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Stents and Implants for Bioengineering and Biomedical Applications: In Vitro and In Vivo Studies

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Message from the Guest Editors

Dear Colleagues,

This Special Issue was designed to establish recent studies concerning new technologies, such as the use of new or modified materials to construct stents and implants. We are interested in research assessing biocompatibility of products in a human environment. Articles based on in vitro or in vivo studies are welcome. In recent years, one has observed the evolution in designing and constructing new devices. It concerns new antimicrobial coatings on the surface of stents and the use of nanoparticles. From clinical practice, we know that implants are not ideal ones. They have quite a lot of unwanted features, such as thrombogenicity, stimulating growth of endothelial and subendothelial cells, leading to occlusion of vessels following procedures. Surgery, traumatology, dentistry, cardio surgery, vascular surgery, phlebology are the fields mostly interested in development of this field.

Keywords:

- multifunctional stent
- nano functionalized stent
- drug-eluting stent
- nonvascular stent
- dental implantology
- implants in orthopedics
- functional catheter
- biomedical application



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Special Issue



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Message from the Editor-in-Chief

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