

## **Barbara Hasse, MD – Biography**

Dr. Barbara Hasse is Senior Consultant of Infectious Diseases at the University Hospital of Zurich (Switzerland) and Professor of Medicine at the University of Zurich. Her research focusses on cardiovascular infections, HIV/AIDS and mycobacteria. She initiated two prospective cohort studies on the topic of vascular graft/endovascular infections (VASGRA, since 2013) and infective endocarditis (ENVALVE, since 2018) in Switzerland. The VASGRA cohort has uncovered a fundamental problem of patient safety in cardiovascular surgery. We detected *Mycobacterium chimaera*, a slowly growing non-tuberculous mycobacterium (NTM), in tissue samples of two VASGRA patients with thoracic vascular prosthesis infections. In the course of a rigorous outbreak investigation, *M. chimaera* was found in the air of the operating room and in the water tanks of temperature control devices (HCD). The HCD is part of the heart-lung machine. Further investigations provided the information that patients were infected by airborne transmission of mycobacteria from these contaminated HCDs. Mycobacterial infection-related morbidity and mortality in patients following cardiopulmonary bypass surgery is high. Guidelines for treatment were issued by ISCVID covering aspects of prevention, clinical management, laboratory diagnostics, device management and public health aspects., whereby Dr. Hasse was the first author of the document.