

Lena Stigh

Project Manager

Jegrelius Institute for Applied Green Chemistry



What are the challenges?



Essential product

- The blood bag is a life-saving product
- Transfusion of blood is a transfer of living blood cells (or plasma) involving potentially immunological effects and effects associated with physiologically active substances. Those effects are considered to pose a significantly higher risk to the patient.

We need to store blood

- The red blood cells are stabilized by DEHP causing less hemolysis
- International norms; max 0,8% hemolysis

Technical barriers

- The blood bag is a complex product
- Quality requirements on blood components
- High material properties required

Centrifugation

Sterile sealable tubings

Storage at low temperature up to 37 C

Compatibility

Economic barriers

- “Not profitable for the producers”
- Investments and long lead times
- Lack of life cycle perspective
- A risk of higher initial cost

Lack of clear demand

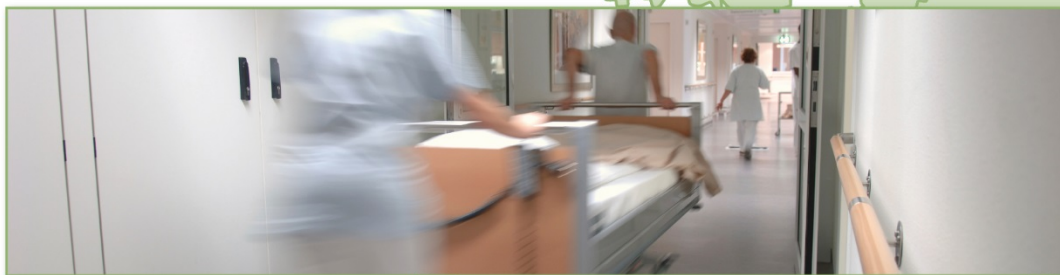
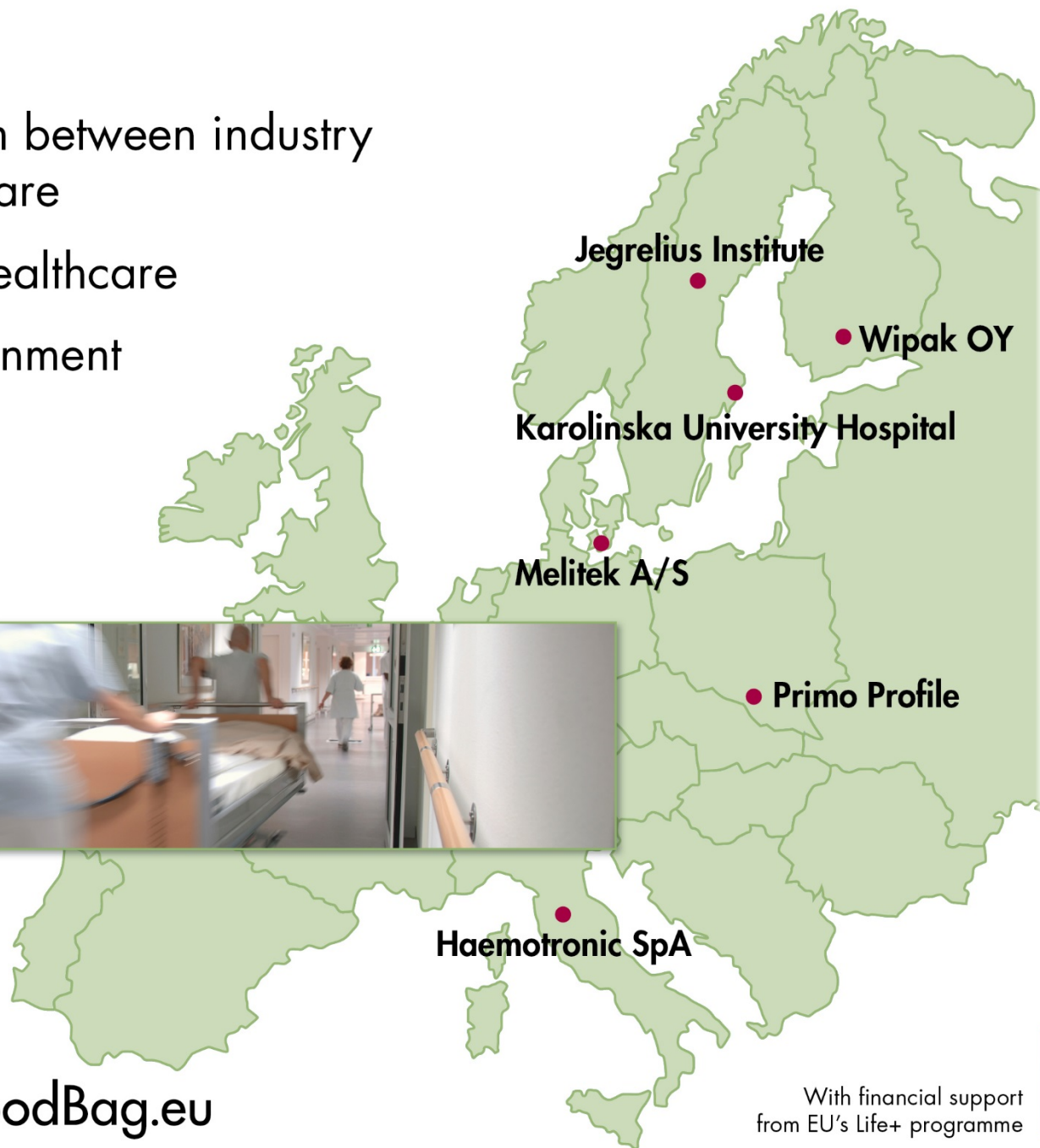
- The incentives for the manufactures to bring new blood bags to the market are not high enough
- Legislation not strong enough



How do we overcome these challenges?



- Cooperation between industry and healthcare
- Non-toxic healthcare
- LIFE+ Environment



Objectives

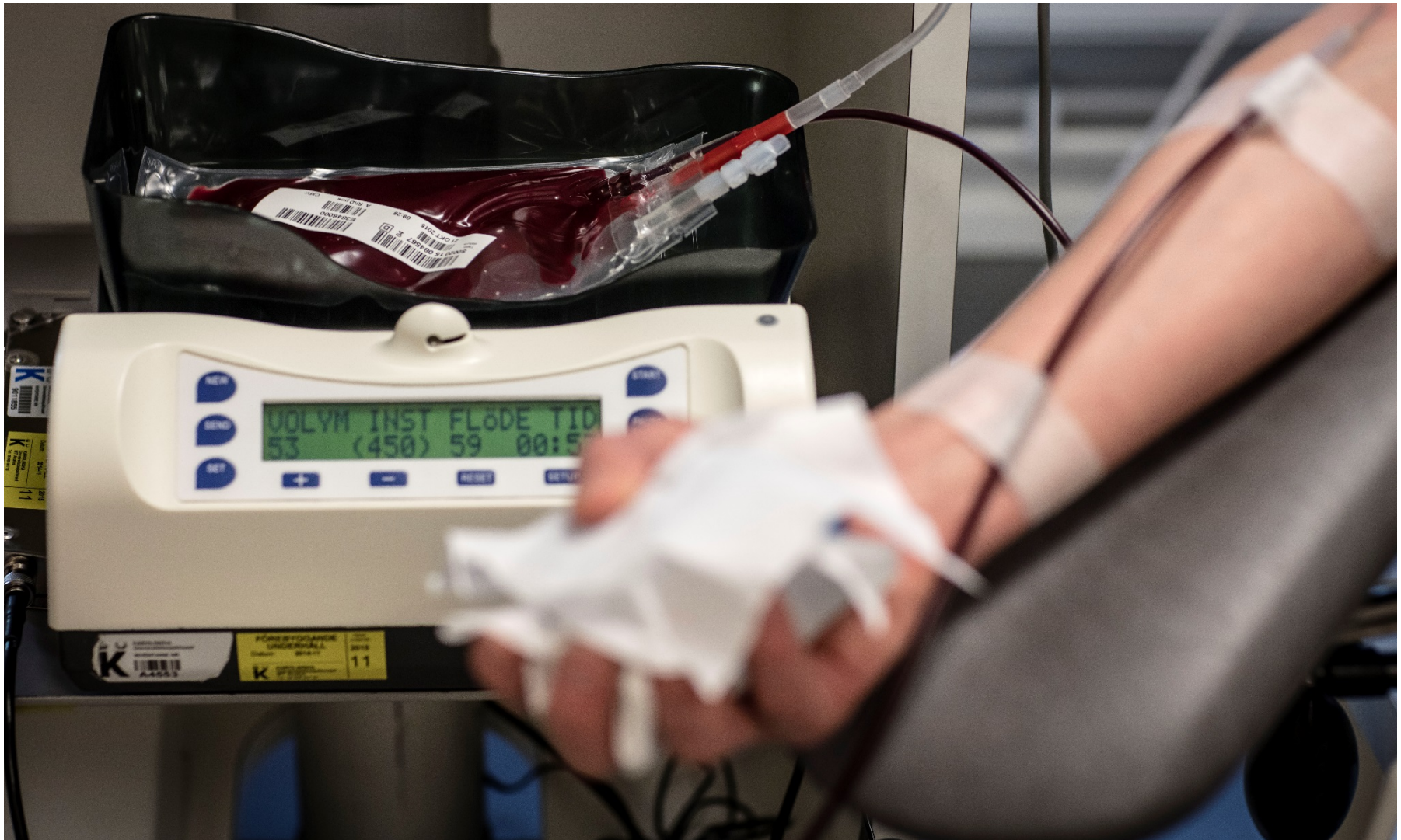
To show that it is possible to produce a PVC-free blood bag that fulfil requirement specification, including CE-labelling

To cooperate with European healthcare to disseminate knowledge and increase the demand

How far have we come ?







Next to come

- User tests
- A non-PVC blood bag tested
- Technical Report/Publication
- Economic feasibility study
- LCA of the new bag
- Final Workshops
- End of project

30 March 2017

How about increased awareness and demand ?



If a PVC free blood bag
were available...

Would you buy it?

A bag that...

- minimise patient exposure to potentially hazardous substances and thus gives long-term health improvements
- gives better working environment for both manufacturers and hospital employees
- reduces long-term costs in healthcare due to healthier population

You will find the petition on the website.

