LICOX®

Brain Tissue Oxygen Monitoring System
Quick Set-up
Simple Operation
Reliable Performance

Clinical Advantages:
• Early warning of differences between brain tissue oxygen supply and demand
• Allows adjustment of Cerebral Perfusion Pressure levels based on the needs of each patient
• Independent, sensitive outcome prediction

LICOX® Brain Tissue Oxygenation (PbtO2) Probe*:
• Highly accurate at relevant PbtO2 values in brain tissue
• Oxygen sensitivity averaged over a probe area of 13mm²
• Excellent long-term stability
• Catheter automatically calibrates instantly with the use of the smart card

In the last decade, clinical researchers have demonstrated the significance of oxygen partial pressure measurements in the brain. A study by van Santbrink, et al (2000), examined brain tissue oxygenation (PbtO2) in 101 head trauma patients (Glasgow Coma Scale<8) using LICOX®. Despite aggressive conventional monitoring and treatment, hypoxic events were observed with the LICOX® system in more than half of these patients. The depth and duration of tissue hypoxia were related to outcome, and proved to be an independent predictor of unfavorable outcome and death.

Monitoring PbtO2 has been shown to be a reliable and sensitive diagnostic method to

LICOX® BOLT SYSTEM:
• Single or multi-lumen design allows monitoring of single or multiple parameters through one burr hole
• Provides reliable, reproducible probe positioning
• Unique patented™ hermetic seal for tight closure and infection control

LICOX® TUNNELED SYSTEM:
• Oxygen catheter micro probe is designed to be tunneled under the scalp using the probe guide and integral trocar
• May be introduced during a cranial procedure at the margins of an existing bone flap or through a burr hole
• Extremely low profile; ideal for pediatric patients

LICOX® CMP MONITOR:
• Quick, easy smart card calibration
• Cerebral temperature measurement with the use of the C.B.B temperature probe
• Easy-to-read digital display
• Compact, lightweight
• Easily connects to bedside monitors through the use of LML.1 module

* Covered by U.S. Patent No. 6,068,743
** Covered by U.S. Patent No. 5,891,100
monitor cerebral oxygenation, and experience shows the risks of placing intraparenchymal sensors are minimal.4, 5

Clinical research has demonstrated that the prevention of secondary injury following severe head injury is well correlated with better patient outcome.2, 3, 5, 6

1 van Santbrink H., Maas A.I.R. et al, Continuous Monitoring of Cerebral Tissue pO₂ After Severe Head Injury, Neurosurgery 38, 21-31, 1996.
<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>AC3.1</td>
<td>LICOX® Oxygen and Temperature Monitor</td>
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<tr>
<td>LML.1</td>
<td>LICOX® Monitor Link to connect to AC3.1</td>
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<tr>
<td>NL950-MC-xx</td>
<td>Interface Cable to connect LML.1 to Bedside Monitor</td>
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<tr>
<td>CC1.SB</td>
<td>LICOX® Oxygen Catheter Micro Probe, Diameter 0.8mm, Precalibrated</td>
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<tr>
<td>C8.B</td>
<td>LICOX® Temperature Micro Probe, Diameter 0.8mm</td>
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<tr>
<td>IT1</td>
<td>Complete LICOX® Brain Oxygen Tunneling Probe Kit</td>
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<td>Contains CC1.G2 Oxygen Tunneling Probe and VK5.1 Parenteral Probe Guide</td>
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<tr>
<td>IM1.S</td>
<td>Complete LICOX® Probe Kit, Single Lumen</td>
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<tr>
<td></td>
<td>Contains CC1.SB Oxygen Probe and IM1 Single Lumen Bolt</td>
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<tr>
<td>IM3.S</td>
<td>Complete LICOX® Probe Kit, Triple Lumen</td>
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<tr>
<td></td>
<td>Contains CC1.SB Oxygen Probe and IM3 Triple Lumen Bolt</td>
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<tr>
<td>IM3.ST</td>
<td>Complete LICOX® Probe Kit with Temperature, Triple Lumen</td>
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<tr>
<td></td>
<td>Contains CC1.SB Oxygen Probe, C8.B Temperature Probe, IM3 Triple Lumen Bolt</td>
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<tr>
<td>IM1.T</td>
<td>Complete LICOX® Probe Kit for Temperature Measurement, Single Lumen</td>
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<td></td>
<td>Contains C8.B Temperature Probe and IM1 Single Lumen Bolt</td>
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<tr>
<td>IM1</td>
<td>LICOX® Bolt System only, Single Lumen, w/o Catheter</td>
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<tr>
<td>IM3</td>
<td>LICOX® Bolt System only, Triple Lumen, w/o Catheter</td>
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**To measure Intracranial Pressure with LICOX® Oxygen Monitoring:**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<tbody>
<tr>
<td>110-4L</td>
<td>Camino® Intracranial Pressure Monitoring Kit</td>
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<td></td>
<td>Used with all Camino Monitors: MPM-1, V420</td>
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<tr>
<td>NL950-SD</td>
<td>Ventrix® Intracranial Pressure Monitoring Kit</td>
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<td>Used with Ventrix monitor NL950-100</td>
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**PRODUCT ORDERING INFORMATION**

Licox Brain Tissue Oxygen Monitoring System

All products can be ordered through your Integra NeuroSpecialist or Customer Service Representative.

**Integra NeuroSciences Customer Service**

311 Enterprise Drive
Plainsboro, NJ 08536
www.integra-ls.com

USA and Canada: 800-654-2873
609-275-0500 (Outside USA)
609-275-5363 (Fax)

England: +44 (0) 1264 345 700
+44 (0) 1264 332 113 (Fax)

France: +33 (0) 493 95 56 00
+33 (0) 493 95 56 60 (Fax)

Germany: 0800 10 10 755
06995 775 477 (Fax)

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