

chloride with lisinopril (major), furosemid with digoxin (moderate), and warfarin with levofloxacin (moderate). **CONCLUSIONS:** Potential DDIs were common in this elderly population with multiple comorbidities. While some drug combinations with potential DDIs may be clinically appropriate, they require ongoing monitoring to ensure patient safety. The large number of potential DDIs identified with these data warrants future research into the prevalence of appropriate monitoring when potentially interacting drug combinations are prescribed. This study demonstrates the utility of using prescription claims databases for identifying specific sub-populations of patients at high risk for potential DDIs and targeting appropriate areas for intervention.

## PCV17

**COLD AND INACTIVITY: THE ULTIMATE FACTORS FOR HEART ATTACK**

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**OBJECTIVES:** Heart attack is diagnosed in approximately 20000 cases annually in Hungary, half of which leads to death in one year. In our study we investigated, how meteorological factors influence the figures of heart attack, whether there is a parallel relationship between weather fronts and heart attack during the study period. **METHODS:** We analyzed data of patients admitted to hospitals in Hungary between 2000 and 2004, with the diagnosis of heart attack. During the study period 81,956 cases were recorded. We categorized patient subgroups based on the day, month and year of the admission, and the gender and age of the patients. The National Health Insurance Fund and the National Weather Service provided us with the appropriate data. Statistical analysis was performed using ANOVA and chi2-probe. **RESULTS:** During the study period we found a correlation between the incidence of heart attack cases and meteorological factors. In spring, we observed significantly more heart attacks than in other seasons ( $p < 0.01$ ). Cold weather fronts in spring and summer positively correlated with heart attack incidence, while in autumn and winter the warm front had similar impact ( $p < 0.01$ ). In 2002, there was a statistically significant difference between age groups below and above 50 years ( $p: 0.069$  vs.  $p: 0.930$ , correspondingly). **CONCLUSIONS:** There is a statistically significant seasonality in heart attack incidence. The development of new prevention strategies must rely on the seasonal and age characteristics of the change of heart attack incidence throughout the world.

## PCV18

**EFFECT OF ENVIRONMENTAL TEMPERATURE AND WORKDAYS ON HEART ATTACK FIGURES**

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**OBJECTIVES:** We investigated, whether environmental temperature and workdays, beyond the well known risk factors, might have an impact on the figures of heart attack cases in Hungary. **METHODS:** Data analysis and retrospective data collection was used among patients diagnosed with heart attack at the Cardiology Department of the University of Pecs, Hungary in the time period between January 1, 2000 and December 31, 2004. Weather data were obtained from the Local Service of the National Weather Institute, Pecs, Pogany Airport Base. In the time period under investigation, 81.956 patients were admitted with the above

diagnosis. Analysis of variance and linear regression analysis were used as statistical methods. **RESULTS:** We found that the environmental temperature influenced the incidence of heart attack in 0.79 %. This result was found to be significant ( $p < 0.01$ ). Above 0 Co there were more heart attack cases diagnosed than below it. We observed a steady decrease in the incidence from Monday to weekend. During weekend days markedly less cases were recorded comparing to weekdays ( $p: 0.110$  MT[0.108;0.112] vs.  $p: 0.155$  MT[0.153;0.158], respectively). Furthermore, there was a peak in the number of cases on Monday and a drop during the weekend. **CONCLUSIONS:** Environmental temperature has an effect on the change in figures of heart attack cases, thus, we believe, it plays an important role in the disease.

## PCV19

**THE TIME OF SUNRISE AND HOURS WITH DAYLIGHT MAY HAVE AN EFFECT ON THE SEASONALITY AND DIURNAL VARIATION OF A HEART ATTACK**

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**OBJECTIVES:** The time of onset of a myocardial infarction shows seasonal and daily variation. We aimed to investigate whether the number of hours with daylight has an effect on the seasonal variation of heart attack, and whether the time of sunrise has an effect on the diurnal rhythm of myocardial infarction. **METHODS:** We carried out a retrospective database study covering all patients admitted to any acute care hospital with the diagnose of myocardial infarction in Hungary in years 2004 and 2005 ( $n = 32.329$ ). Data was collected from the database of the National Health Insurance Fund Administration according to the International Classification of Diseases (ICD). Data on the time of sunrise and sunset was collected from the Hungarian National Meteorological Service. **RESULTS:** With consideration to seasonal variation, the peak period of a heart attack was found during the spring season, with lowest number of events during the months of summer. The number of hours with daylight showed a weak negative correlation with the occurrence of myocardial infarction ( $r = -0.108$ ,  $p < 0.05$ ). With consideration to diurnal variation, the peak period of daily events was between 6–12 in the morning (35.57 %). We have found a positive correlation between the time of sunrise and sunset and the occurrence of myocardial infarction ( $p < 0.01$ ). **CONCLUSIONS:** Based on our findings, the number of hours with daylight and the time of sunrise may be connected with the chances of having a heart attack, however other factors may also have an influence.

## PCV20

**PREDICTED CARDIOVASCULAR EVENT REDUCTION WITH THE CO-ADMINISTRATION OF FENOFIBRIC ACID AND STATINS IN A DYSLIPIDEMIA PATIENT COHORT**

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**OBJECTIVES:** To predict total 3-year cardiovascular event (CVE) rates for treatment with fenofibric acid in combination with statins versus statin monotherapy in a cohort of dyslipidemia patients. **METHODS:** A disease outcomes model was used to predict 3-year CVE rates in a cohort of 1000 dyslipidemia patients. Risk of primary and secondary CVEs (MI, stroke, angina) was based on published risk equations from the Framingham Heart Study, which were adjusted to incorporate the impact of triglycerides (TG) in addition to high-density lipoprotein cholesterol and total cholesterol. The impact of TG was based on