Bioactivity of Lignans from Taxus baccata

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Three lignan derivatives, (-)-taxiresinol (1), (-)-3'-demethylisolariciresinol-9'-hydroxyisopropylether (2) and (-)-3-demethylisolariciresinol (3), previously isolated from the heart-

3) and the chloroform extract were shown to possess antifungal activity, whereas only the

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wood of Taxus baccata L. (Taxaceae) were investigated for cytotoxicity against the Oncology Cell Line Panel (breast, colon, ovary, prostate, lung and a normal adult bovine aortic endothelial cell line) as well as for antimicrobial activities. Besides, a chloroform-soluble portion of the ethanol extract from the heartwood of T. baccata was also tested for antimicrobial activities. Compounds 1 - 3 did not demonstrate much cytotoxic potency according to the reference drug etoposide. With the exception of compound 2, the other two lignans (1 and

chloroform extract exhibited antibacterial activity against Pseudomonas aeruginosa. Key words: Taxus baccata, Lignans, Antimicrobial Activity, Cytotoxicity