Objective
The present study aims to describe pregnancy outcomes for fetuses with increased nuchal translucency (NT) above 99th percentile in relation to the degree of increase in a local area of Barcelona.

Methods
All singleton pregnancies with NT values above 99th percentile were identified in a tertiary referral university hospital in Barcelona between January 2013 and December 2021. Pregnancies were divided into 3 groups: group 1, NT = 2.6 – 3.5 mm; group 2, NT 3.5 – 4.5 mm; group 3, NT > 4.5 mm. Pregnancy follow up included karyotyping, array in cases with normal karyotype, monthly detailed ultrasound scan starting with a 12th-week scan, followed by a 16th-week and 20th-week scan and a genetic and psychological counseling. Demographic features, clinical characteristics, abnormal findings and perinatal outcomes were analyzed retrospectively.

Results
Three hundred fifty nine fetuses were referred for increased NT above 99th percentile. Abnormal karyotype/array increased from 20.2% (group 1) to 56.5% (group 3). Conversely, favorable pregnancy outcome decreased from 81.1% (group 1) to 20.7% (group 3). Normal ultrasonographic anatomy was found in 94%, 88.9% and 92.9% of groups 1, 2 and 3 respectively.

Conclusion
The degree of increase in nuchal translucency seems to be associated with increased rates of chromosomal abnormalities and adverse perinatal outcomes. Dividing the population with increased nuchal translucency in groups seems to be useful for parenting counseling.