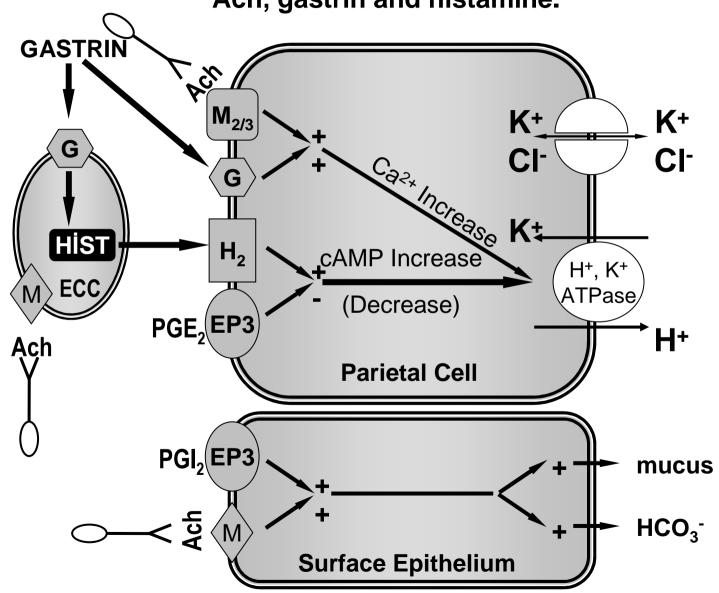
# Pharmacotherapy of Peptic Ulcers and Gastroesophageal Reflux Disease

Prof. Dr. Özlem Uğur Dept. of Medical Pharmacology Gastric acid is secreted through the proton pump on the parietal cell.

The major mediators that stimulate acid secretion are

Ach, gastrin and histamine.



#### Strategies that are used to treat peptic ulcers:

Reducing the intragastric acidity Proton pump inhibitors

**H2** Histamine receptor blockers

H. Pylori eradication Antibiotics

### **Proton Pump Inhibitors**

Lansoprazole

**Omeprazole** 

**Pantoprazole** 

Raberprazole

## H<sub>2</sub> Reseptör Blokürleri

Cimetidine

Ranitidine

**Famotidine** 

**Nizatidine** 

## H. Pylori Eradication

**Bizmuth compounds** 

Metronidazole

**Tetracycline** 

Clarithromycin

**Amoxicillin** 

#### **Antacids**

Antacids are weak bases that neutralize the gastric acid They are useful for easing intermittant dyspepsia and heartburn.

AI(HO)<sub>3</sub> + 3HCI 
$$\longrightarrow$$
 AICI<sub>3</sub> + 3H<sub>2</sub>O  
Mg(HO)<sub>2</sub> + 2HCI  $\longrightarrow$  MgCI<sub>2</sub> + 2H<sub>2</sub>O  
CaCO<sub>3</sub> + 2HCI  $\longrightarrow$  CaCI<sub>2</sub> + H<sub>2</sub>O + CO<sub>2</sub>  
NaHCO<sub>3</sub> + HCI  $\longrightarrow$  NaCI + H<sub>2</sub>O + CO<sub>2</sub>