

Bone Disease Treatments, Technical Advances

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Abstract

Bone disease is common human diseases worldwide. At present, drug and surgery development is stable and low speed. Different, technical progress is rapid more recently. This editorial offers new insights into technical advance for bone disease treatments.

Keywords: *Osteoporosis; Drug Development; Diagnostics; Technology; Computer-Aid; Bone-Disease*

Introduction

High quality bone disease diagnosis, interventions and therapeutics requires new breakthroughs. In the lifetime of a lot of people, bone tissue is commonly experienced with bone fracture and other bone pain symptoms especially in sports activity [1,2]. Bone disease treatments take different forms (pathology and therapeutics) [3-11]. It is classified as different strategies and paradigms (drug, surgery, rehabilitation and nursery) [3-14]. Their development is in different pace.

Drug development

Drug development is growing costly since this millennium [15-17]. It needs 1-2 billion USD for single drug licensing. Its development is now adventurous. As a result, alternative treatments and pathways must be pursued.

Technical advances

The fastest path now we make is technical renovation and progress. It represents in different technical areas and fields. We summarize them into following sectors [18-26]:

1. Drug development (computational-aid drug design-molecular docking)
2. Disease diagnosis (digital tool and diagnosis)
3. Surgery (assistance or automation)
4. Supportive techniques (movement assistance and prosthetic limbs)
5. Artificial intelligence (almost all areas)
6. New materials (inorganic, organic and biomaterials).

And others

By technical advances, clinical orthopedic treatments will be improved without the necessity of new drug development. According to this new trend, we may achieve more for orthopedic treatment in the future.

Conclusion

With the rapid development of diagnostic and therapeutic technology, we should pay more attention to them in the future.

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