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Current and Recent Advances in Natural Products-Based Drug Discovery, Design and Development

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Message from the Guest Editors

The successful story of natural products in the discovery and development of medicines is still being written and forecasted to continue in the future. Not necessarily that the final approved drug is a natural product, but in many cases, it could also be a semi-synthetic compound, a modified derivative, an analog of a natural product, or even a purely synthetic compound that mimics a natural product or inspired by a natural product. In principle, natural products-based drug discovery design and development comprise several steps that involve, but are not limited to:

- Extraction, isolation, characterization, and biological evaluation of natural products or metabolites.
- Design, synthesis, and evaluation of synthetic or semi-synthetic derivative or analogs.
- Development of purely synthetic molecules that mimic natural products.

In addition, natural products-based drug discovery design and development encompass *in vitro* and/or *in silico* study of molecular mechanisms and/or target identification, development of synthetic routes to access interesting bioactive natural products, and several other related areas to drug discovery and development.



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Message from the Editor-in-Chief

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