

EUROPEAN PUBLIC ASSESSMENT REPORT (EPAR)**SIMULECT****EPAR summary for the public**

This document is a summary of the European Public Assessment Report (EPAR). It explains how the Committee for Medicinal Products for Human Use (CHMP) assessed the studies performed, to reach their recommendations on how to use the medicine.

If you need more information about your medical condition or your treatment, read the Package Leaflet (also part of the EPAR) or contact your doctor or pharmacist. If you want more information on the basis of the CHMP recommendations, read the Scientific Discussion (also part of the EPAR).

What is Simulect?

Simulect is a powder and solvent that are made up into a solution for injection or infusion (drip into a vein). It contains the active substance basiliximab.

What is Simulect used for?

Simulect is used in adults and children aged over one year, to prevent the body from rejecting a newly transplanted kidney. Simulect is used in combination with other medicines used to prevent organ rejection, such as ciclosporin, corticosteroids, azathioprine and mycophenolate mofetil. The medicine can only be obtained with a prescription.

How is Simulect used?

Simulect should only be prescribed and given by a doctor who has experience in the use of immunosuppressive treatment following an organ transplant. It should be given under qualified medical supervision. Simulect should not be given unless it is absolutely certain that the patient will receive the transplant and other medicines to prevent rejection.

Simulect is given as two injections. The first injection should be given a maximum of two hours before transplantation surgery, and the second four days after the transplant, unless the patient has had a severe hypersensitivity (allergic) reaction or has complications after the operation, such as loss of the new kidney. In adults and children weighing more than 35 kg, the recommended total dose is 40 mg, given as two 20 mg doses. In children weighing less than 35 kg, it is 20 mg, given as two 10 mg doses. Simulect is given into a vein, either as a 'bolus' injection (given all at once) or as an infusion over 20 to 30 minutes.

How does Simulect work?

The active substance in Simulect, basiliximab, is a monoclonal antibody. A monoclonal antibody is an antibody (a type of protein) that has been designed to recognise and bind to a specific structure (called an antigen) that is found on certain cells in the body. Basiliximab has been designed to target an antigen called CD25, which is present on the surface of T-lymphocytes (a type of white blood cell that is involved in the rejection of organ transplants).

CD25 is a receptor for the messenger interleukin-2, which stimulates the T-lymphocytes to divide. By binding to CD25, basiliximab blocks the activity of interleukin-2, reducing the rate at which the

lymphocytes multiply. This reduces the number of activated T-lymphocytes, lowering the risk of the transplant being rejected.

How has Simulect been studied?

Simulect has been assessed in three main studies involving a total of 1,067 adults who were having a kidney transplant. All three studies compared the effectiveness of Simulect with that of placebo (a dummy treatment). In the first two studies, most of the 722 patients were also taking ciclosporin and corticosteroids ('dual therapy'), with some patients also taking azathioprine or mycophenolate mofetil. In the third study, all 345 adults were taking ciclosporin, steroids and azathioprine ('triple therapy'). The main measure of effectiveness was the number of treatment failures (death, loss of the new kidney or signs of rejection) over the first year after the transplant.

Two additional studies looked at how Simulect is handled in the body when it is given to children aged over one year or to adolescents.

What benefit has Simulect shown during the studies?

Simulect was more effective than placebo. Looking at the results of the first two studies taken together, 40% of the patients receiving Simulect in addition to dual therapy failed treatment over six months (145 out of 363), compared with 56% of the patients receiving placebo (201 out of 359). Similar results were seen after a year. In the third study, fewer patients receiving Simulect with triple therapy failed treatment (26%) than those receiving placebo (40%).

The studies in children and adolescents showed that the lower dose of Simulect was appropriate for children, and that adolescents could use the adult dose.

What is the risk associated with Simulect?

In the studies, side effects were similar in patients taking Simulect and those receiving placebo, in combination with other medicines. In adults, the most common side effects (seen in more than 20% of patients) were constipation, urinary tract infections (infection of the structures that carry urine), pain, nausea (feeling sick), peripheral oedema (swelling), hypertension (high blood pressure), anaemia (low red blood cell counts), headache, hyperkalaemia (high blood potassium levels), hypercholesterolaemia (high blood cholesterol levels), surgical wound complication, weight increase, increased serum creatinine (a marker of kidney problems), hypophosphataemia (low blood phosphate levels), diarrhoea and upper respiratory tract infection (colds). In children, the side effects seen in more than 20% of patients were urinary tract infections, hypertrichosis (excess body hair), rhinitis (stuffy and runny nose), pyrexia (fever), hypertension, upper respiratory tract infection, viral infection, sepsis (blood infection) and constipation. For the full list of all side effects reported with Simulect, see the Package Leaflet.

Simulect should not be used in people who may be hypersensitive to basiliximab or any of the other ingredients. Simulect must not be used during pregnancy or breast-feeding.

Why has Simulect been approved?

The Committee for Medicinal Products for Human Use (CHMP) decided that Simulect's benefits are greater than its risks for the prophylaxis of acute organ rejection in *de novo* allogeneic renal transplantation in adult and paediatric patients. The Committee recommended that Simulect be given marketing authorisation.

Other information about Simulect:

The European Commission granted a marketing authorisation valid throughout the European Union for Simulect to Novartis Europharm Limited on 9 October 1998. The marketing authorisation was renewed on 9 October 2003 and on 9 October 2008.

The full EPAR for Simulect can be found [here](#).

This summary was last updated in 10-2008.