

## SCAI Guidelines on Device Selection in Aorto-Iliac Arterial Interventions

### SUPPLEMENT 1. SYSTEMATIC REVIEW METHODOLOGY

#### Study Search and Selection

We searched PubMed, Embase and CENTRAL (inception-October 2018) using key search terms. For instance, the search string used in PubMed was: (Aortoiliac OR aorto-iliac OR external iliac OR common iliac OR infrarenal aorta OR Leriche's syndrome or Leriche syndrome) AND (Occlusive OR Occlusion OR stenosis OR stenotic OR atherosclerotic OR atherosclerosis OR stenosed OR lesion) AND (Stent OR Device OR Scaffold OR graft OR endoprosthesis OR nitinol OR elgiloy OR polytetrafluoroethylene OR PTFE OR Dacron OR covered OR balloon-expandable OR self-expanding OR drug-eluting OR parallel OR kissing OR hemobahn OR Palmaz OR cheatham-platinum OR cheatham platinum OR SMART OR s.m.a.r.t OR Wallstent OR Icast OR advanta OR viabahn OR jostent OR flexive OR everflex OR protege OR intrastent OR balloon OR Bard Fluency OR Lifestream OR Boston Scientific Wallgraft OR zilver OR lithoplasty OR Express LD OR Assurant OR Omnilink Elite OR Everflex OR Absolute Pro OR Lifestar).

The prespecified inclusion criteria were: a) randomized controlled trials, meta-analyses, registries, non-randomized comparative studies, case series and cohort studies, b) studies comparing efficacy and/or safety of percutaneous/endovascular interventions for aortoiliac occlusive disease (involving infrarenal aorta, aortic bifurcation, external iliac artery, internal iliac artery).

We excluded review articles, editorials, interventions for other arteries (femoral/popliteal etc.), articles solely studying surgical interventions, or those evaluating interventions for aortoiliac aneurysms.

3,587 results were obtained. After removal of duplicates and followed by screening at title and abstract levels, we shortlisted 397 articles. Further screening was conducted based on specific questionnaire. Ultimately 131 articles were included in this document.

The recommendations were derived from randomized controlled trials (RCTs), meta-analyses, registries, non-randomized comparative studies, case series and cohort studies.

The Class (Strength) of Recommendation (COR) demonstrates the anticipated certainty of comparative benefit for a group of devices, which was defined as, endpoints related to symptom improvement, patency, functional status or quality of life versus risks of the devices.