

OR18-2: Higher Plasma Estradiol Concentration Is Independently Associated with Lower Biological Age, Assessed as Leucocyte Telomere Length, in Older Men

Bu B. Yeap. *University of Western Australia*

Bu B. Yeap, MBBS, PhD¹, Jennie Hui, PhD², Matthew W. Knuiman, PhD¹, David J. Handelsman, MBBS, PhD³, Leon Flicker, MBBS, PhD¹, Mark L. Divitini, BSc¹, Gillian M. Arscott, BSc², Susan McLennan, MD, PhD⁴, Stephen M. Twigg, MBBS, PhD⁵, Osvaldo P. Almeida, MD, PhD¹, Graeme J. Hankey, MBBS, MD¹, Jonathan Golledge, MBChB, MChir⁶, Paul E. Norman, MBChB, DS¹, John P. Beilby, PhD².

¹University of Western Australia, Perth, Australia, ²PathWest Laboratory Medicine, Perth, Australia, ³ANZAC Research Institute, Sydney, Australia, ⁴University of Sydney, Sydney, Australia, ⁵Royal Prince Alfred Hospital, Sydney, Australia, ⁶James Cook University, Townsville, Australia.

Background: Telomeres are essential DNA-protein complexes comprising TTAGGG repeats binding specific proteins, which protect the physical ends of chromosomes from fusion and degradation. Attrition of telomeres results in cellular senescence. Leucocyte telomere length (LTL) reflects lengths of telomeres in various tissues, and