



**PHILIPS**

EPIQ and  
Affiniti ultrasound

Customer story

# First-rate care in the first trimester

**Dr. med. Robert Lachmann**

Senior physician at the Department for Obstetrics and Gynecology and lead consultant for prenatal medicine and fetal therapy University Hospital Carl Gustav Carus Dresden, Germany

**Recent highlights:**

- Diploma in Fetal Medicine (FMF and ISUOG Educational Series)
- 11-13 weeks scan certification (FMF, since 2005)

A proper focus on risk is integral to individualized care. Certified by the Fetal Medicine Foundation (FMF), Dr. Robert Lachmann champions the FMF's "inverted pyramid of care" principle. At its heart: an 11-13 week assessment to help clinicians estimate early patient-specific risks for fetal abnormalities and pregnancy complications. To support other clinicians in putting this concept into practice at their clinics, Dr. Lachmann recently collaborated with Philips to develop 11-13 week scan presets on two premium ultrasound systems.

### Seeing risk in context

Investigating chromosomal abnormalities remains an important activity, remarks Dr. Lachmann, “but we should also focus on the major health issues that are the key causes of pregnancy complications such as miscarriage, preeclampsia, and fetal growth restriction.” In his opinion, first-trimester scans reveal that the majority of pregnant women is low-risk. At the same time, the small proportion of high-risk patients can be identified early. “And looking at the baby early gives you more opportunities to prevent future complications – instead of later treatment,” he says. This insight gained during his work with the Fetal Medicine Foundation (FMF) prompted him to develop ultrasound system presets that help other clinicians comply with FMF guidelines for assessments at 11-13 weeks.

### Relying on the right tools

Designed to assist clinicians in measuring several parameters, such as the fetal heart and intrauterine artery, the presets will be available on the EPIQ and Affiniti, Philips premium ultrasound systems. Why Philips? “I’ve worked in many hospitals and trained in many specialized units,” he explains. “The EPIQ, for example, is one of the best I’ve seen. Its B-mode in particular – the images we work with every day – and color Doppler are just outstanding.”

Dr. Lachmann believes the transducers available on these systems give clinicians the flexibility they need. “The L12-3 offers very good resolution for first-trimester scans, too,” he continues. “The C5-1 is excellent for low frequency. And Philips was the first company to focus on high-frequency probes, such as the C9-4 and C9-2. We can even see in 4D with the same quality in each cross-section using probes like the X6-1 and X5-1 – all from one brand.”

## The path to early risk management

# Excellent patient care

## starts early

### Putting the patient first

Every woman wants to be treated as an individual, emphasizes Dr. Lachmann, and the image quality and workflow tools on Philips ultrasound systems help clinicians deliver this high level of care. “Patients want peace of mind,” he continues, “and I feel we can offer this at the end of the 11-13 week scan. In one visit, we have the maternal history, the images, the blood pressure measurements – in one report with the information we need. Instead of asking patients to come back in two weeks for a consultation, we can point out clinically relevant findings right away and discuss treatment.”

### Working efficiently across the patient spectrum

The new presets free up clinicians’ time for patient care. Following the Fetal Medicine Foundation guidelines for the 11-13 week assessment is as easy as pushing a button, he reports, and the process yields rich clinical information. “These additional markers support high detection rates and low false positives,” he points out. “It is quite simple and [results in] individualized care.”

The overall system design also allows clinicians to cope with a wide variety of patients. “We have a simple workflow on one machine,” he says, “so we switch quickly between routine clinical work and advanced diagnostics.” Philips transducers play a key role here. They’re easy to exchange and “with just four probes, we can address almost all of our clinical situations – even obese patients.”

### Making one investment for multiple specialties

Pediatric cardiology specialists at the University Hospital Carl Gustav Carus Dresden also rely on the fetal medicine clinic’s EPIQ system and collaborate with obstetrics caregivers. “This is made possible by the EPIQ’s transducers,” he notes. “We really like the concept of a ‘shared system’ Philips delivers.”



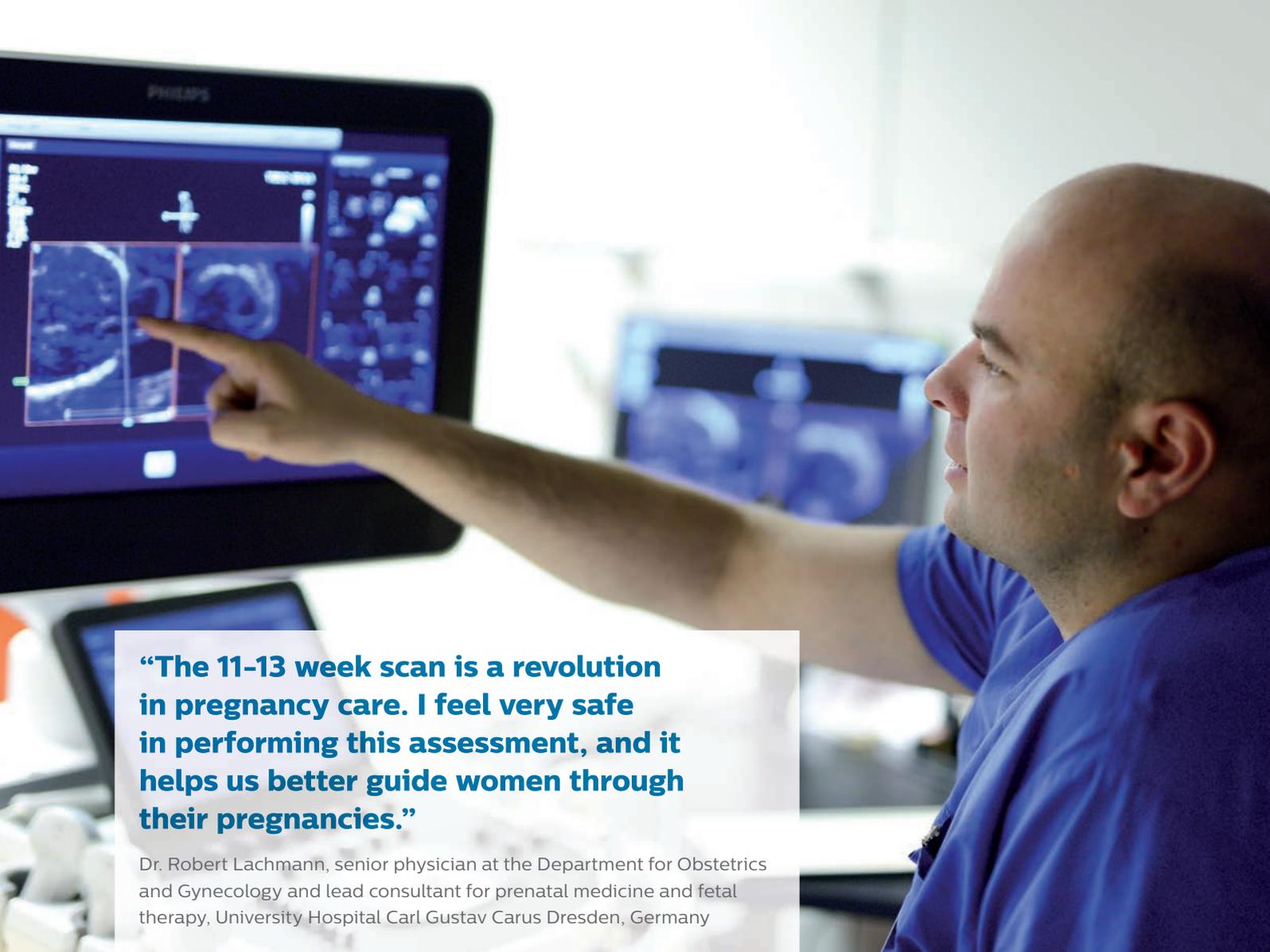
**“Image quality – good visualization and resolution – helps reduce exam times, but when you have information as early as possible – that’s when you save time overall.”**



Research and practice from the last 20 years has revealed that more than 90% of all major aneuploidies can be identified at 11-13 weeks’ gestation by a combination of maternal characteristics, ultrasound findings and biochemical testing of maternal blood.<sup>1</sup>

These comparative scans demonstrate what can already be visualized at 12 weeks.

<sup>1</sup> Fetal Medicine Foundation. <https://fetalmedicine.org/pyramid-of-care>, accessed December 12, 2014



**“The 11-13 week scan is a revolution in pregnancy care. I feel very safe in performing this assessment, and it helps us better guide women through their pregnancies.”**

Dr. Robert Lachmann, senior physician at the Department for Obstetrics and Gynecology and lead consultant for prenatal medicine and fetal therapy, University Hospital Carl Gustav Carus Dresden, Germany

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