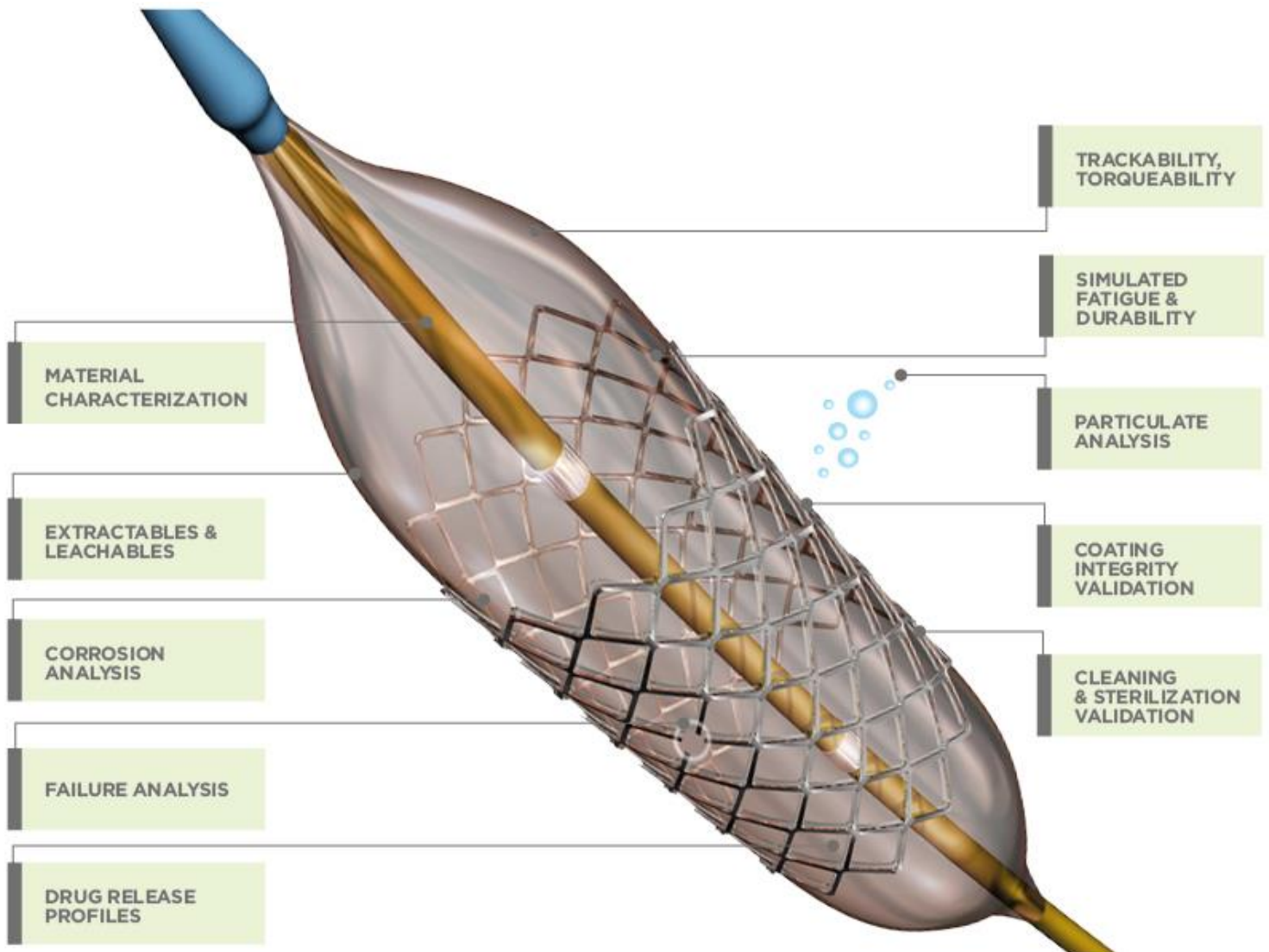


VASCULAR DEVICES SERVICES



MATERIAL CHARACTERIZATION

In vascular applications it is important to understand your materials, their composition, key properties and how they behave. At Lucideon, we provide the answers with qualitative, quantitative and visual data to support a full understanding of your materials.

EXTRACTABLES & LEACHABLES

Extractables and leachables can pose a serious risk in vascular applications. When elements and compounds leach into your products, from packaging or manufacturing environments, they can render them unfit and even dangerous for use. We test not only for what does leach but also for all potential extractables in your process and packaging, meaning you can test for and protect against them.

CORROSION ANALYSIS

Stability and safety is of utmost importance for implantable devices, especially where multiple materials are used. We offer expert materials selection and long and short-term performance testing to ensure that your products function without fear of excessive corrosion leading to failure. If corrosion does appear, we can help you to understand why and make the necessary changes to your product design.

FAILURE ANALYSIS

At Lucideon we perform extensive testing to predict and reduce failure risks in application. We also perform root cause identification of failures, should the failure have occurred in application, as well as recommending corrective actions.

DRUG RELEASE PROFILES

The next generation of vascular care materials will offer greater drug eluting and repair promoting properties. We have the technologies to control the release of key actives and making delivery more efficient.

TRACKABILITY, TORQUEABILITY

Vascular implants require torqueability to maneuver through the vascular system; this needs to be tracked using markers to help visualize the progress. We can help to develop and test materials for use in vascular applications to make sure they are safe, effective and have the right mechanical properties to aid successful implantation.

SIMULATED FATIGUE & DURABILITY

To ensure your vascular devices are fit for purpose over the lifetime of the implant, we can carry out an extensive range of physical and mechanical testing to ensure the materials and designs produce safe and robust components and products. We conform to a range of ASTM and ISO standards, but also perform custom method development for non-standard designs.

PARTICULATE ANALYSIS

Loose particles in your materials and in surgical sites have the potential to cause serious harm once implanted into the body. If you have particulates present in your vascular materials and applications we can help to characterize them, assess their level of potential harm and identify their source. If required, we can work to improve manufacturing and cleaning processes to prevent the potential of particle formation.

COATING INTEGRITY VALIDATION

Coatings can provide a high level of functionality to products including: bioactivity, biocompatibility, lubrication and antibacterial properties. Effective and robust coatings are important to provide optimal performance. Our experts can provide detailed analysis and method development to ensure your coating applications are consistent and adequate. We can measure the chemical, mechanical and microstructural properties of the materials – validating both the process and the product for regulatory submissions. Furthermore, using our extensive experience and existing development platforms, we work with you to develop next generation coating technologies.

CLEANING & STERILIZATION VALIDATION

Whether it's single-use or reusable, your vascular device needs to be clean and sterile for use. Our cleaning and sterilization validation service ensures your processes and reagents are suitable to effectively clean your devices.