## **ABSTRACT**

We present the results of the first study of longitudinal change in HIV-associated risk behaviors in men before and after circumcision in the context of a population-level voluntary medical male circumcision (VMMC) program. The behaviors of 1,588 newly circumcised men and 1,598 age-matched uncircumcised controls were assessed at baseline, 6, 12, 18 and 24 months of follow-up. Despite the precipitous decline in perception of high HIV risk among circumcised men (30-14 vs. 24-21 % in controls) and increased sexual activity among the youngest participants (18-24 years; p-time < 0.0001, p-group = 0.96), all specific risk behaviors decreased over time similarly in both groups. The proportion of men reporting condom use at last sex increased for both groups, with a greater increase among circumcised men (30 vs. 6 %). We found no evidence of risk compensation in men following circumcision. Concerns about risk compensation should not impede the widespread scale-up of VMMC initiatives.