7.2 Part VI.2 Elements for a Public Summary

7.2.1 Part VI.2.1 Overview of disease epidemiology

Overactive bladder (OAB) is a disabling condition associated with considerable negative impact on quality of life, quality of sleep, and mental health. Urinary incontinence and overactive bladder are common symptoms among the adult population worldwide, affecting approximately 200 million people. In women, urge incontinence increases with age from 2.0% affected women to 19% with a marked increase after 44 years of age, and in men, increases with age from 0.3% to 8.9% with a marked increase after 64 years of age. Across all age groups, overactive bladder without urge incontinence is more common in men than in women. Urge incontinence affects only a portion of the OAB population: 33% of patients have OAB with urge incontinence ("OAB wet"), while 66% have OAB without urge

incontinence ("OAB dry"). The symptoms of OAB can affect social, psychological, occupational, domestic, physical, and sexual aspects of life. OAB can also lead to depression and low self-esteem[1,2,3].

7.2.2 Part VI.2.2 Summary of treatment benefits

Solifenacin belongs to the group of medicines called anticholinergics. It is used to treat symptoms of an overactive bladder, such as:

- having an urgent need to urinate and wetting yourself because you could not get to the bathroom in time
- increased urinary frequency having to urinate more frequently
- having a strong, sudden urge to urinate.

7.2.3 Part VI.2.3 Unknowns relating to treatment benefits

Safety and efficacy in children and adolescents under 18 years have not yet been established. Therefore, solifenacin should not be used in children.

No clinical data are available from women who became pregnant while taking solifenacin. Animal studies do not indicate direct harmful effects on fertility, embryonal / foetal development or parturition. The potential risk for humans is unknown. Solifenacin is not recommended during pregnancy and in women of childbearing potential not using contraception. No data on the excretion of solifenacin in human milk are available. In mice, solifenacin and/or its metabolites was excreted in milk, and caused a dose dependent failure to thrive in neonatal mice. Solifenacin should not be used during breast-feeding.

Pharmacokinetics of solifenacin in patients with severe hepatic impairment and in patients undergoing hemodialysis have not been studied

7.2.4 Part VI.2.4 Summary of safety concerns

Table 7-5 Important identified risks

Risk	What is known	Preventability
Angioedema (skin allergy that results in the swelling that occurs in the tissue just below the surface of the skin)	Angioedema with airway obstruction has been reported in some patients on solifenacin.	If angioedema occurs, solifenacin should be discontinued and appropriate therapy and/or measures should be taken.
Anaphylactic reactions	Anaphylactic reaction has been reported in some patients treated with solifenacin.	In patients who develop anaphylactic reactions, solifenacin should be discontinued and appropriate therapy and/or measures should be taken.
Interaction with potent CYP3A4 inhibitors like ketoconazole (Interaction with drugs like ketoconazole which may decrease the removal of solifenacin from the body)	Drugs like ketoconazole, ritonavir, nelfinavir, intraconazole, verapamil and diltiazem may decrease the rate at which solifenacin is broken down by the body.	Solifenacin should not be taken if a patient suffers from severe kidney disease or moderate liver disease AND at the same time is being treated with medicines that may decrease the removal of solifenacin from the body (for example, ketoconazole). The doctor or pharmacist will inform the patient if this is the case. The patient should inform the treating doctor or pharmacist if he/she is taking, have recently taken, or might take any other medicines, especially if he/she takes drugs like ketoconazole, ritonavir, nelfinavir,

Risk	What is known	Preventability
		intraconazole, verapamil and diltiazem.
Muscular weakness	Muscle weakness was observed with a not known frequency (cannot be estimated from the available data) during therapy with solifenacin.	Solifenacin should not be taken if a patient suffers from the muscle disease called myasthenia gravis, which can cause an extreme weakness of certain muscles.
Glaucoma (Increased pressure in the eyes, with gradual loss of eye sight)	Increased pressure in the eyes was observed with a not known frequency (cannot be estimated from the available data) during therapy with solifenacin.	Solifenacin should not be taken if a patient suffers from increased pressure in the eyes, with gradual loss of eye sight (glaucoma)
Severe gastrointestinal conditions including colonic obstruction and ileus (Severe conditions of the digestive system like partial or complete blockage of the small and/or large bowel)	Rarely (may affect up to 1 in 1,000 people), lodging of a large amount of hardened stool in the large intestine (faecal impaction) was observed during therapy with solifencain.	The doctor should be informed if the patient has some obstruction of the digestive system (constipation).
Urinary retention (build-up of urine in the bladder due to inability to empty the bladder)	Difficulty in passing urine was observed uncommonly (may affect up to 1 in 100 people) and build-up of urine in the bladder due to inability to empty the bladder rarely (may affect up to 1 in 1,000 people) during therapy with solifenacin. Also if too much solifenacin was taken (overdose), accumulation of urine in the bladder (urinary retention) can occur. If a patient has trouble emptying the bladder (= bladder obstruction) or has difficulty in passing urine (e.g. a thin urine flow), the risk of accumulation of urine in the bladder is much higher.	Solifenacin should not be taken if a patient has an inability to pass water or to empty the bladder completely. Before taking solifenacin, the doctor or pharmacist should be informed if the patient has trouble emptying the bladder or has difficulty in passing urine. Risk of accumulation of urine in the bladder is much higher.
QT prolongation and Torsade de Pointes	QT prolongation and Torsade de Pointes have been observed in patients with risk factors, such as pre-existing long QT syndrome and hypokalaemia.	Specific attention should be paid to patients with known risk for QT-prolongation (i.e. hypokalaemia, bradycardia and concurrent administration of medicinal products known to prolong QT-interval) and relevant pre-existing cardiac diseases (i.e. myocardial ischaemia, arrhythmia, congestive heart failure).

Table 7-6 Important potential risks

Risk	What is known (Including reason why it is considered a potential risk)
Hallucinations, confusional state	Hallucinations and confusional state were observed in post-marketing studies. In severe cases they should be treated with physostigmine or carbachol.

Table 7-7 Missing information

Risk	What is known
Pediatric population	Safety and efficacy in children and adolescents under 18 years have not yet been established. Therefore, solifenacin should not be used in children.
Pregnancy and lactation	No clinical data are available from women who became pregnant while taking solifenacin. Animal studies do not indicate direct harmful effects on fertility, embryonal / foetal development or parturition. The potential risk for humans is unknown. Solifenacin is not recommended during pregnancy and in women of childbearing potential not using contraception.No data on the excretion of solifenacin in human milk are available. In mice, solifenacin and/or its metabolites was excreted in milk, and caused a dose dependent failure to thrive in neonatal mice. Solifenacin should not be used during breast-feeding.
Pharmacokinetics in patients with severe hepatic impairment (Data on the fate of solifenacin from administration to complete elimination from the body in patients with severe liver impairment)	Pharmacokinetics in patients with severe liver impairment have not been studied. Solifenacin should not be taken if a patient has severe liver disease.
Pharmacokinetics in patients undergoing hemodialysis (Data on the fate of solifenacin from administration to complete elimination from the body in patients undergoing kidney dialysis)	Pharmacokinetics in patients undergoing kidney dialysis have not been studied. Solifenacin should not be taken if a patient is undergoing kidney dialysis.

7.2.5 Part VI.2.5 Summary of risk minimisation measures by safety concern

All medicines have a SmPC which provides physicians, pharmacists and other health care professionals with details on how to use the medicine, the risks and recommendations for minimising them. An abbreviated version of this in lay language is provided in the form of the package leaflet (PL). The measures in these documents are known as routine risk minimisation measures.

This medicine has no additional risk minimisation measures.

7.2.6 Part VI.2.6 Planned post authorisation development plan

None

7.2.7 Part VI.2.7 Summary of changes to the Risk Management Plan over time