4-Hydroxy-2-quinolones: syntheses, reactions and fused heterocycles

Abstract

The interesting pharmaceutical and biological activities of 4-hydroxy-2-quinolones make them valuable in drug research and development. Hence, many publications have recently dealt with their synthetic analogous and the synthesis of their heteroannelated derivatives. Consequently, we have found that it is of importance to shed new light on these interesting heterocycles. This focused review article discusses the recent synthetic approaches and the applications of this class of compounds in the synthesis of related four-membered to seven-membered heterocycles, most of them showing unique biological activities.