







Special Issue Reprint

# Cutting-Edge in Arthroplasty: Before, While and after Surgery

www.mdpi.com/books/reprint/9075

Edited by Johannes Beckmann

ISBN 978-3-7258-0660-7 (Hardback) ISBN 978-3-7258-0659-1 (PDF)



Personalized medicine was introduced in arthroplasty several years ago to further improve outcomes. Compared to the early beginnings of arthroplasty, the range of implant types, implant sizes, geometrical forms, and implantation techniques has grown enormously over the last few decades to more effectively deal with patients' needs and anatomy and to improve outcomes. Several attempts failed, several were successful, and others were partially successful or experienced a renaissance and advancement. However, it is not just the "hardware" that makes the difference. The "software" of peri-operative medicine that deals with the patient and the tissues around the joints also became a milestone in treatment. Navigation, gender implants, PSI (patient-specific instrumentations), customized implants, robotics, early mobilization, minimal-invasive surgery, and altered analgesic and anesthetic care are some of the examples.

Another significant issue and remaining problem for the coming years and decades is revision arthroplasty of failed implants. Even with optimized implantation and improved materials, the more active patients who undergo operations today will potentially need new surgeries in the future. Removal of implants, infection, and osteolysis can lead to significant bone loss, which needs to be addressed.

This Special Issue aims to address the cutting-edge topics that concern arthroplasty and the period before, during, and after the surgery.



Order Your Print Copy You can order print copies at www.mdpi.com/books/reprint/9075



MDPI Books offers quality open access book publishing to promote the exchange of ideas and knowledge in a globalized world. MDPI Books encompasses all the benefits of open access – high availability and visibility, as well as wide and rapid dissemination. With MDPI Books, you can complement the digital version of your work with a high quality printed counterpart.



#### **Open Access**

Your scholarly work is accessible worldwide without any restrictions. All authors retain the copyright for their work distributed under the terms of the Creative Commons Attribution License.



#### **Author Focus**

Authors and editors profit from MDPI's over two decades of experience in open access publishing, our customized personal support throughout the entire publication process, and competitive processing charges as well as unique contributor discounts on book purchases.



#### **High Quality & Rapid Publication**

MDPI ensures a thorough review for all published items and provides a fast publication procedure. State-of-the-art research and time-sensitive topics are released with a minimum amount of delay.



## **High Visibility**

Due to our global network and well-known channel partners, we ensure maximum visibility and broad dissemination. Title information of books is sent to international indexing databases and archives, such as the Directory of Open Access Books (DOAB), and the Verzeichnis Lieferbarer Bücher (VLB).



## **Print on Demand and Multiple Formats**

MDPI Books are available for purchase and to read online at any time. Our print-on-demand service offers a sustainable, cost-effective and fast way to publish MDPI Books printed versions.

MDPI AG Grosspeteranlage 5 4052 Basel Switzerland Tel: +41 61 683 77 34 www.mdpi.com/books books@mdpi.com

