Outcomes of MCDA pregnancies in a tertiary center
Center of Fetal Medicine, Institute for the Care of Mother and Child, Prague, Czechia

Objective
The aim of this study was to illustrate pregnancy outcomes of monochorionic diamniotic twin pregnancies in our institute – a tertiary fetal medicine center with fetal therapy program since 2012.

Methods
Observational retrospective cohort study describing 236 cases of monochorionic diamniotic twin pregnancies delivered in a single center from 2012 to 2016.

Results
From a total of 236 monochorionic twin pregnancies that delivered in our institute, 207 (87.7%) resulted in two survivors, 27 (11.4%) in one survivor and 2 (0.8%) in no survivor. The overall mortality was 6.5%. 12.4% of pregnancies delivered below 26 weeks of gestation, 9% at 26-28 weeks, 19.3% at 28-32 weeks and 44.6% were born at 32-36th weeks. Only 37 (14.7%) monochorionic twin pregnancies had an uncomplicated course with two live born fetuses delivered after 36 weeks. Out of the 109 pregnancies that required fetal surgery, 35 were delivered with twin-to-twin transfusion syndrome (TTTS), 16 with selective IUGR without TTTS and 9 with discordant congenital anomalies. Mortality after TTTS was 17%, which accounted for 12 of 31 (39 %) losses. After 32 weeks of gestation 19 fetuses died (4 %).

Conclusion
Monochorionic twin pregnancies are at high risk of maternal and fetal complications that need specialized care. Only uncomplicated pregnancies with no risk factors can be managed expectantly and deliver after 36 weeks of gestation. TTTS was the most common cause of intrauterine fetal death in our series.