

**Title: Triazolopyrimidine Derivatives: An Updated Review on Recent Advances in Synthesis, Biological Activities and Drug Delivery Aspects**

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**Abstract:** Molecules containing triazolopyrimidine core showed diverse biological activities, including anti-Alzheimer's, anti-diabetes, anti-cancer, anti-microbial, anti-tuberculosis, anti-viral, anti-malarial, anti-inflammatory, anti-parkinsonism, and anti-glaucoma activities. Triazolopyrimidines have 8 isomeric structures, including the most stable 1,2,4-triazolo[1,5- a] pyrimidine ones. Triazolopyrimidines were obtained by using various chemical reactions, including a) 1,2,4-triazole nucleus annulation to pyrimidine, b) pyrimidines annulation to 1,2,4-triazole structure, c) 1,2,4-triazolo[1,5-a] pyrimidines rearrangement, and d) pyrimidotetrazine rearrangement. This review discusses synthetic methods, recent pharmacological actions and drug delivery perspectives of triazolopyrimidines.

**Keywords:** Alzheimer's, triazolopyrimidine, pharmacological actions, biology, drug delivery, tetrazines.

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