Two protected 14,15-secoergostane derivatives suitable as pivotal intermediates for the synthesis of strophasterols A and B, anti-MRSA and neuronal cell-protecting natural products bearing a recently discovered strophastane skeleton, have been synthesized by two different routes. The first approach employed an oxidative cleavage of an α-hydroxy ketone intermediate with the Jones reagent as the key step to reach the targeted secoergostane from ergosterol in ten steps. In the second approach, an unprecedented reaction cascade composed of four reactions enabled us to obtain the secoergostane more efficiently in six steps.

Two approaches to 14,15-secoergostane intermediates for the synthesis of strophasterols