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## Published study from the US shows promising results on the use of Glycosorb® ABO to provide low-titer group O whole blood

**The first pilot study on the use of Glycosorb® ABO for reducing anti-A/B antibody titers in blood group O whole blood has been published. The study was conducted at the University of Rochester, US. The use of Glycosorb® ABO effectively reduced the anti-A/B antibody titers to near zero without an increase in hemolysis. Glycosorb® ABO could be employed to provide low-titer group O whole blood reducing the need for type-specific blood which may expedite treatment and mitigate the risk of hemolysis from incompatible transfusion.**

Massive bleeding is one of the leading causes of death in severe trauma. Early intervention with blood products in patients with traumatic bleeding saves lives and growing evidence suggest that transfusion of whole blood (WB) is the most appropriate in this setting. When whole blood is provided to a recipient whose ABO blood group is unknown, such as in the pre-hospital phase of resuscitation or early in the patient's in-hospital course, it must be blood group O to avoid immediate hemolytic reactions (destruction of red blood cells), and the plasma must contain low levels of anti-A/B antibodies. Fulfilling these criteria are blood products known as low titer group O whole blood (LTOWB). The use of LTOWB is increasing. However, insufficient availability is a barrier to routine use and thus, products or methods for the manufacturing of LTOWB may prove to be of significant clinical value in both civilian and military settings.

Glycosorb® ABO is a medical device developed to specifically select and reduce anti-A and anti-B antibodies present in blood plasma. In the recently published study from the University of Rochester in US, Glycosorb® ABO was investigated as a method for manufacturing LTOWB. Glycosorb® ABO effectively reduced anti-A and anti-B antibody titers in group O whole blood to near zero without an increase in hemolysis. The article named "*Reduction of Anti-A and Anti-B Isoagglutinin Titers of Group O Whole Blood Units Employing an ABO Antibody Immune Adsorption Column*" has been published in the journal "Transfusion and Apheresis Science".

This pilot study provides proof of concept that Glycosorb® ABO can be used for removing most of the anti-A and anti-B antibodies from group O whole blood units to produce LTOWB. This could provide benefit by reducing the risks related to blood group incompatibility, increase the amount of group O whole blood that could safely be given to non-O patients and also expand the donor pool. Further studies are required to validate the procedure before clinical use on markets where the product is approved.



The Glycosorb® ABO column used in this study is a smaller product variant of the Glycosorb® ABO column used to facilitate blood group incompatible transplants. The smaller variant has previously also been called the UBP-product or Glycosorb UBP. The product is approved for the specific reduction of anti-A/B antibodies in blood plasma and can be used to produce universal plasma (low titer plasma). The product has also been evaluated in platelet concentrates and the results showed significant reduction of anti-A/B antibodies with a shorter process time compared to current method and without significantly affecting the quality or number of platelets.

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**Brief information about the company**

Glycorex Transplantation AB (publ) is a global medical technology company headquartered in Sweden. The company has developed a unique technology to select and remove specific antibodies in the blood.

Glycosorb® ABO is one of the company's self-developed proprietary medical devices that is used to facilitate blood group-incompatible transplants. Whilst primarily used to facilitate blood group incompatible kidney transplants, Glycosorb® ABO is also used in blood group incompatible liver-, heart-, lung-, and stem cell transplants. More than 60 scientific papers have been published in reputable medical journals, showing excellent short- and long-term outcomes of blood group incompatible transplants performed with Glycosorb® ABO. Each kidney transplant saves about 150 dialysis treatments per year. Glycosorb® ABO has been used on five continents in more than 6,000 transplants. In addition to Europe, Glycosorb® ABO is used in Australia, Canada, India, Israel, Mexico, Singapore, South Africa, and Thailand, for example.

The company has also developed a CE-marked medical device product for the production of universal (low titer) blood products and is collaborating with a leading European research institute to develop a product for the treatment of the autoimmune disease rheumatoid arthritis.

Glycorex Transplantation AB (publ) is listed on NGM Main Regulated Equity (Nordic Growth Market) and is traded under the symbol GTAB B