

## **Prevalence of adverse events associated with potent antiretroviral treatment: Swiss HIV Cohort Study**

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### **Summary**

**Background** Data on adverse events to antiretroviral treatment have been recorded in clinical trials, post-marketing analyses, and anecdotal reports. Such data might not be an up-to-date or comprehensive assessment of all possible treatment combinations defined as potent antiretroviral treatment.

**Methods** Using a standard clinical and laboratory method, we assessed prevalence of adverse events in 1160 patients who were receiving antiretroviral treatment. We measured the toxic effects associated with the drug regimen (protease inhibitor [PI], non-nucleoside and nucleoside analogue reverse transcriptase inhibitor) and specific compounds using multivariate analyses.

**Findings** 47% (545 of 1160) of patients presented with clinical and 27% (194 of 712) with laboratory adverse events probably or definitely attributed to antiretroviral treatment. Among these, 9% (47 of 545) and 16% (30 of 194), respectively, were graded as serious or severe. Single-PI and PI-sparing-antiretroviral treatment were associated with a comparable prevalence of adverse events. Compared with single-PI treatment, use of dual-PI-antiretroviral treatment and three-class-antiretroviral treatment was associated with higher prevalence of adverse events (odds ratio [OR] 2.0 [95% CI 1.0-4.0], and 3.9 [1.2-12.9], respectively). Compound specific associations were identified for zidovudine, lamivudine, stavudine, didanosine, abacavir, ritonavir, saquinavir, indinavir, nelfinavir, efavirenz, and nevirapine.

**Interpretation** We recorded a high prevalence of toxic effects attributed to antiretroviral treatment for HIV-1. Such data provides a reference for regimen-specific and compound-specific adverse events and could be useful in postmarketing analyses of toxic effects.

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