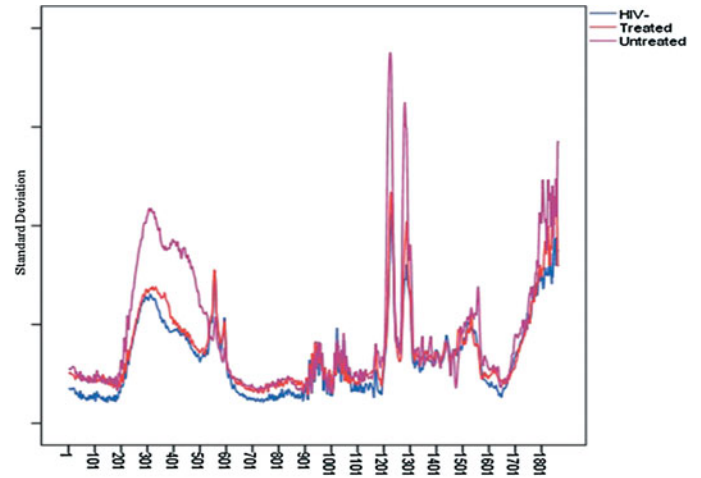
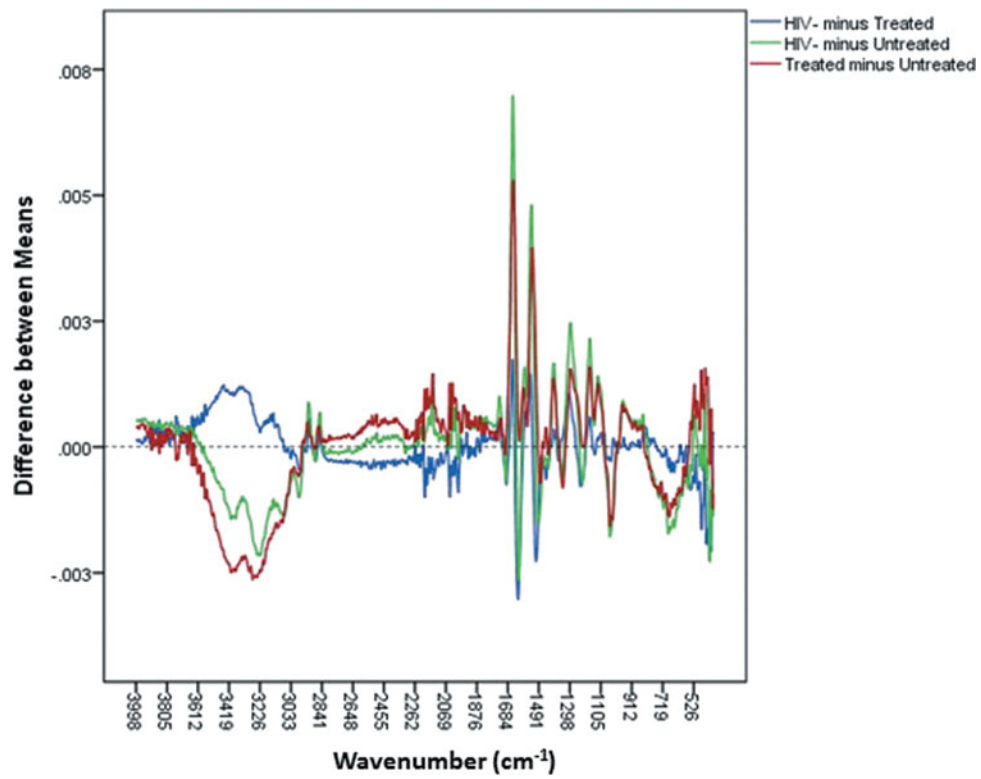


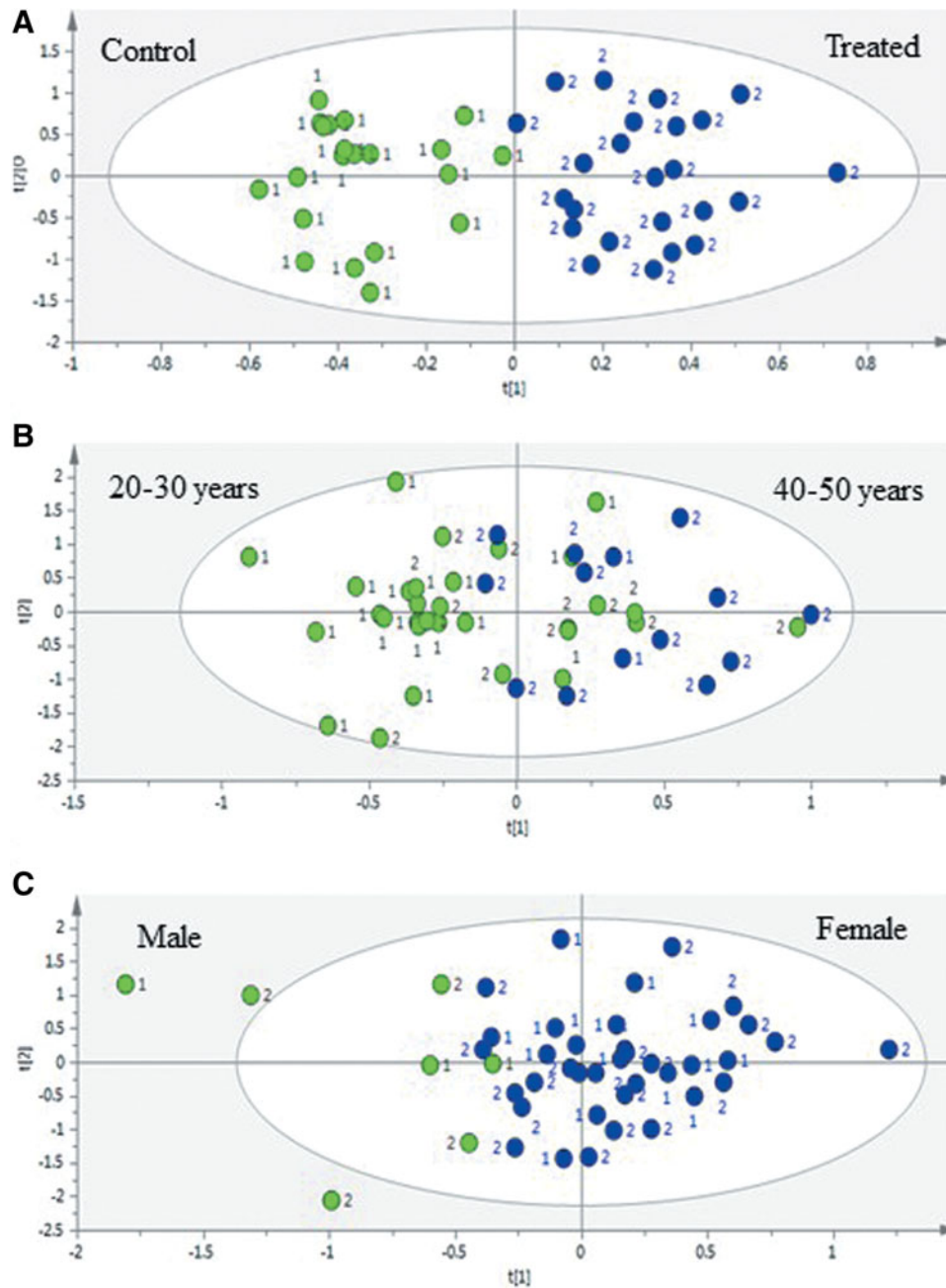
## Supplementary Data

**SUPPLEMENTARY FIG. S1.** Representative averaged mean ATR-FTIR spectra of serum obtained from: uninfected controls (*blue*), HIV<sup>pos</sup> ART<sup>pos</sup> (*red*), and HIV<sup>pos</sup> ART<sup>neg</sup> (*pink*).

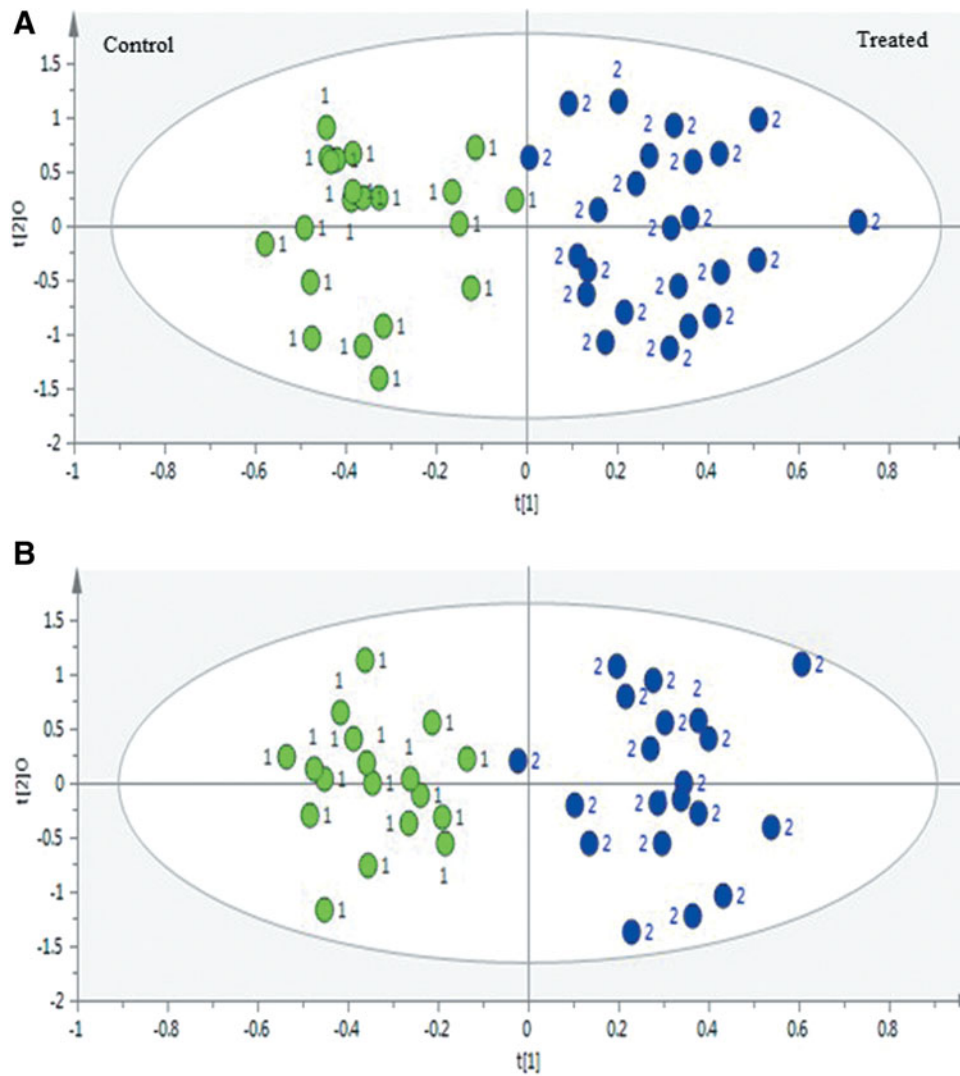




**SUPPLEMENTARY FIG. S2.** Representative averaged mean ATR-FTIR spectra of serum obtained from: uninfected controls: HIV<sup>pos</sup> ART<sup>pos</sup> (*blue*), uninfected: HIV<sup>pos</sup> ART<sup>neg</sup> (*green*), and HIV<sup>pos</sup> ART<sup>pos</sup> - HIV<sup>pos</sup> ART<sup>neg</sup> (*red*).



**SUPPLEMENTARY FIG. S3.** OPLS-DA scores plots depicting the effects of age and gender in comparison to the original model of HIV<sup>pos</sup> ART<sup>pos</sup> patients and uninfected controls. Scores plots generated from: (A) OPLS-DA of HIV<sup>pos</sup> ART<sup>pos</sup> patients and uninfected controls. (B) OPLS-DA of differences in age with 20–30 years (*green*) and 40–50 years (*blue*). (C) OPLS-DA of differences in gender with male (*green*) and female (*blue*). Numeric 1 and 2 represent the uninfected control and treated groups, respectively. (B) and (C) show that the chemistry that plays a role in the differences of both age and gender is different to the chemistry that plays a role in the differences between HIV-infected individuals and uninfected controls (A). This therefore means that age and gender had no influence on the HIV<sup>pos</sup> ART<sup>pos</sup> patients and uninfected controls model.



**SUPPLEMENTARY FIG. S4.** Comparison of OPLS-DA scores plots representing (A) the original model with 38 female and 7 male samples, and (B) new model with the removal of the 7 male samples (100% female). Numeric 1 and 2 represent the uninfected control and treated groups, respectively. This figure shows that the exclusion of the 7 male samples had minimal effect on the original model, meaning that gender had no influence on the original OPLS-DA model.