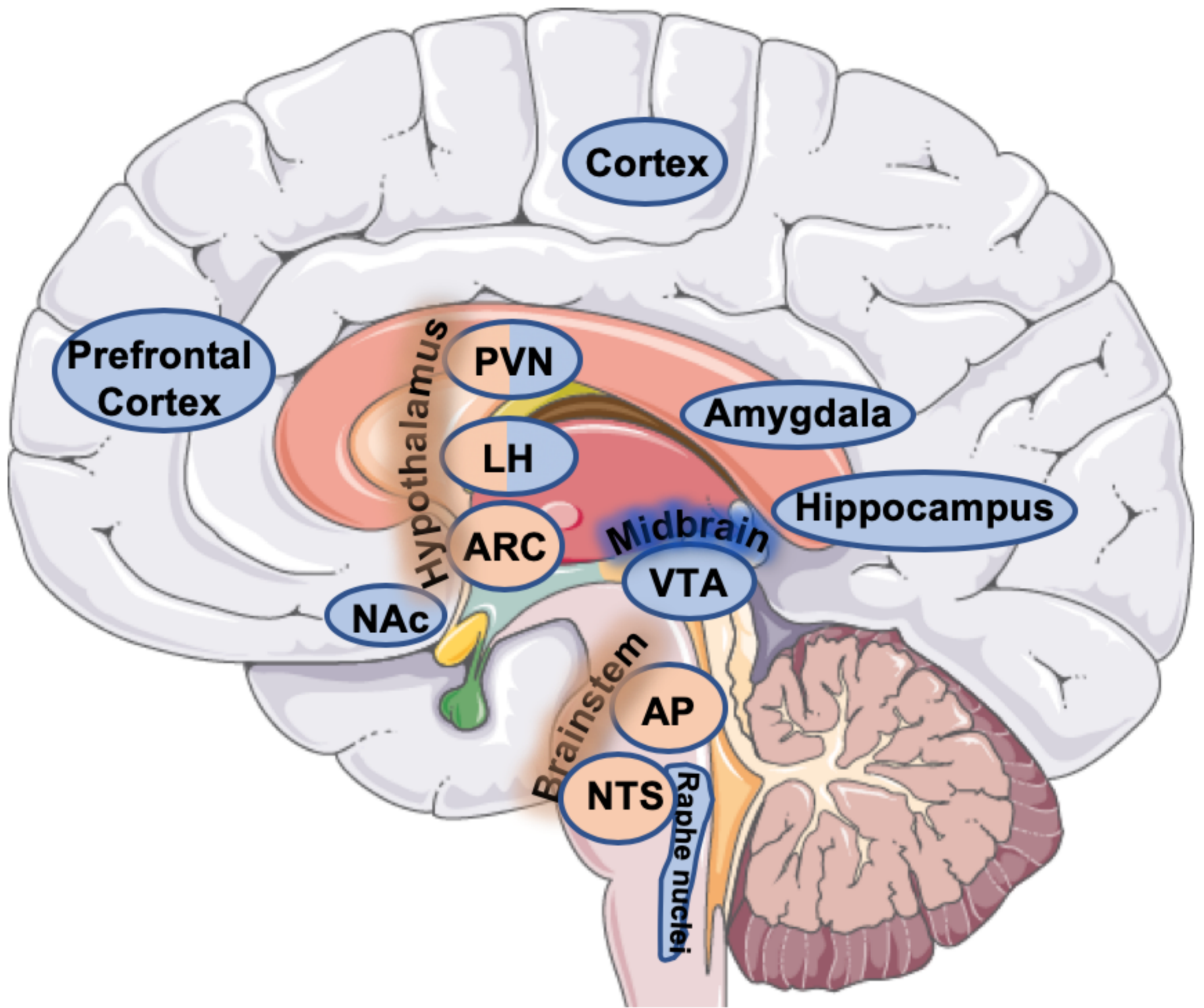


Figure 1

CNS centers related to the MetS



Circulating nutrients Hormonal signals Neuronal signals

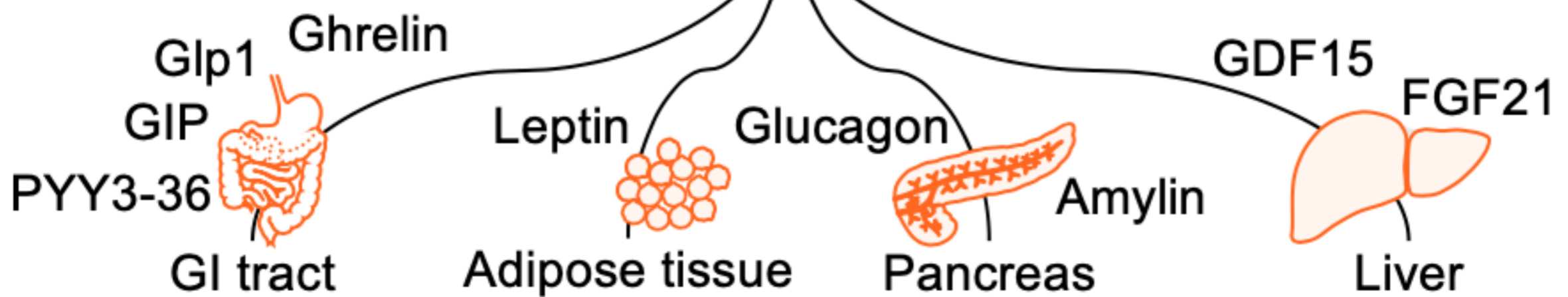


Figure 2

Drugs targeting monoaminergic neurotransmission

Amphetamines

(Competitive) Agonism: ⚡ Inhibition: ⚡

- ① Intracellular uptake of amphetamines by NET/DAT
- ② Inhibition of monoamine oxidase (MAO) further increases intracellular NE/dopamine
- ③ Amphetamines activate Trace amine-associated receptor 1 (TAAR1) to redirect NET/DAT transport of NE/dopamine to the synaptic cleft
- ④ Via vesicular monoamine transporter 2 (VMAT2) inhibition and/or uptake, amphetamines disintegrate the vesicles to release NE/dopamine into the cytosol
- ⑤ Reverse NET/DAT transport of NE/dopamine leads to elevated NE/dopamine levels in the synaptic cleft, and triggers NE & D₁/D₂ receptor hyperactivation

Serotonergic drugs

- ① 5-HT releasing agents, induce reverse 5-HT transport by SERT (and possibly VMAT2)
- ② 5-HT reuptake inhibitors of SERT, elevate 5-HT in the synaptic cleft
- ③ Selective 5-HT_{2C} agonists

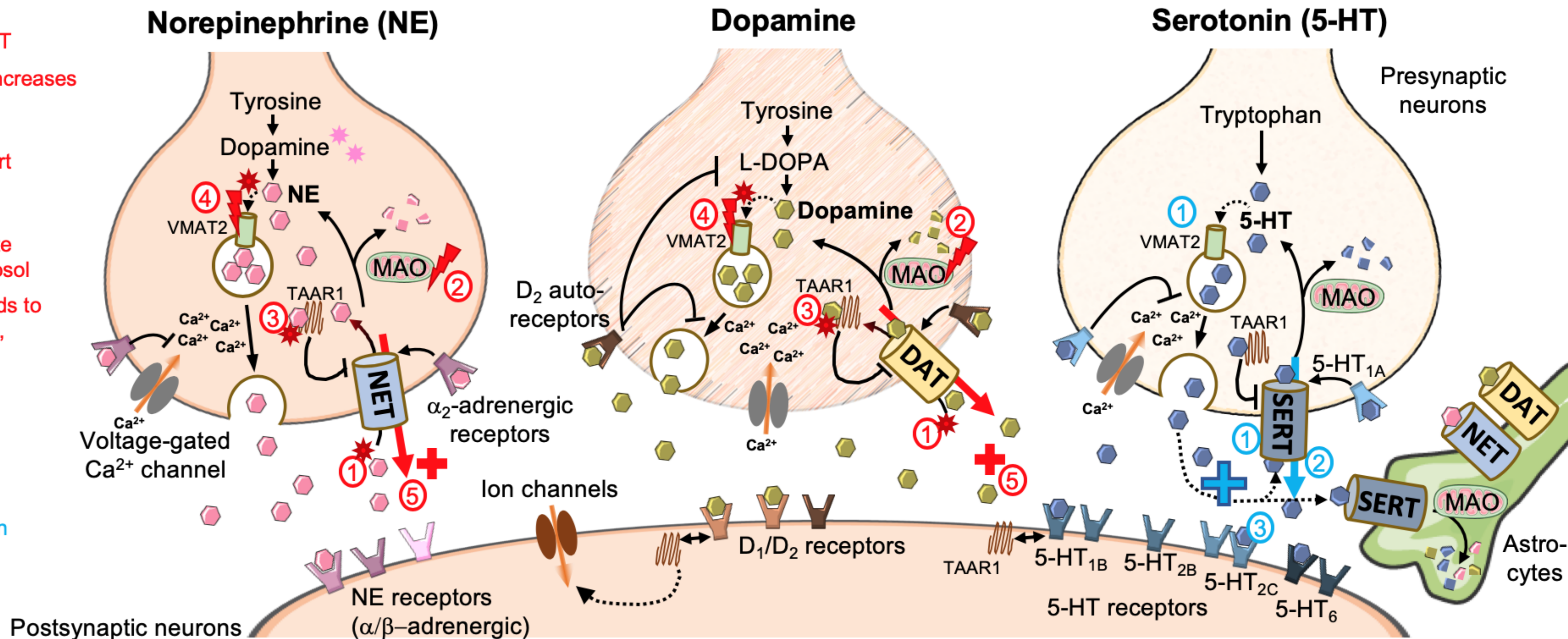


Figure 3

Drugs targeting the cannabinoid and opioid system

