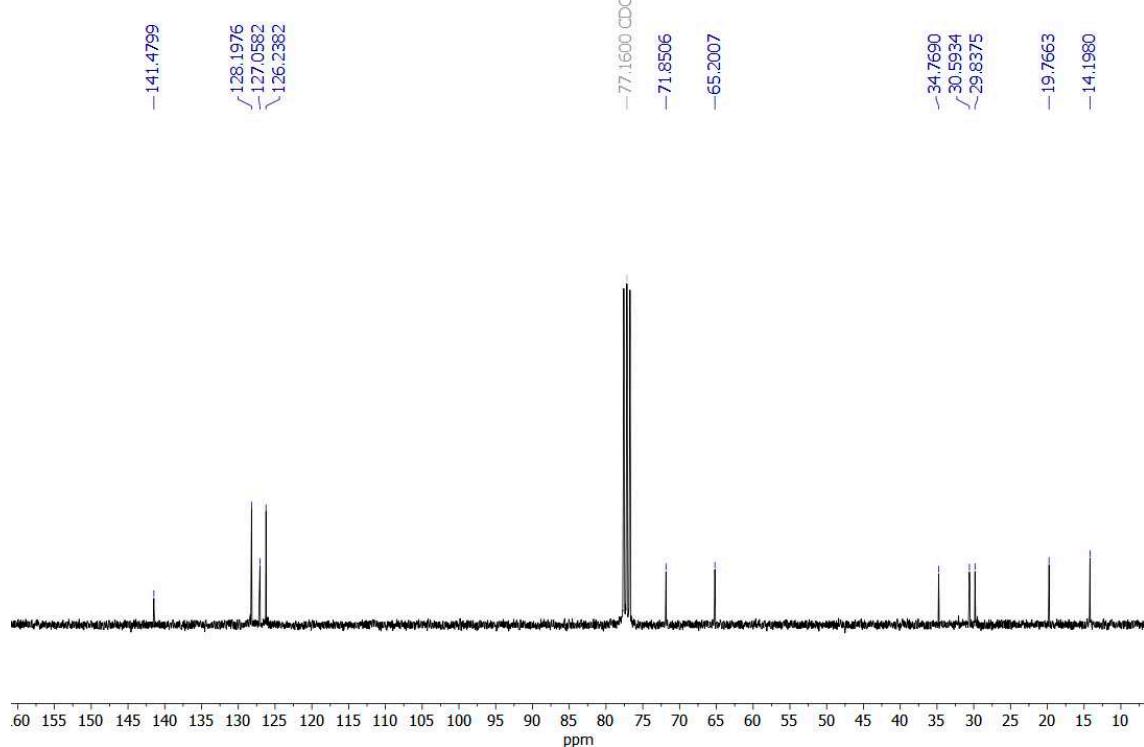


**Figure S4.** GC-MS spectrum of dihydromethylone in (A) Full Scan and (B) SIM mode.

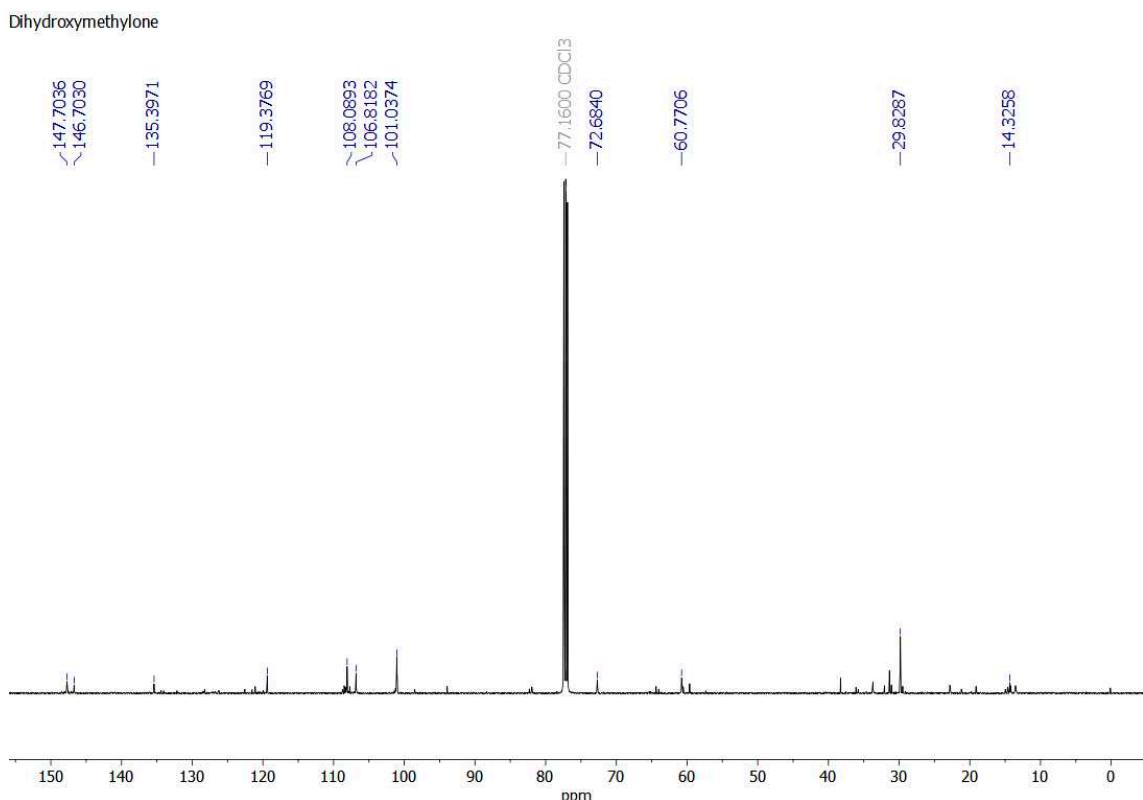
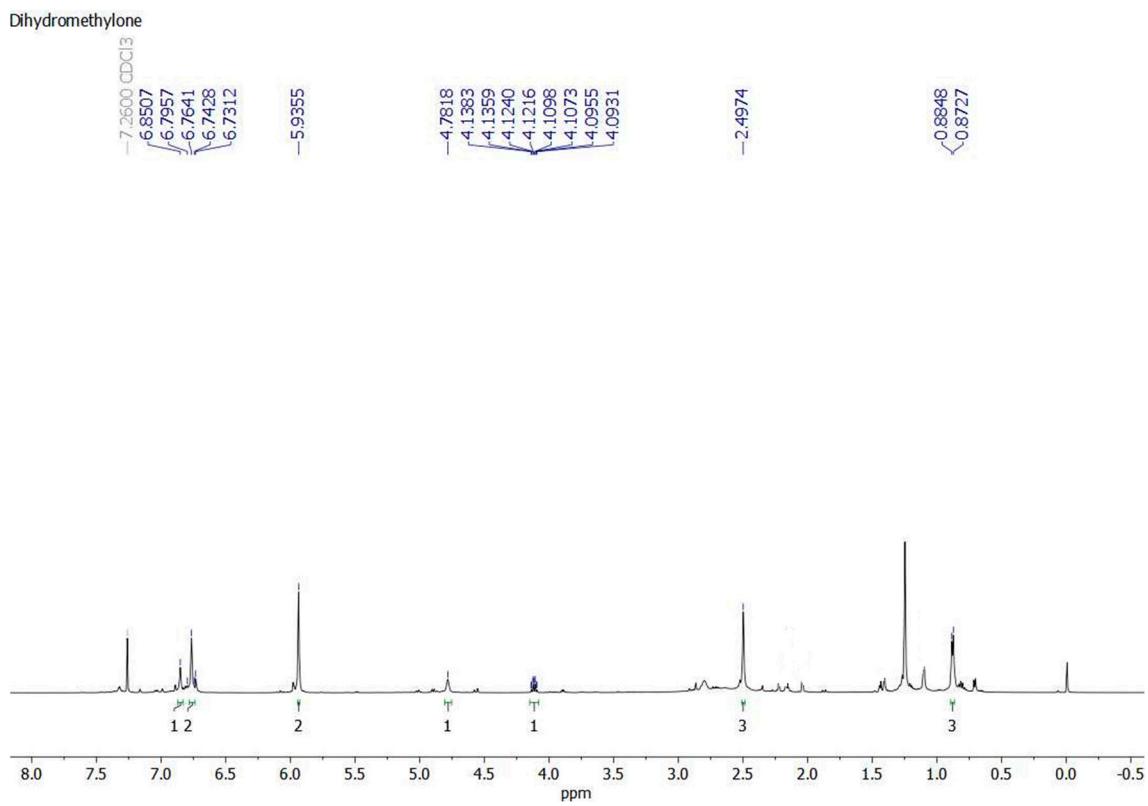
Dihydropentedrone



Dihydroxypentedrone



**Figure S5.** <sup>1</sup>H NMR (300.13 MHz, CDCl<sub>3</sub>) and <sup>13</sup>C NMR (75.48 MHz, DMSO-d<sub>6</sub>) for dihydromethylone.



**Figure S6.**  $^1\text{H}$  NMR (300.13 MHz,  $\text{CDCl}_3$ ) and  $^{13}\text{C}$  NMR (75.48 MHz,  $\text{DMSO}-d_6$ ) for dihydropentedrone.