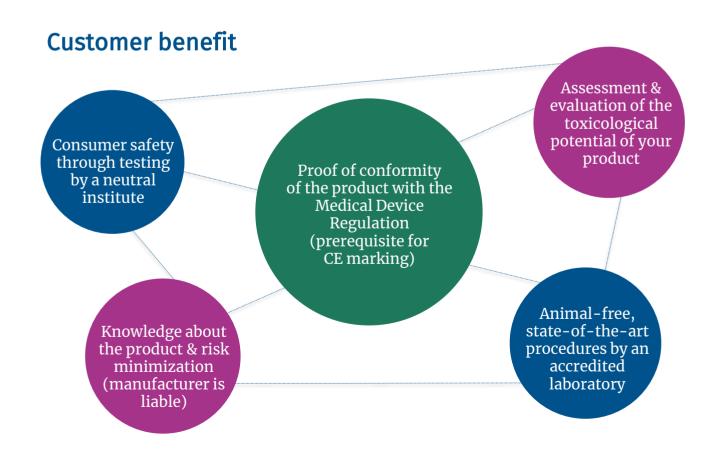


# Biocompatibility of medical devices







The basis for the biological assessment of medical devices is the series of standards DIN EN ISO 10993. The DIN EN ISO 10993-1 specifies which endpoints you must consider in the biological risk assessment of your product.

### **Tests**

- Chemical characterization according to DIN EN ISO 10993-18
  - **⇒** Basic information on the toxicological risk of the test sample
- Cytotoxicity according to DIN EN ISO 10993-5
  - ⇒ Determination of growth inhibition of skin cells
- Cytotoxicity according to DIN EN ISO 10993-5 in combination with Wiegand, C. et al. (2017)
  - ⇒ for elastane-containing materials (e.g. medical compression stockings)
- Sensitization
  - ⇒ Recognized screening test or alternative to the animal tests described in DIN EN ISO 10993-10.
  - ⇒ Assessment of the risk potential of the tested substances to cause allergies
- HET-CAM according to DB-ALM Method Summary n° 96
  - ⇒ Recognized alternative to the Draize test and thus to the animal tests described in DIN EN ISO 10993-10
  - ⇒ Exclusion of chemical irritation
- Test for irritation according to DIN EN ISO 10993-23
  - → Determination of the irritation potential with the reconstructed human epidermis model (RhE model)

# Test sample requirements

### **General**

- If dyestuffs, auxiliaries or avivages are used in different quantities, always select the articles with the highest input quantity (worst case)
- When sending several samples, ensure that substances contained in the samples are not transferred to other samples, i.e. pack them separately in plastic bags
- Provide sufficiently precise designations of the test sample (material composition, item number, LOT/batch number, etc.)

### Quantity of material

Total product, at least 40 g (for each individual test)

## **Test duration**

• Usually 10-15 working days (per individual test), 4-6 weeks for irritation test according to 10993-23; date confirmation after receipt of test sample