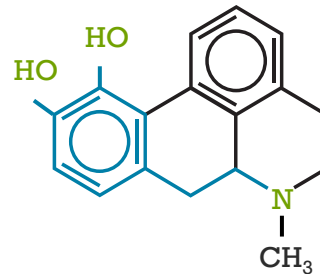
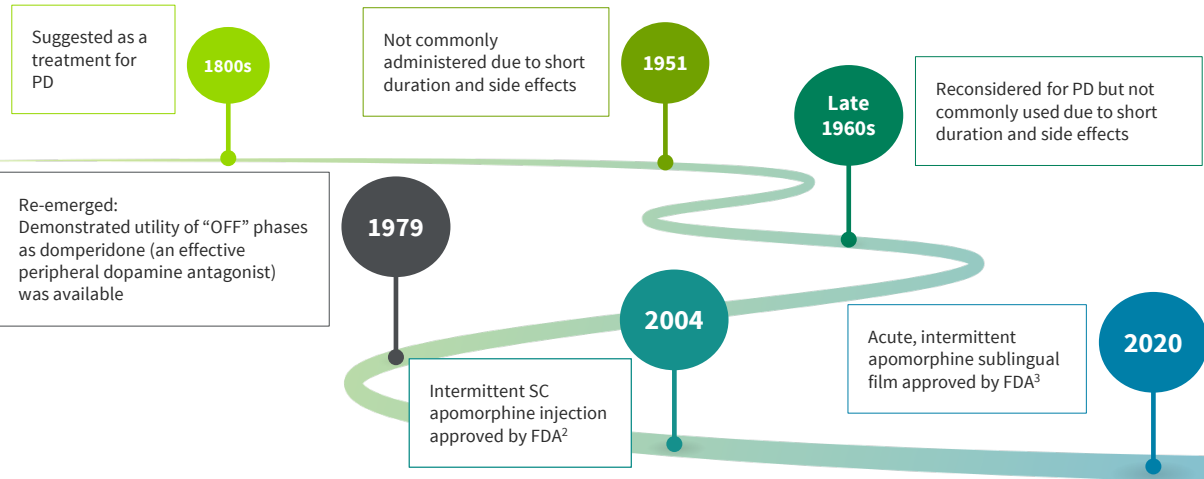
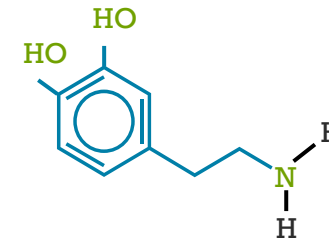


Apomorphine: Non-ergoline Dopamine Agonist

Structure and Chemistry



Apomorphine
(10,11-dihydroxyaporphine)



Dopamine
(4-(2-aminoethyl) benzene-1,2-diol)

Highly lipophilic⁴

- Able to cross the blood-brain barrier, where it preferentially accumulates⁴
- Brain concentrations can be up to 8X higher than those in plasma^{4,5}

Acidic⁶

- pH of 3-4

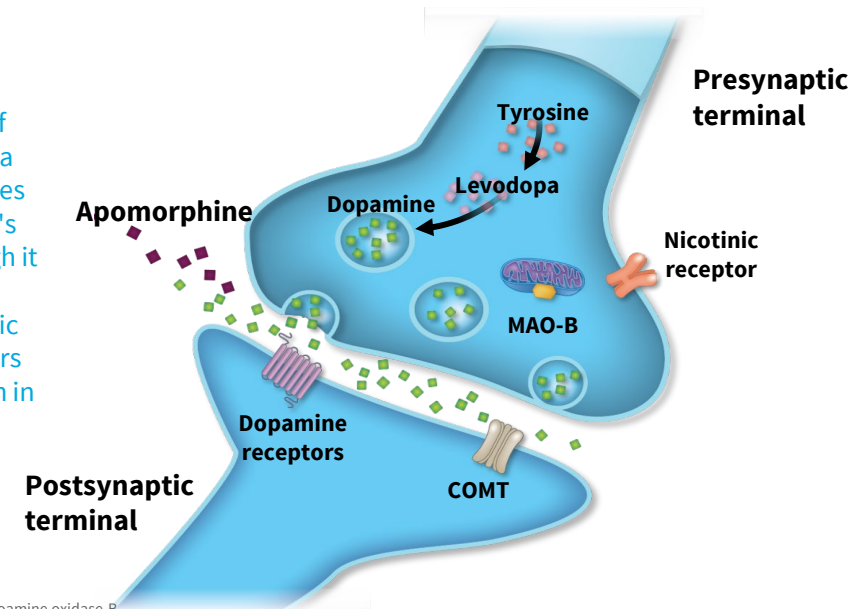
FDA, U.S. Food and Drug Administration; NDA, new drug application; PD, Parkinson's disease; SC, subcutaneous.

Mechanism of Action

Overview of Apomorphine

<Placeholder>

The precise mechanism of action of apomorphine as a treatment for "OFF" episodes associated with Parkinson's disease is unknown, although it is believed to be due to stimulation of post-synaptic dopamine D2-type receptors within the caudate-putamen in the brain.³



COMT, catechol-O-methyltransferase; MAO-B, monoamine oxidase-B.

1. Hagell P, Odin P. Apomorphine in Parkinson's disease. 3rd ed. UNI-MED; 2014. 2. APOKYN® (apomorphine hydrochloride injection). Prescribing information. US WorldMeds, LLC; May 2019. 3. KYNMOBI™ (apomorphine hydrochloride) sublingual film. Prescribing information. Sunovion Pharmaceuticals Inc.; May 2020. 4. Boyle A, Ondo W. *CNS Drugs*. 2015;29:83-89. 5. Ribaric S. *Molecules*. 2012;17:5289-5309. 6. Pietz K, et al. *J Neurol Neurosurg Psychiatry*. 1998;65:709-716. 7. KYNMOBI® [package insert]. Marlborough, MA: Sunovion Pharmaceuticals Inc. 8. Hagell P, Odin P. Apomorphine in Parkinson's disease. 3rd ed. Bremen, Germany: UNIMED; 2014. 9. Hisahara S, Shimohama S. *Int J Med Chem*. 2011;2011:403039.