Abstract: **P1515**

**Indication of permanent cardiac pacing after transcatheter aortic valve implantation**

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Introduction: Regarding the extent of TAVI’s indication to patients with intermediary risks, it seems essential to lower its complication. Conduction disturbances after TAVI remains a major complication without any standardized guidelines to help with its treatment.

Objective: The primary end-point of this study is to confirm that standard criterion for pacing are reliable in post-TAVI conduction disorders and to analyze the contribution of a systematic electrophysiological study (EPS).

Methods: In TAVI patients, indications for pacing were persistent high-degree atrioventricular block (AVB) or bundle branch block appearance associated to HV interval longer than 70ms, 24 hours after the procedure (data from unpublished pilot study). After a two-month follow-up, clinical and ECG evaluation and 24-hour ECG Holter monitoring were realized in patients without pacemaker and compared to data obtained from the devices in pacemaker-implanted patients (% of ventricular pacing > 1% ; presence of more than 1 AVB episod).

Results. 165 consecutive patients who underwent TAVI were prospectively included. Out of the 165 patients included, 157 were sampled : 20 in the high grade persistent AV block, 5 in the persistent bundle branch heart block with HV interval > 70ms, 13 with HV interval < 70ms, and 119 in the temporary conduction disturbances group. Amongst the 22 patients implanted with PMK following the protocol, only one had conduction recovery. On the other hand there were 14 patients who did not benefit from a PMK implant but should have. HV interval in the bundle branch block group has a 88% specificity and a 44% sensibility. None of the pacing indication would have been missed if considered at day 3 instead of day 2, independently of HV measurement.

Conclusion: From this experimental protocol it appears that an HV based algorithm has a good specificity but a poor sensibility. Conduction disorders are stable at day 3 and allow to decide if pacing is needed. Besides QRS duration, PR interval as well as morphologic data (membranous septum length) might be of interest in predicting risk of AV block after TAVI.