Special Issue

Recent Advances in Protein-Drug Conjugates: From Bioanalytical, Drug Metabolism to Pharmacokinetics

Message from the Guest Editor

Protein-drug conjugates such as antibody-drug conjugates (ADC) have recently received significant attention due to their dramatic clinical efficacies with acceptable toxicity profiles, particularly as novel anticancer drugs. This approach comprises a protein (i.e., monoclonal antibody) conjugated to the cytotoxic payload via a chemical linker directed toward a target antigen expressed on the cancer cell surface, reducing systemic exposure and, therefore, toxicity. Thus, ADC is one of the most popular platforms but also requires a good balance among various components such as monoclonal antibody, linker, and payload from drug metabolism and pharmacokinetic perspectives. Albumin-drug conjugates (ALDCs) are another good novel platform of choice due to favorable distribution to the tumor as well as a long half-life. ALDCs are also receiving increased attention from the pharmaceutical industry as an alternative approach to overcome various cancers. In addition to protein or linker sides, new payloads are also recently introduced, such as immunomodulators, molecular glues, and PROTACs for conjugation.

Guest Editor

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