Summary

Stabilisation and resuscitation in the delivery room is an integral part of the care of extremely premature newborns. The main task is to support essential life functions and to facilitate the adaptation of the immature organism to the extrauterine life. The current recommendations are well defined for the full term and late preterm newborns, but there is a lack of targeted recommendations for the stabilisation and resuscitation of extremely premature newborns.

The research part of the submitted thesis summarises the most important results of clinical research performed in 2010–2015 at the Department of Neonatology of the Department of Gynecology and Obstetrics, VFN and First Faculty of Medicine, Charles University in Prague. The research evaluates the efficacy and side effects of the currently recommended methods of stabilisation and resuscitation of extremely premature neonates in the delivery room and presents some new and potentially useful techniques for delivery room care.

A significant output of this work is the recommendation for practice, structured according to the gestational age of extremely premature newborns. The proposed guideline is based on our results of partial clinical trials and aims to improve the current level of stabilisation and resuscitation of extremely premature newborns in clinical practice.