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# A BRIEF INTRODUCTION TO BEMPEDOIC ACID

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**Abstract:** Bampenoic acid is a ACL Inhibitor, lipid lowering agent which is used to treat hypercholesterolemia or mixed dyslipidaemia. This drug is formulated in oral tablet form witj dose of 180mg.

Brand name: Nexletol, Nilemdo Generic name: Bempedoic acid

Company name: ESPERION

Formulations: Tablet

**Dosage**: 180 mg PO 4times daily

Year of approval: February 2020 in USA, April2020 in European union.

Drug properties:

**Protein binding: 99.3%** 

Metabolism: glucuronidation
Elimination half life: 21±11hrs
Excreation: 70% urine, 30% feces

#### **Mechanism of action:**

Bempedoic acid is a drug which activated to the thioester with co-enzyme A by the enzyme SLC27A( very long chain acetyl coA synthetase) in the liver. These activated substance inhibits ATP citrate lyase which involved in the livers biosynthesis of cholesterol upstream of HMG-CoA reductase the enzyme that is blocked by the statins.

AMP-activated protein kinase is also activated by these substance, but this effect is not likely relevant in humans.

#### Side effects:

Muscle spasm, lower back pain, gastro intestinal problems such as diarrhea

#### Therapeutic uses:

Bempedoic acid in combination with highest tolerated statin therapy which is used to treat hypercholesterolemia for adults with atherosclerotic cardiovascular diseases, heterozygous familial hypercholesterolemia in united states. And given to patients who need additional lowering of LDL cholesterol.

Bempedoic acid is used to treat primary hypercholesterolemia or mixed dyslipidaemia for adult in combination with statin or statins with other lipid lowering therapies and adjuvant to diet in the patients who are satatin intolerants, or to the patients who are contraindicated to statins

Category: ACL Inhibitor, lipid lowering agent

**Chemical classification:** anti hyperlipidemic drugs (hypolipidemic drugs)

#### Drug image or label:





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