Bosentan and ambrisentan, endothelin receptor antagonists, are used as treatment of pulmonary arterial hypertension (PAH), alone or combined. It’s known that elevations in liver aminotransferases (AST/ALT) associated with bosentan and ambrisentan are dose dependent so aminotransferases levels must be monitored.

**Objective**

To analyse hepatotoxicity in patients diagnosed of PAH treated with bosentan or ambrisentan.

**Material and methods**

A retrospective observational study from 2010 to 2016. We included all patients in treatment with bosentan or ambrisentan at less 2 months. We registered AST and ALT levels prior to initiation of treatment, at 2 and 8 week after initiation and then monthly. We considered based at summary of product characteristics, aminotransferases level 3 times upper limit of normal (ULN) mean hepatotoxicity. Information was obtained from electronic medical record (SAP®).

**Results**

On the one hand, we enrolled 39 patients (37 women, 2 mens) with a mean age of 57 years old (20-85) at start treatment with bosentan. The mean period of treatment until the end of study was 57,2 months (2-146). During study period, we registered 3xULN in 18% of patients; 57% of them required reduce dose, 14% stop treatment and the rest did not required modification of treatment.

On the other hand 6 patients (5 women, 1 man), with mean age 51 years old (45-77) at start treatment) were treated with ambrisentan. At the end of period of study, mean time of treatment was 18,5 months. We registered 3xULN in 33% of patients, in any case, medical prescription changed treatment.

**Conclusions**

Hepatotoxicity results registered in our group of study is very similar to clinical trials outcomes. Pharmacist must check the correct dose, based on AST/ALT level. Also, that side effect is dose-dependent and mainly asymptomatic nevertheless some cases of liver cirrhosis and liver failure have been reported.

No conflict of interest