Determining the mechanical performance and biocompatibility of an implantable medical device are crucial steps in evaluating a device’s safety and efficacy. Thanks to its innovative histological resources and its experience in testing according international regulatory requirements, HISTALIM helps you assess the performance of your device.

**Sample study types**

We support medical device manufacturers from proof of concept stage to pivotal safety and efficacy evaluations:

- Osteo-integration of implanted medical devices (tissue and matrix level)
- Tolerance by the body and safety (biocompatibility)
- Distortions (load resistance and ductility of materials)
- Deteriorations (corrosion resistance)

**Integrated approach with commitment to scientific excellence**

- Sample preparation
- Histopathology
- Imaging
- Morphometric evaluation
- Resin embedding and sectioning of all material

**Quality Insurance**

- GLP compliant pathology data collection and reporting
- Tailored SOP’s for histology and histopathology endpoints
- Successful regulatory inspection history

From stent to regenerative medicine, we test all types of medical devices

Dental implants • Intact stents • undecalcified bones • composite materials • artificial heart • biomaterials

Sheep Coronary stent HE coloration MMA resin for IMMR

Sheep Coronary stent, MMA resin for IMMR

Coronary stent

www.histalim.com — Phone: +33(0)4.67.712.765 — contact@histalim.com
Resin: an alternative to paraffin
For the inclusion of hard material & surrounding tissues, take advantage of resin embedding. The same labelling panels are available – Immunostaining also provided.

We offer three resins
- Methyl methacrylate (MMA)
- Proprietary resin (MMA): green / healthier
- Glycol methacrylate (GMA)

Sharp cutting methods

<table>
<thead>
<tr>
<th>High density materials</th>
<th>Low density materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diamond saw cutting</td>
<td>Electronic Microtome</td>
</tr>
<tr>
<td>This system is able to cut all kind of materials (implanted medical devices, prosthesis, ...) with high quality and precision in MMA resin.</td>
<td>An efficient cutting method for lower density materials (Porous materials, fluids: gel, pasty,...) Embedded in all kind of resins MMA, GMA... Sharp sections up to 5 µm thickness.</td>
</tr>
<tr>
<td>Polisher</td>
<td></td>
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<tr>
<td>The polishing system reduces the thickness of the sample with high accuracy and without artifact. It is possible to get sections up to 20 µm, which is ideal to perform histological studies.</td>
<td></td>
</tr>
</tbody>
</table>

Key Features
- All kind of density tissues and materials: bones without decalcification, metals (titanium alloys, cobalt, surgical steel...), ceramics, polymers...
- Friction force reduction
- Artefact reduction
- Tissue structures preservation
- Standard NF EN ISO 10993-6 Compliant

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For any further information, please contact our team.