Metabolic profile in a cohort of HIV-1 positive patients treated with RAL-based therapy.

In HIV-infected patients, raltegravir (RAL) is effective and generally well tolerated. It has been suggested that RAL causes modest changes in fasting lipids, being candidate for treatment of patients requiring cholesterol-lowering therapy or with family history of dyslipidemia.

To provide information on this issue, we have analysed a sample of subjects on RAL-based treatment, enrolled in an ongoing cohort study.
Methods

• The SCOLTA Project is a prospective, observational, multi-center study created to assess the incidence of adverse events in patients receiving new antiretroviral drugs in clinical practice. Laboratory information including total and HDL cholesterol (TC and HDL-C), triglycerides (TGL) and blood glucose (BG) are collected at baseline and at each six-month follow-up. Parameters were considered normal if TC was < 220 mg/dL, HDL>45 mg/dL, TGL <170 mg/dL and BG<110 mg/dL.
Results

Currently, 435 patients are enrolled in the RAL cohort (288 males, 66.1%) and followed-up for 21 months on average. Most patients were Caucasians (92.9%) and experienced (94.0%). Mean age was 45.8 years (range 20-81); 192 (44.1%) subjects were aged more than 45 years. At enrollment, the viral load was undetectable in 172 (39.4%); median CD4+ cell count was 336 cell/mm³ (IQR 185-537). Despite no significant difference between baseline and follow-up medians, 17% of subjects with normal value of baseline TC showed TC>220 at follow-ups. Similarly, patients with normal baseline TGL had increased values at 6-month (19.6%) and 1-year (32.7%) visit. These alterations were significantly related to ritonavir (RTV)-associated regimen; however, we found that HDL-C also decreased (18.7% and 30.4%) during the study period, regardless RTV therapy.
Lipids alterations

- TC: 14.4% (6-m), 16.9% (12-m), 21.4% (18-m)
- HDL-C: 30.3% (6-m), 29.9% (12-m), 29.9% (18-m)
- TGL: 22.2% (6-m), 23.9% (12-m), 29.9% (18-m)
Conclusion

- Among our patients on raltegravir treatment, though the median values showed small, if any, changes, a substantial proportion of subjects with normal baseline values developed alterations during 1-year follow-up; RTV-association may partially, but not completely, account for this metabolic variation.