Objective
To compare outcomes between electively induced labours and spontaneous birth at 41 weeks.

Methods
We conducted a retrospective cohort study from January 2018, to December 2018. Inclusion criteria included singleton cephalic hospital births at or after 41.0 weeks of gestation. Exclusion criteria included missing data for delivery type or gestational week at birth, cesarean birth without any attempt of vaginal birth, fetal anomaly, pre-pregnancy diabetes mellitus, and pre-pregnancy hypertension. Two groups were compared: pregnancies with elective inductions and those with spontaneous delivery. Primary outcome was caesarean section. As secondary outcomes, we studied operative vaginal birth, 3rd- or 4th-degree perineal laceration, postpartum complications, results in 5't Apgar test, respiratory complications and neonatal intensive care unit admission in both groups. Categorical data were analyzed by the Chi-square test, and continuous data were expressed as medians and compared with T-Student test.

Results
188 patients were included, 82 (43.6%) delivered spontaneously and 106 (56.4%) were induced. Baseline characteristics of both groups were similar, except for maternal age (mean age 33 in elective induction vs 31 years in spontaneous delivery; p=0,02) and day of delivery (mean day 2.95 in elective induction vs day 1.76 in spontaneous delivery p=0,001). Elective induction of labor at or after 41.0 weeks was associated with a significantly higher frequency of cesarean delivery (25.6% vs 13.2%; p=0.04, RR 2.95%, CI 1.07-4.79). We did not found differences among operative vaginal birth (8.5% vs 8.5%; p=1), 3rd- or 4th-degree perineal laceration (1.2% vs 0%; p=0.25) and postpartum complications (1.2% vs 0%; p=0.25). Neonatal results were similar in both groups in terms of 5't Apgar test (9.62 vs 9.82, p=0.97), respiratory complications (7.3% vs 8.5%; p=0,9) and neonatal intensive care unit admission (1.2% vs 0.9%; p=0,8). There was no maternal nor perinatal mortality in both groups.

Conclusion
Elective induction of labor at or after 41 weeks compared with expectant management was associated with a significantly higher rate of cesarean delivery in our series, but differences between mean maternal age and day of delivery could be confusion factors.