Bone Cancer and Metastasis Trials, Drug Treatment

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Abstract

Bone cancer and metastasis is difficult to be managed. In the early stage, amputation is widely practiced in the clinic. To avoid this devastating event, drug treatment should be strengthened. Several factors or associations should be noticed for therapeutic promotion and paradigms. This editorial discusses drug development and clinical treatment for bone cancer and metastasis.

Keywords: Bone Cancer; Neoplasm Metastasis; Drug Treatment; Drug Targets; Personalized Medicine

Introduction

Cancer is the secondary leading cause of human mortality worldwide [1-4]. Bone cancer and metastasis is one of frequent cancer categories and difficult to be managed by current medicine. In the early stage, amputation is widely practiced in the clinic. To avoid this devastating event, drug treatment should be a future trend.

Several factors or associations should be noticed for therapeutic promotion and paradigms. They contain the disciplines of diagnosis, pathophysiology, pharmacology and pharmaceuticals. This editorial discusses the landscape of drug development and clinical treatment for bone cancer and metastasis.

Emerging problems

Currently, anticancer drugs are proposed to be the foremost therapeutic selection by avoiding big inconvenience of radical therapy. There are a lot of different anticancer drugs in the clinic. How to optimize drug therapy is a key for promoting patient life-quality and survival. Facing with therapeutic setback of surgery and drug diversity, individualized drug therapy will play major role for therapeutic selection. Several pathways can improve these therapeutic responses and benefiting for bone cancer and metastasis treatment [5].

Major pathways

Basic study

- Identify and discover key genetic or molecular factors that is involving bone cancer and metastasis [6].
- Development of high-active anticancer or antimetastatic drugs [7-9].
- Drug targets and mechanisms should be searched [10,11].

Clinical study

- Herbal medicine may promote human physiological conditions and integrity [12-14].
- Personalized medicine is a drug selection paradigm that may optimize drug treatment against cancer growth and metastasis [15-25].
- Drug combination commonly promote clinical outcomes yet mechanisms should be understood [26,27].

Future study

- Mathematics and computational aids [28-31].
- Pharmaceutical innovation, such as nanomedicine and other drug delivery systems [32].

Discussion

Novel approaches aiming at promoting drug therapy against growth and metastasis of bone cancers should be strengthened in the future. Moreover, drug targets, mechanisms, pharmacology, toxicity and medicinal chemistry should be separately or integrate compared.

Conclusion

Drug development for bone cancer and metastasis treatment should be indispensable. Many new pathways should be explored and promoted. Facing with important oncologic and pharmacological challenge, hard work will be paid of.

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