

Aprotinin 10,000 KIU/ml Injection BP Prescribing Information - Consult the summary of product characteristics (SmPC) before prescribing

Name and active ingredients: Aprotinin solution for Injection. Each 50ml vial contains 500,000 Kallikrein Inactivator Units (KIU) (10,000 KIU/ml). **Indication:** Prophylactic use to reduce blood loss and blood transfusion in adults, at high risk of major blood loss, undergoing isolated cardiopulmonary bypass graft surgery (CABG). Only to be used after careful consideration of the benefits and risks, and the consideration that alternative treatments are available. **Dosage and administration:** An appropriate aprotinin-specific IgG antibody test may be considered before administration and a 1ml (10,000 KIU) test dose should be administered to all patients at least 10 minutes before the remainder of the dose. An H1 antagonist and an H2 antagonist may be administered 15 minutes before the test dose. In any case, standard emergency treatments for anaphylactic and allergic reactions should be readily available. After the uneventful administration of the 1ml test dose, the therapeutic dose of aprotinin may be given. An initial loading dose of 1 - 2 million KIU is administered as a slow intravenous injection or infusion over 20 - 30 minutes after induction of anaesthesia and before sternotomy. A further 1 - 2 million KIU should be added to the pump prime of the heart-lung machine. Aprotinin and heparin must each be added during recirculation of the pump prime to ensure adequate dilution before admixture with the other component. Following the initial infusion, 250,000 - 500,000 KIU of aprotinin per hour should be administered as a continuous infusion until the end of the operation. In general, the total dose per treatment should not exceed 7 million KIU. The safety and efficacy of aprotinin in children below 18 years of age have not been established. Aprotinin should be infused using a central venous catheter. The same lumen should not be used for the administration of any other medicinal product. When using a multi-lumen central catheter a separate catheter is not required. Aprotinin must be given only to patients in the supine position and must be given slowly (maximum 5 - 10ml/min) as an intravenous injection or a short infusion. **Contraindications:** Hypersensitivity to the active substance or any of the excipients listed in SmPC. Patients with a positive aprotinin-specific IgG antibody test. In case no aprotinin-specific IgG antibody test is possible before treatment, administration of aprotinin to patients with a suspected previous exposure including in fibrin sealant products during the last 12 months is contraindicated. **Special warnings and precautions for use:** Aprotinin should not be used when CABG surgery is combined with another cardiovascular surgery because the benefit-risk balance of aprotinin in other cardiovascular procedures has not been established. Aprotinin is not a heparin-sparing agent and it is important that adequate anticoagulation with heparin be maintained during aprotinin therapy. The partial thromboplastin

time (PTT) and activated partial thromboplastin time (APTT) become immeasurable with high doses of heparin. Therefore, APTT and PTT should not be used to monitor anticoagulation with heparin in patients undergoing CABG. In patients undergoing cardiopulmonary bypass with aprotinin therapy, one of the following methods are recommended to maintain adequate anticoagulation: Individualized heparin and protamine management, or if unavailable, regular activated clotting time (ACT) tests, with heparin doses given accordingly. If ACT is used to maintain adequate anticoagulation, minimal celite-ACT of 750 seconds or kaolin-ACT of 480 seconds, independent of the effects of haemodilution and hypothermia, is recommended in the presence of aprotinin. See the SmPC for further information on monitoring of anticoagulation during CABG. As the protamine test is unaffected by aprotinin, the neutralisation of heparin by protamine after discontinuation of CABG should be carried out following test manufacturer's notices. Blood drawn from the aprotinin central infusion line should not be used for graft preservation. Administration of aprotinin, especially to patients who have received aprotinin (including aprotinin containing fibrin sealants) in the past requires a careful risk/benefit assessment because an allergic reaction may occur. Renal dysfunction could be triggered by aprotinin, particularly in patients with pre-existing renal dysfunction, therefore, careful consideration of the balance of risks and benefits is advised before administration of aprotinin to patients with pre-existing impaired renal function or those with risk factors. An increase in renal failure and mortality compared to age-matched historical controls has been reported for aprotinin-treated patients undergoing cardiopulmonary bypass with deep hypothermic circulatory arrest during operation of the thoracic aorta. An association between aprotinin use and increased mortality has been reported in some non-randomised observational studies while other non-randomised studies have not reported such an association. See the SmPC for more information on mortality. **Undesirable effects:** For the full list of undesirable effects see the SmPC. Common ($\geq 1/100$ to $<1/10$): Blood creatinine increased. Uncommon ($\geq 1/1,000$ to $<1/100$): Myocardial ischaemia, coronary occlusion, thrombosis, embolic stroke myocardial infarction, pericardial effusion, oliguria, acute kidney injury, renal tubular necrosis, anaphylactic reaction. Rare ($1/10,000$ to $<1/1,000$): Pulmonary embolism. Very rare ($<1/10,000$): anaphylactic shock. **Legal category:** POM. **Presentation and basic NHS price:** £83.00 for 1x50ml vial. **Marketing authorisation number:** PL 40621/0020. **Marketing authorisation holder:** Nordic Group B.V, Siriusdreef 41, 2132 WT Hoofddorp, The Netherlands. **Date of revision:** February 2025. **Item code:** UK-TRA-2500003.

Adverse events should be reported. Reporting forms and information can be found at yellowcard.mhra.gov.uk or search for MHRA Yellow Card in the Google Play or Apple App Store. Adverse events should also be reported to Nordic Pharma at medinfo.uk@nordicpharma.com