

# Physician Testimonial

## Dr. Marcus Wieczorek

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Heart Center Duisburg,  
Germany

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**The Heart Center in Duisburg, Germany first began performing atrial fibrillation (AF) ablations around the year 2000. At that time, Dr. Marcus Wieczorek was enthusiastic about the potential of AF ablation, but he had to rely on the technology of the time, which included a lasso catheter and external imaging technology. He recollected those early efforts using four conventional-type catheters in the pulmonary veins (PVs) and looking for ectopy, which was then treated within the veins.**

“Step by step, we changed our methods.” Dr. Wieczorek and the electrophysiology (EP) team at Duisburg, like many other EP groups around the world, avidly followed the efforts of Dr. Michel Haissaguerre and colleagues. Publications from this team in Bordeaux, France encouraged him about the theoretical promise of catheter AF ablation, but the practical reality at that time was that the procedure was long, arduous, and prone to complications.

In fact, the Duisburg team found themselves taking an increasingly conservative approach to AF ablation because of the high incidence of complications subsequently reported by other groups. Eventually they moved to a substrate modification strategy to reduce the chances of delivering RF in the pulmonary veins. “At that time, we



were using three-dimensional (3D) imaging systems and a procedure took a very long time, four to six hours was typical. We only performed about 20 or 25 procedures a year.” The procedure then deemed too risky for many AF patients.

A drastic change in approach and mindset occurred when a representative introduced the EP lab at Duisburg to a new technological solution offered by Ablation Frontiers. Dr. Wieczorek quickly availed himself of Ablation Frontiers training by observing procedures performed by colleagues who were already using the technology effectively in the Netherlands and Switzerland.

“We have completely switched our attitude about AF ablation since Ablation Frontiers,” Dr. Wieczorek reported. “We are increasing the number of procedures



we are performing at the moment and expect to do even more in the future.”

The training took place at centers routinely using and well versed with Ablation Frontiers technology. Dr. Wieczorek found the training not only instructive, but quite useful in terms of how Ablation Frontiers products would be deployed. “Different labs use different strategies,” he reported. “It was good to see this in action. It was very positive, because all of the colleagues were quite open to discussion.”

To date, the Heart Center in Duisburg has performed about 40 AF ablations using Ablation Frontiers’ innovative technology, and there have been no procedure-related complications. Currently, only patients with paroxysmal AF are being ablated, but Dr. Wieczorek will soon extend this procedure to patients with more severe forms of the arrhythmia, persistent or permanent AF.

In Germany, a general cardiologist serves as an intermediary and must grant the EP lab permission to conduct subsequent checks on the patient. As a result, many AF ablation patients from Duisburg are implanted with a loop recorder in order to gather data on arrhythmia burden both before and after the ablation.

“At three months, our success rate is around 85%,” Dr. Wieczorek reported. Data come mainly from loop recorders with some patients monitored using seven-day Holter monitor instead. The arrhythmia burden is assessed by adding together the durations of any episodes of atrial tachyarrhythmias, with a treatment failure counted as having occurred if a patient experiences more than combined 30 seconds of atrial tachyarrhythmias.

Even by this strict definition, success rates are high and complication rates are very low.

“We have observed no complications to date,” Dr. Wieczorek stated. In the past, one particularly worrisome complication was perforation, which Dr. Wieczorek says has not occurred with the Ablation Frontiers system.

Furthermore, the Heart Center in Duisburg no longer uses 3D mapping routinely for AF ablations, although Dr. Wieczorek said it was still useful in cases of recurrent AF despite PV isolation, where the source of the AF may be outside the pulmonary veins, and he might employ a substrate modification strategy.

“In my opinion, the equipment from Ablation Frontiers is easy to handle,” Dr. Wieczorek commented, and the learning curve was short. “It’s not as tough as learning the more complex AF ablation procedures, which are more difficult with respect to left atrial geometry. Getting good left atrial contact is tough with other systems.”

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Clinicians can become quite familiar and comfortable using the Ablation Frontiers system in just a few procedures.

“The Ablation Frontiers products make AF ablation quite cost effective, which is why we are able to offer it to so many of our patients,” Dr. Wieczorek added. The older approach required not only external mapping equipment but additional diagnostic and mapping catheters for each procedure. “Plus it is expensive to use a cath lab for six hours for one procedure.”

Dr. Wieczorek recounted the last patient on whom he performed an AF ablation. “We used two catheters – PVAC and a coronary sinus reference – and got complete pulmonary vein isolation. The catheters worked very well, and it was not a difficult procedure. We achieved perfect results.” ■