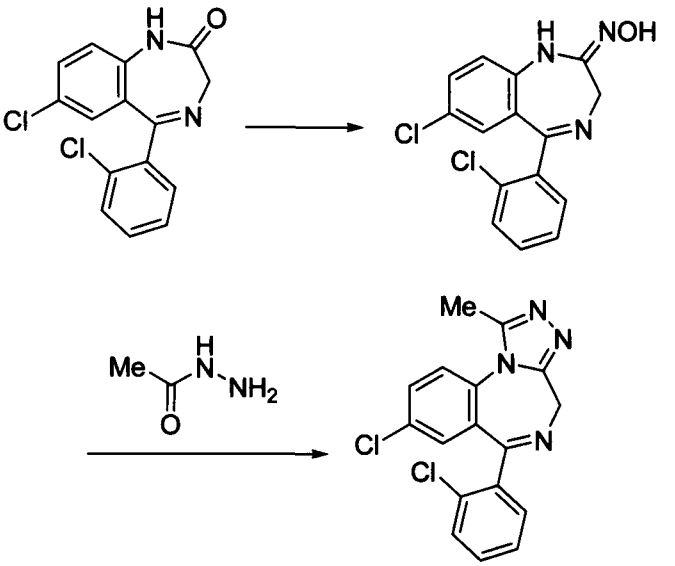
The synthesis of triazolam starts with a benzodiazepine derivative. After activation of the cyclic system, *N*-nitrosoamidine is treated with acetylhydrazine to yield the corresponding amidine.[43]



9.3.3 Construction of the Tetrazole Ring

The synthesis of tetrazole usually involves a variation of the Finnegan tetrazole synthesis that is the addition of hydrazoic acid to a carbon-nitrogen multiple bond. Forasatan is an angiotensin I (AT1) antagonist that binds to the AT1 receptor and can be used alone or with other anti-hypertensive agents to treat hypertension. The forsartan contains an 1,2,4-triazole and a tetrazole. The tetrazole is an isostere for a carboxylic acid group. The tetrazole moiety in forasartan is synthesized by a 1,3-dipolar addition of tributyltinazide to a benzonitrile derivative to form the tetrazole moiety.[44]