

A detailed 3D rendering of various microorganisms. In the foreground, several large, purple, spherical viruses with prominent, club-shaped spikes are visible. Interspersed among them are numerous blue, rod-shaped bacteria of varying lengths and orientations. The background is a soft, out-of-focus blue, suggesting a vast field of these organisms.

HITADO

**Infection diagnosis
on an objective basis**

A field report

Interview with Ulrich Kuhn, specialist physician for paediatrics and adolescent medicine



„... effortless handling is preferred in laboratory operations ...“

The practice for paediatrics and adolescent medicine Kuhn + Gaißer from Kirchberg in Baden Württemberg (Germany) offers the whole palette of specialised medical care. For acute diagnostics, quick determination of patient's blood levels, specifically C-reactive protein (CRP), is expedient and cost-efficient. Using the CUBE as a miniature laboratory was the logical next step within the practice's comprehensive, patient-oriented philosophy.

We spoke to Ulrich Kuhn, who manages the practice and leads an association for specialist physician care for paediatrics and adolescent medicine.

Mister Kuhn, please describe the structure of your practice in a few words.

Currently we employ two paediatricians and adolescent health specialists as well as a part-time training consultant for paediatricians and adolescent medical professionals.

On average we are treating between 2000 and 2200 patients per quarter, most of them newborns and children up to six years of age. We also get sporadic visits from patients up to the age of 17. Every process – ranging from capillary blood sampling to treatment itself – is handled by our medical professionals in our own laboratory.

Our practice conducts around 800 – 1000 CRP measurements per year. We are very generous with our CRP measurements, because it is important for us to have a quantitative diagnosis rather than just making a diagnosis through observation or by checking the patient's medical history. It is much easier calling it a day when your diagnosis was made on an objective basis.

Why is the determination of CRP levels so important in your day-to-day work and how did your attention get drawn towards the Eurolyser CUBE?

Having a point-of-care device like the CUBE at hand gives us the opportunity to speed up our daily operations. We have been using it since day one and we wouldn't want to miss it.

„... values are quickly and reliably determined ...“

It is very important to measure CRP to distinguish between bacterial and viral infections. The Eurolyser CUBE is a great tool for determining CRP values because it only takes about three minutes to complete a test. Hence, there is no more need to wait for a remote laboratory's results - diagnosis and treatment go hand in hand.

Besides my career as a doctor, I am also the director of the association for specialist physician care for paediatrics and adolescent medicine in Baden Württemberg.

The required sample volume of 5µl is extremely low, the values are quickly and dependably determined and the handling is very easy and intuitive.

„... it facilitates communication with patient's parents ...“

As director, I am responsible for procurement of analytic instruments for our members, something I have committed myself to do. I want to offer my colleagues alternatives to standard instruments, keeping in mind that those standard instruments may not be available at some point in the future. That is how I learned about the CUBE.

How was the training of your employees?

The support through HITADO was very professional and enjoyable. The instruction by a product specialist was thorough and the user interface is very straightforward anyway. Additionally the user manual is constantly available on the provided tablet-PC... It just could not be simpler.

What do you like best about the Eurolyser CUBE?

In the past, we have tested numerous systems in our practice. Our qualified employees have also had vast experiences with different devices earlier in their careers. After introducing our employees to the Eurolyser CUBE instrument, we quickly realised that with its simple handling in lab operations it had to be our system of choice.

Determining CRP levels aids in the decision whether administration of antibiotics is justified or not – does this help in communicating with your patient's parents?

Yes, the system helps a lot with that. Some parents view antibiotics as some kind of universal remedy which will instantly cure their children. On the other hand, there are parents who have a critical view on antibiotics and who want to avoid them wherever possible ►



The CUBE allows for objective diagnosis and the type of infection can be detected safely. For instance, antibiotics are pointless when treating viral infections, which is why in case of a virus we don't prescribe them.

However, if treatment with antibiotics is generally opposed by the patient's parents, we can tell them that, for example, their child's CRP value is over 100. This strongly indicates a bacterial infection which is likely to worsen if not treated. Quantitative results considerably facilitate the communication with parents.

„... the waiting period for results is simply omitted ...“

What is your final impression?

We like the Eurolyser CUBE very much. Results are very accurate and the instrument greatly supports us in the decision to prescribe antibiotics. Particularly because the distinction between a bacterial and a viral infect is not an easy task.



Even experienced physicians can be misled by symptoms, because they won't always be explicitly pointing to a specific disease. I personally could not call the claim, that I could distinguish it in 100% of the cases.

Ulrich Kuhn

- d.o.b. 26.06.1964
- married
- 2 children (born 1999 and 2002)
- Medical studies in Würzburg
- Further education as medical specialist for paediatrics and adolescent medicine
- Specialist physician for paediatrics and adolescent medicine for Kuhn + Gaißler

The Eurolyser CUBE delivers reliable quantitative values allowing a treatment built upon a solid basis.

Specialist physician Ulrich Kuhn was interviewed by Susanne Schmidt and Christoph Schönberger