



## **First in vitro tests of PVC-free Blood Bags have started at Karolinska University Hospital**

**This week the first tests of a new PVC-free blood bag started with human blood at Karolinska University Hospital in Stockholm.**

**"I am delighted to see the bags performing so well during blood donation," said Alice Ravizza, appointed R&D by Haemotronic for this project.**

Alice Ravizza and Hans Gulliksson, Associate professor in Experimental Transfusion Medicine at Karolinska University Hospital, supervised the first blood donations for the in vitro evaluations. Donors gave blood at Skanstull donation centre in Stockholm and the blood used for the tests was donated by donors who had given their informed consent.

"Introducing new medical devices is a long and thorough process. I am very happy that we're now starting in vitro testing - it is a huge milestone in the project," said Lena Stigh, project manager from Region Jämtland Härjedalen in Sweden.

The physical performance of the bags has already been tested with water. The bags were deemed to fulfil essential requirements when factors such as impact during centrifugation, leakages and suitable length of tubes were tested. The same tests will be carried out using blood.

"The study is taking place at Karolinska University Hospital and will be conducted by a team managed by professor Petter Höglund. It will be exciting to see the results of the evaluation in March next year," said Hans Gulliksson.

Concurrently, the PVC-free blood bags will also undergo a handling test at Östersund hospital and four other Swedish hospitals. These tests are planned to start before Christmas and will simulate and evaluate the practical handling of the blood bags by medical staff.

There are currently no PVC-free blood bags for red blood cells on the market. The most commonly used plasticizer in blood bags for red blood cells is a substance that is classified as a reproductive disruptor.

The PVCfreeBloodBag is a cooperation between industry and European healthcare, aimed at phasing out hazardous substances from healthcare.

Four European companies are participating in the project - Melitek A/S in Denmark, Wipak Oy in Finland, Primo Profile in Poland and Haemotronic in Italy. Karolinska University Hospital is responsible for evaluating the bag.

"This project has two objectives: firstly to increase demand from healthcare organisations; and secondly to demonstrate that it is possible to make a PVC-free blood bag that fulfils the relevant requirements specification," said Lena Stigh.

Progress towards producing a PVC-free blood bag has been successful and the work to increase demand is underway. Disseminating knowledge and raising awareness in partnership with European healthcare providers is essential for driving demand.



*Picture: Alice Ravizza shows one of the new PVC-free blood bags filled with blood and ready for further tests.*

*Photographer: Andreas Johansson*

PVCfreeBloodBag is a project within the EU's Life+ Environmental Programme. The full title is "Public healthcare and plastic makers demonstrate how to remove barriers to PVC-free blood bags in the spirit of REACH". It started in the autumn of 2011 and will run for four years.

**Do you want to find out more?**

**Contact Lena Stigh, project manager at the Jegrelius Institute for Applied Green Chemistry, part of Region Jämtland Härjedalen.**

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