- My name is Michel Reijnen. I'm a vascular surgeon from a city called Arnhem, which is located at the east of the Netherlands. And today I'm going to talk about cost effectiveness of the treatments with drug-coated balloons in patients with critical limb-threatening ischemia.

Treatment Aims for CLTI Patients with Femoropopliteal Artery Disease

When you compare the treatment goals for CLTI with those for intermittent claudication, they're different. In patients with CLTI the most important goal is lymph preservation.

Whereas in patients with intermittent claudication further walking distance is more relevant. What we've seen in the last years is that cost of medical healthcare is increasing significantly during the years.

Study Rationale

The aim of the study was to see if treatment of CLTI patients with a drug-coated balloon is cost effective or not in the Dutch and the German healthcare societies.

Study Design & Patient Population

What we did in the study was we took the subset of patients treated for critical limb ischemia from the IN.PACT Global Registry and compared them to the data from the literature from patients that were treated with PTA with or without bare metal stenting. And what we then did, we created a Markov system and compared the healthcare situations in both the Netherlands and Germany.

Key Findings

The key findings were that both in the Dutch and the German healthcare society treatment with a DCB is likely to be dominant over the gold standard, PTA, with stenting or without stenting.

Results Impact on Treatment for Patients with Advanced Disease

Having showed that this is cost effective, it will make it easier for the hospitals to indeed use this treatment for this subset of patients as it has now been proved to be cost effective. Having said that, it needs to be validated with other studies as we used a registry and compared it to data from the literature as no randomised trial is available. So there is some weaknesses in the study but it's the best we have.

Take-Home Messages

The take-home message is that patients with CLTI can be safely treated with a drug-coated balloon and that the treatment is likely to be dominant over the standard of care PTA with stenting.

Next Steps

The next step is that we need to validate this data with other studies using other balloons as we used only one, but also with randomised data.