Special Issue

Plant Metabolites in Improving Drug's Oral Bioavailability

Message from the Guest Editor

It is well-known that one of the most famous and convenient routes of drug introduction into the human body is oral administration. Nevertheless, this route is the most challenging and complex one, as it requires an opposite property such as water and lipid solubility in one chemical molecule for the drug to be successful. Of course, it is extremely hard for this to be applied in practice since most effective drugs are lipophilic compounds. This is usually the reason for their low bioavailability, together with other impacts, such as presystemic and first-pass metabolism. To overcome this problem, different approaches may be applied. One of them is the usage of different plant metabolites that can form supramolecular systems with drugs and increase their water solubility and oral bioavailability. In contrast to inert chemical carriers which are used mainly to improve water dissolution, such metabolites can additionally act directly on the intestinal epithelium and increase bioavailability via several mechanisms. The aim of this Special Issue is to highlight recent advances in this field, including in vivo and in vitro research.

Guest Editor

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