This package insert is continually updated: please read carefully before using a new pack! In case of any question, please contact your physician or pharmacist.

Composition

Amaryl 1mg Tablet: Each tablet contains 1mg glimepiride, as active ingredient.
Amaryl 2mg Tablet: Each tablet contains 2mg glimepiride, as active ingredient.
Amaryl 3mg Tablet: Each tablet contains 3mg glimepiride, as active ingredient.
Amaryl 4mg Tablet: Each tablet contains 4mg glimepiride, as active ingredient.

Excipients: Lactose, sodium starch glycolate, polyvidone 25000, microcrystalline cellulose, magnesium stearate, red ferric oxide (Amaryl 1.0), yellow ferric oxide (Amaryl 2.0 and Amaryl 3.0), indigo carmine aluminium lake (Amaryl 2.0 and Amaryl 4.0).

Properties

Glimepiride, the active ingredient of Amaryl, is a blood-sugar-lowering agent belonging to the sulfonylurea group. The decrease in blood sugar is achieved principally by means of the stimulation of insulin release from pancreatic beta cells. This effect is predominantly based on improved responsiveness of these cells to the physiological glucose stimulus. Glimepiride augments the normal action of insulin on peripheral glucose uptake. Moreover, it mimics such action as well as the glucose output of the liver. Good metabolic control over 24 hours can be achieved with a single dose of Amaryl.

In patients with insufficient response to the maximum dose, combined use with an additional oral antidiabetic containing metformin or with insulin improves metabolic control.

Indications

Non-insulin-dependent (type II) diabetes, whenever blood sugar levels cannot be controlled adequately by diet, physical exercise and weight reduction alone. Amaryl may also be used in combination with an oral antidiabetic containing metformin or with insulin.

Dosage

Strictly follow the recommended dosage unless directed otherwise by the physician.

In principle, the dosage of Amaryl is governed by the desired blood sugar level. The dosage of glimepiride must be the lowest which is sufficient to achieve the desired metabolic control.

Treatment with Amaryl must be initiated and monitored by a physician. Amaryl must be taken at the times and in the doses prescribed. Mistakes, e.g. forgetting to take a dose, must never be corrected by subsequently taking a larger dose. Measures for dealing with such mistakes (in particular forgetting a dose or skipping a meal) or situations where a dose cannot be taken at the prescribed time must be discussed and agreed between physician and patient beforehand. A physician must be notified immediately if the dose taken is too high, or an extra dose has been taken. The initial and the maintenance doses are set based on the results of regular checks.
of glucose in blood and urine. Monitoring of glucose levels in blood and urine also serves to detect either primary or secondary failure of therapy.

**Initial dose and dose titration:** The usual initial dose is 1mg Amaryl once daily. If necessary, the daily dose can be increased. Any increase should be based on regular blood sugar monitoring, and should be gradual, i.e., at intervals of one to two weeks, and carried out stepwise, as follows: 1mg - 2mg - 3mg - 4mg - 6mg, and in exceptional cases 8mg.

**Dose range in patients with well controlled diabetes:** The usual dose range in patients with well controlled diabetes is 1 to 4 mg Amaryl daily. Only some patients benefit from daily doses of more than 6 mg.

**Distribution of doses:** Timing and distribution of doses are to be decided by the physician, taking into consideration the patient's current life-style. Normally, a single daily dose of Amaryl is sufficient. This dose should be taken immediately before a substantial breakfast or - if none is taken - immediately before the first main meal. It is very important not to skip meals after taking Amaryl.

**Secondary dosage adjustment:** As the control of diabetes improves, sensitivity to insulin increases; therefore, glimepiride requirements may fall as treatment proceeds. To avoid an excessive reduction in blood sugar (hypoglycaemia), a timely dose reduction or cessation of Amaryl therapy must be considered.

A dose adjustment must also be considered whenever the patient's weight or lifestyle changes, or other factors causing an increased susceptibility to hypoglycaemia or to an excessive increase in blood sugar levels (hyperglycaemia) arise (see under "Warnings and precautions").

**Duration of treatment:** Treatment with Amaryl is normally a long-term therapy.

**Changeover from other oral antidiabetics to Amaryl:** There is no exact dosage relationship between Amaryl and other oral blood-sugar-lowering agents. When substituting Amaryl for other such agents, the initial daily dose is 1 mg; this applies even in changeovers from the maximum dose of another oral blood-sugar-lowering agent. Any Amaryl dose increase should be in accordance with guidelines given above in "Initial dose and dose titration".

Consideration must be given to the potency and duration of action of the previous blood-sugar-lowering agent. It may be necessary to interrupt treatment to avoid additive effects which would increase the risk of hypoglycaemia.

**Use in combination with metformin:** Whenever blood sugar levels cannot be controlled adequately with the maximum daily dose of either Amaryl or a metformin-containing antidiabetic alone, both medicines may be used concomitantly. In such cases, the dose of the established medicine remains unchanged. Treatment with the additional medicine is started at a low dose, which - depending on the desired blood sugar level - may then be increased gradually up to the maximum daily dose. Combined treatment should be initiated under close medical supervision.

**Use in combination with insulin:** Whenever blood sugar levels cannot be controlled adequately with the maximum daily dose of Amaryl, insulin may be given concomitantly. In this case, the current dose of Amaryl remains unchanged. Insulin treatment is started at a low dose, which is subsequently increased stepwise according to the desired blood sugar level. Combined treatment should be initiated under close medical supervision.

**Special Populations Renal Insufficiency:** There is limited information available on the use of Amaryl in renal insufficiency. Patients with impaired renal function may...
be more sensitive to the glucose-lowering effect of Amaryl.

**Administration**
Amaryl tablets must be swallowed without chewing and with sufficient amounts of liquid (approximately 1/2 glass).

**Contraindications**
Amaryl is not suitable for the treatment of insulin-dependent (type I) diabetes mellitus (e.g., for the treatment of diabetics with a history of ketoacidosis), of diabetic ketoacidosis, or of diabetic precoma or coma. Amaryl must not be used in patients hypersensitive to glimepiride, other sulfonylureas, other sulfonamides, or to any of the excipients (see "Composition"). No experience has been gained concerning the use of Amaryl in patients with severe impairment of liver function and in dialysis patients. In patients with severe impairment of hepatic function, changeover to insulin is indicated, not least to achieve optimal metabolic control.

**Pregnancy and lactation:** To avoid risk of harm to the child, Amaryl must not be taken during pregnancy; a changeover to insulin is necessary. Patients planning a pregnancy must inform their physician, and should change over to insulin. Ingestion of glimepiride with the breast milk may harm the child. Therefore, Amaryl must not be taken by breast-feeding women, and a changeover to insulin or discontinuation of breast-feeding is necessary.

**Warnings and precautions**
To achieve optimal control of blood sugar, a correct diet, regular and sufficient physical exercises and, if necessary, reduction of body weight are just as important as regular intake of Amaryl. Clinical signs of hyperglycaemia are, e.g., increased urinary frequency, intense thirst, dryness of the mouth, and dry skin.

When starting treatment, the patient must be informed about the effects and risks of Amaryl and about its role in conjunction with dietary measures and physical exercise; the importance of adequate co-operation must also be stressed. In the initial weeks of treatment, the risk of hypoglycaemia may be increased and necessitates especially careful monitoring. Factors favouring hypoglycaemia include:
- unwillingness or (more commonly in older patients) incapacity of the patient to co-operate,
- under nutrition, irregular mealtimes, or skipped meals,
- imbalance between physical exertion and carbohydrate intake,
- alternations of diet,
- consumption of alcohol, especially in combination with skipped meals,
- impaired renal function,
- severe impairment of liver function,
- overdosage with Amaryl,
- certain uncompensated disorders of the endocrine system affecting carbohydrate metabolism or counter-regulation of hypoglycaemia (as, for example, in certain disorders of Thyroid function and in anterior pituitary or adenocortical insufficiency),
- concurrent administration of certain other medicines (see "Interactions").

The physician must be informed about such factors and about hypoglycaemic episodes, since these require particularly careful monitoring.

If such risk factors for hypoglycaemia are present, it may be necessary to adjust the dosage of Amaryl or the entire therapy. This also applies whenever illness occurs during therapy or the patient's life-style changes. Those symptoms of hypoglycaemia...
which reflect the body’s adrenergic counter-regulation (see under “Adverse effects”) may be milder or absent in those situations where hypoglycaemia develops gradually, in the elderly, and in patients with a certain type of nervous disease (autonomic neuropathy) or those receiving concurrent treatment with beta-blockers, clonidine, reserpine, guanethidine, or other sympatholytic medicines. Hypoglycaemia can almost always be promptly controlled by immediate intake of sugar, e.g., in the form of glucose, sugar cubes or sugar-sweetened beverages. Patients should always carry at least 20 grams of glucose with them for this purpose (food or beverages containing artificial sweeteners - such as diet foods or drinks - are ineffective in controlling hypoglycaemia). They may require the assistance of other persons to avoid complications.

It is known from other sulfonylureas that, despite initially successful countermeasures, hypoglycaemia may recur. Therefore, continued close observation is necessary. Severe hypoglycaemia requires, in addition, immediate treatment and follow-up by a physician and, in some circumstances, hospitalisation.

If treated by different physicians (upon, e.g., admission to hospital after an accident, illness while on holiday), the patients must inform them about their diabetes and previous treatment.

In exceptional stress situations (e.g., trauma, surgery, infections with fever) blood sugar control may deteriorate, and a temporary change to insulin may be necessary. During treatment with Amaryl, glucose levels in blood and urine must be checked regularly, as should, additionally, the proportion of glycated haemoglobin. Alertness and reactions may be impaired due to hypo- or hyperglycaemia, especially when beginning or after altering treatment, or when Amaryl is not taken regularly. Such impairment may, for example, affect the ability to operate a vehicle or machinery.

**Overdose**

Amaryl overdose may lead to severe and sometimes life-threatening hypoglycaemia and may require hospitalisation even as a precautionary measure. Significant overdose with severe reactions is a medical emergency and will necessitate immediate treatment and hospitalisation.

Mild episodes of hypoglycaemia can usually be treated with oral carbohydrates. Adjustments in dosage, meal patterns or physical activity may be necessary. More severe episodes with coma, seizure or neurologic impairment may be treated with glucagon (intramuscular or subcutaneous) or concentrated glucose solution (intravenous). If life-threatening amounts have been ingested, detoxification (by, e.g., gastric lavage, activated charcoal) will be necessary.

Sustained administration of carbohydrates and observation may be necessary because hypoglycaemia may recur after apparent clinical recovery.

**Interactions**

In order to avoid possible interactions with other medicines, inform your physician or pharmacist about any other current treatment.

Patients who take or discontinue taking certain other medicines while undergoing treatment with Amaryl may experience changes in blood sugar control. Based on experience with Amaryl and on what is known of other sulfonylureas, the following interactions must be considered:

Potentiation of the blood-sugar-lowering effect and, thus, in some instances hypoglycaemia may occur when one of the following medicines is taken, for example: insulin.
lin and other Oral Antidiabetics, ACE inhibitors, allopurinol, anabolic steroids and male-sex-hormones, chloramphenicol, coumarin derivatives, cyclophosphamide, di-opyramide, fenfluramine, fenriamol, fibrates, fluoxetine, guanethidine, isosofa-
mide, MAO-inhibitors, miconazole, para-aminosalicylic acid, pentoxifylline (high dose parenteral), phenylbutazone, azapropazone, oxyphenbutazone, probenecid, quino-
lones, salicylates, sulfinpyrazone, sulfonamides, tetracyclines, tritoqualine, trofosfa-
mide. Weakening of the blood-sugar-lowering effect and, thus, raised blood sugar levels may occur when one of the following medicines is taken, for example: acetazola-
mide, barbiturates, corticosteroids, diazoxide, diuretics, epinephrine (adrenaline) and other sympathomimetic agents, glucagon, laxatives (after protracted use), nicotinic acid (in high doses), oestrogens and progestogens, phenothiazines, phenytoin, rifampicin, Thyroid hormones. H₂ receptor antagonists, clonidine and reserpine may lead to either potentiation or weakening of the blood-sugar-lowering effect. Beta-blockers decrease glucose tolerance. In patients with diabetes mellitus, this may lead to deterioration of metabolic control. In addition, beta-blockers may increase the tendency to hypoglycaemia (due to impaired counter-regulation). Under the influence of sympatholytic medicines such as beta-blockers, clonidine, guanethidine and reserpine, the signs of adrenergic counter-regulation to hypogly-
caemia or may be reduced or absent. Both acute and chronic alcohol intake may potentiate or weaken the blood-sugar-
lowering action of Amaryl unpredictably. The effect of coumarin derivatives may be potentiated or weakened.

Adverse effects

Please tell your physician or pharmacist if you experience any adverse effect with the use of Amaryl.

Based on experience with Amaryl and on what is known of other sulfonylureas, the following adverse effects must be considered:

Hypoglycaemia: As a result of the blood-sugar-lowering action of Amaryl, hypogly-
caemia may occur, and may also be prolonged. Possible symptoms of hypoglycaemia include headache, ravenous anger, nausea, vomiting, lassitude, sleepiness, disordered sleep, restlessness, aggressiveness, impaired concentration, alertness and reactions, depression, confusion, difficulty in speaking and even speech loss, visual disorders, tremor, pareses, sensory disturban-
ces, dizziness, helplessness, loss of self-control, delirium, cerebral convulsions, con-
norlence and loss of consciousness up to and including coma, shallow respiration and slow heart rate (bradycardia). In addition, signs of adrenergic counter-regulation may be present such as sweating, clammy skin, anxiety, rapid heart rate (tachycardia), hypertension, palpitations, angina pectoris, and cardiac arrhythmias. The clinical pic-
ture of a severe hypoglycaemic attack may resemble that of a stroke. The symptoms of hypoglycaemia nearly always subside when hypoglycaemia is corrected.

Eyes: Especially at the start of treatment, temporary visual impairment may occur due to the change in blood sugar levels.

Digestive tract: Occasionally, gastrointestinal symptoms such as the following may occur: nausea, vomiting, sensations of pressure or fullness in the epigastrium, abdominal pain, and diarrhoea. In rare cases, liver enzyme levels may increase. In isolated cases, impairment of liver
function (e.g. with cholestasis and jaundice) and hepatitis may develop, possibly leading to liver failure.

**Blood:** Severe changes in the blood picture may occur: Rarely, thrombocytopenia and, in isolated cases, leucopenia, haemolytic anaemia or, e.g. erythrocytopenia, granulocytopenia, agranulocytosis, and pancytopenia (e.g. due to myelosuppression) may develop.

**Other adverse reactions:** Occasionally, allergic or pseudoallergic reactions may occur, e.g. in the form of itching, urticaria or rashes. Such reactions may be mild, but also may become more serious and may be accompanied by dyspnoea and a fall in blood pressure, sometimes progressing to shock. If urticaria occurs, a physician must be notified immediately. In isolated cases, a decrease in serum sodium, inflammation of blood vessels (allergic vasculitis) and hypersensitivity of the skin to light may occur.

Since some adverse effects (e.g., severe hypoglycaemia, certain changes in the blood picture, severe allergic or pseudoallergic reactions, or liver failure) may under certain circumstances become life-threatening, it is essential that, if sudden or severe reactions do occur, you inform a physician at once, and on no account continue taking the drug without a physician's express guidance.

**Storage:** Do not store above 25°C

**Expiry Date:** Do not use later than the date of expiry.

**Keep medicines out of the reach of children.**

**Presentation**

Amaryl 1mg Tablets: Pack of 2 x 10 Tablets.

Amaryl 2mg Tablets: Pack of 2 x 10 Tablets.

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Amaryl 4mg Tablets: Pack of 2 x 10 Tablets.

Manufactured by: Aventis Pharma S.p.A., Scoppito, Italy.

Repacked by: sanofi-aventis Pakistan limited.
Plot No. 23, Sector 22, Korangi Industrial Area, Karachi.
**Amaryl**

**Product:** Amaryl Tablet.

**Component:** Lealet (Page 7 / 10)

**SAP No. :** 511915

**Code No.:** 511915-01

**Version:** 1

**Logo Version:** Version SCV A1 05.10.2005

**Min.font size:** 8

**Size (W x H):** 525 x 168 mm

**PCM:** PCM 6 (60mm)

**Colour Scheme:** Reflex Blue

**Country:** sanofi-aventis Pakistan limited
Korangi Industrial Area, Karachi.

**Prepared by:** Muhammad Idrees

**Checked by:** Muhammad waqas

**Title:** A.M. QC.

**Title:** QC Officer

**Date:**

**Title:** DRA Associate

**Title:** Head IQC

**Date:**
ARTWORK LEGEND

| Product: | Amaryl Tablet. |
| Component: | Leaflet (Page 8 / 10) |
| SAP No.: | 511915 |
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