

// MODULAR CANNULA DEVICE FOR RIGHT HEART VENTRICULAR FAILURE

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HINTERGRUND

Right heart failure is a cardiac complication that often occurs in patients with severe lung failure (ARDS), patients with implanted left ventricular assistance devices (LVAD) and generally intensive care patients including severely affected Covid-19 patients. The disadvantage of surgically implanted cannula systems for hemodynamic support of the right ventricle (right heart support, RHS) is that at least two interventions (im- and explant) are necessary which bears high risk of complications in patients that are already in poor condition. Meanwhile existing percutaneous systems show low performance and the complex implantation process including repeated insertion and retraction of different components are time consuming and make complications or failure to establish RHS more likely to occur. Thus, there is a great need to improve existing systems.

LÖSUNG

A medical specialist of the Saarland University Medical Centre in Homburg developed a modular cannula device for RHS which gives less experienced physicians the possibility to correctly place the cannula percutaneously into the pulmonary arteria via Seldinger Technique. The innovative technology allows a direct insertion of the cannula into place in one go. It enables a correction of mistakes without the need to start over the whole procedure which is inevitable in the conventional method. The new modular cannula design (3/8" system) combines all relevant tools needed for the insertion in one piece, can be connected to an extracorporeal membrane oxygenation (ECMO) system and allows for a high blood flow rate.

VORTEILE

- Easy and safe handling
- Highly reduced strain for patient
- Time saving procedure
- Perfectly matched components
- ECMO based (3/8" connections)
- No surgery needed



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ENTWICKLUNGSSTAND

Prototyp

CATEGORIES

//Medizin und
Pharma //Medizintechnik

ANWENDUNGSBEREICHE

The new innovative cannula in combination with e.g. ECMO can be used/applied in all medical cases in which a right heart support is indicated or advantageous for the patient.

SERVICE

We are looking for partners who are interested in commercialization of the invention. Various licensing models are negotiable.
