AstraZeneca

STUDY REPORT SUMMARY

ASTRAZENECA PHARMACEUTICALS

FINISHED PRODUCT: ATACAND
ACTIVE INGREDIENT: Candesartan

Study No: NIS-CFR-ATA-2007/1
Observational usage and efficacy study of candesartan in heart failure treatment in France

Developmental Phase:
Study Completion Date: October 2010
Date of Report: February 2011

OBJECTIVES:

The objective of the study was to describe real life effectiveness and utilization of candesartan prescribed recently to patients suffering from heart failure in France.

METHODS:

From January 2008 to July 2010, 143 cardiologists included 452 patients, 450 were kept for the analysis out of which 295 were followed during 12 months.

RESULTS:

The mean patient age was 71.3 and there were more men (60.3%) than women. The mean length of time since heart failure diagnosis was 2.3 years, half of the patients had a length of time since heart failure diagnosis lower than one year.
Among the 448 patients for whom the information is reported, 6.0% had a heart failure class IV, 33.5% class III, 53.1% class II and 7.4% class I. Heart failure etiology was ischemic cardiopathy among 39.0% of patients, then hypertensive cardiopathy (34.3%) and primitive cardiopathy (24.9%).
A cardiovascular treatment was prescribed before candesartan to 95.3% of patients. Among the 450 patients, 269 (59.8%) had both a prescription of candesartan and one drug of the 4 therapeutic families: diuretics, angiotensin-converting enzyme (ACE) inhibitors, beta blockers, angiotensin II receptor antagonists. The most frequent combination with candesartan is a beta blocker and a diuretic, in 50.6% of patients.

The initial dose strength of candesartan was 8 mg a day for 36.2% of patients, 4 mg for 30.8% of patients and 16 mg for 24.2 %. The other initial dose strengths were less frequent. The dose strength was modified among 147 (32.7%) of the 450 patients and for 120 (40.7%) of the 295 patients followed during 12 months. There was an increase of dose strength in 88.3% of patients followed during 12 months. A third and fourth dose strength rise occurred among a small number of patients (respectively 9 and 2 patients). At treatment initiation, no patient had a dose strength higher than 32 mg a day. During the follow up, a dose strength higher than 32 mg was noticed for a small part of patients (5 patients, that is 1.1% of the 450 patients).

A minimum waiting period of 14 days was maintained for 113 patients out of the 125 patients that had at least a dose strength increase (90.4%).

Left-ventricular ejection fraction (LVEF) less than or equal to 40% is noticed in 47.6% of patients, less frequently in patients included by cardiologists in retail practice (43.1%) compared to those included by hospital cardiologists (59%) ($p = 0.002$). Nevertheless, 76.2% of patients had a LVEF less than 50%.

A heart failure class II or III is reported among 86.6% of patients. Intolerance or lack of effectiveness is reported for 81.4% of patients.

When considering those 3 criteria (LVEF $\leq$ 40% and heart failure class II or III and reason for prescribing candesartan: intolerance or ACE inhibitors lack of effectiveness), 34.5% of patients are in line with the market authorization labelling, less frequently for patients included by cardiologists in retail practice (30.9%) compared to those included by hospital cardiologists (43.7%) ($p = 0.01$).

Natremia and kaliemia were realized for 86.4% of the 450 analyzed patients. Creatinemia or creatinine clearance was realized for 89.8% of patients. Before initiation of candesartan, analysis of kaliemia, natremia and creatinemia (or creatinine clearance) was performed in 80.9% of patients.

Out of 394 patients, 95 (24.1%) had a serum electrolytes the month after the first prescription of candesartan.

One year after, 81.2% (IC95% = [77.4% ; 85.2%]) of patients were still treated with candesartan.

Out of the 450 analyzed patients, 127, that is 28.2% were hospitalized at least once. Among the 392 patients not lost to follow up, 21 (5.4%) died. The death rate seems steady along the time. The reason for death is not known for 4 patients. Reason for death is cardiovascular for 9 patients (52.9% of the 17 others). After one year follow-up, 4.9% of patients (IC95% [2.7% ; 7.1%] were dead.