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Tandem Ring-Opening/Closing Reactions of *N*-Ts Aziridines and Aryl Propargyl Alcohols Promoted by *t*-BuOK *Org. Lett.* **2009**, *11*, 1119-1122.

## Synthesis of Dihydroxazines via Opening of Aziridines



**Significance:** Reported is a base-promoted tandem ring opening of N-substituted aziridines with propargylic alcohols followed by ring closing onto the tethered alkyne to give dihydroxazines in moderate to good yields. Selected examples of dihydroxazines were further reduced to 3,5-disubstituted morpholine derivatives with poor to high (where *cis* isomer predominates) diastereoselectivity. **Comment:** Different chiral aziridines were studied. DMSO was used as the solvent in all cases and could be a drawback to this method. In order to support the mechanism, protonated versions of **A** and **C** were isolated via different routes and were further subjected to the reaction conditions to give 90% yield and no reaction, respectively. Moreover, allene **B** formation was observed via NMR studies, which supports the possible mechanism via intermediate **B** through a 6-*exo* cyclization mode.

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Category

Synthesis of Heterocycles

## Key words

aziridines propargyl alcohols dihydroxazines