Background: Vascular bypass is used in patients with PAD (Peripheral Arterial Disease) to treat ischemic rest pain, to improve walking distance in patients with severe life-limiting claudication, and to save limbs that might otherwise require amputation. When patients presenting for peripheral artery reconstruction have absent or inadequate saphenous veins due to prior use, small size, or poor quality, vascular surgeons may choose a prosthetic bypass graft. The GORE® PROPATEN® Vascular Graft features a proprietary end-point covalent linkage of heparin molecules to the luminal surface of the graft that provides sustained resistance to thrombosis.

Objectives: Demonstrate the cost savings of using the GORE® PROPATEN® Vascular Graft compared to standard ePTFE vascular grafts in the management of PAD patients. Superior clinical outcomes in terms of primary / secondary patency and limb salvage rates result in lower average per-patient treatment costs.

Methods: A cost model analysis was developed to represent hospital treatment costs. A typical PAD patient’s treatment pathway in Italian clinical practice was identified by a survey involving Italian vascular surgeons. A literature review was conducted to determine patency and limb salvage rates. Italian MD18ottobre 2012 DRG tariffs were used as hospital cost of treatment inputs. A three-year patient management cycle was considered.

Results: Better patency and limb salvage rates obtained using the GORE® PROPATEN® Vascular Graft result in fewer reinterventions and amputations, corresponding to lower per-patient treatment costs. The cost model demonstrates an overall cost saving for PAD patient management using the GORE® PROPATEN® Vascular Graft for infrapopliteal bypass. The cumulative cost savings at 3 years is estimated to be 10.704€ per patient.

Conclusions: The use of the GORE® PROPATEN® Vascular Graft for infrapopliteal bypass in the PAD patient population represents a safe, clinically effective, and cost-saving alternative to standard ePTFE vascular grafts.