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How Are Predicted Protein Structures Advancing the Development of New Drugs?

Guest Editor:

Dr. Michael Liebman

1. Pharmacology and Physiology, Drexel University College of Medicine, Philadelphia, PA 19348, USA

2. Managing Director, IPQ Analytics, LLC, Kennett Square, PA 19348. USA

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Message from the Guest Editor

Dear Colleagues,

Structural drug development has relied on having access to the three-dimensional structure of the protein or nucleic acid targets. This approach has been effective at enabling computational screening of molecular libraries containing as many as a billion small molecules and prioritizing those that can be utilized in experimental validation. However, given the available DNA and amino acid sequence data sets, the number of known high-resolution target structures is limited. There have been significant advances in the ability to predict the three-dimensional structure of proteins from their amino acid sequence. This Special Issue is soliciting articles that address:

- 1. How accurate is structure-based drug design in producing drugs that go on to be approved for clinical use?
- 2. Are there new generalizable approaches/methods that are proving to be more effective?
- 3. What is the effectiveness of using the newly predicted protein structures, i.e., are they accurate enough to supply the critically needed targets and lead to new drugs?













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Editor-in-Chief

Prof. Dr. Maurizio Battino

Department of Odontostomatologic and Specialized Clinical Sciences, Sez-Biochimica, Faculty of Medicine, Università Politecnica delle Marche, Via Ranieri 65, 60100 Ancona, Italy

Message from the Editor-in-Chief

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