

A great proxy of success in endovascular aneurysm repair is achieving sac regression. Although sac regression is a multifactorial issue, there are several mechanical factors that address sac regression — namely, optimizing the seal and depressurizing the aneurysm sac. The Endurant II and IIs triple A stent graft was designed for maintaining a continuous seal and hemostatic barrier. Tip capture means accurate and predictable placement as the physician can evaluate the landing zone and make fine adjustments during delivery. Accurate placement is critical for optimizing the seal zone. The proximal suprarenal anchor pins fix the graft outside the seal zone to allow fixation independent of seal. Without disrupting the seal, we ensure durable fixation which is clinically supported by our low stent migration rate. With our M-stent design we optimize the number of peaks in contact with the seal zone to ensure uniform apposition against the vessel wall. Furthermore, the self-expanding nature of nitinol maximizes circumferential conformability and maintains a dynamic, continuous seal resulting in low type I endoleak rates. The multifilament polyester is woven to optimize durability and wear resistance and was chosen for its long-standing reputation for strength and biocompatibility in open surgical repair. Polyester is thrombogenic, potentially sealing off branch vessels that may otherwise cause type II endoleaks. These combined features create a reliable hemostatic barrier that leads to depressurization within the aneurysm sac and ultimately encourages aneurysm remodeling and sac regression.