

## **Summary of Product Characteristics for Pharmaceutical Products**

### **1. Name of the medicinal product:**

Argolin 0.5 mg Tablet

### **2. Qualitative and quantitative composition**

One Argolin tablet contains 0.5 mg cabergoline.

#### **Excipients with known effect:**

Each tablet contains 75.90 mg of lactose.

For the full list of excipients, see section 6.1.

### **3. Pharmaceutical form**

Film-coated tablet

White color, round shape, film coated tablet with single dividing line in Alu-Alu Blister.

### **4. Clinical particulars**

#### **4.1 Therapeutic indications**

##### **Inhibition/suppression of physiological lactation**

Cabergoline is indicated for the inhibition of physiological lactation soon after delivery and for suppression of already established lactation:

1. After parturition, when the mother elects not to breast feed the infant or when breast feeding is contraindicated due to medical reasons related to the mother or the new-born.
2. After stillbirth or abortion.

Cabergoline prevents/suppresses physiological lactation by inhibiting prolactin secretion.

In controlled clinical trials, cabergoline given as a single 1 mg administration during the first day post-partum, was effective in inhibiting milk secretion, as well as breast engorgement and pain in 70 - 90% of the women. Less than 5% of women experienced rebound breast symptomatology during the third post-partum week (which was usually mild in severity).

Suppression of milk secretion and relief of breast engorgement and pain are obtained in approximately 85% of nursing women treated with a total dose of 1 mg cabergoline given in four divided doses over two days. Rebound breast symptomatology after day 10 is uncommon (approximately 2% of cases).

##### **Treatment of hyperprolactinaemic disorders**

Cabergoline is indicated for the treatment of dysfunctions associated with hyperprolactinaemia, including amenorrhoea, oligomenorrhoea, anovulation and galactorrhoea. Cabergoline is indicated in patients with prolactin-secreting pituitary adenomas (micro- and macroprolactinomas),

idiopathic hyperprolactinaemia, or empty sella syndrome with associated hyperprolactinaemia, which represent the basic underlying pathologies contributing to the above clinical manifestations.

On chronic therapy, cabergoline at doses ranging between 1 and 2 mg per week, was effective in normalising serum prolactin levels in approximately 84% of hyperprolactinaemic patients. Regular cycles were resumed in 83% of previously amenorrhoeic women. Restoration of ovulation was documented in 89% of women with progesterone levels monitored during the luteal phase. Galactorrhoea disappeared in 90% of cases showing this symptom before therapy. Reduction in tumour size was obtained in 50 - 90% of female and male patients with micro- or macroprolactinoma.

#### **4.2 Posology and method of administration**

Cabergoline is to be administered by the oral route. Since in clinical studies cabergoline has been mainly administered with food and since the tolerability of this class of compounds is improved with food, it is recommended that cabergoline be preferably taken with meals for all the therapeutic indications.

##### **Inhibition/suppression of physiological lactation**

For inhibition of lactation cabergoline should be administered during the first day post-partum. The recommended therapeutic dose is 1 mg (two 0.5 mg tablets) given as a single dose.

For suppression of established lactation, the recommended therapeutic dosage regimen is 0.25 mg (one-half 0.5 mg tablet) every 12 hours for two days (1 mg total dose). This dosage regimen has been demonstrated to be better tolerated than the single dose regimen in women electing to suppress lactation having a lower incidence of adverse events, in particular of hypotensive symptoms.

##### **Treatment of hyperprolactinaemic disorders**

The recommended initial dosage of cabergoline is 0.5 mg per week given in one or two (one-half of one 0.5 mg tablet) doses (e.g. on Monday and Thursday) per week. The weekly dose should be increased gradually, preferably by adding 0.5 mg per week at monthly intervals until an optimal therapeutic response is achieved. The therapeutic dosage is usually 1 mg per week and ranges from 0.25 mg to 2 mg per week. Doses of cabergoline up to 4.5 mg per week have been used in hyperprolactinaemic patients.

The maximum dose should not exceed 3mg per day.

The weekly dose may be given as a single administration or divided into two or more doses per week according to patient tolerability. Division of the weekly dose into multiple administrations is advised when doses higher than 1 mg per week are to be given since the tolerability of doses

greater than 1 mg taken as a single weekly dose has been evaluated only in a few patients.

Patients should be evaluated during dose escalation to determine the lowest dosage that produces the therapeutic response. Monitoring of serum prolactin levels at monthly intervals is advised since, once the effective therapeutic dosage regimen has been reached, serum prolactin normalisation is usually observed within two to four weeks.

After cabergoline withdrawal, recurrence of hyperprolactinaemia is usually observed. However, persistent suppression of prolactin levels has been observed for several months in some patients. Of the group of women followed up, 23/29 had ovulatory cycles which continued for greater than 6 months after cabergoline discontinuation.

### **Paediatric population**

The safety and efficacy of cabergoline has not been established in subjects less than 16 years of age.

### **Use in the elderly**

As a consequence of the indications for which cabergoline is presently proposed, the experience in elderly is very limited. Available data do not indicate a special risk.

## **4.3 Contraindications**

Hypersensitivity to cabergoline, any of the excipients listed in section 6.1 or any ergot alkaloid.

History of pulmonary, pericardial and retroperitoneal fibrotic disorders.

Cabergoline is contraindicated in patients with hepatic insufficiency and with toxemia of pregnancy. Cabergoline should not be co-administered with anti-psychotic medications or administered to women with a history of puerperal psychosis.

For long-term treatment: Evidence of cardiac valvulopathy as determined by pre-treatment echocardiography. (See section 4.4).

## **4.4 Special warnings and precautions for use**

### **General:**

The safety and efficacy of cabergoline have not yet been established in patients with renal and hepatic disease. As with other ergot derivatives, cabergoline should be given with caution to patients with severe cardiovascular disease, Raynaud's syndrome, renal insufficiency, peptic ulcer or gastrointestinal bleeding, or with a history of serious, particularly psychotic, mental disorders. Particular care should be taken when patients are taking concomitant psychoactive medication.

Patients with rare hereditary problems of galactose intolerance, total lactase deficiency or glucose-galactose malabsorption should not take this medicine.

Symptomatic hypotension can occur with cabergoline administration for any indication. Care should be exercised when administering cabergoline concomitantly with other drugs known to lower blood pressure.

The effects of alcohol on overall tolerability of cabergoline are currently unknown.

Before cabergoline administration, pregnancy should be excluded and after treatment pregnancy should be prevented for at least one month.

#### *Hepatic Insufficiency:*

Lower doses should be considered in patients with severe hepatic insufficiency who receive prolonged treatment with cabergoline. Compared to normal volunteers and those with lesser degrees of hepatic insufficiency, an increase in AUC has been seen in patients with severe hepatic insufficiency (Child-Pugh Class C) who received a single 1 mg dose.

#### *Postural Hypotension:*

Postural hypotension can occur following administration of cabergoline. Care should be exercised when administering cabergoline concomitantly with other drugs known to lower blood pressure.

#### *Somnolence/Sudden Sleep Onset:*

Cabergoline has been associated with somnolence. Dopamine agonists can be associated with sudden sleep onset episodes in patients with Parkinson's disease. Sudden onset of sleep during daily activities, in some cases without awareness or warning signs, has been reported uncommonly. Patients must be informed of this and advised to exercise caution while driving or operating machines during treatment with cabergoline. Patients who have experienced somnolence and/or an episode of sudden sleep onset must refrain from driving or operating machines. Furthermore a reduction in dosage or termination of therapy may be considered. (See section 4.7)

#### **Impulse control disorders:**

Patients should be regularly monitored for the development of impulse control disorders. Patients and carers should be made aware that behavioural symptoms of impulse control disorders including pathological gambling, increased libido, hypersexuality, compulsive spending or buying, binge eating and compulsive eating can occur in patients treated with dopamine agonists including Argolin Dose reduction/tapered discontinuation should be considered if such symptoms develop.

#### **Inhibition/suppression of physiological lactation:**

As with other ergot derivatives, cabergoline should not be used in women with pregnancy-induced hypertension, for example, post-partum hypertension, unless the potential benefit is judged to outweigh the possible risk, except for toxæmia of pregnancy (see section 4.3).

Serious adverse events including hypertension, myocardial infarction, seizures, stroke or psychiatric disorders have been reported in postpartum women treated with cabergoline for inhibition of lactation. In some patients the development of seizures or stroke was preceded by severe headache and/or transient visual disturbances. Blood pressure should be carefully monitored after the treatment. If hypertension, suggestive chest pain, severe, progressive, or unremitting headache (with or without visual disturbances), or evidence of central nervous system toxicity develop, cabergoline should be discontinued and the patient should be evaluated promptly.

In post-partum studies with cabergoline, blood pressure decreases were mostly asymptomatic and were frequently observed on a single occasion 2 to 4 days after treatment. Since decreases in blood pressure are frequently noted during the puerperium, independently of drug therapy, it is likely that many of the observed decreases in blood pressure after cabergoline administration were not drug-induced. However, periodic monitoring of blood pressure, particularly during the first few days after cabergoline administration, is advised.

A single dose of 0.25 mg of cabergoline should not be exceeded in nursing women treated for suppression of established lactation to avoid potential postural hypotension (see section 4.2). A clinical study exploring the efficacy and tolerability of 0.5 mg of cabergoline given as a single dose for suppression of lactation has shown that the risk of side effects is approximately doubled in this indication if the drug is administered as a single dose of 0.5 mg.

### **Treatment of hyperprolactinaemic disorders:**

Because hyperprolactinaemia accompanied with amenorrhoea/galactorrhoea and infertility may be associated with pituitary tumour, a complete evaluation of the pituitary is indicated before treatment with cabergoline is initiated.

Cabergoline restores ovulation and fertility in women with hyperprolactinaemic hypogonadism.

Because pregnancy might occur prior to reinitiation of menses, a pregnancy test is recommended at least every four weeks during the amenorrhoeic period and, once menses are reinitiated, every time a menstrual period is delayed by more than three days. Women who wish to avoid pregnancy should be advised to use mechanical contraception during treatment with cabergoline and after discontinuation of cabergoline until recurrence of anovulation. As a precautionary measure, women who become pregnant should be monitored to detect signs of

pituitary enlargement since expansion of pre-existing pituitary tumours may occur during gestation.

Before administration of cabergoline, pregnancy should be excluded. Because clinical experience is still limited and the product has a long half-life, as a precautionary measure it is recommended that once regular ovulatory cycles have been achieved women seeking pregnancy discontinue cabergoline one month before intended conception. Should pregnancy occur during treatment, cabergoline is to be discontinued. As a precautionary measure, women who become pregnant should be monitored to detect signs of pituitary enlargement since expansion of pre-existing pituitary tumours may occur during gestation.

Regular gynaecological assessment, including cervical and endometrial cytology, is recommended for patients taking cabergoline for extensive periods.

**Fibrosis and cardiac valvulopathy and possibly related clinical phenomena:**

Fibrotic and serosal inflammatory disorders such as pleuritis, pleural effusion, pleural fibrosis, pulmonary fibrosis, pericarditis, pericardial effusion, cardiac valvulopathy involving one or more valves (aortic, mitral and tricuspid) or retroperitoneal fibrosis have occurred after prolonged usage of ergot derivatives with agonist activity at the serotonin 5HT<sub>2B</sub> receptor, such as cabergoline. In some cases, symptoms or manifestations of cardiac valvulopathy improved after discontinuation of cabergoline.

Erythrocyte sedimentation rate (ESR) has been found to be abnormally increased in association with pleural effusion/fibrosis. Chest x-ray examination is recommended in cases of unexplained ESR increases to abnormal values.

Valvulopathy has been associated with cumulative doses, therefore, patients should be treated with the lowest effective dose. At each visit, the risk benefit profile of cabergoline treatment for the patient should be reassessed to determine the suitability of continued treatment with cabergoline.

**Before initiating long-term treatment:**

All patients must undergo a cardiovascular evaluation, including echocardiogram to assess the potential presence of asymptomatic valvular disease. It is also appropriate to perform baseline investigations of erythrocyte sedimentation rate or other inflammatory markers, lung function/chest X-ray and renal function prior to initiation of therapy. In patients with valvular regurgitation, it is not known whether cabergoline treatment might worsen the underlying disease. If fibrotic valvular disease is detected, the patient should not be treated with cabergoline (see section 4.3).

**During long-term treatment:**

Fibrotic disorders can have an insidious onset and patients should be regularly monitored for possible manifestations of progressive fibrosis. Therefore, during treatment, attention should be paid to the signs and symptoms of:

- Pleuro-pulmonary disease such as dyspnoea, shortness of breath, persistent cough or chest pain.
- Renal insufficiency or ureteral/abdominal vascular obstruction that may occur with pain in the loin/flank and lower limb oedema as well as any possible abdominal masses or tenderness that may indicate retroperitoneal fibrosis.
- Cardiac failure: cases of valvular and pericardial fibrosis have often manifested as cardiac failure. Therefore, valvular fibrosis (and constrictive pericarditis) should be excluded if such symptoms occur.

Clinical diagnostic monitoring for development of fibrotic disorders, as appropriate, is essential. Following treatment initiation, the first echocardiogram must occur within 3-6 months, thereafter, the frequency of echocardiographic monitoring should be determined by appropriate individual clinical assessment with particular emphasis on the above-mentioned signs and symptoms, but must occur at least every 6 to 12 months.

Cabergoline should be discontinued if an echocardiogram reveals new or worsened valvular regurgitation, valvular restriction or valve leaflet thickening (see section 4.3).

The need for other clinical monitoring (e.g. physical examination including, cardiac auscultation, X-ray, CT scan) should be determined on an individual basis.

Additional appropriate investigations such as erythrocyte sedimentation rate, and serum creatinine measurements should be performed if necessary to support a diagnosis of a fibrotic disorder.

#### **4.5 Interaction with other medicinal products and other forms of interaction**

The concomitant use of other drugs during early puerperium, particularly of ergot alkaloids, was not associated with detectable interactions modifying the efficacy and safety of cabergoline.

No information is available about the interaction between cabergoline and other ergot alkaloids; therefore, the concomitant use of these medications during long-term treatment with cabergoline is not recommended.

Since cabergoline exerts its therapeutic effect by direct stimulation of dopamine receptors, it should not be concurrently administered with drugs which have dopamine-antagonist activity (such as phenothiazines, butyrophenones, thioxanthenes, metoclopramide) since these might reduce the prolactin-lowering effect of cabergoline.

As with other ergot derivatives, cabergoline should not be used with macrolide antibiotics (e.g. erythromycin) due to increased systemic bioavailability of cabergoline.

#### **4.6 Pregnancy and Lactation**

There are no adequate and well-controlled studies from the use of cabergoline in pregnant women. Animal studies have not demonstrated teratogenic effects, but reduced fertility and embryo-toxicity were observed in association with pharmacodynamic activity (see section 5.3).

In a twelve year observational study on pregnancy outcomes following cabergoline therapy, information is available on 256 pregnancies. Seventeen of these 256 pregnancies (6.6%) eventuated in major congenital malformations or abortion. Information is available on 23/258 infants who had a total of 27 neonatal abnormalities, both major and minor. Musculoskeletal malformations were the most common neonatal abnormality (10), followed by cardio-pulmonary abnormalities (5). There is no information on perinatal disorders or long-term development of infants exposed to intra-uterine cabergoline. Based on recent published literature, the prevalence of major congenital malformations in the general population has been reported to be 6.9% or greater. Rates of congenital abnormality vary between different populations. It is not possible to accurately determine if there is an increased risk as no control group was included.

Cabergoline should only be used during pregnancy if clearly indicated and after an accurate benefit/risk evaluation. (See section 4.4).

Due to the long half-life of the drug and limited data on in utero exposure, women planning to become pregnant should discontinue cabergoline one month before intended conception. If conception occurs during therapy, treatment should be discontinued as soon as pregnancy is confirmed to limit foetal exposure to the drug.

In rats, cabergoline and/or its metabolites are excreted in milk. No information is available on the excretion in breast milk in humans; however, mothers should be advised not to breast-feed in case of failed lactation inhibition/suppression by cabergoline. Since it prevents lactation, cabergoline should not be administered to mothers with hyperprolactinemic disorders who wish to breast-feed their infants.

#### **4.7 Effects on ability to drive and use machines**

Patients should be careful when performing actions which require fast and accurate reaction during treatment initiation.

During the first days of cabergoline administration, patients should be cautioned about re-engaging in activities requiring rapid and precise responses such as driving an automobile or operating machinery.

Patients being treated with cabergoline and presenting with somnolence must be informed to refrain from driving or engaging in activities where



impaired alertness may put themselves and others at risk of serious injury or death (e.g. operating machines) until such episodes and somnolence have resolved. (See section 4.4).

#### 4.8 Undesirable effects

Adverse events are generally dose-related. In patients known to be intolerant to dopaminergic drugs, the likelihood of adverse events may be lessened by starting therapy with cabergoline at reduced doses, e.g. 0.25 mg once a week, with subsequent gradual increase until the therapeutic dosage is reached. If persistent or severe adverse events occur, temporary reduction of dosage followed by a more gradual increase, e.g. increments of 0.25 mg/week every two weeks, may increase tolerability.

The following undesirable effects have been observed and reported during treatment with cabergoline with the following frequencies: Very common ( $\geq 1/10$ ); common ( $\geq 1/100$  to  $<1/10$ ); uncommon ( $\geq 1/1,000$  to  $\leq 1/100$ ); rare ( $\geq 1/10,000$  to  $\leq 1/1,000$ ); very rare ( $\leq 1/10,000$ ), not known (cannot be estimated from the available data).

<b>MedDRA System Organ Class</b>	<b>Frequency</b>	<b>Undesirable Effects</b>
<b>Cardiac disorders</b>	Very Common	Valvulopathy (including regurgitation) and related disorders (pericarditis and pericardial effusion)
	Uncommon	Palpitations
	Not Known	Angina pectoris
<b>Respiratory, thoracic and mediastinal disorders</b>	Uncommon	Dyspnea, pleural effusion, fibrosis, (including pulmonary fibrosis), epistaxis
	Very rare	Pleural fibrosis
	Not Known	Respiratory disorder, respiratory failure, pleuritis, chest pain
<b>Immune system disorders</b>	Uncommon	Hypersensitivity reaction
<b>Nervous system disorders</b>	Very common	Headache*, dizziness/vertigo*
	Common	somnolence
	Uncommon	Transient hemianopsia, syncope, paresthesia
	Not Known	Sudden sleep onset, tremor
<b>Eye disorders</b>	Not Known	Visual impairment
<b>Psychiatric disorders</b>	Common	Depression
	Uncommon	Increased libido
	Not Known	Aggression, delusions, hypersexuality, pathological gambling, psychotic disorder, hallucinations
<b>Vascular disorders</b>	Common	Cabergoline generally exerts a hypotensive effect in patients on long-term treatment; Postural hypotension, hot flushes**
	Uncommon	Digital vasospasm, fainting
<b>Gastrointestinal disorders</b>	Very common	Nausea*, dyspepsia, gastritis, abdominal pain*
	Common	Constipation, vomiting**
	Rare	Epigastric pain

<b>General disorders and administration site conditions</b>	Very Common	Asthenia***, fatigue
	Uncommon	Oedema, peripheral oedema
<b>Hepato-biliary disorders</b>	Not Known	Hepatic function abnormal
<b>Skin and subcutaneous tissue disorders</b>	Uncommon	Rash, alopecia
<b>Musculoskeletal and connective tissue disorders</b>	Uncommon	Leg cramps
<b>Reproductive system and breast disorders</b>	Common	Breast pain
<b>Investigations</b>	Common	Asymptomatic decreases in blood pressure ( $\geq 20$ mmHg systolic and $\geq 10$ mmHg diastolic)
	Uncommon	A decrease in haemoglobin values have been observed in amenorrhoeic women during the first few months after menses.
	Not Known	Blood creatinine phosphokinase increased, liver function tests abnormal

\*Very common in patients treated for hyperprolactinaemin disorders;

Common in patients treated for inhibition/suppression of lactation

\*\* Common in patients treated for hyperprolactinaemin disorders;

Uncommon in patients treated for inhibition/suppression of lactation

\*\*\* Very common in patients treated for hyperprolactinaemin disorders;

Uncommon in patients treated for inhibition/suppression of lactation

#### **Impulse control disorders**

Pathological gambling, increased libido, hypersexuality, compulsive spending or buying, binge eating and compulsive eating can occur in patients treated with dopamine agonists including Argolin (see section 4.4).

#### **Reporting of suspected adverse reactions**

Healthcare professionals are asked to report any suspected adverse reactions via pharmacy and poisons board, Pharmacovigilance Electronic Reporting System (PvERS) <https://pv.pharmacyboardkenya.org>

## **4.9 Overdose**

Symptoms of overdose would likely be those of over-stimulation of dopamine receptors e.g. nausea, vomiting, gastric complaints, postural hypotension, confusion/psychosis or hallucinations.

Supportive measures should be taken to remove any unabsorbed drug and maintain blood pressure, if necessary. In addition, the administration of dopamine antagonist drugs may be advisable.

## **5. Pharmacological properties**

### **5.1 Pharmacodynamic properties**

Pharmacotherapeutic group: Prolactin inhibitors, ATC code: G02CB03

Cabergoline is a dopaminergic ergoline derivative endowed with a potent and long-lasting PRL-lowering activity. It acts by direct stimulation of the D<sub>2</sub>-dopamine receptors on pituitary lactotrophs, thus inhibiting PRL secretion. In rats the compound decreases PRL secretion at oral doses of 3-25 mcg/kg, and *in-vitro* at a concentration of 45 pg/ml. In addition,

cabergoline exerts a central dopaminergic effect via D<sub>2</sub> receptor stimulation at oral doses higher than those effective in lowering serum PRL levels. The long lasting PRL-lowering effect of cabergoline is probably due to its long persistence in the target organ as suggested by the slow elimination of total radioactivity from the pituitary after single oral dose in rats (t<sub>½</sub> of approximately 60 hours).

The pharmacodynamic effects of cabergoline have been studied in healthy volunteers, puerperal women and hyperprolactinaemic patients. After a single oral administration of cabergoline (0.3 - 1.5 mg), a significant decrease in serum PRL levels was observed in each of the populations studied. The effect is prompt (within 3 hours from administration) and persistent (up to 7 - 28 days in healthy volunteers and hyperprolactinaemic patients, and up to 14 - 21 days in puerperal women). The PRL-lowering effect is dose-related both in terms of degree of effect and duration of action.

With regard to the endocrine effects of cabergoline not related to the antiprolactinaemic effect, available data from humans confirm the experimental findings in animals indicating that the test compound is endowed with a very selective action with no effect on basal secretion of other pituitary hormones or cortisol. The pharmacodynamic actions of cabergoline not correlated with the therapeutic effect only relate to blood pressure decrease. The maximal hypotensive effect of cabergoline as single dose usually occurs during the first 6 hours after drug intake and is dose-dependent both in terms of maximal decrease and frequency.

## **5.2 Pharmacokinetic properties**

The pharmacokinetic and metabolic profiles of cabergoline have been studied in healthy volunteers of both sexes and in female hyperprolactinaemic patients.

After oral administration of the labelled compound, radioactivity was rapidly absorbed from the gastrointestinal tract as the peak of radioactivity in plasma was between 0.5 and 4 hours.

Ten days after administration about 18% and 72% of the radioactive dose was recovered in urine and faeces, respectively. Unchanged drug in urine accounted for 2-3% of the dose.

In urine, the main metabolite identified was 6-allyl-8β -carboxy-ergoline, which accounted for 4-6% of the dose. Three additional metabolites were identified in urine, which accounted overall for less than 3% of the dose. The metabolites have been found to be much less potent than cabergoline in inhibiting prolactin secretion *in vitro*. Cabergoline biotransformation was also studied in plasma of healthy male volunteers treated with [<sup>14</sup>C]-cabergoline: a rapid and extensive biotransformation of cabergoline was shown.

The low urinary excretion of unchanged cabergoline has been confirmed also in studies with non-radioactive product. The elimination half-life of

cabergoline, estimated from urinary excretion rates, is long (63-68 hours in healthy volunteers (using a radio-immuno assay), 79-115 hours in hyperprolactinaemic patients (using a HPLC method).

On the basis of the elimination half-life, steady state conditions should be achieved after 4 weeks, as confirmed by the mean peak plasma levels of cabergoline obtained after a single dose ( $37 \pm 8$  pg/ml) and after a 4 week multiple regimen ( $101 \pm 43$  pg/ml).

*In vitro* experiments showed that the drug at concentrations of 0.1-10 ng/ml is 41-42% bound to plasma proteins. Food does not appear to affect absorption and disposition of cabergoline.

### **5.3 Preclinical safety data**

There were maternotoxic effects but no teratogenic effects in mice given cabergoline at doses up to 8 mg/kg/day (approximately 55 times the maximum recommended human dose) during the period of organogenesis.

A dose of 0.012 mg/kg/day (approximately 1/7 the maximum recommended human dose) during the period of organogenesis in rats caused an increase in post-implantation embryofoetal losses. These losses could be due to the prolactin inhibitory properties of cabergoline in rats. At daily doses of 0.5 mg/kg/day (approximately 19 times the maximum recommended human dose) during the period of organogenesis in the rabbit, cabergoline caused maternotoxicity characterized by a loss of body weight and decreased food consumption. Doses of 4 mg/kg/day (approximately 150 times the maximum recommended human dose) during the period of organogenesis in the rabbit caused an increased occurrence of various malformations. However, in another study in rabbits, no treatment-related malformations or embryofoetotoxicity were observed at doses up to 8 mg/kg/day (approximately 300 times the maximum recommended human dose).

## **6. Pharmaceutical Particulars**

### **6.1 List of Excipients**

#### **Tablet core:**

Lactose Monohydrate  
Microcrystalline Cellulose  
(Microcel MC 102)  
Crospovidone  
Colloidal Anhydrous Silica  
(Aerosil 200)  
Purified talc  
Magnesium Stearate

#### **Tablet coating:**

Spectrablend Clear SB 9043  
Mastercote White FA 0961G

Purified Talc  
Carnauba Wax  
Purified Water

**6.2 Incompatibilities**

Not applicable.

**6.3 Shelf-Life**

2 years.

**6.4 Special Precautions for storage**

Do not store above 25° C. Keep the bottle tightly closed in order to protect from moisture.

**6.5 Nature and Content of container**

Class I amber glass bottles, stoppered with an aluminum tamper-evident screw cap with silica gel insert or high-density polyethylene (HDPE) bottles with child-resistant polypropylene (PP) cap with inner low-density polyethylene (LDPE) desiccant canister containing silica gel.

Each bottle contains 2, 4 or 8 tablets and is enclosed in an outer cardboard carton.

Not all pack sizes may be marketed.

**6.6 Special precautions for disposal and other handling**

Bottles of Argolin are supplied with desiccant in caps. This desiccant must not be removed.

**7. Marketing Authorization Holder**

**OPSONIN PHARMA LIMITED**

CORPORATE HEADQUARTER:

OPSONIN BUILDING

30 NEW ESKATON ROAD

DHAKA-1000, BANGLADESH.

**8. Marketing Authorization Number**

CTD10312

**9. Date of first authorization/renewal of the authorization**

19/09/2013

**10. Date of revision of the text**

10/05/2025