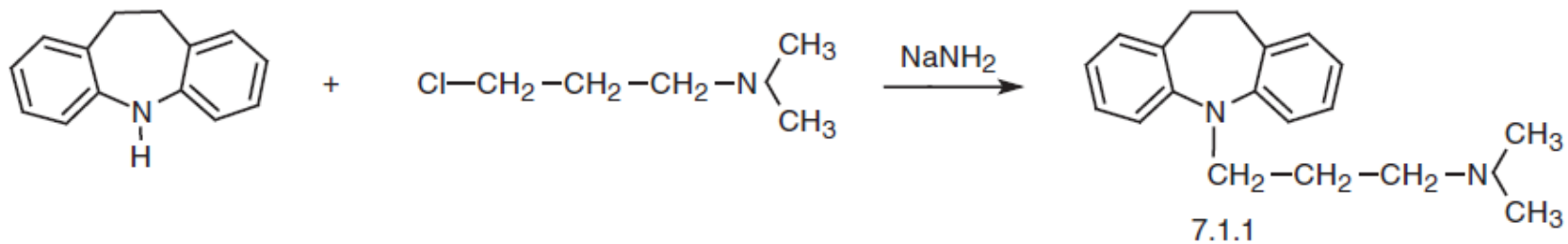


Syntheses & metabolism of selected antidepressants

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Synthesis of imipramine



Metabolism of imipramine

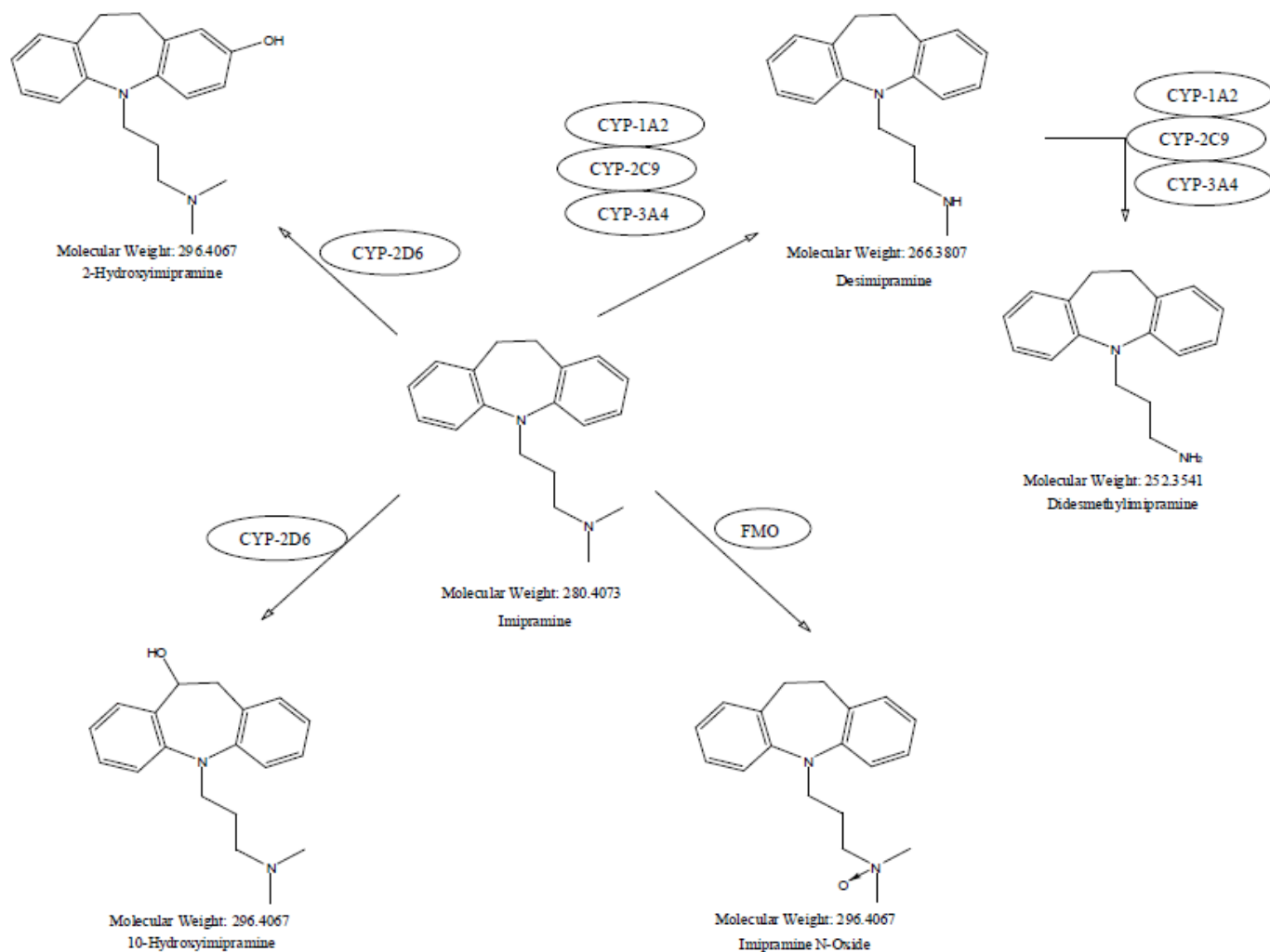
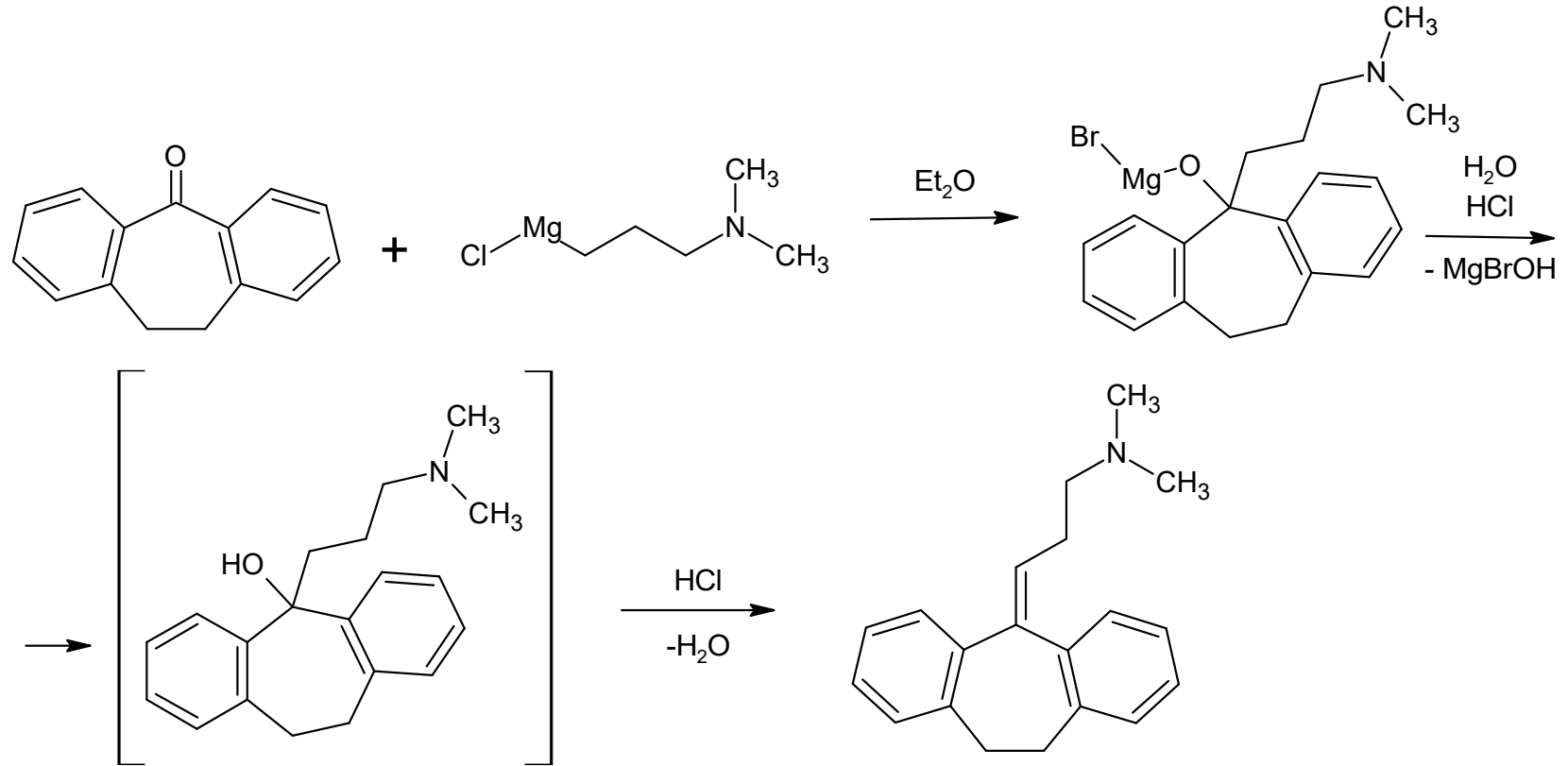
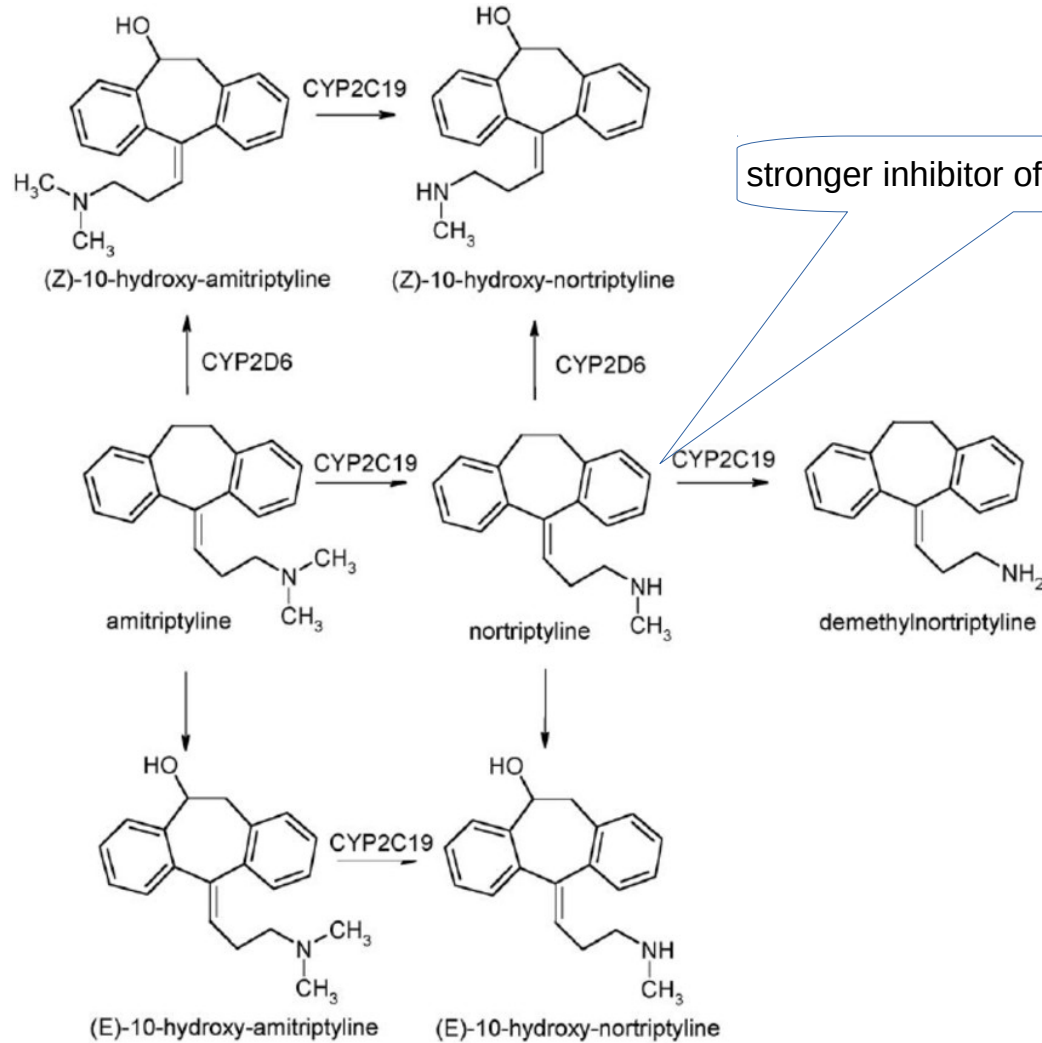


Figure 3: Metabolite generation from parent molecule of Imipramine with respective enzymes. (FMO-Flavin containing Monooxygenases).

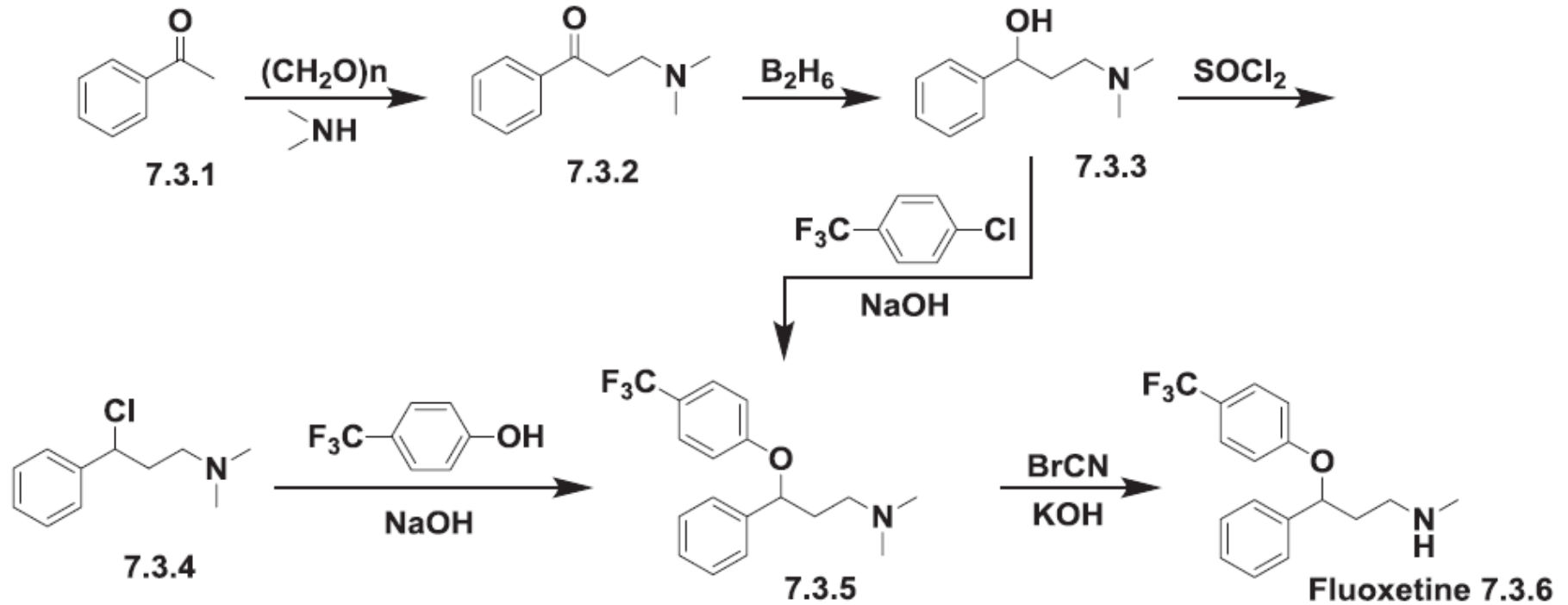
Synthesis of amitriptyline



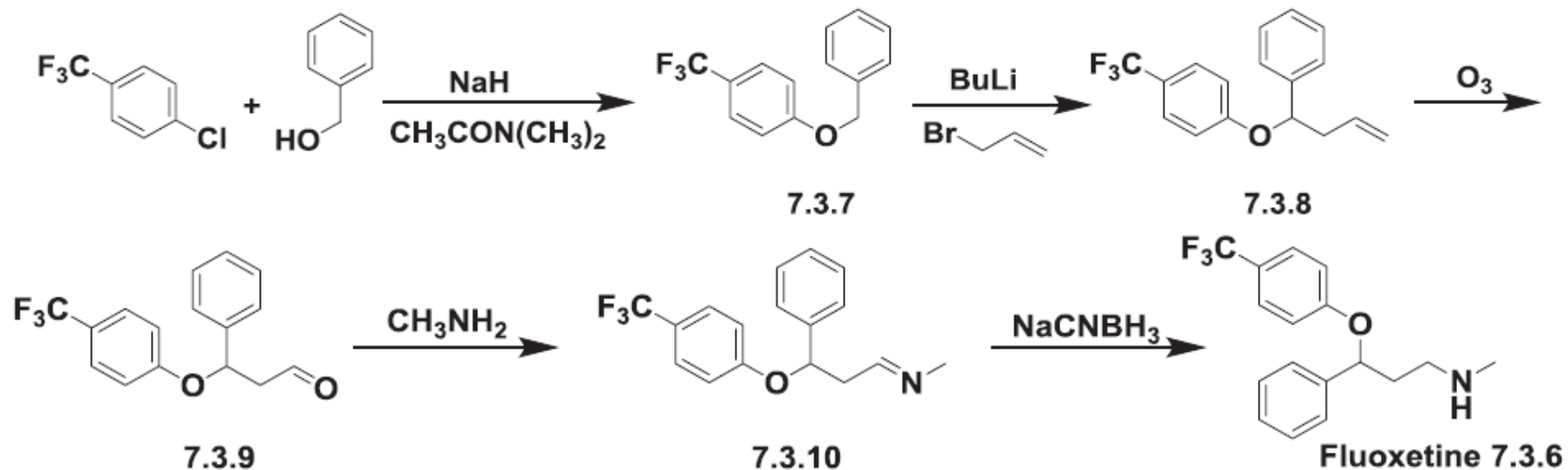
Metabolism of amitriptyline



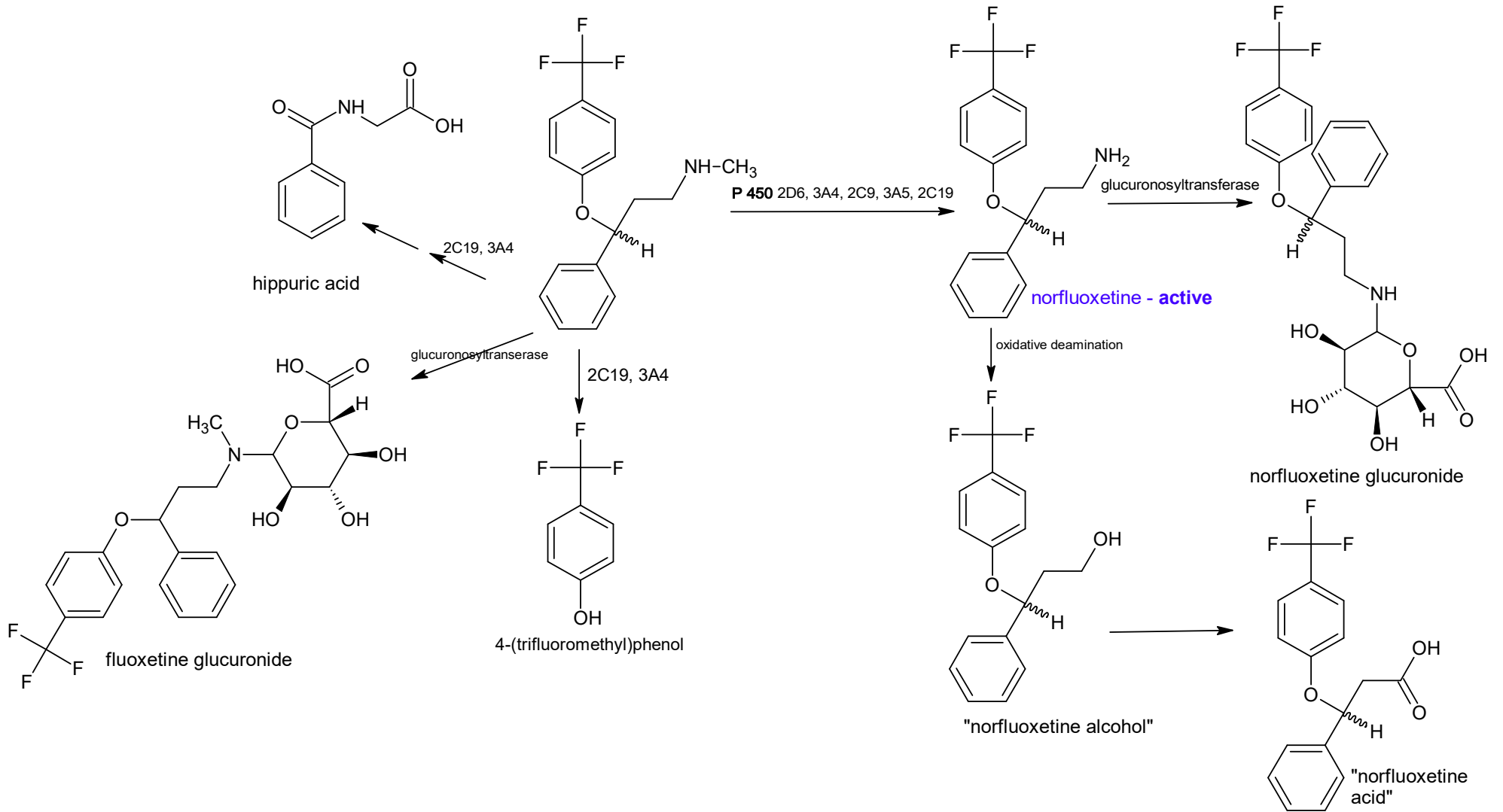
Syntheses of fluoxetine



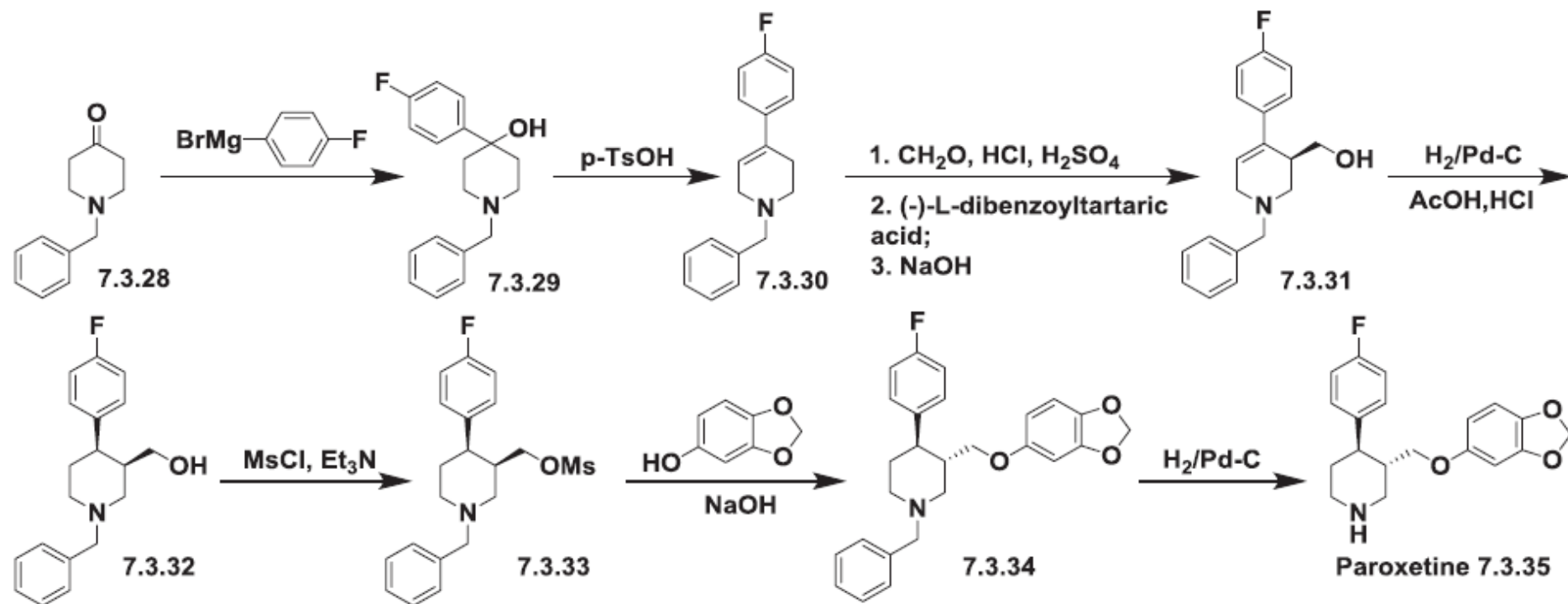
Syntheses of fluoxetine (continued)



Metabolism of fluoxetine

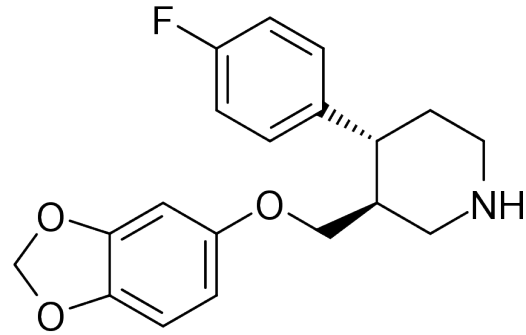


Synthesis of paroxetine



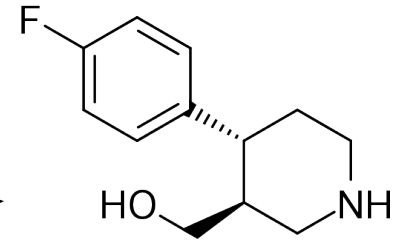
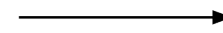
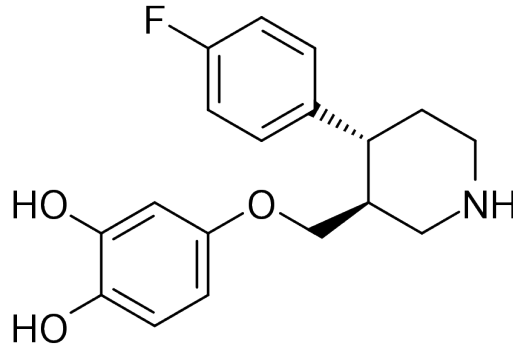
Metabolism of paroxetine

paroxetine

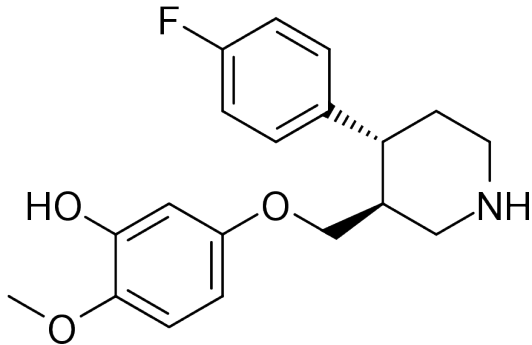


CYP1A2
CYP2C19
CYP2D6
CYP3A4
CYP3A5

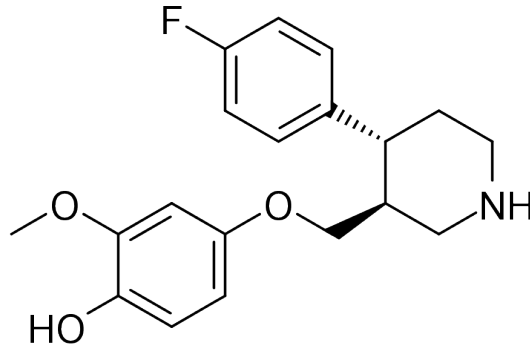
paroxetine catechol



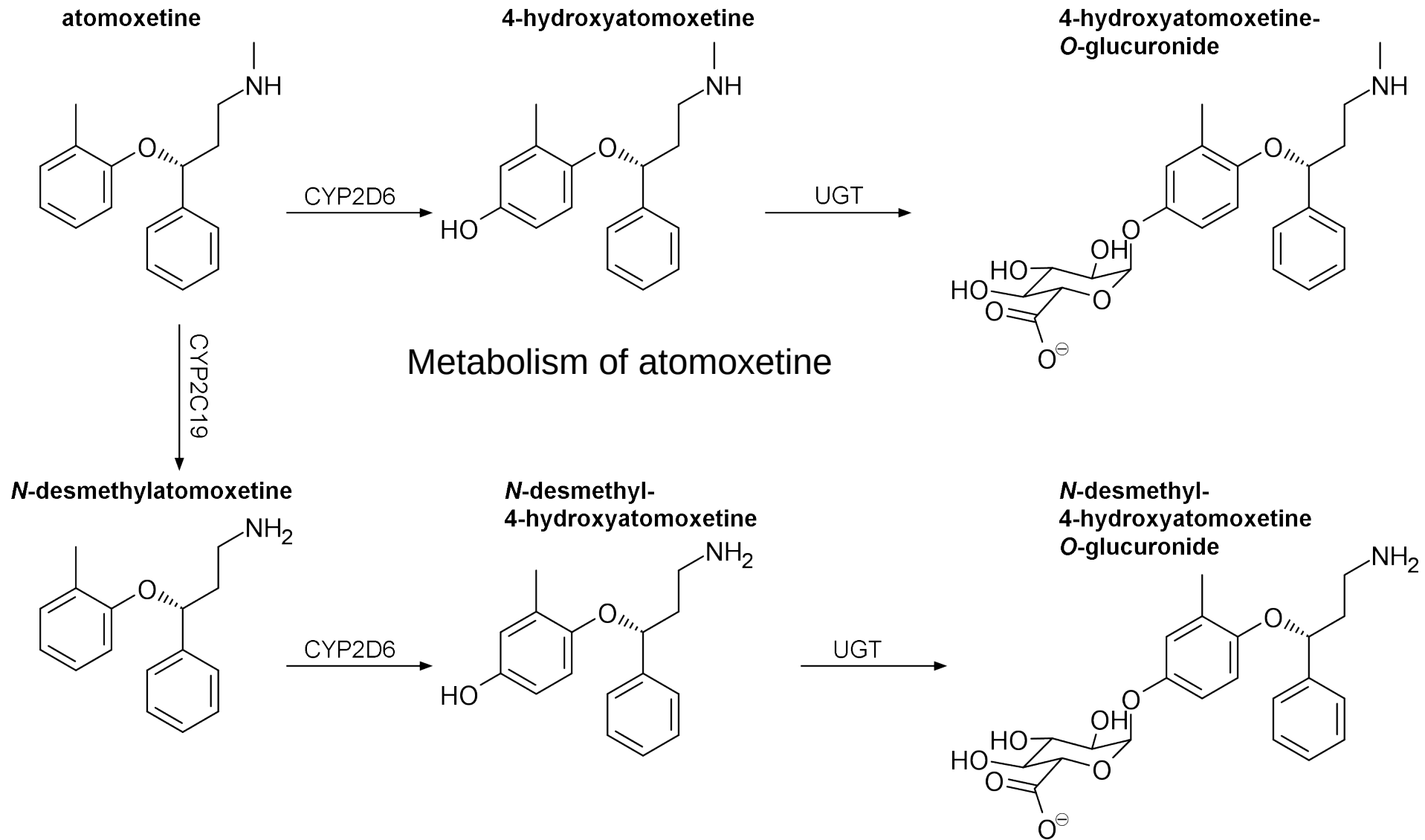
COMT



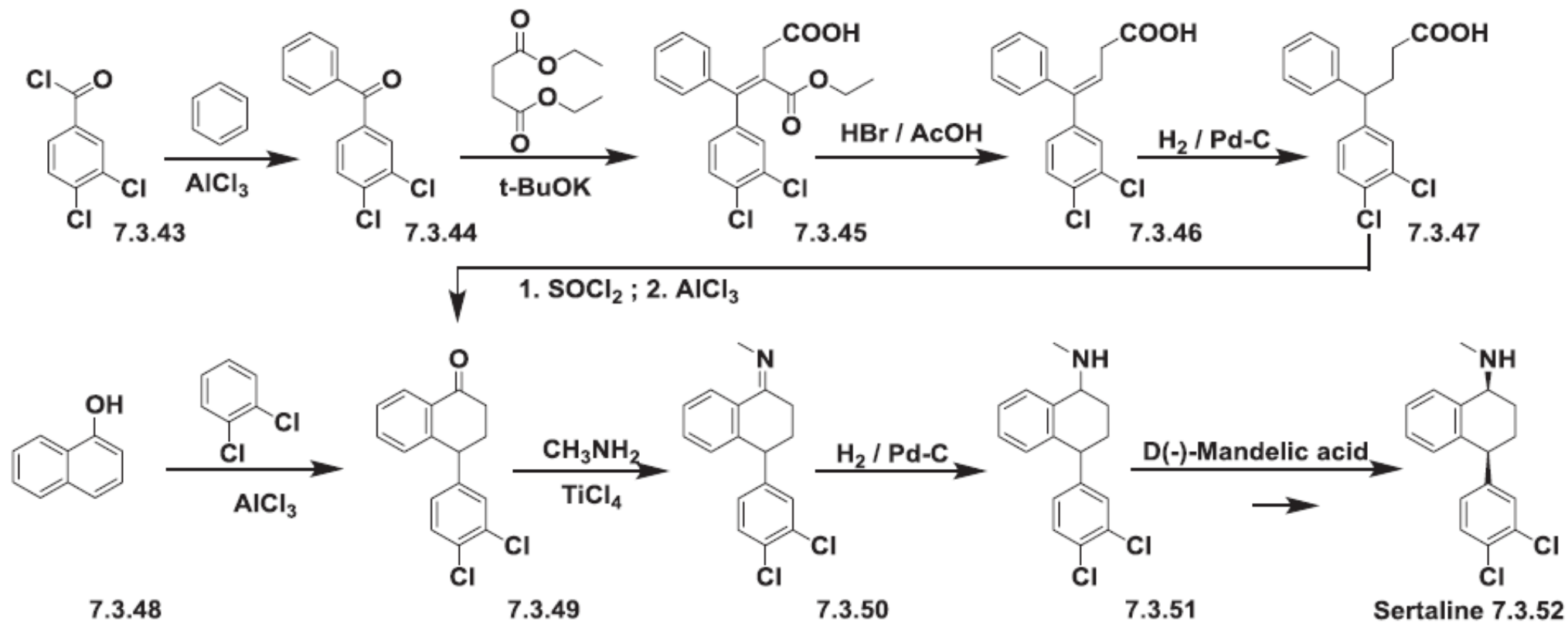
COMT



Excretion: 62% in urine as metabolites,
2% in urine as parent drug, 36% in feces
via bile (<1% as parent drug)



Synthesis of sertraline



Metabolism of sertraline

