NINOS SAMANO was born in Baghdad, Iraq, in 1972. He received his medical degree from the University of Baghdad in 1996. After working in Baghdad and, later, in Amman, Jordan, he moved to Sweden in 2000. He completed his internship at St. Göran’s Hospital in Stockholm and started his training in cardiothoracic surgery at Örebro University Hospital in 2005. He received his specialist degree in 2010 and joined Dr. Domingos Souza’s research group, with main focus on the no-touch saphenous vein harvesting technique in coronary artery bypass grafting.

Ischemic heart disease is currently the leading cause of death globally. Coronary artery bypass grafting (CABG) is considered the best treatment for many patients and its success depends on the long-term patency of the conduits. Greater use of arterial grafts has been advocated because of their higher long-term patency compared to saphenous vein grafts. Despite this, saphenous vein grafts account for up to 80% of all grafts used in CABG. Consequently, the long-term patency of the saphenous vein is one of the most crucial challenges in cardiovascular surgery. The aim of this thesis was to study the long-term angiographic, echocardiographic, and clinical aspects of CABG patients receiving either no-touch or conventional vein grafts and to investigate the health-related quality of life in this patient group. No-touch vein grafts showed a higher patency rate compared to conventional vein grafts at a mean of 16 years postoperatively, a patency similar to that of the left internal thoracic artery. The no-touch group also had a better left ventricular ejection fraction compared to the conventional group. After a mean of 6 years, the patency rate of no-touch veins to the left anterior descending artery was comparable to that of the left internal thoracic artery. Graft patency was shown to be an independent predictor of health-related quality of life in CABG patients. These patients reported a function and wellbeing similar to that of the Swedish population and clearly better health status compared to the same disease group in the general population.