

Acute cardiology cares for critically ill patients suffering from organ dysfunctions and failures, which have to be supported by both pharmacological and non-pharmacological, device-related organ support. The thesis deals with implementation of organ support methods to acute cardiology and its influence on patients' survival. Author implemented and scientifically analyzed benefits of ECMO (extracorporeal membrane oxygenation) both in generally critically ill, and in patients with severe right ventricular failure with cardiogenic shock. (...) These findings confirm crucial role of hemodynamic status in the prognosis of the critically ill patients. Noninvasive artificial mechanical ventilation and specialized outpatient facility were also implemented for early postdischarge care for patients, who survive critical illness.

Continued extending of organ support measures is a key prerequisite for further cardiac centre developement.