VI.2 Elements for a public summary

VI.2.1 Overview of disease epidemiology

Nevirapine is used for antiretroviral combination therapy of Human Immunodeficiency Virus (HIV) infection.

Human immunodeficiency virus (HIV) is a virus typically transmitted via sexual intercourse, shared intravenous drug paraphernalia (needles), and mother-to-child transmission, which can occur during birth or during breastfeeding. HIV infects cells in the human immune system. That causes the immune system to weaken and the body to become less resistant to life-threatening infections. When the immune system is damaged enough that significant opportunistic infections begin to develop, the person is considered to have an advanced HIV infection, also known as AIDS (acquired immunodeficiency syndrome).

Globally, 35.0 million [33.2–37.2 million] people were living with HIV in 2013.

VI.2.2 Summary of treatment benefits

Nevirapine belongs to a group of anti-retroviral medicines called *non-nucleoside reverse transcriptase inhibitors (NNRTIs)*. They work by interfering with the normal working of enzymes that are essential for the viruses to reproduce themselves.

Nevirapine does not completely cure HIV infection; it reduces the amount of virus in your body. Therefore, you may continue to develop infections and other illnesses associated with HIV infection. You can still pass on HIV when taking this medicine, although the risk is lowered by effective antiretroviral therapy.

If administered as indicated in the Summary of Product Characteristics and taking into account the contraindications, the warnings and precautions, nevirapine can be considered effective in the approved indication.

VI.2.3 Unknowns relating to treatment benefits

Currently available data on pregnant women does not indicate that nevirapine causes malformations, or neonatal or foetal toxicity. There are no adequate and well-controlled studies in pregnant women. Because of this caution should be exercised when prescribing nevirapine to pregnant women.

VI.2.4 Summary of safety concerns

Important identified risks

Risk	What is known	Preventability
Skin rash, including severe or life-threatening skin reactions e.g. Stevens-Johnson syndrome and toxic epidermal necrolysis	When rash occurs it is normally mild to moderate. However, in some patients a rash, which appears as a blistering skin reaction, can be severe or life-threatening (Stevens-Johnson syndrome and toxic epidermal necrolysis) and deaths have been recorded. Most of the cases of both severe rash and mild/moderate rash occur in the first six weeks of treatment. Therefore during first weeks of treatment close monitoring by the doctor is needed.	It is very important that the patient takes only one nevirapine 200mg tablet a day for the first 14 days ("lead-in" period). After 14 days, the usual dose is one 400 mg prolonged-release tablet once a day. The 14-day "lead-in" period has been shown to lower the risk of skin rash. If the patient experiences severe rash or hypersensitivity (allergic reactions that may appear in the form of rash) accompanied by other side effects such as: • fever, • blistering, • mouth sores, • inflammation of the eye, • swelling of the face, • general swelling, • shortness of breath, • muscle or joint pain, • general feelings of illness, • or abdominal pain the patient should immediately discontinue taking nevirapine and contact his/her doctor
Severe and life- threatening liver damage incl. sudden and intense inflammation of the liver [fatal fulminant hepatitis]	Abnormal liver functioning has been reported with the use of nevirapine. This includes some cases of inflammation of the liver (hepatitis), which can be sudden and intense (fulminant hepatitis), and liver failure, which can both be fatal	If the patient experiences symptoms suggesting damage of the liver, such as: Ioss of appetite, feeling sick (nausea), vomiting, yellow skin (jaundice), abdominal pain the patient should discontinue taking nevirapine and must contact his/her doctor immediately.

Risk	What is known	Preventability
Decrease in number of one type of white blood cells, particularly in children	A reduction in the numbers of one type of white blood cells (granulocytopenia) has been reported with the use of	Patients who take both nevirapine and zidovudine should inform their doctor since he/she might need to check their white blood cells.
[Granulocytopenia, particularly in paediatric population]	nevirapine. It is more common in children. Patients who receive both nevirapine and zidovudine have an increased risk for granulocytopenia.	Patients should inform their doctor of any side effects.

Important potential risks

None

Missing information

Risk	What is known
Use in pregnant women	There are no adequate and well-controlled studies in pregnant women. Because of this caution should be exercised when prescribing nevirapine to pregnant women. If a patient is pregnant or thinks they might be pregnant or are planning to have a baby, the patient should consult their doctor or pharmacist for advice before taking nevirapine.

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 Patient Information Leaflet (PIL). The measures in these documents are known as routine risk minimisation measures.

This medicine has no additional risk minimisation measures.

VI.2.6 Planned post authorisation development plan

Study/activity	Objectives	Safety concerns addressed	Status	Planned date for submission of (interim and) final results
Antiretroviral pregnancy registry (APR)	Objective of the APR is to detect any major teratogenic effect involving any of the Registry drugs when administered to pregnant women	Use in pregnancy	In progress	Regular APR reports. Estimated study completion date- January 2099

Studies which are a condition of the marketing authorisation

None of the above studies are conditions of the marketing authorisation

VI.2.7 Summary of changes to the risk management plan over time

Not applicable.