Patented Hydromer® Lubricious Coatings are used worldwide in the medical device industry. For over 20 years, these coatings have been used on a wide variety of metallic, polymeric and ceramic substrates. Hydromer bio-compatible, hydrophilic coatings swell instantaneously upon contact with water-containing fluids, becoming highly lubricious. They exhibit significant anti-thrombogenic behaviour in a blood environment. Hydromer® Lubricious Coatings are non-leaching, meeting even stringent Japanese Ministry of Health and Welfare standards for extractability.

**Hydromer® Lubricious Coating Advantages:**
- Coats lumens as small as 0.0005"  
- Reduces friction, often over 90%  
- Cost effective  
- Able to supply turnkey device coating process to licensees  
- Rapid turnaround time on sample coating  
- Custom development available to meet customer's specific needs

**Hydromer® Lubricious Coating Properties:**
- Bonds to almost any material, independent of surface geometry  
- Coats lumens  
- Unsurpassed Lubricity  
- Biocompatible  
- Anti-thrombogenic  
- Significantly reduces platelet and protein adhesion  
- Durable/Non-Leaching  
- Easy to Apply  
- Economical  
- Proven World-Wide Track Record  
- Advanced coating technologies available including:
  - Biostatic Drug delivery  
  - Radio-opaque

Our Application Laboratories are equipped to treat a wide variety of devices made of many different materials.

**Typical Devices**
- Guidewires  
- Catheters  
- Needles  
- Stents  
- Applicators/Inserters  
- Catheters  
- Shafts  
- Cannulas  
- Styles  
- Pacemaker Leads  
- Implants  
- Etc.

**Typical Materials**
- Stainless Steel  
- Nickel/Titanium Alloys  
- Silicone Elastomers  
- Polyurethane  
- PVC  
- Polyesters  
- Polyamides  
- Polyamides  
- Polycarbonates  
- Polypropylene  
- Polyethylene  
- Latex and Butyl Rubbers  
- Ceramics  
- Glass  
- Nylon  
- Etc.

The chemistry of the Hydromer® coating has unique in-vivo anti-thrombogenic properties as demonstrated below in an 8-day in-vivo study.

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- Etc.
The release profile of the active agent can be tailored from minutes to weeks. Both leaching and non-leaching anti-microbial coatings provide added bacterial colonization resistance.

Hydromer® complexed with Ampicillin (left) and Methicillin (right) showing zones of inhibition (ZOI) against E. coli and S. aureus cultures, respectively.

Plot of milligram of antimicrobial leaching from a Hydromer® complexed coating versus time (in hours).

Hydromer® Lubricious Coatings have a long history of safety. Our customer service group, upon request, will provide you with our extensive safety testing dossier and list of medical devices with Hydromer® coatings. Many Hydromer® coated products are Japan Ministry of Health and Welfare approved!!
HYDROMER® Specialty Coatings
HYDROMER® Radio-Opaque Coatings

A new development from the Hydromer Labs is our unique, patent-pending Hydromer® Radio-Opaque Polymeric Coating, a covalently cross-linked, non-leaching radio-opaque polymeric coating invented to improve visualization of stents, wires, implants, catheters, etc., under fluoroscopy or X-Ray.

- Avoids the use of high barium particle load and the accompanying process and mechanical property changes of extrusions
- Eliminates the need for expensive ion implantation or gold bands, and resultant galvanic issues and mechanical property changes on metallic devices.
- Suitable on any substrate
- Permanent
- Very cost-effective and process friendly

Improved Radiodensity in Heart Muscle Coated Stents (left two), Uncoated stent (right)

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U.S. Patents: 4,642,267, 4,873,287, 4,847,324, 4,987,182, 4,769,013, 6,054,504, corresponding foreign patents and pending patents.

REFERENCES:


UBTL Division, University of Utah Research Institute Study No. TR 05-429-001, June 21, 1983.
HYDROMER®
Lubricious Medical Coatings

Bonds to Almost any Material, Independent of Surface Geometry
Coats Lumens
Unsurpassed Lubricity
Biocompatible
Anti-Thrombogenic
Significantly Reduces Platelet and Protein Adhesion
Durable/Non-Leaching
Easy to Apply
Economical
Proven World-Wide Track Record