

Right
the first time

Pioneering tissue identification technology –

Injeq IQ-Tip[®] system for pediatric lumbar puncture

The Injeq IQ-Tip[®] spinal needle is
the smartest needle around.



Precision increases chances of recovery

Acute lymphoblastic leukemia (ALL) is the most common cancer type diagnosed in children. During the treatment; up to 20 lumbar punctures may be performed on each patient (European ALLTogether treatment protocol).

Each puncture is a challenge in itself: the needle tip must be precisely inserted into the spinal canal, the puncture must be neither too deep nor too superficial. At the same time, all unnecessary needle movements must be avoided. It is essential to minimize the risk of bleeding and prevent cancer cells from entering the spinal canal.

With a precise lumbar puncture, the risk of relapse of the disease in the central nervous system region may be essentially reduced. Precision in punctures can therefore improve the prognosis and chances of complete recovery from ALL.

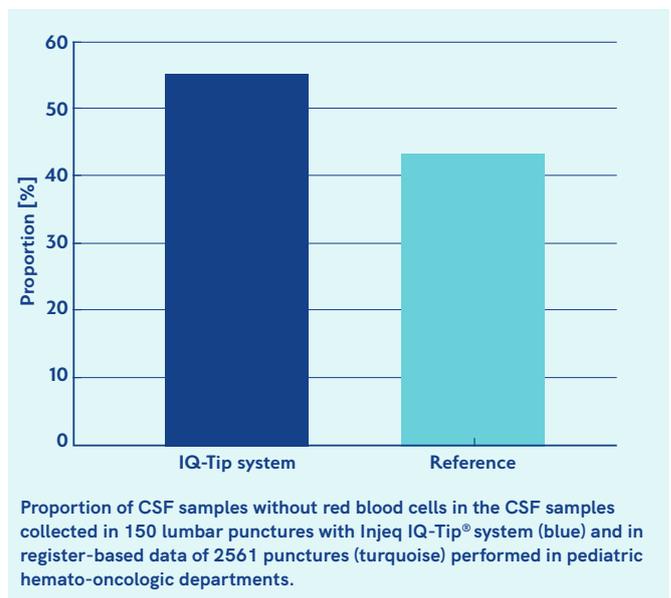
Smart digital technology for high quality CSF samples

The smart digital technology of the Injeq IQ-Tip[®] system helps physicians to detect when the needle tip reaches the cerebrospinal fluid (CSF), and can therefore reduce traumatic lumbar punctures.

Designed to significantly reduce the risk of touching the highly vascularized back wall of the spinal canal,

the system indicates the presence of CSF at the needle tip with an audiovisual alarm.

Knowing that the needle tip is in the right place, you can protect the patient and get higher quality CSF samples while avoiding repeated, inconvenient punctures. Fewer blood-tinged CSF samples prevent unnecessary delays in diagnosis, may help avoid unnecessary additional chemotherapy, and in the long term, diminish the risk of relapse of the disease. As the Injeq IQ-Tip[®] delivers significant benefits for the treatment of patients, it will also reduce costs now and in the future.



Smart Injeq IQ-Tip® enables

- easy detection of needle tip reaching cerebrospinal fluid
- higher quality CSF samples
- reduction of traumatic lumbar punctures
- reduction in the risk of hitting the spinal canal's back wall
- increased confidence in performing lumbar punctures

The Injeq IQ-Tip® system will help you succeed with the first puncture!

Working in an emergency room, the pressure to achieve a fast diagnosis is high 24 hours a day, which means you routinely have to make quick decisions.

When you have a patient with suspected neonatal meningitis, it is imperative to quickly obtain a CSF sample for diagnosis. Although lumbar puncturing is basically an established and simple procedure, performing it on a neonate while under pressure involves risks.

Easier and smoother puncturing

According to clinical studies, only 45-54%¹ of lumbar punctures performed on neonatal babies are successful. Traumatic lumbar punctures occur very frequently, in 30%-46%² of cases, depending on how the condition is defined (>500 or >1000 erythrocytes/ μ L). Besides pain, failed punctures resulting in



poor-quality samples cause delays in diagnosis and additional expenses, as the patient may have to stay longer in intensive care.

The smart Injeq IQ-Tip® system will help you improve your first puncture success rate and perform lumbar punctures more smoothly. Obtaining high-quality CSF samples becomes significantly easier as the smart Injeq IQ-Tip® system tells you when the needle tip reaches the CSF in the subarachnoid space.

High quality saves lives

The Injeq IQ-Tip® system has been evaluated also in the lumbar punctures of 29 neonates. In this study, conducted in two university hospitals, a CSF sample was successfully obtained in 75% of the neonatal punctures. The Injeq IQ-Tip® system can substantially improve your puncture success rate in neonatal CSF samples, leading to faster diagnosis and treatment, and eventually saving little lives.

¹ Halliday. When to do a lumbar puncture in a neonate. *Arch Dis Child*. 1989 Mar; 64(3): 313-316.

² Srinivasan et. al. Lumbar puncture in the neonate: challenges in decision making and interpretation. *Semin Perinatol*. 2012 Dec; 36(6): 445-453.