Amiodarone Orion 50 mg/ml

22.6.2015, Version 1.0

PUBLIC SUMMARY OF THE RISK MANAGEMENT PLAN

VI.2 Elements for a Public Summary

VI.2.1 Overview of disease epidemiology

Electrical impulses mediated through specialized conducting system in the heart regulate synchronized contraction of the heart muscle. In cardiac arrhythmia, the function of this conduction system becomes disturbed leading to abnormal contraction of the heart and abnormalities in the heart rate. Heart rate may be too fast (so called tachycardia) or too slow (so called bradycardia) or the heartbeat may become irregular. Arrhythmia can originate primarily from the upper chambers of the heart, called atria, or from the lower chambers of the heart, called ventricles.

Fast cardiac arrhythmias originating from the atria are called supraventricular tachycardias. They are often characterized with episodes of fast heartbeat. Atrial fibrillation is the most common cardiac arrhythmia causing fast and irregular heartbeat. Approximately 1.5-2% of the general population in the developed countries experience atrial fibrillation, and the average age of patients with this condition is between 75 and 85 years.

Approximately 0.6-0.8% of adult population experiences other supraventricular arrhythmias. Supraventricular arrhythmias include several different type of conditions including tachycardias caused by re-entry of cardiac electrical impulses in accessory conducting pathways between atria and ventricles (e.g. Wolff-Parkinson-White syndrome) leading to episodes of rapid heartbeat.

Fast cardiac arrhythmias originating from the ventricles are called ventricular tachycardias. Ventricular tachycardia can also be seen in healthy heart, but it is often associated with other cardiac diseases or genetic predisposition. Life-threatening ventricular arrhythmias include ventricular tachycardia and ventricular fibrillation. The incidence of sudden cardiac death is estimated as 0.1-0.2% in the overall population and the most common cause, accounting for 75–80% of cases, is ventricular arrhythmia.

VI.2.2 Summary of treatment benefits

Amiodarone slows down conduction of cardiac electrical impulses both in atria and in ventricles. Amiodarone has been shown to be effective in the treatment of certain types of supraventricular and ventricular tachycardia.

VI.2.3 Unknowns relating to treatment benefits

No controlled paediatric studies have been undertaken.

VI.2.4 Summary of safety concerns

Important identified risks

Risk	What is known	Preventability
Cardiac disorders	Amiodarone can cause the development of new cardiac arrhythmias, or exacerbate existing ones. Proarrhythmic adverse effects may occur with all antiarrhythmic drugs in use. However, in comparison with some other antiarrhythmic agents, the incidence of this effect seems to be lower with amiodarone. The most common adverse drug reactions reported with intravenous amiodarone are inflammation of the vein (phlebitis), low heart rate (bradycardia), and low blood pressure (hypotension).	Parenteral amiodarone should only be used with constant monitoring of ECG and arterial blood pressure. Treatment should be initiated and normally monitored only under hospital or specialist supervision.
Thyroid dysfunction	Amiodarone may have effects on thyroid hormones, which regulate multiple functions in the body. The levels of the thyroid hormones may become too high (hyperthyroidism) or too low (hypothyroidism). Hyperthyroidism may accelerate the body metabolism significantly, causing sudden weight loss, a rapid or irregular heartbeat, sweating, and nervousness or irritability. Hypothyroidism may have opposite effects and lead to weight gain, slow heart beat, fatigue and decreased sweating. The risk for thyroid dysfunction is increased in patients with personal history of thyroid disorders, patients from an iodine-deficient population, or patients who are taking or have	Amiodarone should not be used in patients with thyroid dysfunction or with history of thyroid problems unless strictly necessary. Monitoring of thyroid function is recommended in patients before starting amiodarone treatment and periodically during treatment. Serum levels of thyroid hormones should be measured when thyroid dysfunction is suspected. In cases of confirmed hyperthyroidism, therapy with intravenous amiodarone should be discontinued. In severe cases individual emergency therapy should be initiated.

Risk	What is known	Preventability
	previously taken oral amiodarone.	
Lung disorders	Severe toxic reactions in lungs, have been reported during the use of intravenous amiodarone. In addition, constrictions of the bronchi in patients with respiratory promlems (especially with asthma) have been reported. These events are very rare, meaning reporting rate less than 1/10 000 and they are generally reversible and resolve rapidly upon discontinuation of the treatment. Corticosteroid treatment may possibly be considered. In most cases, clinical symptoms resolve within 3 to 4 weeks.	Amiodarone should not be used in patients with severe respiratory problems unless strictly necessary. A chest x-ray should be taken and lung function tests performed if shortness of breath is observed.
Liver disorders	Severe liver failure can occur within 24 hours following intravenous administration of amiodarone. Liver disorders have been reported very rarely (less than 1/10 000).	The liver function should be monitored during treatment with amiodarone.
Severe skin reactions	Amiodarone may cause severe exfoliating and blistering eruptions of skin and mucous membranes.	Treatment should be initiated and normally monitored only under hospital or specialist supervision.
Interactions with other drugs	Amiodarone has potential interactions with several other drugs. These include, for example, interactions with drugs that increase the risk of arrhythmias and cardiac conduction disorders, and drugs that interfere with the metabolism of amiodarone. After termination of repeated intravenous administration of amiodarone, there might be a still effective concentration of amiodarone in the blood serum for some weeks because of the slow elimination of amiodarone.	Concomitant medications need to be taken into consideration when prescribing amiodarone and also after some weeks after termination of repeated intravenous administration of amiodarone.

Important potential risks

Risk	What is known (Including reason why it is considered a potential risk)
Use during pregnancy and lactation	The use of amiodarone during pregnancy may cause adverse effects in the foetus/newborn and amiodarone should not be used during pregnancy unless clearly necessary (life-threatening and pregnancy-threatening arrhythmias). Amiodarone and its metabolite are excreted in breast milk. If amiodarone therapy is required during breastfeeding, or if amiodarone is taken during pregnancy, breastfeeding should be stopped.

Missing information

Risk	What is known (Including reason why it is considered a potential risk)
Use in paediatric population	No controlled paediatric studies have been undertaken. In the limited published data available in paediatric patients, no differences compared with adults are noted. Due to presence of benzyl alcohol, intravenous amiodarone is contraindicated in neonates, infants and children up to 3 years old.

VI.2.5 Summary of risk minimisation measures by safety concern

All medicines have a Summary of Product Characteristics (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. The Summary of Product Characteristics and the Package leaflet for Amiodarone Orion can be found in the national authority's web page.

This medicine has no additional risk minimisation measures.