

Products information

Columns for the removal of antibodies
against A and B human blood group antigens

ABO Adsopak®

Removal of antibodies against ABO antigens gives the possibility of transplantation across ABO barrier.

Transplantation of solid organ across incompatible blood group barriers is associated with severe complications and therefore is not performed in standard clinical practice. The increasing number of patients waiting for the transplantation stimulates the efforts to develop new therapeutic strategies to overcome ABO barrier.

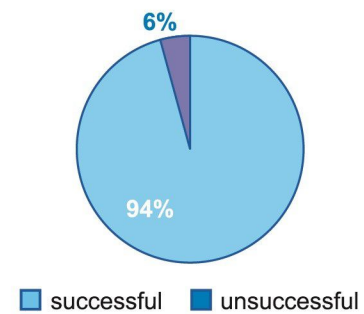
Numerous clinical data confirm the efficacy and safety of the treatment using A/B antigen specific columns capable for removal of anti-A and anti-B antibodies and thus solving the compatibility problem.

ABO Adsopak® columns represent the class of reusable medical devices for extracorporeal elimination of anti-A and anti-B antibodies. There are three types of adsorption columns, ABO Adsopak®-A, ABO Adsopak®-B and ABO Adsopak®-AB specific for anti-A, anti-B or both anti-A and anti-B antibodies accordingly.

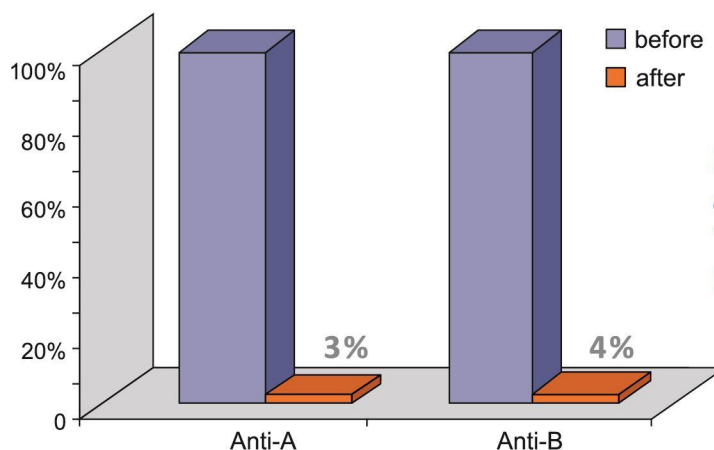
ABO Adsopak® column consists of glass or plastic housing filled by active ingredient. The active ingredient is the synthetic oligosaccharide immobilized on inert agarose matrix through hydrophilic polymer. The active ingredient binds anti-A/B antibodies according to the principle of affinity chromatography. ABO Adsopak® columns are specific to anti-A/B antibodies, they don't absorb any other proteins and components of human blood plasma. ABO Adsopak® columns are biocompatible, pyrogen-free and sterile.

ABO Adsopak® columns are intended for individual multiple use. The columns can be used several times during one procedure or during several consecutive treatments as well. Reusability of ABO Adsopak® columns is a big advantage that provides the opportunity to conduct the course of treatment for the patient using just one adsorption column.

The ratio of successfully performed transplantations after adsorption on ABO Adsopak® columns (data on 240 transplantations)



Level of anti-A and anti-B antibodies before and after adsorption on ABO Adsopak® columns



Data on 63 patients, titers of antibodies before the treatment 1:16 – 1:2048, number of procedures performed for each patient is up to 9

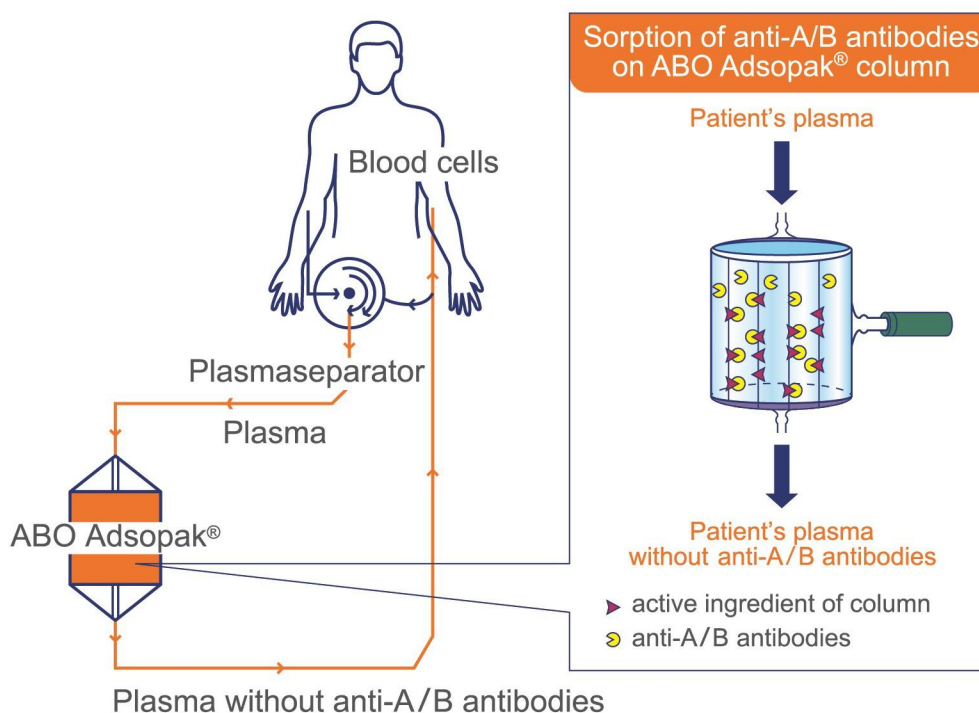
ABO Adsopak[®] columns represent the effective tool for anti-A and anti-B antibodies elimination.

Adsorption columns are used in the extracorporeal plasma adsorption procedure. The column is integrated into plasma line of the extracorporeal circulation circuit. Depending on donor and recipient blood groups, according type of ABO Adsopak[®] columns (ABO Adsopak[®]-A, ABO Adsopak[®]-B or ABO Adsopak[®]-AB) can be used in the plasmatherapy treatment.

The primary device is a plasma separator that divides patient's blood into plasma and blood cells. The patient's plasma enters the column, cells return to the bloodstream. The recommended volume is 1.0-2.0 volumes of patient's blood plasma passed through the column during one procedure, anticoagulation is necessary. When patient's plasma passes through ABO Adsopak[®] column, active ingredient specifically binds the anti-A/B antibodies circulating in human plasma. Then plasma without anti-A/B antibodies is returned to the patient.

After the completion of the procedure, the column is disconnected from the extracorporeal circuit, bound antibodies are eluted, and the column is regenerated. To do this, sterile pyrogen-free solutions are passed through the column: saline solution, glycine buffer pH 2.5, PBS buffer, saline solution. So the column can be used in the next procedure. Between the treatments, the column is stored in the storage solution (PBS buffer with 0.02% sodium azide). Before the next procedure, the storage solution is removed by washing with saline solution. The guaranteed usage of each ABO Adsopak[®] column is 20 plasma adsorption procedures.

Adsorption procedure on ABO Adsopak[®] column



POCARD Ltd., Moscow, Russia develops and manufactures the columns for extracorporeal therapy since 1994. Our products LDL Lipopak®, Lp(a) Lipopak®, Ig Adsopak® are used in hospitals more than 25 years. Our new products Immuno-Adsopak® and Toxipak® show impressive clinical results and have good perspectives of the wide implementation to clinical practice. The manufacture of the columns is based on unique technology certified according to ISO 13485 standards.

Columns	Volume (ml)	Intended use
ABO Adsopak®-A150	150	Specificity to blood group A antibodies
ABO Adsopak®-B150	300	Specificity to blood group A antibodies
ABO Adsopak®-A300	150	Specificity to blood group A antibodies
ABO Adsopak®-B300	300	Specificity to blood group A antibodies
ABO Adsopak®-AB300	300	Mix of anti-A and anti-B sorbents in equal proportions

ISO 13485:2016

MDa.b.-012EN-03-0123



POCARD Ltd.
 Technopark «Orbita-2»,
 building 20/1, Kulakova str., Moscow,
 121552, Russia
 phone: +7 (499) 550 92 45
 e-mail: info@pocard.ru
 www.eng.pocard.ru