Special Issue

The Integration of Novel Approaches in Laboratory Medicine into Precision Pharmacotherapy

Message from the Guest Editor

Bioinformatics is an essential tool used to integrate the results of laboratory assays into precision pharmacotherapy. Its importance is particularly prevalent in pharmacokinetic and pharmacodynamic analyses, omics, and the analysis of big datasets for identifying confounding biomarkers for diagnosing a pathological condition, as well as for revealing adverse drug effects. In addition, machine learning tools and artificial intelligence define new dimensions of processing laboratory data, and one of the most notable fields that can benefit from this revolution is pharmacotherapy. The aim of this Special Issue is to widen the scope of precision pharmacotherapy by highlighting the application of state-of-the-art or novel multidisciplinary laboratory methodology integrated with contemporary bioinformatics to support decision making in clinical pharmacokinetics, clinical pharmacodynamics, and the management of drug administration. The hopes that the articles appearing in this Special Issue will contribute to the integration of knowledge pertaining to pharmaceutics and laboratory medicine for the benefit of patients.

Guest Editor

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