Safety and efficacy of covered endovascular reconstruction of the aortic bifurcation (CERAB) for complex aortoiliac occlusive disease: a single center experience

Stefano Molinaro MD^; Maria Antonella Ruffino, MD EBIT*; Marco Fronda, MD^; Andrea Discalzi, MD^*; Andrea Mancini, MD^*; Pierluigi Muratore, MD^*; Denis Rossato, MD^*; Dorico Righi, MD^*; Paolo Fonio, MD^*
*Vascular Radiology, Department of Diagnostic Imaging and Radiotherapy, Azienda Ospedaliera Universitaria Città della Salute e della Scienza di Torino
^Radiology Unit, Department of Surgical Sciences, University of Torino, Azienda Ospedaliera Universitaria Città della Salute e della Scienza di Torino

INTRODUCTION
Endovascular intervention with kissing-stenting (KS) is the first-line treatment for complex aortoiliac occlusive disease (AIOD) and it is related to less morbidity and a shorter hospital stay compared with open surgery. To achieve better long-term patency (2y follow-up 79%), in 2013 a new technique named the covered endovascular reconstruction of the aortic bifurcation (CERAB) technique was introduced. The results at 1-year and 3-years FU reported a primary and secondary patency rates of 87% and 95% and 82% and 97% respectively. We report our single center experience with CERAB for the treatment of extensive AIOD

MATERIALS & METHODS
Between February 2018 and September 2018, 12 patients (1 female) where diagnosed with intermittent claudication (8) and critical limb ischemia (4) and treated with CERAB technique with BeGraft, Bentley, balloon-expandable stent graft at our center. Lesion morphology was evaluated by CT angiography. 10 lesions were TASC D and 2 TASC C. Follow-up consisted of clinical assessment and duplex ultrasound at one, three and six months. Patency rates and clinically driven target lesion revascularization were calculated

RESULTS
Technical success was obtained in all the procedures (100%). Mortality rate at 30 days was 0%. Primary patency at 1, 3 and 6 months was 100%. No complications were reported. Mean hospital stay was 1 day.

CONCLUSIONS
The CERAB technique appears to be a safe and feasible alternative to open surgical reconstruction of the aortic bifurcation in complex occlusive disease. Our results are in line with what reported by latest studies in literature.

For correspondence: stefano.molinaro@unito.it mariaantonellaruffino@gmail.com