

# Dulcolax®

## SUPPOSITORIES



### Composition

1 paediatric suppository contains	5 mg
1 suppository contains	10 mg
4,4'-diacetoxy-diphenyl-(pyridyl-2)-methane (= bisacodyl)	

### Product Descriptions

Dulcolax Suppositories 5mg for children: Smooth, white, torpedo-shaped suppositories with a 'chimney' in the base.

Dulcolax Suppositories 10mg for adults: White or slightly yellowish, torpedo-shaped suppositories with a smooth or slightly unctuous surface and a "chimney" in the base.

### Pharmacological properties

ATC code: A06AB02

Bisacodyl is a locally acting laxative from the diphenylmethane derivatives group having a dual action. As a contact laxative, for which also antiresorptive hydragogue effects have been described, bisacodyl stimulates after hydrolysis in the large intestine, the mucosa of both the large intestine and of the rectum. Stimulation of the mucosa of the large intestine results in colonic peristalsis with promotion of accumulation of water, and consequently electrolytes, in the colonic lumen. This results in a stimulation of defecation, reduction of transit time and softening of the stool. Stimulation of the rectum causes increased motility and a feeling of rectal fullness. The rectal effect may help to restore the "call to stool" although its clinical relevance remains to be established.

As a laxative that acts on the colon, bisacodyl specifically stimulates the natural evacuation process in the lower region of the gastrointestinal tract. Therefore, bisacodyl is ineffective in altering the digestion or absorption of calories or essential nutrients in the small intestine.

### Pharmacokinetics

Following either oral or rectal administration, bisacodyl is rapidly hydrolyzed to the active principle bis-(p-hydroxyphenyl)-pyridyl-2-methane (BHPM), mainly by esterases of the enteric mucosa.

Administration as an enteric coated tablet was found to result in maximum BHPM plasma concentrations between 4 - 10 hours post administration whereas the laxative effect occurred between 6 - 12 hours post administration. In contrast, following the administration as a suppository, the laxative effect occurred on average approximately 20 minutes post administration; in some cases it occurred 45 minutes after administration. The maximum BHPM-plasma concentrations were achieved 0.5 - 3 hours following the administration as a suppository. Hence, the laxative effect of bisacodyl does not correlate with the plasma level of BHPM. Instead, BHPM acts locally in the lower part of the intestine and there is no relationship between the laxative effect and plasma levels of the active moiety. For this reason, bisacodyl coated tablets are formulated to be resistant to gastric and small intestinal juice. This results in a main release of the drug in the colon, which is the desired site of action.

After oral and rectal administration, only small amounts of the drug are absorbed and are almost completely conjugated in the intestinal wall and the liver to form the inactive BHPM glucuronide. The plasma elimination half-life of BHPM glucuronide was estimated to be approximately 16.5 hours. Following the administration of bisacodyl coated tablets, an average of 51.8% of the dose was recovered in the faeces as free BHPM and an average of 10.5% of the dose was recovered in the urine as BHPM glucuronide. Following the administration as a suppository, an average of 3.1% of the dose was recovered as BHPM glucuronide in the urine. Stool contained large amounts of BHPM (90% of the total excretion) in addition to small amounts of unchanged bisacodyl.

### Indications

For use in patients suffering from constipation.

For preparation of diagnostic procedures, in pre- and postoperative treatment and in conditions, which require defecation to be facilitated.

### Dosage and Administration

Children aged 10 years or younger with chronic or persistent constipation should only be treated under the guidance of a physician. Bisacodyl should not be used in children aged 4 years or younger.

**Short-term treatment for constipation**

Adults and children over 10 years: 1 to 2 coated tablets (5 - 10 mg) daily before bedtime, or 1 suppository (10 mg) for immediate effect.

Children 4 – 10 years: 1 coated tablet (5 mg) daily before bedtime, or 1 suppository (5 mg) for immediate effect.

**For preparation of diagnostic procedures and preoperatively**

Should only be used under medical supervision.

Adults and children over 10 years: 2 coated tablets (10 mg) in the morning and 2 coated tablets (10 mg) in the evening and 1 suppository (10 mg) on the following morning is recommended.

Children aged 4 -10 years of age: 1 coated tablet (5 mg) in the evening and 1 suppository (5 mg) on the following morning is recommended.

When using DULCOLAX to prepare the patient for radiographic examination of the abdomen or employing it preoperatively, tablets should be combined with suppositories in order to achieve complete evacuation of the intestine.

In the management of constipation, once regularity has been restarted dosage should be reduced and can usually be stopped.

It is recommended to take the coated tablets at night to have a bowel movement the following morning. They should be swallowed whole with an adequate amount of fluid.

The coated tablets should not be taken together with products which reduce the acidity of the upper gastrointestinal tract, such as milk, antacids or proton pump inhibitors, in order not to prematurely dissolve the enteric coating.

Suppositories are usually effective in about 20 minutes (usual range 10 to 30 minutes). Rarely the laxative effect has been reported 45 minutes after administration.

They should be unwrapped and inserted into the rectum pointed end first. No specific information on the use of this product in the elderly is available. Clinical trials have included patients over 65 years and no adverse reactions specific to this age group have been reported.

**Contraindications**

DULCOLAX is contraindicated in patients with ileus, intestinal obstruction, acute abdominal conditions including appendicitis, acute inflammatory bowel diseases, and severe abdominal pain associated with nausea and vomiting which may be indicative of severe conditions.

DULCOLAX is also contraindicated in severe dehydration and in patients with known hypersensitivity to bisacodyl or any other component of the product.

DULCOLAX Suppositories should not be used when anal fissures or ulcerative proctitis with mucosal damage are present.

**Side Effects**

The most commonly reported adverse reactions during treatment are abdominal pain and diarrhoea.

Adverse events have been ranked under headings of frequency using the following convention: Very common ( $\geq 1/10$ ); common ( $\geq 1/100$ ,  $< 1/10$ ); uncommon ( $\geq 1/1000$ ,  $<1/100$ ); rare ( $\geq 1/10000$ ,  $<1/1000$ ); very rare ( $<1/10000$ ).

**Immune system disorders**

Rare: anaphylactic reactions, angioedema, hypersensitivity.

**Metabolism and nutrition disorders**

Rare: dehydration.

**Nervous system disorders**

Uncommon: dizziness.

Rare: Syncope.

Dizziness and syncope occurring after taking bisacodyl appear to be consistent with a vasovagal response (e.g. to abdominal spasm, defaecation).

#### Gastrointestinal disorders

Uncommon: haematochezia (blood in stool), vomiting, abdominal discomfort, anorectal discomfort.

Common: abdominal cramps, abdominal pain, diarrhoea and nausea.

Rare: colitis including ischaemic colitis.

#### **Special Warnings and Precautions**

As with all laxatives, DULCOLAX should not be used on a continuous daily basis for more than five days without investigating the cause of constipation.

Prolonged excessive use may lead to fluid and electrolyte imbalance and hypokalaemia.

Intestinal loss of fluids can promote dehydration. Symptoms may include thirst and oliguria. In patients suffering from fluid loss where dehydration may be harmful (e.g. renal insufficiency, elderly patients) DULCOLAX should be discontinued and only be restarted under medical supervision.

Stimulant laxatives including DULCOLAX® do not help with weight loss (see Section Pharmacological properties).

Patients may experience haematochezia (blood in stool) that is generally mild and self-limiting.

Dizziness and / or syncope have been reported in patients who have taken DULCOLAX. The details available for these cases suggest that the events would be consistent with defaecation syncope (or syncope attributable to straining at stool), or with a vasovagal response to abdominal pain related to the constipation, and not necessarily to the administration of bisacodyl itself.

There have been isolated reports of abdominal pain and bloody diarrhoea occurring after taking bisacodyl. Some cases have been shown to be associated with colonic mucosal ischaemia.

The use of suppositories may lead to painful sensations and local irritation, especially in patients with anal fissures and ulcerative proctitis.

#### **Effects on Ability to Drive and Use Machines**

No studies on the effects of DULCOLAX on the ability to drive and use machines have been performed.

However, patients should be advised that due to a vasovagal response (e.g., to abdominal spasm) they may experience dizziness and/or syncope. If patients experience abdominal spasm they should avoid potentially hazardous tasks such as driving or operating machinery.

#### **Fertility, Pregnancy and Lactation**

##### **Pregnancy**

There are no adequate and well-controlled studies in pregnant women. Long experience has shown no evidence of undesirable or damaging effects during pregnancy.

Nevertheless, as with all drugs, DULCOLAX® should be taken during pregnancy only on medical advice.

##### **Lactation**

Clinical data show that neither the active moiety of bisacodyl BHPM (bis-(p-hydroxyphenyl)-pyridyl-2-methane) nor its glucuronides are excreted into the milk of healthy lactating human females.

Thus, DULCOLAX® can be used during breast-feeding.

##### **Fertility**

No studies on the effect on human fertility have been conducted.

#### **Interactions**

The concomitant use of antacids and milk products may reduce the resistance of the coating of the tablets and result in dyspepsia and gastric irritation.

The concomitant use of diuretics or adreno-corticosteroids may increase the risk of electrolyte imbalance if excessive doses of DULCOLAX are taken.

Electrolyte imbalance may lead to increased sensitivity to cardiac glycosides.

The concomitant use of other laxatives may enhance the gastrointestinal side effects of DULCOLAX®.

### **Overdose**

#### Symptoms

If high doses are taken watery stools (diarrhoea), abdominal cramps and a clinically significant loss of fluid, potassium and other electrolytes can occur.

Laxatives when taken in chronic overdose may cause chronic diarrhoea, abdominal pain, hypokalaemia, secondary hyperaldosteronism and renal calculi. Renal tubular damage, metabolic alkalosis and muscle weakness secondary to hypokalaemia have also been described in association with chronic laxative abuse.

#### Therapy

After ingestion of oral forms of DULCOLAX, absorption can be minimised or prevented by inducing vomiting or gastric lavage. Replacement of fluids and correction of electrolyte imbalance may be required. This is especially important in the elderly and the young. Administration of antispasmodics may be of value.

### **Availability**

Suppositories are presented in aluminium foil blister strips coated with polyethylene film.

5 mg: Box of 6 suppositories

10mg: Box of 5 or 50 suppositories

Not all pack sizes may be marketed.

### **Storage Conditions**

Store below 25°C.

In order to protect from light, keep the blister in the outer carton.

Please consult your doctor or pharmacist for further information.

Please refer to packaging for information on shelf-life.

### **Name and Address of Manufacturer**

Dulcolax Suppository 5 mg and 10mg

Manufactured by

Istituto De Angeli S.r.L

Florence, Italy

### **Product Registration Holder**

#### **In Malaysia:**

DKSH Malaysia Sdn Bhd,

B-11-01, The Ascent, Paradigm

No.1, Jalan SS7/26A, Kelana Jaya

47301 Petaling Jaya, Malaysia

### **Product Registrant**

#### **In Singapore:**

Opella Healthcare Singapore Pte. Ltd.

38 Beach Road #18-11

South Beach Tower

Singapore 189767

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<b>Store in a safe place out of the reach of children!</b>
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