

BSET Endovascular Travel Fellowship Report
Department of Vascular Surgery, LMU Klinikum, Munich, Germany
Fellowship Supervisor: Professor Nikolaos Tsilimparis

I am deeply grateful to the British Society of Endovascular Therapy (BSET) for awarding me the opportunity to undertake a post-CCT endovascular fellowship at Ludwig-Maximilians-Universität Klinikum in Munich. This placement, which preceded my appointment as Consultant Vascular Surgeon at Addenbrooke's Hospital, Cambridge, proved to be an enriching and pleasantly challenging experience.

LMU Klinikum is a high-volume vascular surgical centre renowned for its excellence in complex endovascular aortic procedures. The centre is Germany's second largest hospital, with more than 2,000 beds. There are two fully equipped hybrid operating theatres and typically over 25 arterial surgical interventions performed weekly. Under the expert supervision of Professor Nikolaos Tsilimparis and his outstanding team, I was immersed in a broad spectrum of vascular surgery, with a particular emphasis on cutting-edge endovascular techniques. The department's culture of clinical and innovative excellence and academic vigour provided an ideal environment to refine my operative capabilities and broaden my clinical perspective.

During my time in Munich, I was actively involved in many vascular cases, encompassing both endovascular and open surgical domains. The case mix was notably diverse and interesting. On the endovascular front, I gained hands-on experience with a wide array of procedures including standard infra-renal EVAR, thoracic endovascular aortic repair (TEVAR), scalloped TEVAR with adjunctive false lumen management using the Candy-Plug technique, fenestrated EVAR (FEVAR), branched aortic arch devices, and inner-branched and t-branch stent-grafts. The unit's use of CO₂ angiography for EVAR was of particular interest, offering valuable insights into contrast-sparing techniques for patients with renal impairment. The exposure to visceral and mesenteric endovascular revascularisation added further depth to my understanding of managing complex aortic pathology.

Peripheral interventions included advanced revascularisation techniques for chronic limb-threatening ischaemia (CLTI), subintimal angioplasty, and retrograde access strategies. I also had the opportunity to utilise intravascular ultrasound (IVUS) in conjunction with mechanical thrombectomy devices, such as the INARI system, for the management of deep vein thrombosis—an area of growing importance in contemporary venous practice.

While the fellowship's primary focus was endovascular, it also incorporated substantial exposure to open vascular surgery. Notably, I was involved in the surgical management of infected aortic grafts, including explantation and bovine graft reconstruction, ultra-distal bypass procedures, and hybrid interventions for CLTI.

Equally impactful was my involvement in the broader clinical and academic activities of the department. I attended and contributed to daily ward and on-call planning meetings, where complex cases were discussed with a multidisciplinary lens. I participated in weekly faculty and resident teaching sessions, which fostered lively academic discourse and evidence-based reflection on surgical practice. I was also afforded the opportunity to present elements of my own research, thereby engaging in meaningful exchange with peers and faculty members. Outwith the fellowship was the opportunity to establish collaborative links with cardiovascular researchers at the Technical University of Munich (TUM). This cross-institutional collaboration has since evolved into the early stages of a planned multi-centre research initiative spanning Munich and Cambridge—an exciting opportunity to help strengthen research links between the two centres.

From a professional development perspective, this fellowship has been helpful in preparing me for independent consultant practice. I returned with a markedly enhanced technical repertoire, as well as renewed confidence in procedural decision-making and perioperative patient management. Furthermore, the immersion in a highly specialised European centre allowed me to appreciate alternative systems of healthcare delivery and surgical training, broadening my understanding of international vascular practice.

Beyond the hospital, Munich proved to be a superb setting for personal growth and cultural enrichment. The city's vibrancy, combined with its proximity to the Bavarian Alps, stunning lakes, and historic towns, made for a truly memorable experience.

I would like to extend my sincere thanks to Professor Tsilimparis for his mentorship and to the entire vascular team at LMU Klinikum for their generosity, enthusiasm, and commitment to education and training. I am also deeply appreciative to the BSET Council for their support. This fellowship has substantially advanced my endovascular skillset, expanded my academic horizons, and helped me develop lifelong collaborations across the international vascular community.