**Objectives**
The introduction of the non-invasive prenatal test (NIPT) has significantly improved the screening detection rate of the main chromosomopathies. The aim of the study is to compare the effectiveness of different prenatal screening strategies in a protocol that considers better predictability and a cost-effective approach.

**Methods**
1719 patients were considered, with single pregnancy, who gave birth at a tertiary center in North-East Italy over a period of one year. The patients have been divided into 4 groups, based on the choice made at the first trimester screening: 1) no tests (47.7%); 2) ultrascreen (24.1%); 3) NIPT (14.1%); 4) invasive diagnosis (ID) (14.1%).

**Conclusions:** The 1/51 - 1/1000 cut-off seems to represent the best solution in terms of detection rate and expected cost for this screening strategy. The data emerging from the study point to a possible integration of NIPT in the combined screening of trisomies 21, 18 and 13.

**Results**
In total 13 cases of Trisomy 21 were diagnosed (3 in patients not subjected to screening or prenatal diagnosis), and one case of trisomy 18. An estimate was then made of the costs associated with each group. Ultrascreen followed by ID in high-risk subjects (estimated cost/patient of € 112.34, with 5.58% of invasive investigations and DR of 90%). NIPT with execution of ID in high-risk subjects (estimated cost/patient of € 579.10, with 5.29% of invasive surveys and DR of 99.2%). Contingent test: ultrascreen with ID execution in patients with risk (≥ 1/50) and NIPT in patients: (A) with risk between 1/51 and 1/300 (estimated cost/patient of € 117.66, with 2, 67% of invasive investigations and DR of 90%); (B) with risk between 1/51 and 1/1000 (estimated cost/patient of € 173.21, with 2.97% of invasive surveys and DR of 97%).