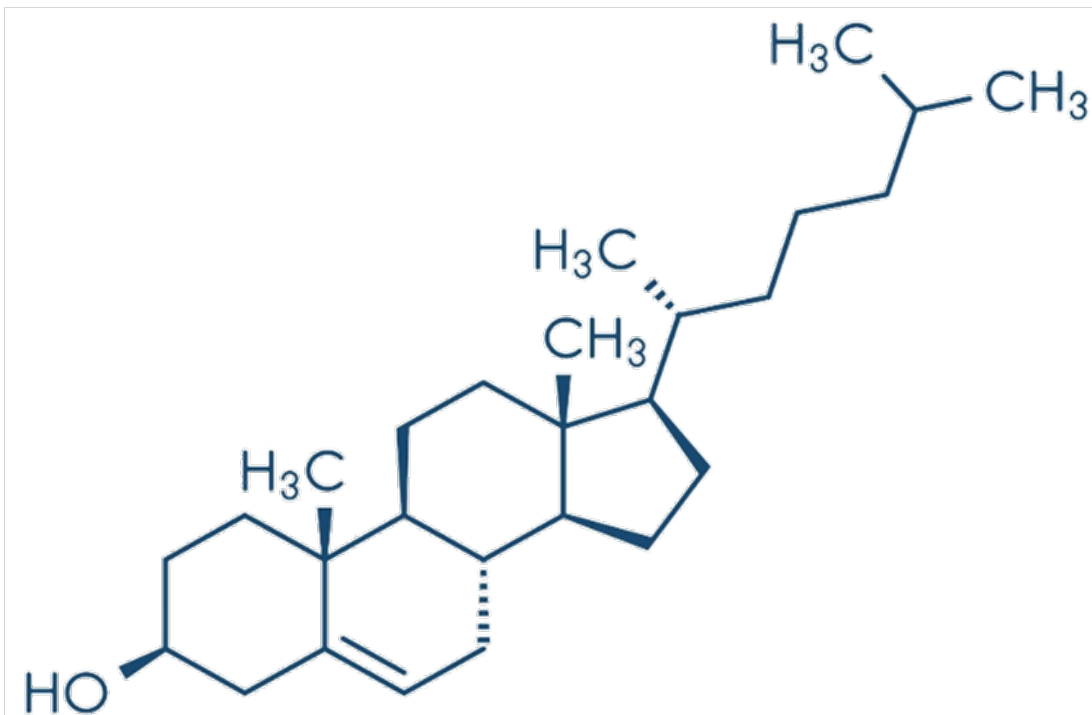


Role of Rosuvastatin in management of dyslipidemia

Cholesterol



- ✓ Waxy
- ✓ Fat like substance
- ✓ Found in every cell

Roles of Cholesterol

- Forms and maintains cell membrane structure
- To produce bile
- To produce vitamin D
- For making hormones like :
 - I. Cortisol,
 - II. Testosterone,
 - III. Progesterone and
 - IV. Estrogen.
- For nerve cells insulation

Normal Lipid profile according to European guideline

Cholesterol Name	Level
Total Cholesterol	≤ 180 mg/dl
LPL Cholesterol	≤ 115 mg/dl
HDL Cholesterol	≥ 40 mg/dl
Triglyceride	≤ 180 mg/dl

Major consequence of High Blood lipid is-

Atherosclerosis

Treatment option for Hyperlipidemia

- Statins
- Niacin
- Fibrates
- Bile acid sequestrants
- Cholesterol absorption inhibitor
- Omega-3 Fatty acid

Treatment options for Hyperlipidemia

- Niacin
- Fibrates
 - ✓ Gemfibrozil
 - ✓ Fenofibrate
- Bile acid sequestrants
 - ✓ Colesevelam
 - ✓ Colestipol
- Cholesterol absorption inhibitor
 - ✓ Ezetimibe
- Omega-3 Fatty acid
 - ✓ Docosahexaenoic acid (DHA)
 - ✓ Eicosapentaenoic acid (EPA)

Why statin is best than other anti-lipidemic drug?

1. Highly effective in reducing –
 - LDL-Cholesterol
 - Total Cholesterol
2. Increases HDL-Cholesterol
3. Long term safety established.

Available statins:

- Atorvastatin
- Rosuvastatin
- Pravastatin
- Fluvastatin
- Simvastatin
- Pitavastatin
- Lovastatin

Why Rosuvastatin is best than other statins ?

Rosuvastatin possesses **stable polar methane sulphonamide** & **fluorinated phenyl** group which provides –

- Lower lipophilicity &
- Enhanced ionic interaction with HMG-CoA reductase enzyme.

Due to Lower Lipophilicity,

Rosuvastatin shows high selectivity towards hepatocytes & less adverse effects than other statins

Due to Enhanced ionic interaction with HMG-CoA reductase enzyme.

Rosuvastatin shows high binding affinity for HMG-CoA reductase.



Labaid
pharma

Labaid
pharma

THANK YOU