

Title of the practices: Awareness on Ranitidine.

Objectives: It is an opportunity to teach the students about the Ranitidine tablet and its chemical nature.

### Introduction

Generic name: Ranitidine

Brand name: Zantac.

Dosage form: oral

Uses: It is used to treat ulcers of the stomach and intestines and prevent them from coming back after they have healed. This medication is also used to treat certain stomach and throat problems. It works by decreasing the amount of acid your stomach makes.

### Side effects:

- Headache,
- Constipation
- Diarrhea

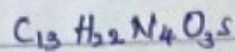
### Precautions:

Before taking ranitidine, tell your doctor or pharmacist if you are allergic to it; such as cimetidine, famotidine. This product may contain inactive ingredients, which can cause allergic reactions or other problems.

## Chemical theory of Ranitidine:

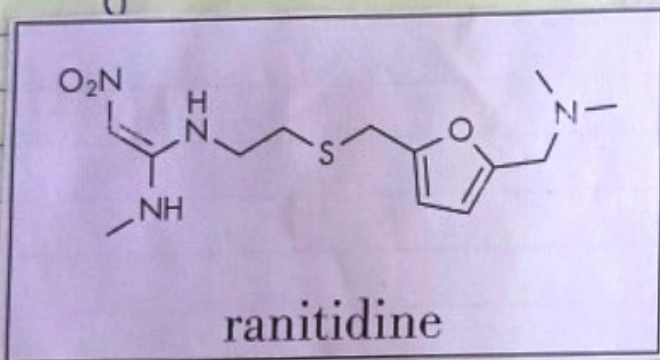
IUPAC name: N-(2-[[5-[[dimethylamino]methyl]furan-2-yl]methyl]thio]ethyl)-N'-methyl-2-nitroethane-1,1-diamine.

Formula:



### Onset of action:

It as a single bolus injection of 50mg induced a rapid increase in gastric pH. forty-five minutes after ranitidine all 12 subjects had a gastric aspirate pH of more than 5 remaining at this value over the whole test period.



**Problem encountered:** In conjunction with a large body of epidemiologic and human and animal basic science research, the study results support the hypothesis that NDMA-contaminated ranitidine increases the risk of cancer and supports the withdrawal of these medications from the market.

### Evidence of Success:

Students are able to know the ranitidine uses, chemical name, Brand name, and able to the onset of action and formula.

Title of the Diclofenac: Awareness on Diclofenac.

Objectives: It is an opportunity to teach the students about the Diclofenac tablet and its chemical nature.

Introduction:

Generic name: Diclofenac.

Brand name: Zorvolex

Dosage form: oral tablets.

Uses:

It is a medicine that reduces swelling and pain. It is used to treat aches and pains, as well as problems with joints, muscles and bones. These include: rheumatoid arthritis and osteoarthritis.

Side effects:-

- Stomach ache
- feeling or being sick
- diarrhoea
- black poo or blood in your vomit.
- headaches
- drowsiness
- ringing in your ears (tinnitus)

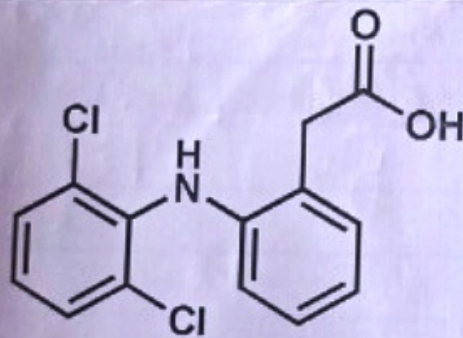
Chemical theory of Diclofenac:

IUPAC name: 2-[2-(2,6-dichloroanilino) phenyl] acetic acid

formula:  $C_{14}H_{11}Cl_2NO_2$

Onset of action: Diclofenac 25 has a rapid onset of action, which makes it particularly suitable for the treatment of acute painful and inflammatory

It 25 has been shown to have an onset of pain relief from 15 minutes and a duration of up to 18 hours.



Diclofenac