

## OP14.5

### **Consumption of statins and cardiovascular mortality in Croatia and four neighbouring countries: preliminary results**

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**Background and Aim:** Increasing rate in consumption of statins in the last 20 years is almost unparalleled in comparison with other drug classes representing as such an exceptional phenomenon. That increase was viewed from beneficial side due to their role in reducing coronary heart disease mortality in secondary prevention and among high risk individuals. The objective was to study the relationship between trends of consumption of statins and age standardized rates of total cardiovascular mortality, as well as specific mortality from coronary heart disease and cerebrovascular disease, in Croatia and four neighbouring countries.

**Methods:** Longitudinal observational study based on routinely collected data on the use of statins (ATC group C10AA) and mortality. Data were obtained from annual reports of national drug regulatory agencies and health-service yearbooks from Croatia, Slovenia, Hungary, Czech Republic and Austria, from 2000 – 2013. Mortality rates and statin utilization trends were evaluated, firstly by descriptive statistic and than by log-linear regression model.

**Preliminary Results:** The utilization of statins between 2000 – 2013 increased in all five countries, but at different rates: 213% in Croatia (between 2004 – 2011), 445% in Slovenia, 3000% in Hungary, 2800% in Czech Republic, and 14,8% in Austria (between 2011 and 2013). Total cardiovascular mortality for the age 0 – 64 years declined in the same period at much lower rates: 36,01% in Croatia, 43,07% in Slovenia, 29,82% in Hungary, 33,20% in Czech Republic and 44,22% in Austria, or at annual rates: 3%, 3,6%, 2,5%, 2,7% and 3,7%.

**Conclusion:** The trends of utilization of statins in all five countries showed almost exponential pattern, while standardized cardiovascular mortality rates decreased of only couple of percent annually. In the next phases of data analysis, the association of those trends will be determined.