

## CASE STUDY

### **A single arm, multi-centre clinical trial to evaluate the HeartWare® ventricular assist system (VAS) for destination therapy of advanced heart failure**

#### **CATEGORISING**

**Kind**

Research project involving living people

**Type****Subtype**

Clinical trial with medical devices (according to ClinO-MD)

#### **BACKGROUND**

Routine treatment with left ventricular assist devices (LVADs) bridges transplantation for patients with advanced heart failure. We aim to determine the safety and effectiveness of the HeartWare® Ventricular Assist System in patients with chronic advanced stage left ventricular ineligible for cardiac transplantation. The HeartWare® Ventricular Assist System is marketed in several countries, but the use of the System in Switzerland has been prohibited by Swissmedic.

#### **METHODS**

We include patients with advanced heart failure symptoms (Stage D/NYHA Class IIIB or IV, ≥18 years old) who have received and failed optimal medical therapy, and are ineligible for cardiac transplantation. All patients receive the HeartWare® Ventricular Assist System. The primary endpoint of the trial is survival and freedom of re-interventions until cardiac transplantation.

#### **SOURCE**

<http://clinicaltrials.gov/ct2/show/record/NCT01166347?term=HeartWare+Ventricular+Assist+System&rank=1>

#### **QUESTIONS OF THE CATEGORISER**

**Does the research project come under the scope of application of the Human Research Act?**

Yes

**BECAUSE**

This project was based on a study protocol that defined the exact procedures that should be used. A relatively large number of persons were included, and outcomes were not based on individual cases ("method-driven search for generalizable knowledge", defined as research by HRA). Adults ("persons") who suffered from advanced heart failure symptoms (Class IIIB or IV) were eligible ("research concerning human diseases").

**Is the research project a project involving living persons?**

Yes

**BECAUSE**

Adults ("persons") who suffered from advanced heart failure symptoms (Class IIIB or IV) were included in this study.

**Is the research project a clinical trial as defined by ClinO or ClinO-MD?**

Yes

**BECAUSE**

According to the study protocol, the investigators treated adults with advanced heart failure symptoms (Class IIIB or IV) with the HeartWare® Ventricular Assist System ("health-related intervention [therapeutic measure]"). These adults were "prospectively assigned" to the intervention, and the study estimated the proportion of stroke-free survival participants at two years ("to investigate its effects on health or on the structure and function of the human body").

**Does the trial involve investigating medicinal products (including combinations according to Art. 2 Para. 1 Letters f and g Medical Device Ordinance (MedDO) from the July 1, 2020)?**

No

**BECAUSE**

**Does the trial involve investigating a medical device (in vitro diagnostics excluded) or any other device as defined in Article 1 of the Medical Devices Ordinance (MedDO) (Status as of 26 May 2022)?**

Yes

**BECAUSE**

This clinical trial investigated the effects of HeartWare® Ventricular Assist System ("medical device").

**Does the trial investigate an intervention that is neither a therapeutic product nor a transplant product, nor a product according to Art. 2a para. 2 Therapeutic Products Act (TPA) (Status from May 26, 2021), nor a transplant?**

No

**BECAUSE**

**Does the trial investigate gene therapy or a pathogenic organism?**

No

**BECAUSE**

**Does the medical device bear a conformity mark?**

Yes

**BECAUSE**

This trial investigated the effects of the HeartWare® Ventricular Assist System ("medical device"). The device passed the required conformity assessment procedure and bears a CE mark.

**In Switzerland, is it forbidden to make the medical device available on the market, to put it into service or to use it on a person?**

Yes

**BECAUSE**

This trial investigated the effects of the HeartWare® Ventricular Assist System ("medical device"). The device passed the required conformity assessment procedure and bears a CE mark. However, use of the HeartWare® Ventricular Assist System was prohibited in Switzerland during conduct of the trial.