

## Discovery of Artemisinin derivatives as anticancer drug candidates

**Dongguk Min and Mankil Jung**

Department of Chemistry, Yonsei University, Korea

Artemisinin, a sesquiterpene isolated from *Artemisia annua* L., and its derivatives have been used clinically to treat drug-resistant malaria. Recently, a variety of researchers have reported on the potential antitumor properties of artemisinin and its derivatives. We have special interest of its antitumor activity against human cancer cells. We synthesized novel derivatives of non-acetal deoxoartemisinin and tested in vitro anticancer activity against major human cancer cell lines (A549, SK-V3, SK-MEL-2, XF498, HCT15). Some of synthesized deoxoartemisinin derivatives showed potent anticancer activity and deserve for further investigation as potential and clinically useful anticancer drug candidates.

### Biography

Dongguk Min has completed his M.S. in 2009 from Yonsei University under the guidance of Professor Mankil Jung. His thesis focused on synthesis and biological evaluation of novel aromatic compounds for the treatment of neurodisease. Currently he is reading for his Ph. D. with working on synthesis and anticancer activity of artemisinin, a natural sesquiterpene endoperoxide.

Mankil Jung has completed his Ph.D in 1981 from Oxford University and postdoctoral studies from Harvard University. He is the director of the Bioorganic & medicinal Chemistry Laboratory. He has published more than 108 papers in reputed journals and serving as an editorial board member of Current Medicinal Chemistry.