P-213

Novel Bufadienolides from South African *Urginavia Altissima* (Hyacinthaceae)

Linda C. Langat¹, Wolfgang Westchnig², Moses K. Langat¹ and Dulcie A. Mulholland¹

Over three million people in South Africa use traditional plant medicine for health care purposes. South Africa's plant biodiversity indicate a high potential for the discovery of bioactive chemicals. The bulbs of $Urginavia\ altissima$ (syn. $Urginea\ altissima$, $Drimia\ altissima$) is ethnomedicinally used in South Africa for treatment of gout, rheumatism and respiratory complaints. The compounds expected to be isolated from this plant include bufadienolides, which are polyhydroxylated steroids and their glycosides. Bufadienolides are reported to possess diverse biological activities. Proscillaridin, a drug traded by GSK as stellarid, is a bufadienolide used for the treatment of congestive heart failure and cardiac arrhythmia. In this study $Urginavia\ altissima$ has yielded nine novel bufadienolides and several known compounds including, scilliglaucoside, 1β , 6α -dihydroxy-4(15)-eudesmene and a polyhydroxylated furan derivative, polybotrin. The structures of the compounds were elucidated using Nuclear Magnetic Resonance, Infrared and Mass spectrometry. The compounds will be submitted to National Cancer Institute (NCI) for anticancer screening against NCI 59 human tumour cell lines.

¹Department of Chemistry, FEPS, University of Surrey, Guildford, Surrey, GU2 7XH, UK; ²University of Graz, Austria