OBJECTIVE:
To identify the impact of diabetes on post-endovascular aneurysm repairs of abdominal aortic aneurysms

MATERIALS & METHODS:
It concerns 324 patients studied retrospectively, who underwent elective EVAR for AAA between March 1998 and October 2016. Patients were mainly male (97.2%), with an average sample age of 73.4 years. Based on their diabetes status, patients were divided in two groups “Diabetics” and “Non-diabetics” and compared. Chi-square Test or Fisher’s exact Test for qualitative variables, and variance analysis (ANOVA) or Kruskal-Wallis Test for continuous variables was used.

RESULTS
Aneurysm sac regression trended to be more important for non-diabetics patients (-0.24 ± 0.013 vs. -0.18 ± 0.027, p=0.059). The risk of endoleaks was similar in both groups (38.7% vs. 43.9%, p=0.74). The identified endoleak risk factors were age (HR=1.04, p=0.014) and fibrates ((HR=3.12, p=0.043). Dyslipidemia (HR=3.01, p=0.0060) and sulfonylureas (HR=8.43, p=0.043) decreased endoleaks duration, whereas diabetes (HR=0.080, p=0.038) and beta-blockers (HR=0.46, p=0.036) increased it. Reintervention probability was similar in both cohort and decreased with a more recent operation (Odd Ratio=0.90, Pr>ChiSq=0.0400).

CONCLUSIONS
With the results of our study, several conclusions can be drawn:
1. Diabetes increase life expectancy of endoleaks, whereas sulfonylureas and dyslipidemia decrease it.
2. Diabetes seems to slow down the regression of the aneurysm sac.