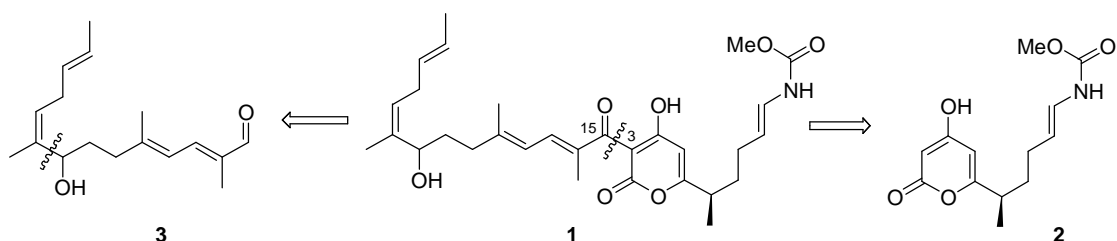


Total Synthetic Approach to Corallopyronin A and Analogue Structures

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The corallopyronins were isolated in 1984 by Jansen *et al.* from the bacterium *Coralloccoccus coralloides*.^[1] They are characterised by a remarkable activity against rifampin-resistant *S. aureus*.^[2] All corallopyronins contain a 6-membered pyrone ring and a vinyl carbamate in the eastern part, whereas their structures differ in the western side chain.



Our retrosynthetic analysis makes a divergent approach to corallopyronin A (1) or modified analogues and related compounds like the myxopyronins^[3] possible by cleavage of the bond between C3 of the pyrone ring and C15 of the western side chain. This approach allows us to vary the western side chain (3 and analogues) and the eastern part (2) including the pyrone ring independently.

The actual range of derivatives goes from substitution of the pyrone ring (by a substituted phenyl-ring) over variation in chain length and double bond position in the eastern side chain to modified western parts.

^[1] R. Jansen, H. Irschik, H. Reichenbach, G. Höfle *Liebigs Ann. Chem.* **1985**, 822-836; H. Irschik, R. Jansen, G. Höfle, K. Gerth, H. Reichenbach *J. Antibiot.* **1985**, 145-152.

^[2] I. Chopra, L. Hesse, A.J. O'Neill *J. Appl. Microbiol. Symp. Suppl.* **2002**, 92, 4S-15S; A. O'Neill, B. Oliva, C. Storey, A. Hoyle, C. Fishwick, I. Chopra, *Antimicrob. Agents Chemother.* **2000**, 44, 3163-3166

^[3] W. Kohl, H. Irschik, H. Reichenbach, G. Höfle *Liebigs Ann. Chem.* **1983**, 1656-1667.