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**In vitro metabolic fate of nine LSD-based new psychoactive substances and their analytical detectability in different urinary screening procedures**

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#### **Article**

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**Analytical and Bioanalytical Chemistry**

**Electronic Supplementary Material**

**In vitro metabolic fate of nine LSD-based new psychoactive substances and their analytical detectability in different urinary screening procedures**

Lea Wagmann, Lilian H. J. Richter, Tobias Kehl, Franziska Wack, Madeleine Pettersson Bergstrand, Simon D. Brandt, Alexander Stratford, Hans H. Maurer, and Markus R. Meyer

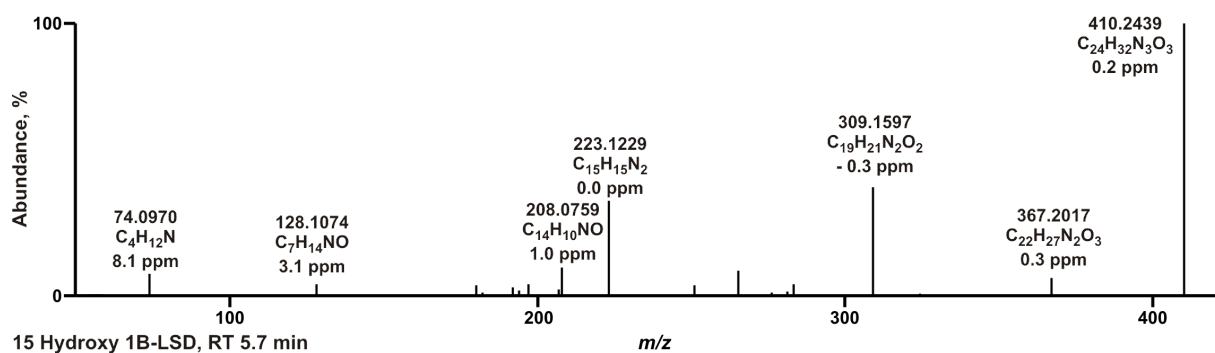
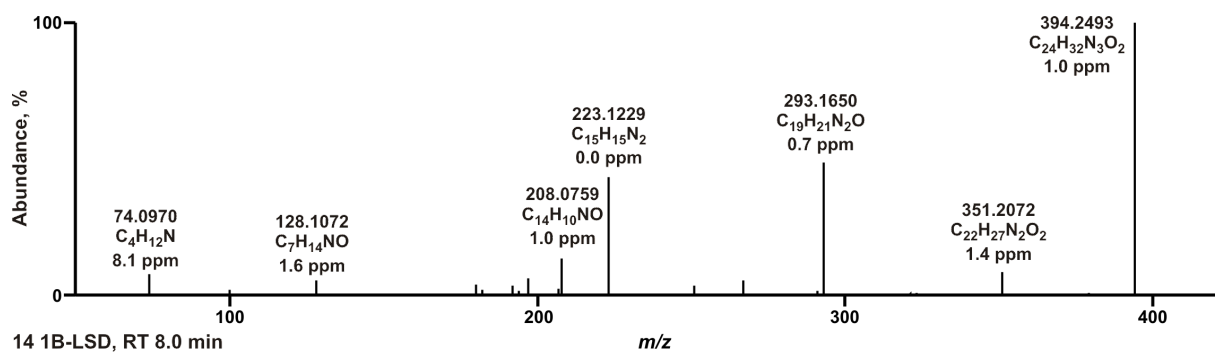
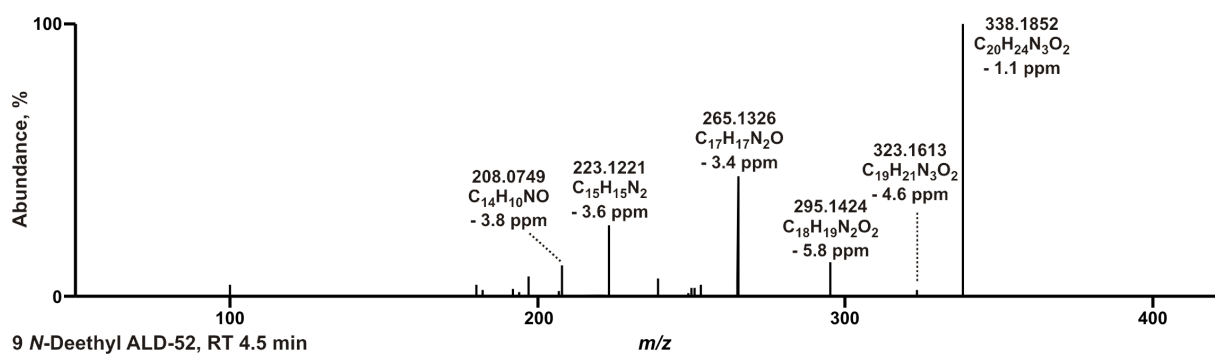
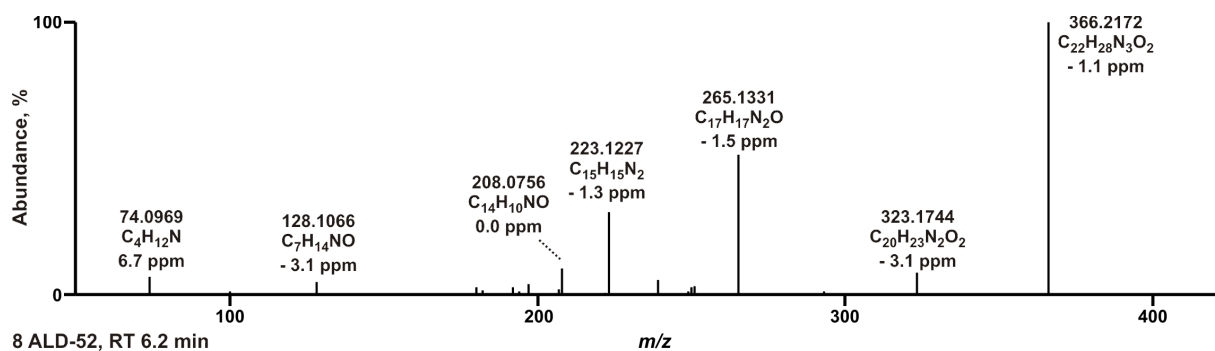


Fig. S1: HRMS/MS spectra of LSD-based new psychoactive substances and their most abundant, unique metabolites along with their retention times (RT). Numbering according to Table 1 in the manuscript.

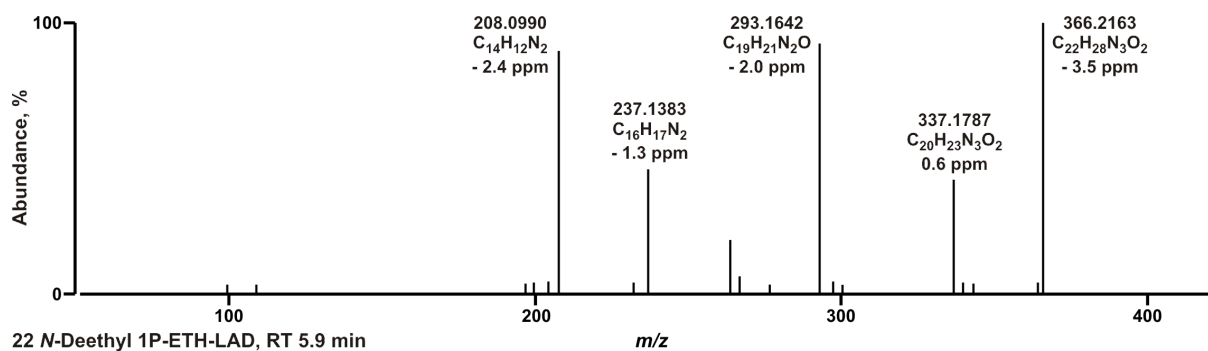
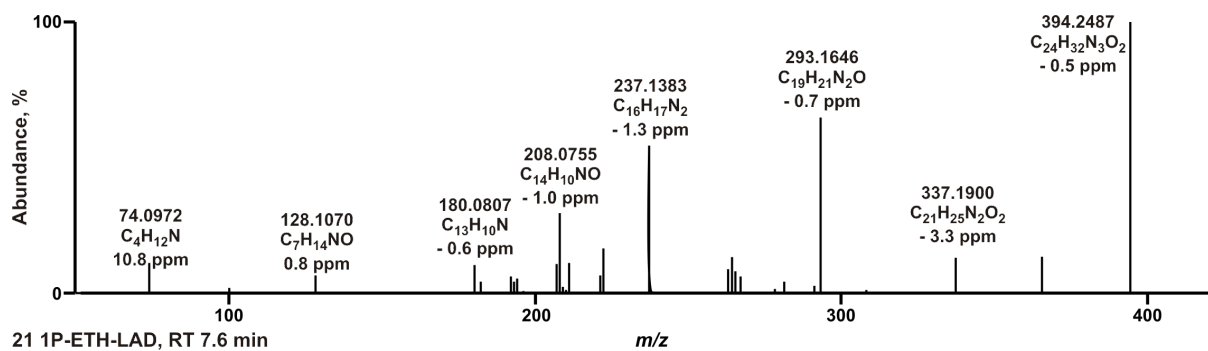
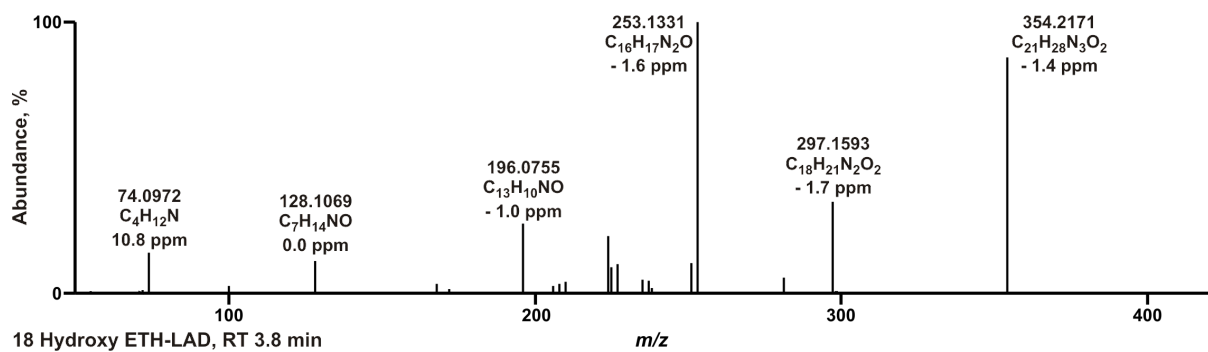
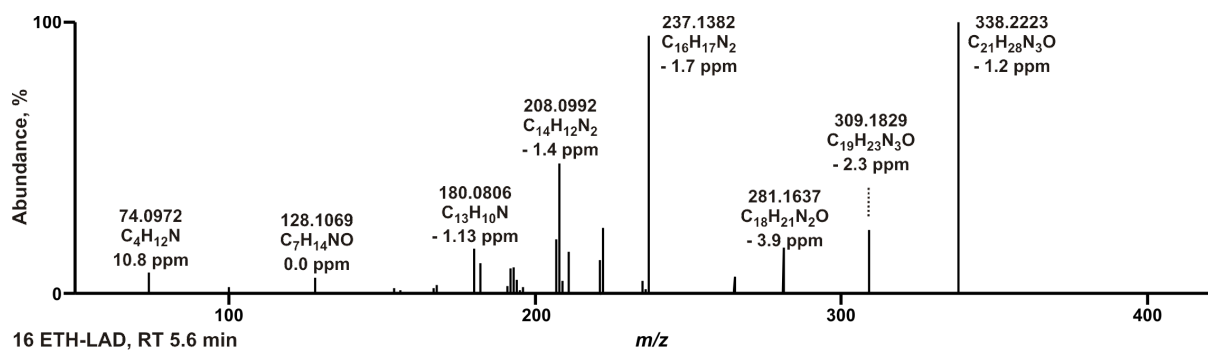


Fig. S1 (continued)

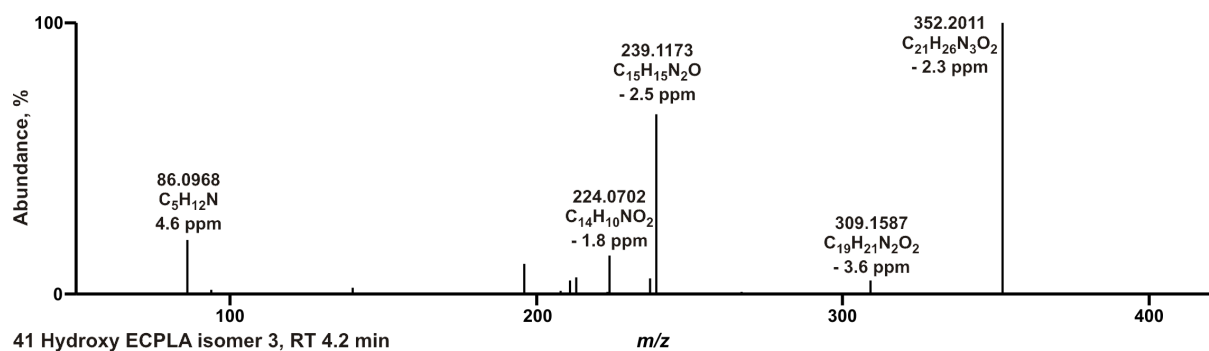
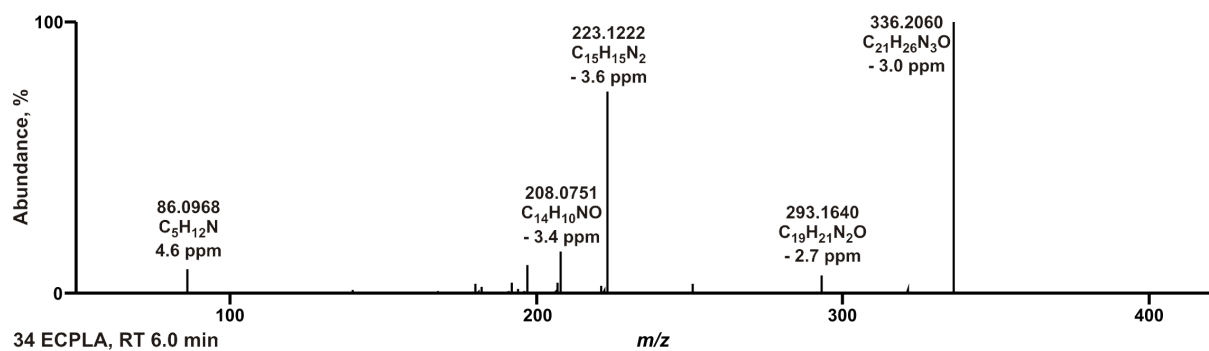
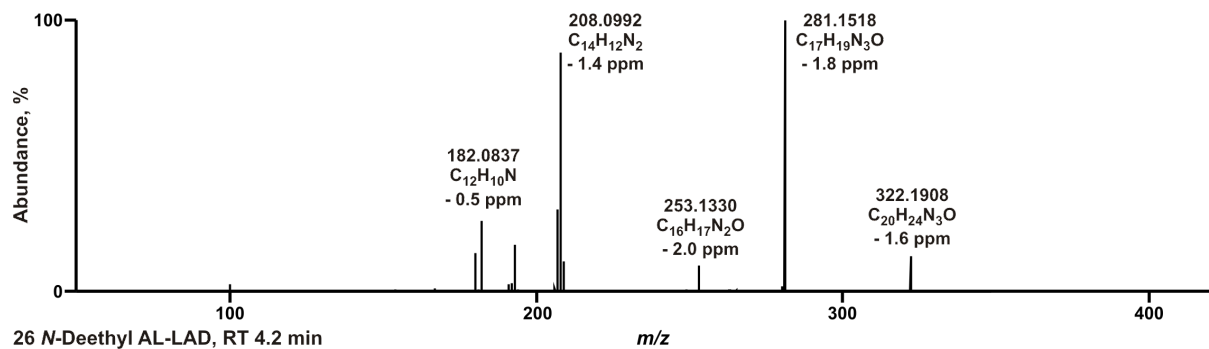
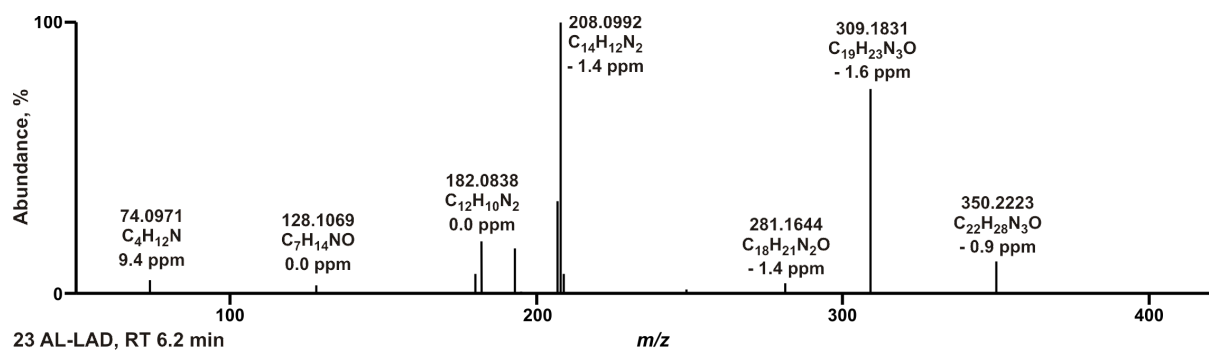


Fig. S1 (continued)

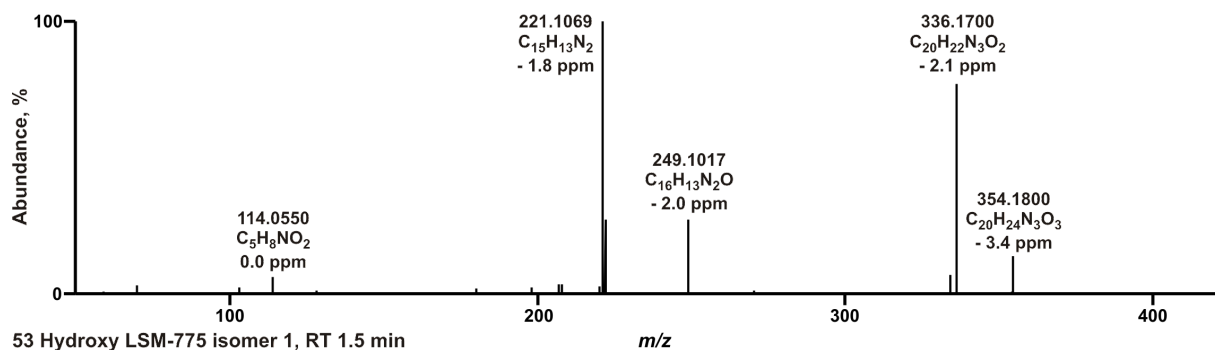
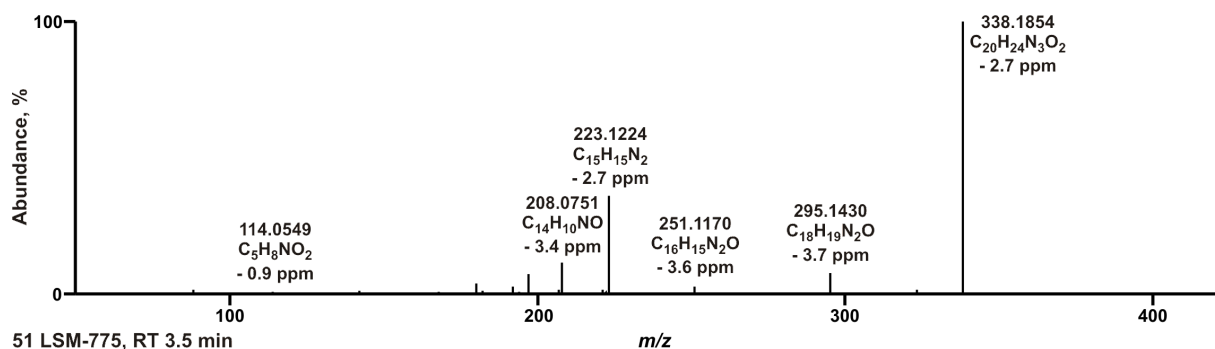
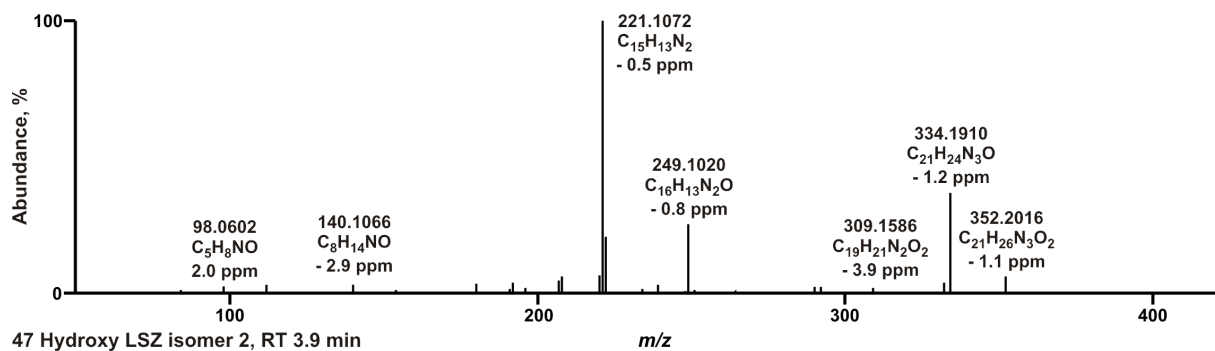
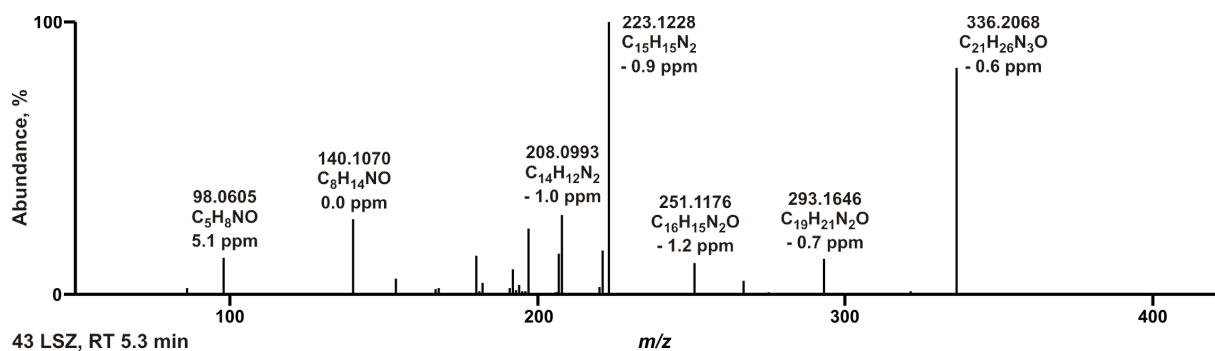


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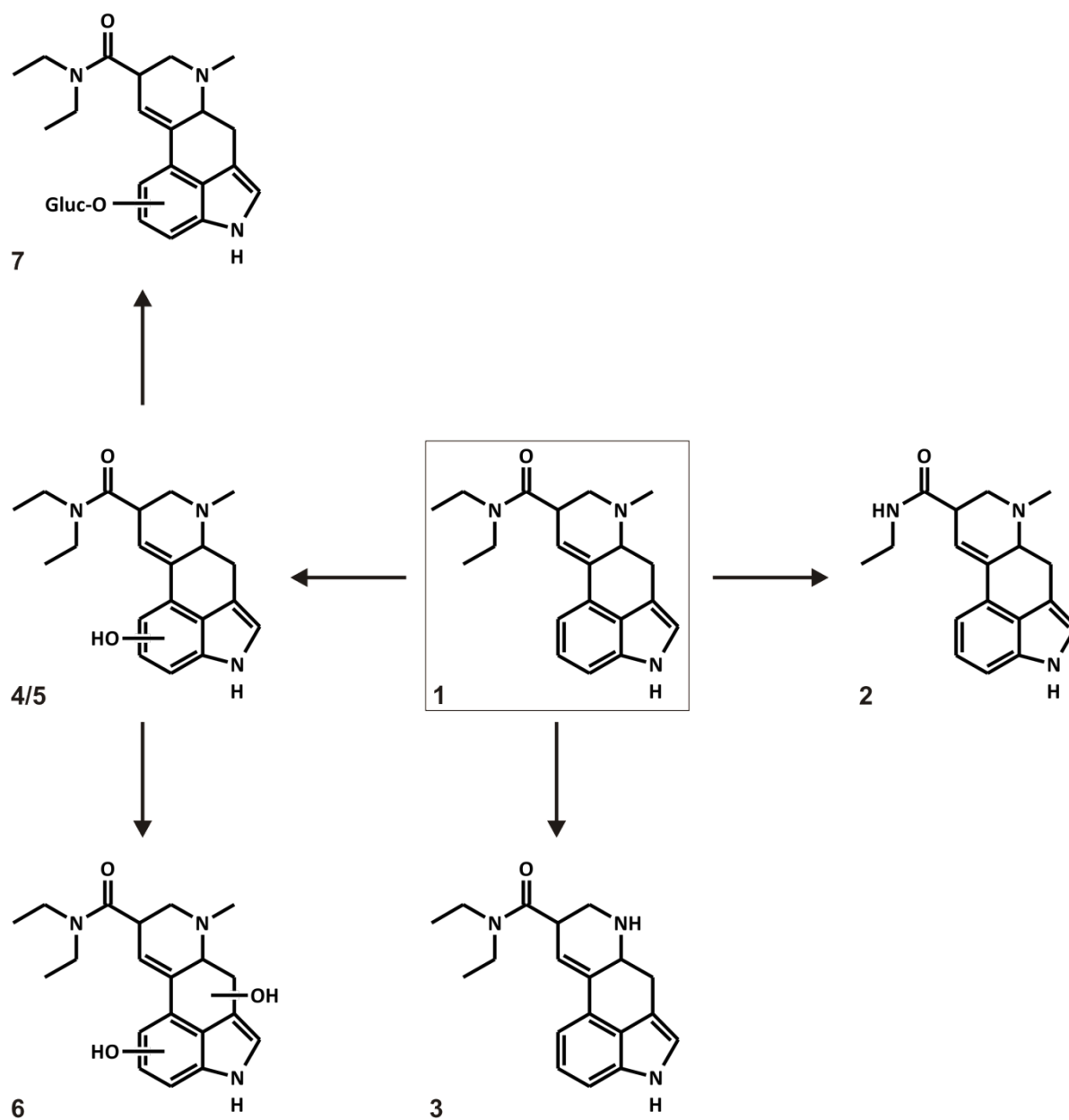


Fig. S2: Metabolic pathways of LSD studied in incubations with pooled human liver S9 fraction. Numbering according to Table 1 in the manuscript.

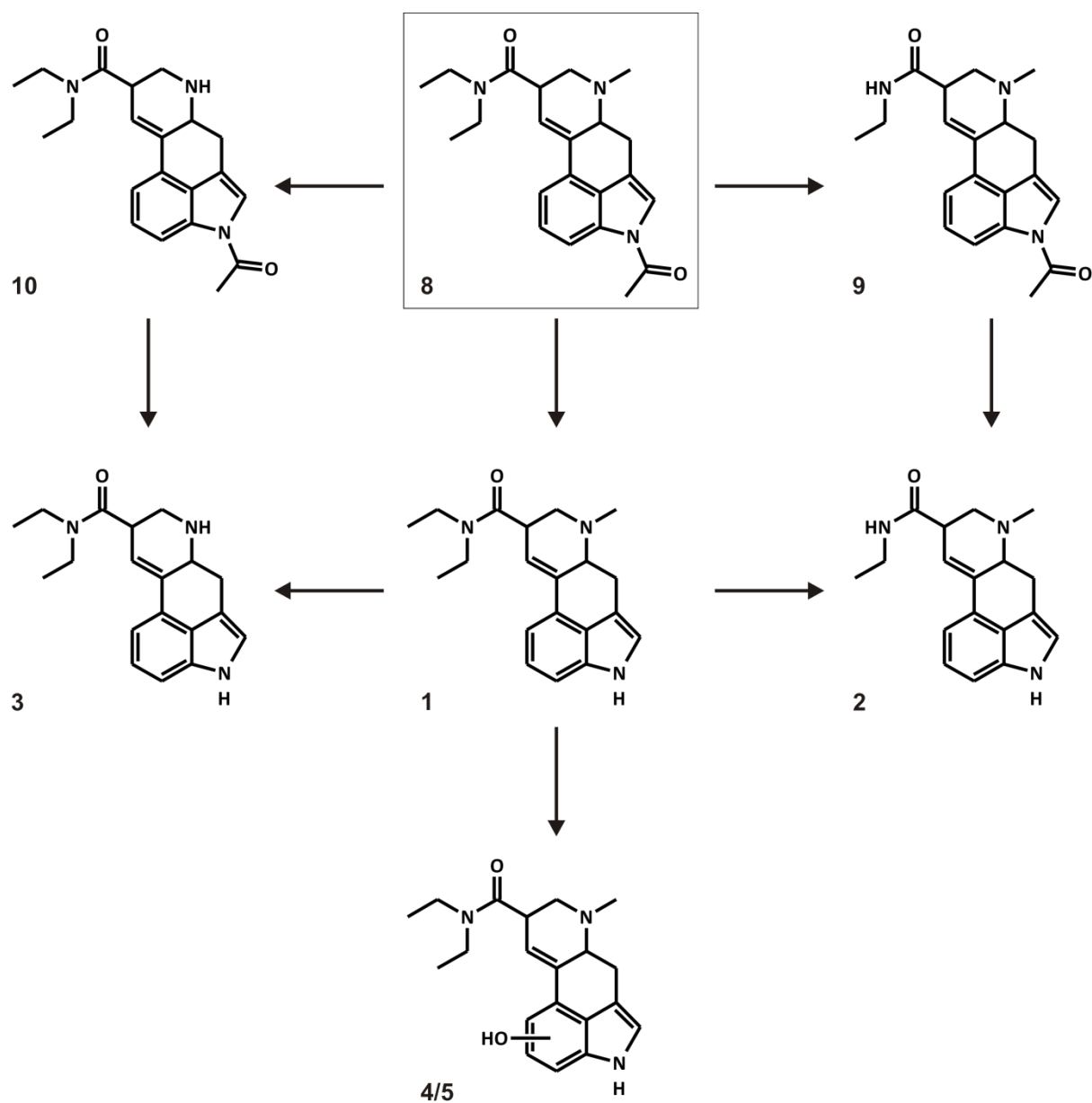


Fig. S3: Metabolic pathways of ALD-52 studied in incubations with pooled human liver S9 fraction. Numbering according to Table 1 in the manuscript.



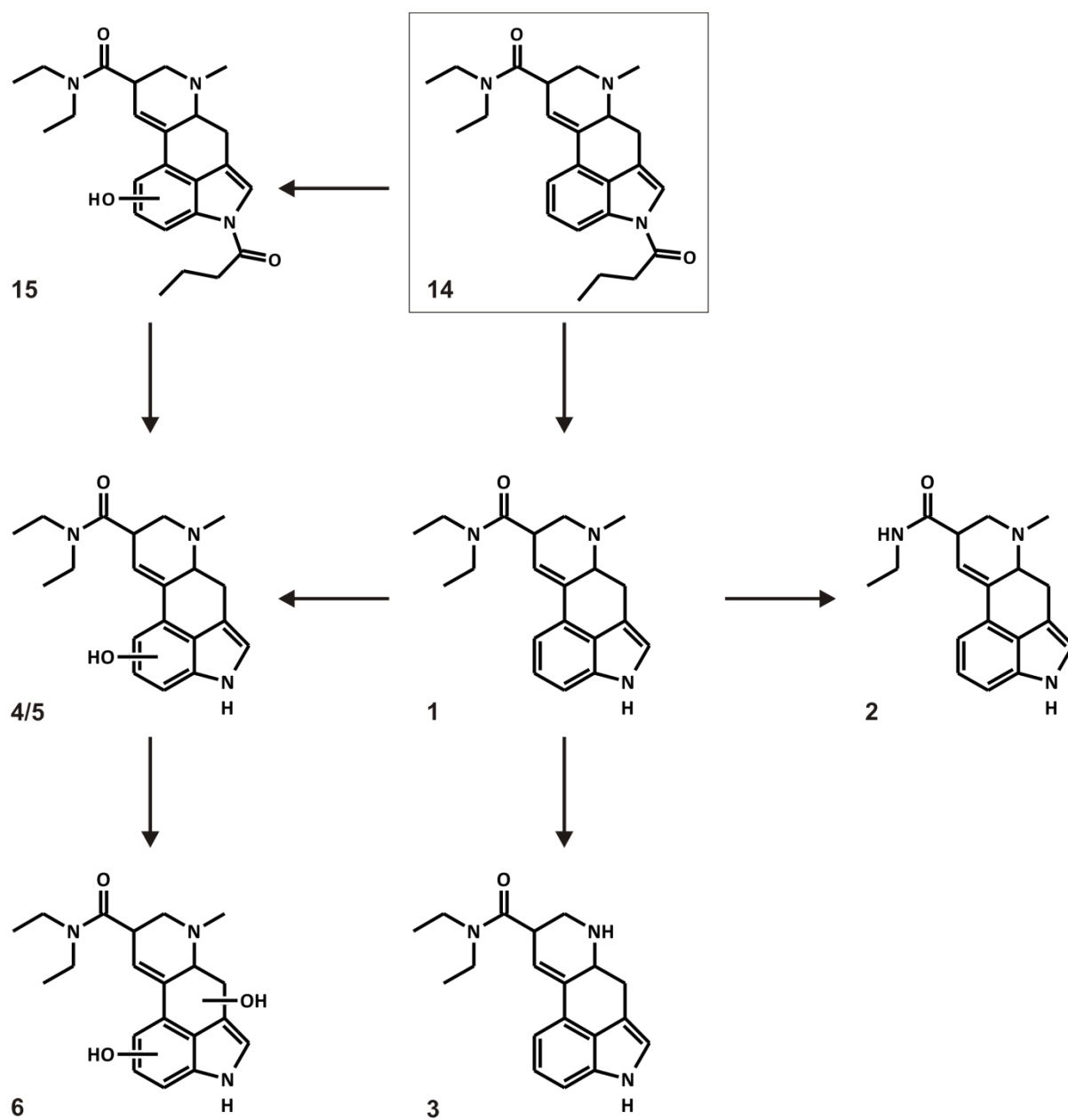


Fig. S4: Metabolic pathways of 1B-LSD studied in incubations with pooled human liver S9 fraction. Numbering according to Table 1 in the manuscript.

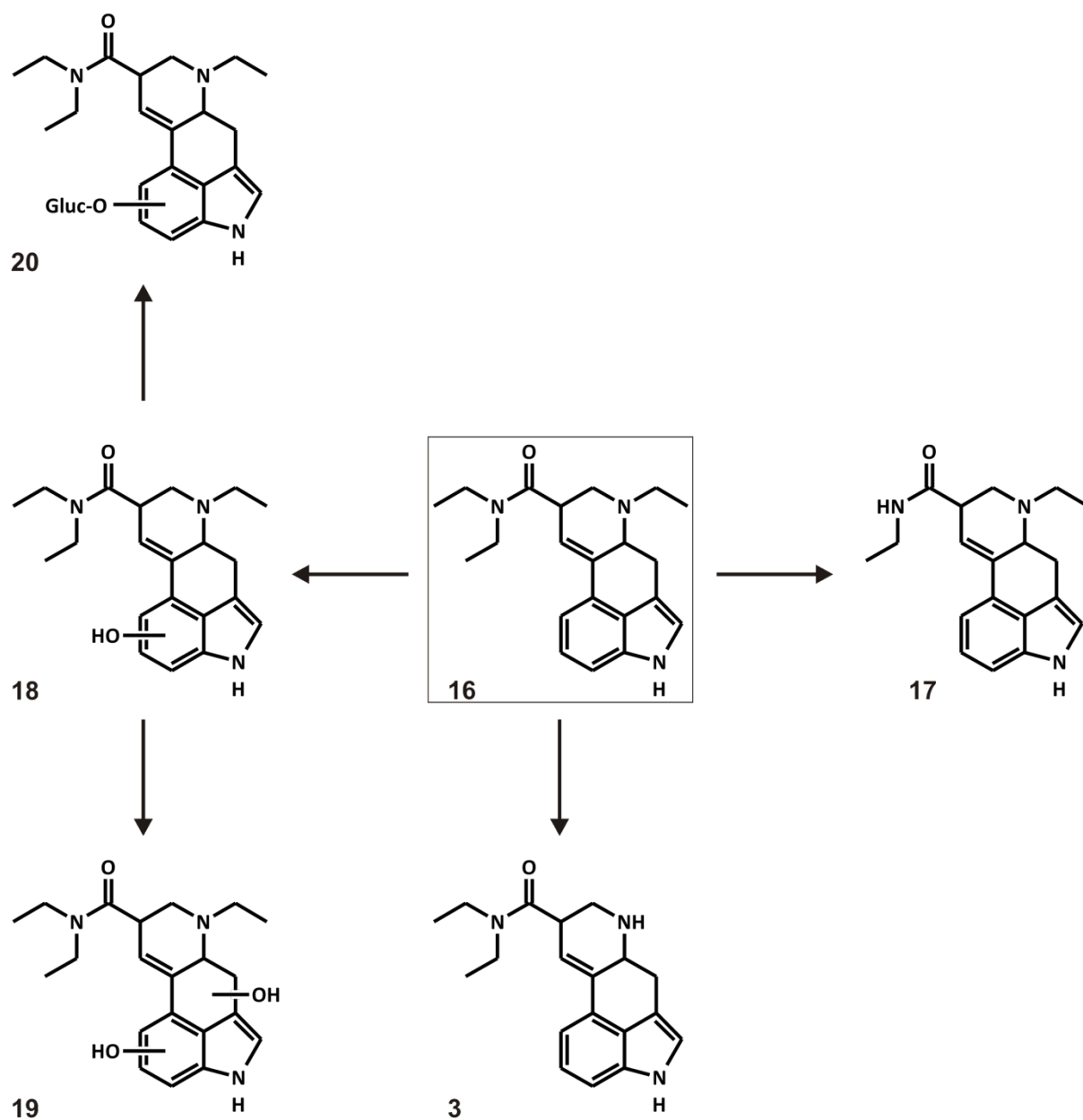


Fig. S5: Metabolic pathways of ETH-LAD studied in incubations with pooled human liver S9 fraction. Numbering according to Table 1 in the manuscript.

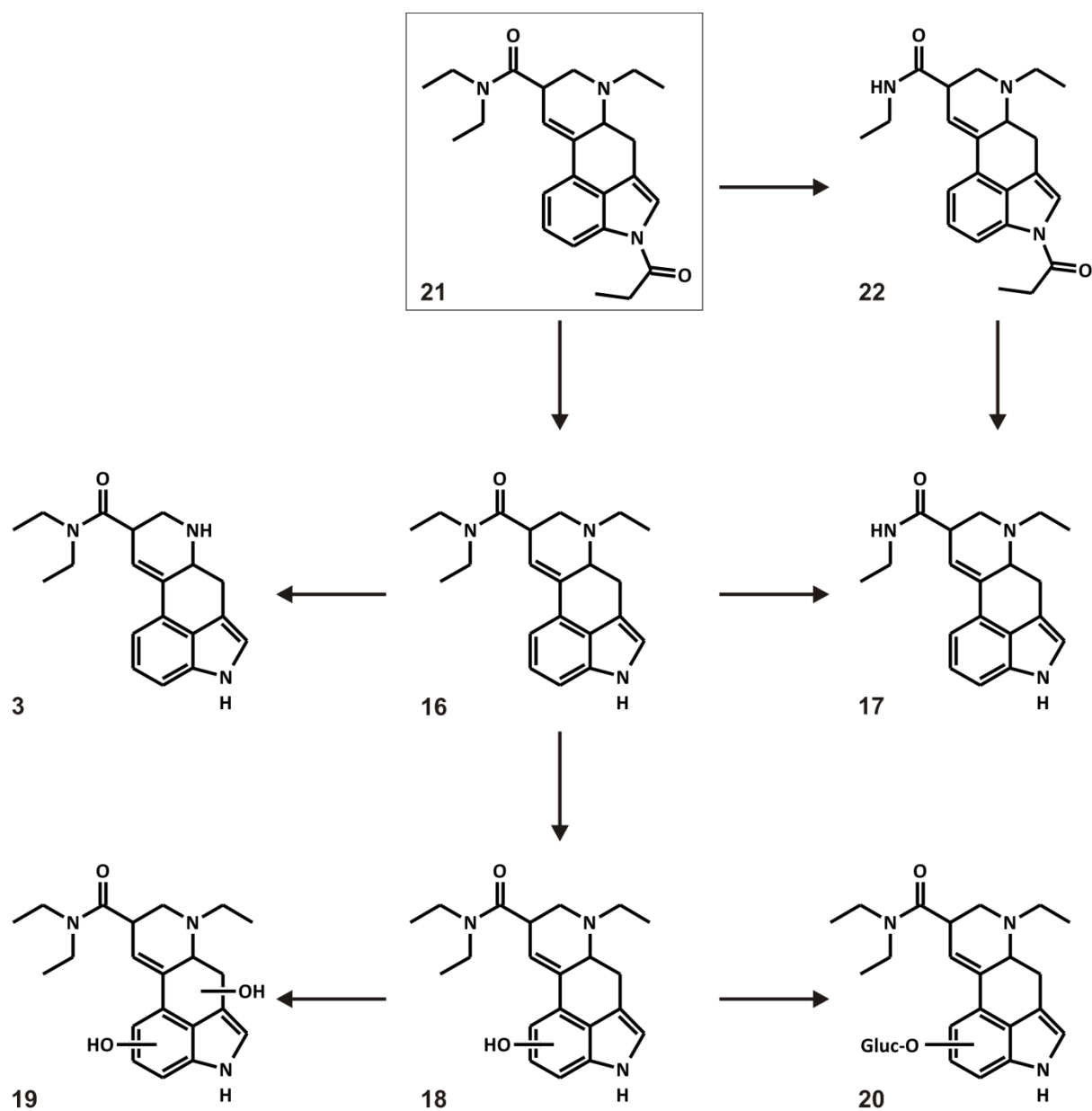


Fig. S6: Metabolic pathways of 1P-ETH-LAD studied in incubations with pooled human liver S9 fraction. Numbering according to Table 1 in the manuscript.

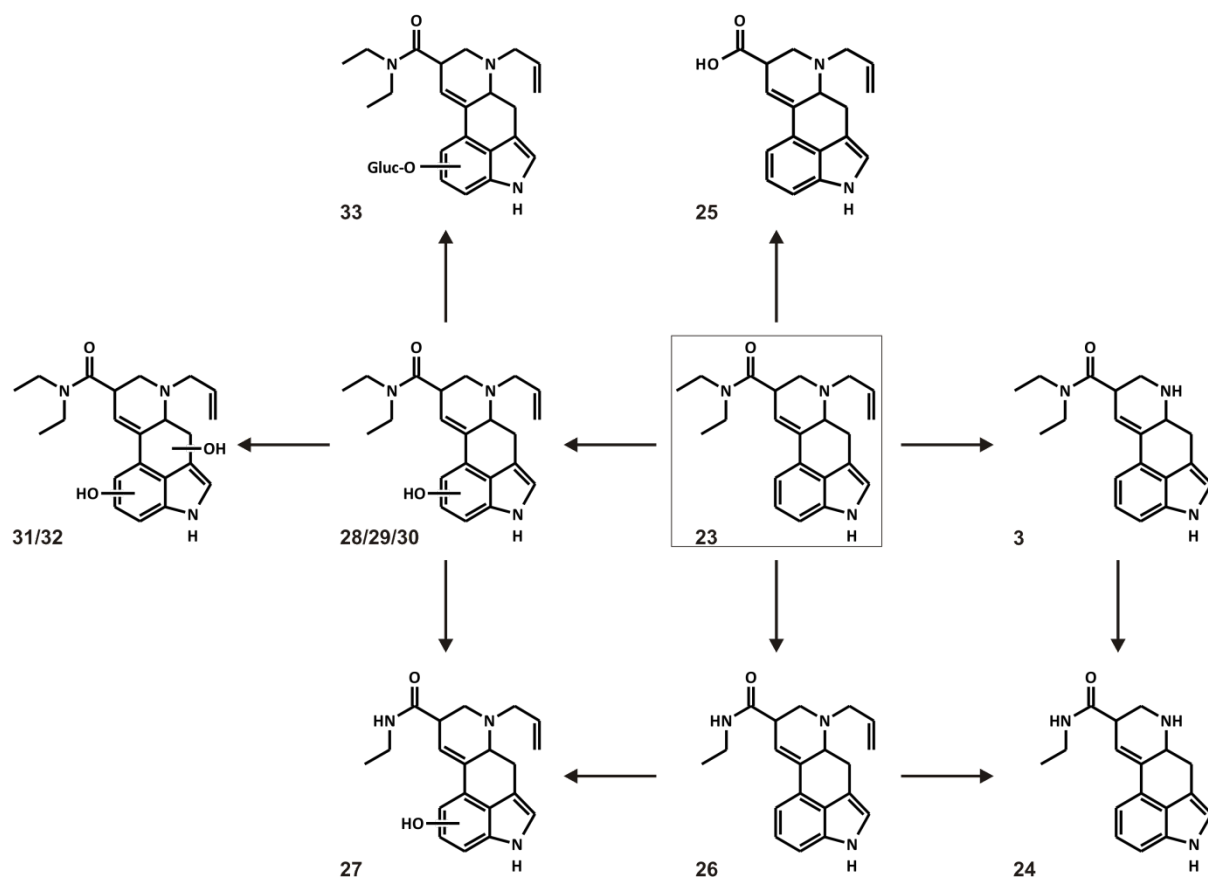


Fig. S7: Metabolic pathways of AL-LAD studied in incubations with pooled human liver S9 fraction. Numbering according to Table 1 in the manuscript.

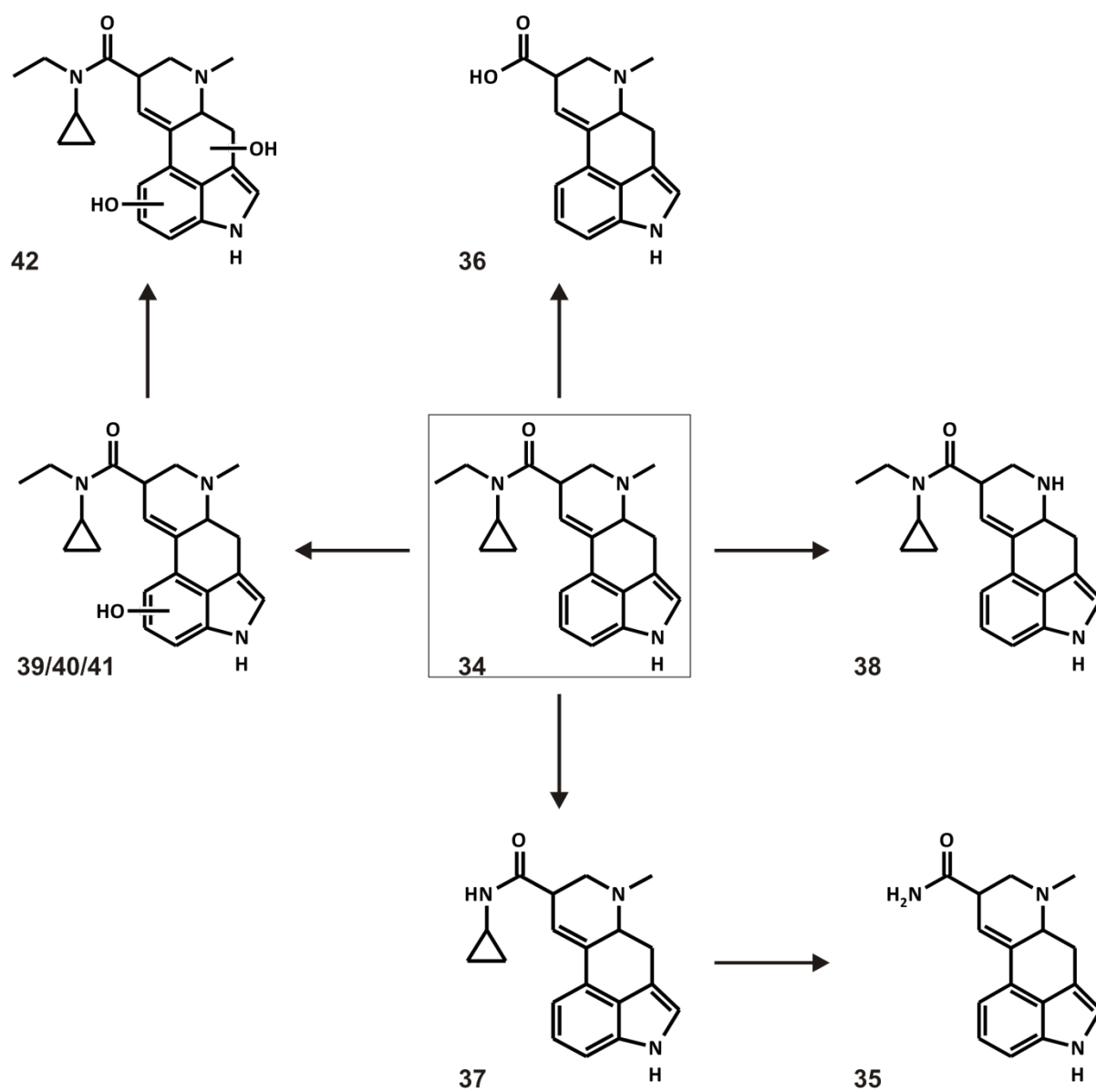


Fig. S8: Metabolic pathways of ECPLA studied in incubations with pooled human liver S9 fraction. Numbering according to Table 1 in the manuscript.

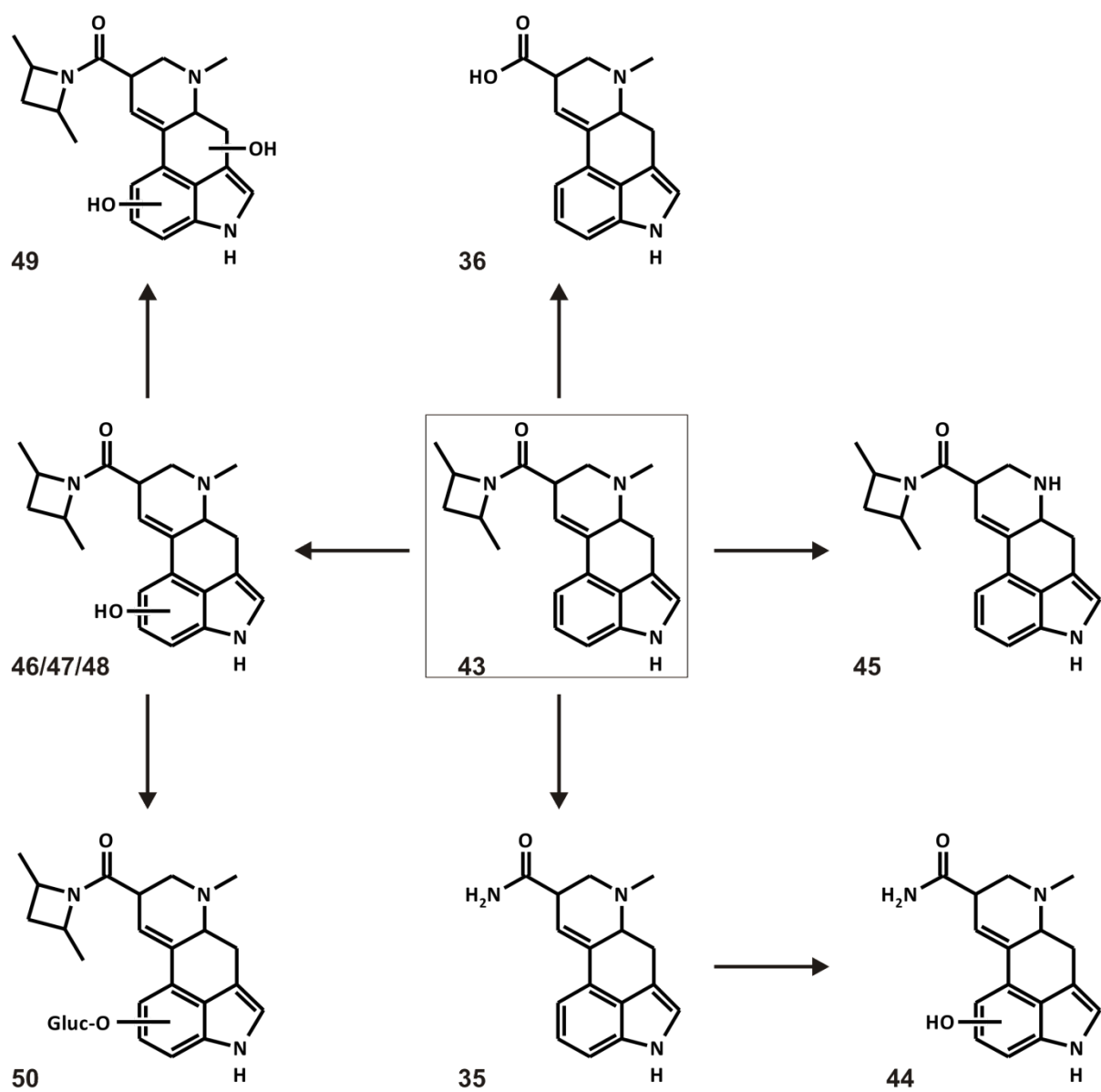


Fig. S9: Metabolic pathways of LSZ studied in incubations with pooled human liver S9 fraction. Numbering according to Table 1 in the manuscript.

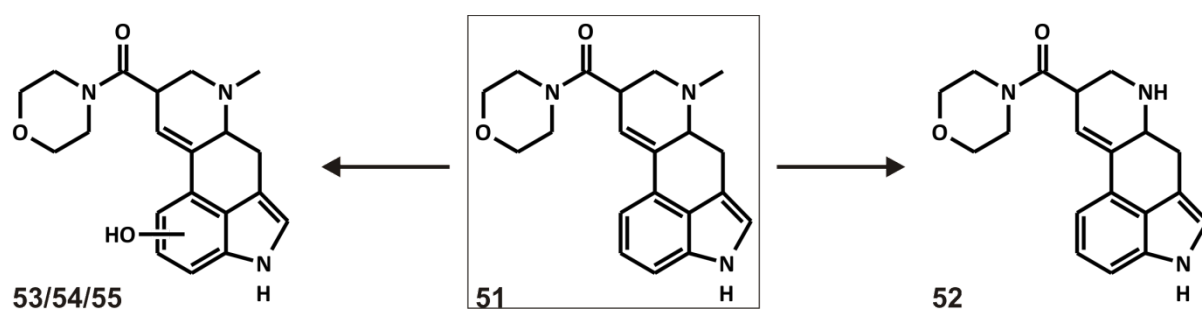


Fig. S10: Metabolic pathways of LSM-775 studied in incubations with pooled human liver S9 fraction. Numbering according to Table 1 in the manuscript.