IMPACT OF SINGLE-PILL VS. 2-PILL AMLODIPIN/ATORVASTATIN TREATMENT ON COMPLIANCE: A CZECH PILOT PROJECT ON MEDICATION ADHERENCE
Cerna V, Skoupá J
Pharma Projects, Prague, Czech Republic

OBJECTIVES: To determine differences in compliance of amlo- dipine and atorvastatin, and their combination in either 2-pill or single-pill forms. METHODS: Patient’s data about amloidipin and/or atorvastatin treatment were obtained from a Health Insurance Company over an 18 month period (January 2006 to July 2007). The indirect measure of compliance was based on the tablet count derived from the size and number of packages dispensed during a 200 days review period. The analyzed sample involved patients using only atorvastatin (7074), amloidipin (8177), a 2-pill amloidipin and atorvastatin combination (953) and amloidipin/atorvastatin in a single-pill (262). Compliance was measured as the percentage of days covered by a given drug. The compliance of patients using both drugs concomitantly was calculated as a product of the compliances of both drugs. We assumed one tablet as a daily dose for both substances.

RESULTS: The mean compliance for patients using atorvastatin was 83.3% (SD 20.29), amloidipine 85.8% (SD 18.99). In patients using both drugs in 2-pills, compliance was 74.8% (SD 24.37), and in the group using amloidipin and atorvastatin in one tablet the compliance was 84.3% (SD 20.54) (p < 0.001). Age was one of the relevant factors affecting compliance in all mediations. CONCLUSIONS: Patients using both, amloidipine and atorvastatin, in a single-pill can reach higher compliance compared to patients using both of substances concomitantly. The results of the Czech pilot project on adherence are consistent with published literature.

THE COST EFFECTIVENESS OF PERSISTENCE TO ANTIHYPERTENSIVE TREATMENT
Jørgensen E1, Paulsson T2
1AstraZeneca Norway, Oslo, Norway, 2AstraZeneca, Södertälje, Sweden

OBJECTIVES: International databases for prescription and use of pharmaceuticals suggest that adherence and persistence to antihypertensive treatment is low and decreasing over time. Furthermore, persistence rates seem to differ between antihypertensive drug classes. The objective of this analysis is to assess the implications of poor persistence on the cost-effectiveness of alternative antihypertensive drug treatments. METHODS: A stochastic Markov model was developed to estimate resource use, morbidity and mortality as a result of published differences in persistence rates. All classes of antihypertensives are assumed to have identical blood-pressure lowering effects, and a given reduction in blood pressure thus generates identical reductions in the probability for stroke, myocardial infarction, and congestive heart failure. Consequently, differences in CV-related morbidity and mortality are solely driven by differences in persistency rates. The model employs a lifetime perspective for a 50-year-old patient in base-case. Patients that discontinue treatment are assumed to lose the protective drug effect, and transit from a well-controlled health state to health states associated with moderate or serious hypertension. In the different Markov states patients experience CV-events subject to event rates calculated on the basis of data from the literature. RESULTS: In a hypothetical comparison between two cohorts of 1000 completely persistent and completely non-persistent 50-year-olds, the model predicts a reduction of 75 cardiovascular events and generates a maximum of 0.46 LYG (discounted at 3%). The ICER (per LYG) of ARBs compared to alternative drug classes, is highest when compared to ACE-inhibitors (SEK 105,000, €1 = SEK 9.25) and lowest when compared to thiazides (SEK 68,000). The cost-effectiveness decreases with increasing start age or diminishing time perspective. CONCLUSIONS: Model results suggest that differences in persistence rates have a non-negligible impact on the relative cost-effectiveness between antihypertensive drug treatments. Validation of model predictions via real-life epidemiological studies is warranted.

THE CONTRIBUTION OF THE MEASUREMENT OF TREATMENT ACCEPTABILITY TO UNDERSTAND PATIENTS’ ADHERENCE TO LONG-TERM TREATMENTS. RESULTS FROM A FEASIBILITY STUDY CONDUCTED WITH IN FINE PHARMA®: A COMMUNITY-PHARMACY NETWORK DEDICATED TO PHARMACOEPIDEMIOLOGICAL SURVEYS
Sausser C1, Van Ganse E2, Augé-Caumon MJ1, Chamba G4, Marrel A1, Benmedjahed K4, Longin J1
1Mapi, Lyon, France, 2Pierre Wertheimer Hospital, Bron, France, 3USPO, Paris, France, 4Pharmakeion, Lyon, France, 5Mapi Values, Lyon, France

OBJECTIVES: Post marketing observational surveys allow investigation of drug utilization in real life settings. However, studies conducted with the help of physicians face difficulties in assessing the perception of risks and benefits by patients, as well as in measuring their adherence. Our objective was to assess positive and negative outcomes of treatment, to measure adherence and to test the concept of treatment acceptability in a network of pharmacies specifically developed to conduct pharmacoepidemiology studies. METHODS: PHARMA® is a network of 2090 community-pharmacies representative of the overall 22,610 French pharmacies with respect to geographic location. Pharmacies belonging to the network had to include 5 to 10 patients. For each dispensing of statin, pharmacists completed a dispensing form and patients completed a self-report questionnaire describing their adherence, their perception towards the treatment and its side-effects and how acceptable they considered taking their statin treatment. RESULTS: Among the 443 patients analysed, 66% of them considered themselves as adherent to their lipid-lowering therapy, and nearly 60% reported at least one adverse event mainly muscular pain or cramps and gastro-intestinal disorders. About 90% of patients declared never having stopped their treatment because they considered it more harmful than beneficial. Sixty-six percent of adherent patients and 42% of non adherent patients agree their treatment give them more advantages than inconveniences. About 70% of adherent and 49% of non adherent patients considered their treatment as “very acceptable”. Our sample was representative of patients taking statins. CONCLUSIONS: The pilot survey highlighted a good participation of pharmacists, along with a good quality of the patient data recorded in pharmacies. Performing pharmacy-based pharmaco-epidemiological studies is powerful, effective, and reliable with In fine PHARMA®. Our study confirmed the potential contribution of the concept of treatment acceptability to the explanation of patients’ adherence toward long-term treatment.