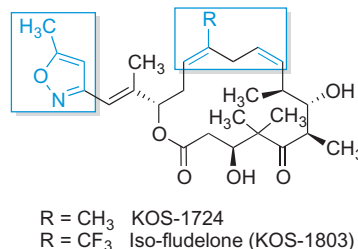
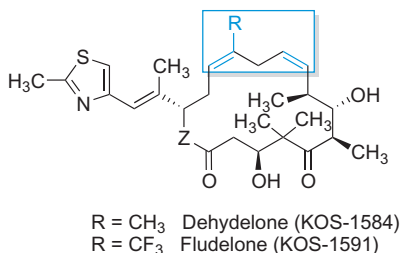
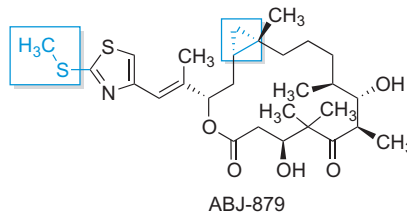
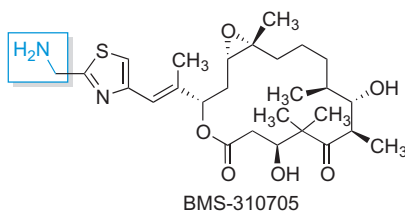
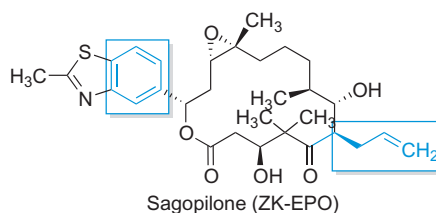
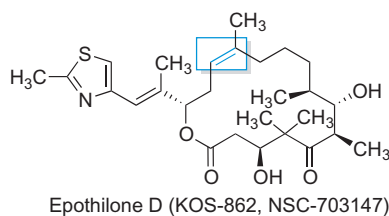


Compound	Z	R
Epothilone A	O	H
Epothilone B (EPO-906, patupilone)	O	CH ₃
Ixabepilone (BMS-247550)	NH	CH ₃



Hundreds of epothilone analogs have been prepared using conventional solution chemistry or combinatorial strategies. Their screening has allowed the establishment of a detailed SAR profile,^{74,92,93} which is summarized as follows:

1. The configuration at the stereocenters C-6, C-8, C-13, and C-15 is important and must be that of the natural products (**1**).
2. The epoxide function is not essential, and it may be replaced by a C₁₂–C₁₃ double bond or a cyclopropane ring (**2**), with diminished toxicity. Analogs incorporating a *trans* epoxide or *trans* olefin structure at C₁₂–C₁₃ appear to be almost equipotent with the corresponding *cis* isomers.
3. A methyl group at C-12 enhances activity (**3**).