Carbidopa is an inhibitor of aromatic amino acid decarboxylase. Chemically, it is (-)-4-((3S,4S)-3-amino-4-(2-fluorophenyl)butanoyl)phenylalanine. Its molecular formula is C31H29FN3O4, and the structural formula is:

\[
\text{HO} \quad \text{CH} \quad \text{D} \quad \text{N} \quad \text{HNH}_2 \quad \text{H}_3 \text{C} \quad \text{O}
\]

Entacapone is a Catechol-O-Methyl Transferase (COMT) inhibitor. It is a 3(3H)-indenone derivative. Chemically, it is (1S,2R,4R)-2,4-dimethyl-3-[2-methoxy-4-(2-fluorophenyl)phenyl]cyclohexanecarboxylic acid. Its molecular formula is C29H30FNO5, and the structural formula is:

\[
\text{HO} \quad \text{CH} \quad \text{N} \quad \text{HNH}_2 \quad \text{H}_3 \text{C} \quad \text{O}
\]
CONTRAINdications
Levodopa + Carbidopa + Entacapone is contraindicated in patients:
• Severe hypersensitivity to the active substances or any of the excipients of the product
• Severe hepatic impairment
• With severe anaphylactic reactions.
With phaeochromocytoma.
• Taking concurrently non-selective monoamine oxidase (MAO) and MAO-B inhibitors, & selective serotonin reuptake inhibitors (SSRIs) or selective norepinephrine reuptake inhibitors (SNRIs).
• With a previous history of Headache/Migraine Syndrome (MIG) & non-metastatic melanoma.
• With suspicious undiagnosed skin lesions or a history of malignant melanoma, because entacapone (an inhibitor of the aromatic amino acid decarboxylase isozyme D) has been reported to form chelates with iron in the gastrointestinal tract.

PRECAUTIONs
• Patients with Parkinson’s disease treated with Levodopa + Carbidopa + Entacapone may have experienced sudden falling asleep without prior warning of sleepiness while engaged in activities of daily living (e.g. crossing the road); some of these events have been reported to occur up to one year after initiation of treatment.
• Levodopa + Carbidopa + Entacapone is not recommended for the treatment of dyskinesia.
• Levodopa + Carbidopa + Entacapone therapy should be administered cautiously to patients with history of severe ulcerative colitis or histamine-2-receptors antagonists/antacids.
• In patients with a history of myasthenic crisis who have received levodopa-containing products, close monitoring of myasthenic crisis or progression of the symptoms should be carried out.
• All patients treated with Levodopa + Carbidopa + Entacapone should be monitored closely for the development of mental status changes, depression, suicidal ideation and behavior.

DOSING INFORMATION
Each film-coated tablet contains:
Carbidopa monohydrate USP equivalent to Carbidopa 37.5mg
Dopacone Tablets 125mg + 31.25mg + 200mg
Dopacone Tablets 75mg + 18.75mg + 200mg
Dopacone Tablets 150mg + 37.5mg + 200mg
Dopacone Tablets 200mg + 50mg + 200mg

DESCRIPTION
Levodopa, is an aromatic amino acid. Chemically, it is (-)-L-α-amino-β-phenylethylamine. Levodopa is a precursor for the synthesis of dopamine and is used to treat Parkinson’s disease.

Beta-glucuronidase:
Isoniazid: Isoniazid may reduce the therapeutic effects of levodopa, a dose increase of 50%-100% in levodopa may be necessary when administering Levodopa + Carbidopa + Entacapone to patients with bilirubin obstruction, as entacapone is excreted mainly bile.
Levodopa + Carbidopa + Entacapone should be used cautiously in patients who have a history of gastrointestinal disorder or bleeding.
Levodopa is known to depress prolactin secretion & increase growth hormone level.
• Dopaminergic adverse reactions, e.g. dyskinesia, were more common in patients who received entacapone and dopamine agonists (such as pramipexole), when compared to levodopa alone. Entacapone may increase the risk of dyskinesia compared to Levodopa + Carbidopa. Entacapone should be given cautiously to patients receiving levodopa/carbidopa.