Introduction
Preterm birth (PTB) - any birth before 37 weeks of gestation. Previous research has shown that singletons conceived by assisted reproductive technology (ART) have an increased risk of PTB compared with those conceived spontaneously.

Objective
To investigate the risk of PTB among singletons to primaparas who conceived with ART

Materials and methods
Retrospective cohort study in infertility treatment clinic IVF Riga.
Inclusion criteria were: 25-35 years old nulliparous women without pre-existing maternal diseases.
I group – ART pregnancy, II group – spontaneously conceived pregnancy.

The data were analyzed by statistical program SPSS ver.23 and p<0.005 was taken as the level of significance.

CONCLUSIONS
1) The main identified infertility reason is female factor
2) The risk of PTB in singleton pregnancies resulting from ART is significantly greater than that in spontaneously conceived singletons
3) There are no statistical difference between neonatal outcomes in both of groups.