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Nota di contenuto	1. Introductory Chapter: Artificial Intelligence in Healthcare - Where Do We Go from Here? -- 2. Unlocking the Potential of Artificial Intelligence (AI) for Healthcare -- 3. Types of Artificial Intelligence and Future of Artificial Intelligence in Medical Sciences -- 4. Artificial Intelligence in Healthcare: Doctor as a Stakeholder -- 5. Artificial Intelligence Starts the Big Bang of Modern Medicine and Surgery -- 6. Human-Machine Collaboration in AI-Assisted Surgery: Balancing Autonomy and Expertise -- 7. Application of Computer-Assisted Surgery System Based on Artificial Intelligence in Pediatric Precise Oncological Surgery -- 8. Application and Prospect of Telesurgery: The Role of Artificial Intelligence -- 9. Artificial Intelligence in Surgery, Surgical Subspecialties, and Related Disciplines -- 10. Artificial Intelligence: Development and Applications in Neurosurgery -- 11. AI in Healthcare: Implications for Family Medicine and Primary Care -- 12. Artificial Intelligence in Musculoskeletal Conditions -- 13. The New Landscape of Diagnostic Imaging with the Incorporation of Computer Vision -- 14. Developing and Deploying a Sepsis Deterioration Machine Learning Algorithm -- 15. A New Liver Segmentation Based on Digital Liver Portal Vein Ramification Using Computer-Assisted Surgery System: Exploring Artificial Intelligence -- 16. Fuzzy Expert System for Rectal Cancer Based on Possibility Measure.
Sommario/riassunto	Human history is filled with inventions and other innovations that

resulted in a significant and lasting change in our civilization's course of development. From gasoline-powered vehicles to transistor-based electronics or jet airplanes, things we now take for granted often appeared suddenly and unexpectedly. Yet after their introduction, our world changed forever. Over the past two decades, artificial intelligence (AI) and machine learning (ML) have been stealthily increasing their presence in our everyday lives. This random systematic adoption process is exposing humanity to something we never previously directly faced: an intelligence that may (and likely will) exceed our own. Despite this, most people are not fully aware of current (and future) benefits, limitations, and threats related to AI/ML. Within health care, there is little awareness of what AI/ML is capable of and how these new capabilities are being implemented or utilized. It is this current state that serves as our starting point in the emerging debate on AI/ML in medicine and surgery, including its integration, projected influence, and many other considerations that are not that different from other past technology adoption paradigms. This book discusses both current trends and future developments in AI and ML across health care.

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