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## PART III

# The Medical Product Life Cycle

## OUTLINE

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- [Introduction: Biomaterials in Medical Devices](#)
- [Total Product Lifecycle for Biomaterial- Based Medical Devices](#)
- [Safety and Risk Considerations in Medical Device Development](#)
- [Sterilization and Disinfection of Biomaterials for Medical Devices](#)
- [Verification and Validation: From Bench to Human Studies](#)
- [Commercial Considerations in Medical Device Development](#)
- [Regulatory Constraints for Medical Products Using Biomaterials](#)
- [Role of Standards for Testing and Performance Requirements of Biomaterials](#)
- [Medical Device Failure—Implant Retrieval, Evaluation, and Failure Analysis](#)
- [Legal Concepts for Biomaterials Engineers](#)
- [Moral and Ethical Issues in the Development of Biomaterials and Medical Products](#)