

Summary of the risk management plan for Certican® (Everolimus)

This is a summary of the risk management plan (RMP) for Certican®. The RMP details important risks of Certican, how these risks can be minimized, and how more information will be obtained about Certican's risks and uncertainties (missing information).

Certican summary of product characteristics (SmPC) and its package leaflet give essential information to healthcare professionals and patients on how Certican should be used.

Important new concerns or changes to the current ones will be included in updates of Certican RMP.

1.1 Part VI: I. The medicine and what it is used for

Certican belongs to a group of medicines called immunosuppressants. It is used to prevent the body's immune system from rejecting a transplanted kidney, heart or liver. Certican is used together with other medicines, such as ciclosporin for kidney and heart transplantation, tacrolimus for liver transplantation, and corticosteroids.

Kidney transplantation: In 2010, approximately 70,000 kidney transplant cases were performed worldwide ([Kasiske et al 2013](#)). Approximately 85% of adults and 82% of children receiving a kidney from a living donor are expected to be alive with a functioning kidney at 5 years after the transplantation. In patients receiving a kidney transplant from a deceased donor, 70% of adults and 70% of children are expected to be alive with a functioning kidney at 5 years ([Matas et al 2013](#)).

Heart transplantation: In 2010, approximately 5,600 heart transplant cases were performed worldwide ([Kasiske et al 2013](#)). About 75% of adults and 72% of children receiving a heart transplant are alive at 5 years from transplantation ([Colvin-Adams et al 2013](#)).

Liver transplantation: In 2010, about 21,000 cases of liver transplant were performed in the World ([Kasiske et al 2013](#)). Approximately 72% of adults and 82% of children receiving a liver transplant from a living donor are expected to be alive with a functioning liver at 5 years after the transplantation. In patients receiving a liver from a deceased donor, 68% of adults and 75% of children are expected to be alive with a functioning liver at 5 years ([Kim et al 2013](#)).

1.2 Part VI: II. Risks associated with the medicine and activities to minimize or further characterize the risks

Important risks of Certican, together with measures to minimize such risks and the proposed studies for learning more about Certican's risks, are outlined below.

Measures to minimize the risks identified for medicinal products can be:

- Specific information, such as warnings, precautions, and advice on correct use, in the package leaflet and SmPC addressed to patients and healthcare professionals;
- Important advice on the medicine's packaging;
- The authorised pack size — the amount of medicine in a pack is chosen so to ensure that the medicine is used correctly;

- The medicine's legal status — the way a medicine is supplied to the patient (e.g. with or without prescription) can help to minimize its risks.

Together, these measures constitute routine risk minimization measures.

In addition to these measures, information about adverse reactions is collected continuously and regularly analysed, including PSUR assessment - so that immediate action can be taken as necessary. These measures constitute routine pharmacovigilance activities.

If important information that may affect the safe use of Certican is not yet available, it is listed under 'missing information' below.

1.2.1 Part VI: II.A: List of important risks and missing information

Important risks of Certican are risks that need special risk management activities to further investigate or minimize the risk, so that the medicinal product can be safely taken. Important risks can be regarded as identified or potential. Identified risks are concerns for which there is sufficient proof of a link with the use of Certican. Potential risks are concerns for which an association with the use of this medicine is possible based on available data, but this association has not been established yet and needs further evaluation. Missing information refers to information on the safety of the medicinal product that is currently missing and needs to be collected (e.g. on the long-term use of the medicine);

Table 0-1 List of important risks and missing information

Important identified risk	Malignancies
Important potential risks	Impaired male fertility Unfavourable outcome of everolimus exposure during pregnancy and breast-feeding
Missing information	Patients at high immunological risk

1.2.2 Part VI: II.B: Summary of important risks

Table 0-2 Table 0-3 Important identified risk: Malignancies

Evidence for linking the risk to the medicine	Current evidence is based on the review of clinical trial data, published literatures and post marketing evidence (Andreone et al 2003 , Paya et al 1999 , U.S. OPTN/SRTR 2003 , Smith et al 2006 , Adam and Hoti 2009 , Faull et al 2005 , Chapman and Webster 2004 , Kasiske et al 2004 , Jensen et al 1999 , Gjersvik et al 2000 , London et al 1995 , Buell et al 2005 , Campistol et al 2007 , ANZDATA Registry report 2008 , Smith et al 2013 , Debray et al 2009)
Risk factors and risk groups	No analysis has been carried out for specific risk factors for malignancy associated with everolimus. Epidemiology studies have identified the following as increased risk factors: intensity of immunosuppression, Epstein-Barr virus infection (PTLD), chronic viral hepatitis (hepatoma), and duration of end-stage renal disease (renal cell carcinoma) (Buell et al 2005).
Risk minimization measures	Routine risk minimization measures • SmPC Section 4.4 and Section 4.8 Additional risk minimization measures None

Table 0-4 Important potential risk: Impaired male fertility

Evidence for linking the risk to the medicine	Not available because of the lack of information for Certican to increase the risk of impaired male fertility
Risk factors and risk groups	Risk factors are unknown
Risk minimization measures	Routine risk minimization measures SmPC Section 4.4 Additional risk minimization measures None

Table 0-5 Important potential risk: Unfavourable outcome of everolimus exposure during pregnancy and breast-feeding.

Evidence for linking the risk to the medicine	Limited data is available for association of use of Certican and adverse outcome of pregnancy (Murakami et al 2004)
Risk factors and risk groups	Not relevant
Risk minimization measures	Routine risk minimization measures SmPC Section 4.6 Additional risk minimization measures None

Table 0-6 Table 0-7 Missing information: Patients at high immunological risk

Evidence for linking the risk to the medicine	Certican has not been adequately studied in patients at high immunological risk (e.g. black, anti-HLA Class I panel reactive antibodies > 20% by a complement dependent cytotoxicity based assay or > 50% by a flow cytometry or enzyme linked immunosorbent assay based assay). Monitoring of data from this population use to identify new safety information or any trends/patterns in AEs that are different from general population AEs.
Risk factors and risk groups	Not relevant
Risk minimization measures	Routine risk minimization measures SmPC Section 4.4 Additional risk minimization measures None

1.2.3 Part VI:II.C: Post-authorization development plan

1.2.3.1 II.C.1. Studies which are conditions of the marketing authorization

This section is not applicable as there are no studies which are under conditions for marketing authorization.

1.2.3.2 II.C.2. Other studies in post-authorization development plan

There are no studies in the post-authorization development plan.