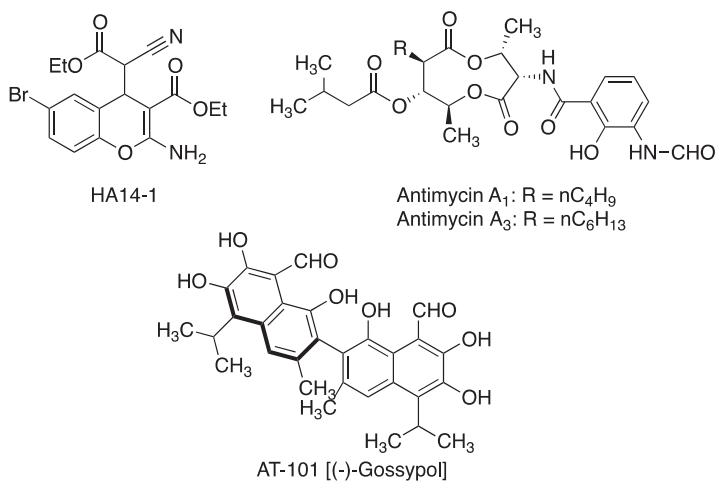


HA14-1 decreases Bcl-2 and Bcl-x1 expression and increases the expression of p53, suggesting that this compound may provide therapeutic potential for the treatment of human cervical cancer.<sup>181</sup> Members of the antimycin A family, a group of closely related bis-lactones previously known as inhibitors of mitochondrial electron transfer, are also anti-apoptotic Bcl-2 inhibitors, although they have not reached the clinical stage yet.<sup>182</sup> Another anti-apoptotic Bcl-2 inhibitor is AT-101 [(-)-gossypol], which has entered phase I/II trials. It may have clinical utility in patients with CLL and high-risk features and to enhance radiation-induced apoptosis.<sup>183</sup>



Some antisense oligonucleotides that reduce the expression of *BCL-2* genes are undergoing clinical trials.<sup>184</sup> One of them is oblimersen sodium (Genasense<sup>®</sup>), an 18-mer oligonucleotide that was the first agent targeting the Bcl-2 pathway to enter clinical trials. It has shown chemosensitizing effects and an