**Study Protocol**

**Learning curve and transcatheter aortic valve implantation (TAVI) : a systematic review.**

**Aims**

* To identify studies mentioning or analysing learning curve for transcatheter aortic valve implantation (TAVI).
* To determine the level of detail for learning, and confront general characteristics of the articles with learning curve data.

**Methods**

**Data sources**

* PubMed and Embase

**Search terms**

* **Pubmed** : “Prospective study” [Mesh] AND (percutaneous OR transcatheter OR transapical OR transsubclavian OR transaortic OR transaxillary) AND (aortic valve) AND (replacement OR implantation)
* **Embase** : (percutaneous OR transcatheter OR transapical OR transsubclavian OR transaortic OR transaxillary) AND (aortic valve) AND (replacement OR implantation)

**Supplementary criteria:**

* Prospective study
* Period of 10 years (2006-2017)
* Articles

**Limitations**

* Language : English and French
* Human study

**Study designs**

* Case report
* Case series
* Comparative study
* Randomized study

**Inclusion process**

* Screening based on titles and abstracts
* Two independent reviewers

**Exclusion criteria**

* **Study design :** registries, meta-analysis, retrospective studies
* **Subject:** adverse event reporting studies, biomarker studies, outcome monitoring studies, drug studies, studies that are not on TAVI or not on TAVI alone, medical imaging studies.
* **No source study**
* **No full text available**
* **Reviews, letters, editorials**

**Data extraction**

* First author, year of publication, country of origin, study design (randomized/controlled study), comparator if concerned, number of patients, original study/sub-study.
* Brand name of TAVI, access type of TAVI, funding, author being a proctor.
* Learning curve mentioned in the article (in background, results and/or discussion) or other article linked (methodological references), proctorship, roll-in, number of patients to maintain skills.

**Data synthesis**

* Distribution of articles according to the year of publication, the country of origin and the design study.
* Studies characteristics according to the learning curve (learning curve mentioned or not, roll-in mentioned or not, proctorship mentioned or not, author being a proctor or not, number of patients specified to maintain skills).
* Focus on articles mentioning roll-in period (number of patient to roll-in, roll-in with human or animal).
* Proportion of the studies with roll-in period when learning curve is mentioned.
* Proportion of the articles with proctorship as compared to the proportion of the articles with author being a proctor.