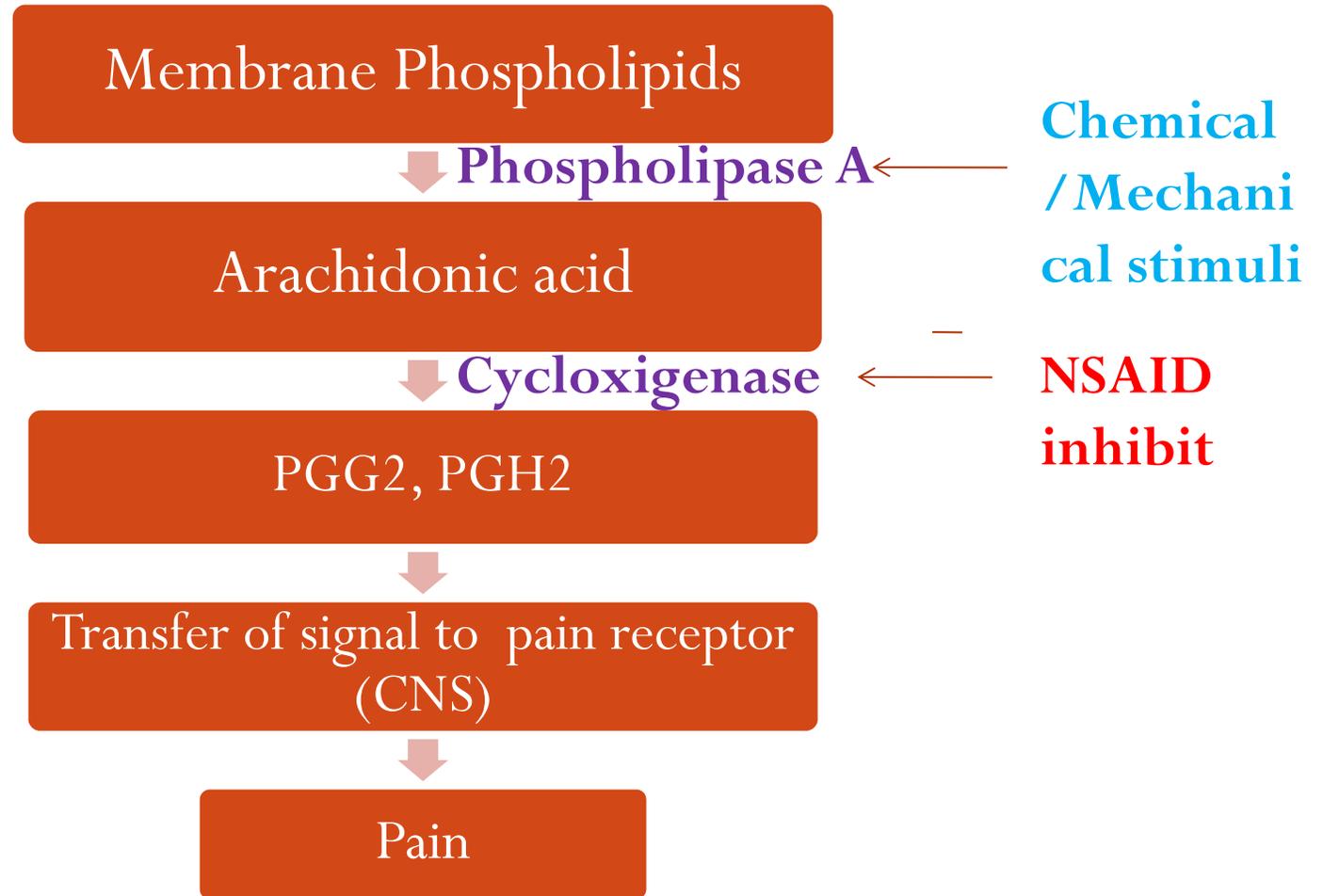


Mechanism of action of NSAID

- ❖ Most NSAIDs act as nonselective **inhibitors** of the **cyclooxygenase (COX) enzymes**, inhibiting both the cyclooxygenase-1 (COX-1) and cyclooxygenase-2 (COX-2) isoenzymes to produce analgesic effect.
- ❖ This inhibition is competitively reversible .
- ❖ COX **catalyzes** the formation of **prostaglandins** and thromboxane from **arachidonic acid** (derived from the cellular **phospholipid bilayer** by **phospholipase A**).
- ❖ Prostaglandins act (among other things) as **messenger molecules** in the process of inflammation.



Pain Pathway