



*link1: <https://storage.googleapis.com/gcp-public-data--gnomad/release/3.1.2/vcf/genomes/gnomad.genomes.v3.1.2.sites.chrX.vcf.bgz>

*PLINK: 1.90 beta version 6.20 64-bit

*vcftools: version 0.1.17

*R: version 3.5.3

*PAR3: No global consensus yet