



# Camouflage®

## Perfectly masked biodevices

### **Hemocompatibility: endothelium is the key**

*Evolution created efficient systems to manage vessel patency and surface integrity: coagulation and fibrinolytic systems and the endothelial cell (EC) layer. After endothelial injury arteries instantly recruit new ECs to prevent thrombus formation. Likewise, medical device surfaces equipped with ECs could escape the body's coagulative response. However, this approach is hardly practicable.*

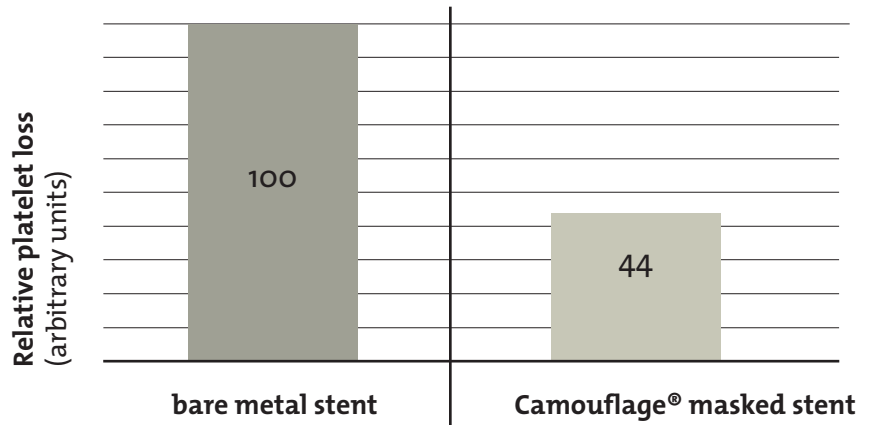
### **Biomimicry and glyco-calix-masked biodevices**

Biomimicry is a powerful concept in biointerface engineering. ECs are lined with a velvet-like monolayer of carbohydrate chains – the glyco-calix. Hemoteq's proprietary Camouflage perfectly mimics this true vessel-blood interface. Nanocoating design for glyco-calix-masked biodevices.

### **Nanocoating – minimized to the max**

The Camouflage® glyco-compound consists of short, linear carbohydrate chains. Dense molecular packing forms a gentle barrier between primary device surface and blood cells. Camouflage® nanothin dimensions – 1000-fold thinner than a coronary stent strut – fit the tiniest structures and miniaturized devices. Strong covalent bonding ensures enduring performance.

**Fig. 1**  
In vitro hemocompatibility  
of stents (Chandler loop system,  
whole blood, 60 min.)



## Camouflage®

### Trusted performance

**Clinical success and safety of glyocalix-masked devices derive from excellent blood and tissue compatibility ensuring efficient thrombo-protection and optimal tissue integration.**

**Numerous Camouflage® enhanced vascular stents are CE marked.**

Hemoteq's coating expertise builds on:

- patient oriented approach
- learning from nature – biomimicry
- high quality and safety standards
- permanent innovation

#### Vascular applications

- Temporary devices (catheters, ECMO equipment etc.)
- Vascular implants (stents, grafts)
  - permanent thrombo-protection: prevention of sub-acute and late acute events
  - suppression of neointimal hyperplasia
  - promotion of »harmonized« tissue integration and reendothelialization
- »safety system« for composed coatings, e.g. Ouverture® (drug-eluting stents)

#### Experimental and clinical evidence

- In vitro hemocompatibility data (Chandler loop, fig.1)
- Long-term patency of sheep AV shunts.
- Stent patency in porcine coronary arteries.
- Safety and stent patency in human coronary arteries (ongoing trials).

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