CLINICAL EXPERIENCE WITH THE ILA MEMBRANE VENTILATOR PUMPLESS EXTRACORPOREAL LUNG-ASSIST DEVICE

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Objective
This article reviews the present state of clinical Novalung® device implementation focusing on encountered limitations and conceivable future developments in the field.

Study Design
Review.

Methods
A total of 8 retrospective, clinical studies, enrolling 225 patients altogether, were reviewed and analyzed with respect to success rate (survival %) and complications like thrombus formation, limb ischemia, infection, plasma leakage and bleeding at the cannula-site.

Results
It is noteworthy that 213 patients were reported by the University Hospital of Regensburg (Germany) in seven studies published between 2000 and 2006. The iLA application represents a reliable treatment with survival rate of 56 % and a comparatively low complication rate of 29 %.

Commentary
Extracorporeal CO_2 removal in patients with acute lung failure and ventilator refractory hypercapnia is advancing in clinical practice. For the iLA, the conducted system modifications during the last few years resulted in a continuous improvement of the device.