



milenia biotec

We bring diagnostics closer to the patient

Sepsis Diagnosis

Which Child Needs A Therapy?



Foto: R. Hammer (www.fotolia.de)

IL-6 Point-of-Care test:

Your rapid decision support

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Background

Neonatal sepsis is one of the main reasons for morbidity and mortality in newborn infants. At an annual rate of approximately 770,000 deliveries e.g. in Germany around 1000 to 8,000 of these babies are at risk of dying. The uncharacteristic clinical signs of sepsis mean that many children are often treated prophylactically with antibiotics before a confirmed diagnosis.

Objectives of Sepsis Diagnostics:

- Quick, safe, and early detection
- Selective therapy strategies

Decision Support

Due to the relatively slow rise of biological markers such as CRP, which can be in the normal range at the start of an infection, an early diagnosis of sepsis may not be easy to confirm. However, it is possible to detect a rapid rise in cytokine levels such as IL-6 or IL-8 (the clinical relevance of both is comparable) one to two days earlier than CRP; this clearly could improve the outcome for your patient.

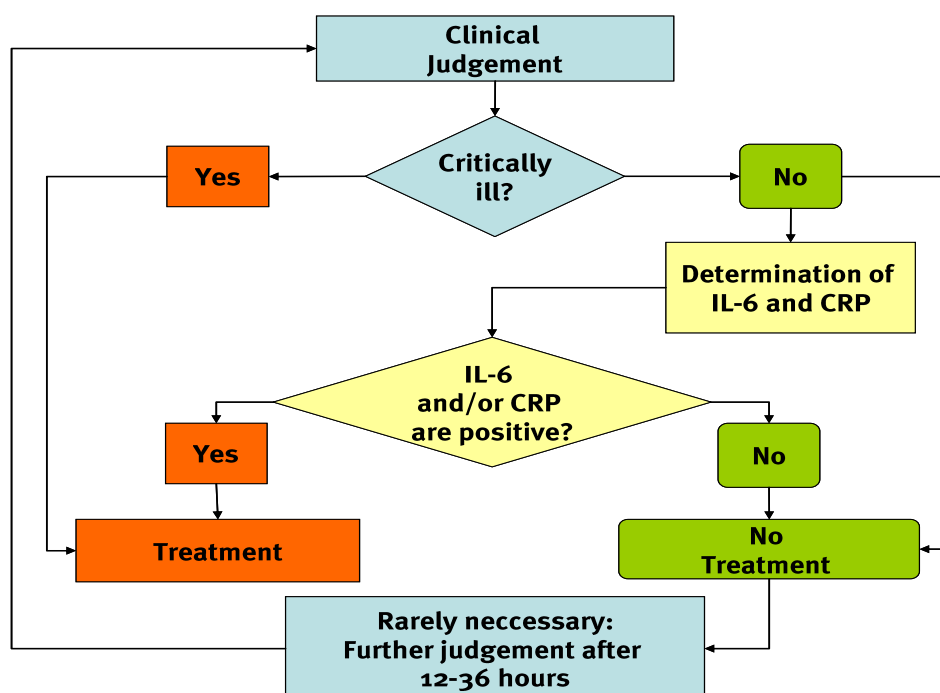
Even better, the use of IL-6 or IL-8 in combination with CRP allows you to exclude an infection with a very high probability. The savings of unnecessary prophylactic antibiotics in itself leading to a cost reduction for the care of the newborn baby (Ref 1).

The evaluation for laboratory determinations in the German Guidance Neonatology / Bacterial Infections in Newborns says (Ref 3):

“The highest sensitivity together with highest specificity during the complete time course of an infection is currently a combination of IL-6 or IL-8 together with CRP”.

Well Proven Strategy

During the last few years, the usefulness of incorporating IL-6 measurements into the strategy for the diagnosis of sepsis has been proven in the day-to-day hospital life of neonatology departments:




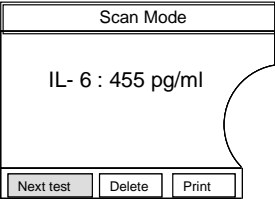


Milenia® QuickLine IL-6– + Milenia® POCScan Reader - Your Advantages

- Real-time therapy decisions at patient's bedside
- Minimal time requirement
- Low staff requirements
- Short turn- around- time (TAT)
- Milenia® POCScan Reader: Portable stand-alone system
- Quantitative interpretation with Milenia® POCScan Reader
- The reader stores up to 100 results
- Internal system check
- Validity-check of the results by the firmware
- Optionally: Thermal printer, Data storage via PC software



Very easy Handling

<p>1 Add 100 µL serum or plasma into the test unit</p> 	<p>2 Put test unit in the Milenia® POCScan Reader</p> 
<p>3 Start "IL-6 " program The result was shown on the display after 20 minutes.</p> 	<p>4 Read the IL-6 value from the display</p>  <p>The result is automatically stored in the system</p>

A value of **100 pg/mL IL-6** measured by the Milenia® QuickLine IL 6 has been proven to be an **appropriate clinical cut-off**.

References

1. Franz AR, Steinbach G, Kron M, and Pohlandt F.
Reduction of unnecessary antibiotic therapy in newborn infants using interleukin-8 and C-reactive protein as markers of bacterial infections. Pediatrics 1999; 104 (3): 447-453.
2. Krüger M, Nauck MS, Sang S, Hentschel R, Wieland H, Berner R.
Cord Blood Levels of Interleukin-6 and Interleukin-8 for the Immediate Diagnosis of Early-Onset Infection in Premature Infants. Biol Neonate 2001; 80: 118-123.
3. AWMF online "Leitlinien der Gesellschaft für Neonatologie und Pädiatrische Intensivmedizin"

Order Information

Parameter	Order Code	Package Size
Milenia® QuickLine IL-6	MQL6 1	20 tests
Milenia® QuickLine IL-6 Control	MQCO6 1	2x 1 ml
Milenia® POCScan Reader	MSCAN 1	1 device

Further products in the Milenia® QuickLine test format:

CRP, HIT, IFN- γ , IP-10, Free IgE, Total IgE,
Development Platform HybriDetect

If you are interested in one of these products, please fill in this page and send it to:

Fax number ++49 641 948883 – 80

I am interested in testing your products, please contact me

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