Introduction:
The purpose of this study was to review the mortality and early postoperative complication rates after TAVI (transcatheter aortic valve implantation) for severe aortic stenosis in an interventional cardiology center in Antwerp, Belgium with more than 10 years of experience. All patients were postoperatively admitted to the ICU for judicious monitoring. Results were compared to large international registries.

Methods:
A retrospective data analysis by medical record review of 242 patients who underwent a TAVI procedure between April 2008 - April 2019 was carried out. A literature search was executed to compare the results with current published data. Endpoints were mortality (72 hours, 1 week, 30 days, 1 year), bleeding, vascular complications, definitive pacemaker implantation, stroke, conversion and cardiac tamponade. Standardized criteria according to the Valve Academic Research Consortium II recommendations for studies evaluating TAVI were used. [1]

Results:
Vascular access was predominantly transfemoral (90.1%), compared to subclavian (7%), carotic (1.7%) and direct aortic (1.2%) approaches. Mean age was 82.6 (range 61-98) years old, with 51.2% female patients. Mortality rates were 1.2, 2, 4.8 and 15.9% at 72 hours, 1 week, 30 days and 1 year respectively. Life-threatening bleeding occurred in 2.9%, major in 10.7% and minor bleeding in 3.3%. The major and minor vascular complication rates were 12.4% and 5.8%. 97.7% was access site related. There were no patients with aortic dissection. The need for definitive pacemaker implantation was 18%. Incidence of stroke and cardiac tamponade was 1.7 and 3.3% respectively. Conversion to open sternotomy was necessary in 0.8%.

Conclusion:
The data presented in this study show that our results are in accordance with the literature with favorable mortality and early postoperative complication rates and support that this procedure is an excellent alternative for surgery in the elderly patients.

References: