Title: Determinants of Type 2 Diabetes Mellitus Risk in Middle-aged Black South African Men and Women: A Longitudinal Study

Synopsis: This longitudinal study, conducted in Soweto, Johannesburg from 2016 to 2018, examines the factors influencing Type 2 Diabetes Mellitus (T2D) risk in 1400 middle-aged Black South African men and women. It explores the roles of sex hormones, inflammation, glucocorticoids, and HIV status in T2D development. Key elements include assessing the impact of aging, menopause, and HIV on sex hormone levels, body fat distribution, insulin sensitivity, and inflammatory and glucocorticoid gene expression in adipose tissue. The study aims to enhance understanding and management of T2D risk in this population, considering the high HIV prevalence.