Objective
In our environment, the expression “late-term pregnancy” is attributed to those pregnancies that extend beyond 41 0/7 weeks of gestation. In these pregnancies, national guidelines propose induction of labor at 41 4/7 weeks of gestation. If the cervix is unfavorable, a ripening process is generally employed prior to induction, and the major technique used is application of a vaginal insert containing 10 mg of prostaglandin E2 (dinoprostone) in a timed-release formulation. The objective of our study was to assess whether the 10 mg PGE2 vaginal insert left in place during 24 hours is more successful for cervical ripening than the administration of 10 mg PGE2 vaginal insert each 12 hours, with a time-lapse of 12 hours without medication between the doses.

Methods
We performed a retrospective study of deliveries occurred in nulliparous women beyond 41 0/7 weeks of gestation in our hospital from January-2015 to December-2015. Cervical ripening technique was analyzed and we made two groups of study: in group 1 (containing deliveries from January-2015 to April-2015) cervical ripening was performed by application of 10 mg PGE2 vaginal insert each 12 hours (two doses separated by 12 hours without medication); in group 2 (May-2015 to December-2015) a single-dose of 10 mg PGE2 vaginal insert was left in place during 24 hours.

Results
Total number of late-term deliveries during the period of study was 138. 34.8% of them were in group 1 (two doses of 10 mg PGE2 vaginal insert separated by 12 hours) and 65.2% in group 2 (single-dose of 10 mg PGE2 vaginal insert left in place during 24 hours). In group 1, 73% developed spontaneous onset of labor compared to 38.9% in group 2 (statistically significant). When we analyzed other secondary outcomes like number of vaginal deliveries and cesarean delivery rates (including those ones indicated for nonreassuring fetal status), no significant differences were found between the two groups of study.

Conclusion
Even if the application of two doses of 10 mg PGE2 vaginal insert separated by 12 hours seems to be more effective than single-dose of 10 mg PGE2 left in place during 24 hours, given the lower cost of induction of labor with oxytocin against prostaglandins, and because no significant differences in vaginal and cesarean delivery rate were found, we can conclude than cervical ripening with single-dose of 10 mg PGE2 vaginal insert is cost-effective.