

## **DETERMINATION OF LOW BLOOD FLOW LIMITS FOR ARTERIOVENOUS CARBON DIOXIDE REMOVAL**

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### **Objective**

This study aims at determining the low blood flow limits required for arterio venous extra pulmonary CO<sub>2</sub> removal.

### **Study Design**

Experimental study.

### **Study Population**

5 adult Suffolk ewes.

### **Results**

The study shows that hemodynamic variables during extrapulmonary CO<sub>2</sub> removal are stable. Blood flow and sweep gas flow were modified independently to determine the optimal extra corporeal blood flow. With 19 % arterio venous shunt no significant change in hemodynamics was observed with CO<sub>2</sub> removal as high as 1417 ml/min. Even a reduction of blood flow to 500 ml/min did not result in hypercapnia.

### **Commentary**

The authors describe arteriovenous CO<sub>2</sub> removal as a simple technique both in monitoring and maintenance. Mechanical ventilation needed to maintain hermocapnia could be reduced 16 % of base line. This allows the lung to rest and gives time to heal.

