predictive value compared to LR. In medicine, even one unnec-
scores or adverse events is of concern, NBC can offer additional
approaches. When the estimation of e.g. propensity
analysis demonstrated the tool’s additional value in comparison
Naïve Bayesian Fusion and decision rationality analysis), this
 tion:
REGRESSION APPROACHES
In addition to previous work done with P-Course (e.g.,
medically sensible choices of variables
were 0.70–0.71 and 0.66–0.68, respectively. In variable screen-
improves P-Course’s accuracy, in particular when the training
rectly classified patients. The dataset was randomly split into
imputation of patients to European LDL cholesterol goals was taken
terolemia in the RF .
original versions of atorvastatin (atva) and simvastatin (simva)
propriation into their CAD decision-analytic models.
mental mortality differences in
conventional logistic
OB jectives:
The cost per patient to LDL-C
preventive coronary artery disease (CAD) screening.
ife only the HRs due to CAD were assumed to be known. The
generated HR_other can be used by decision-analysts for incor-
ential mortality (i.e. HR_other(HR_target) = 1) of the
target disease it also does not explain mortality due to other
cases; 2) the function HR_other(HR_target) is strictly increasing
in HR_target; 3) the relationship of HRs below 1 is derived
by taking the reciprocal values of the corresponding HRs above
1; 4) the function has an upper bound; 5) in the range of HRs
above 1, HR_target exceeds HR_other; and 6) the function
HR_other(HR_target) is continuously differentiable. We created
a function sufficing all postulated properties and applied it in the
context of predictive coronary artery disease (CAD) screening.
We fitted the function based of published HRs. Finally, we
plied this function to hypothetic screening methods, for which
only the HRs due to CAD were assumed to be known. The
generated HR_other can be used by decision-analysts for incor-
poration into their CAD decision-analytic models. CONCLU-
SION: We created a useful function that can be used for the
adjustment of differential non-target-disease related mortality
among risk groups in decision-analytic screening models. This
should result in more valid modeling results.
A TOOL FOR MODELING MORTALITY DIFFERENCES IN
PREDICTIVE SCREENING MODELS
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OB jectives: Due to joint risk factors, positive screening results
are often not only associated with mortality specific for the target
disease of screening, but also with an increased mortality due to
other causes. Most decision-analytic models do not consider this
association leading to potentially biased results. Our goal was to
develop a tool which helps to adjust for such joint mortality.
Methods: We developed a function HR_other(HR_target)
characterizing the relationship between two mortality hazard
ratios (HRs). HR_target compares the mortality rate due to the
target disease among those at high risk versus low risk. HR_other
compares the respective mortality rates not directly related to
the target disease. We postulated several properties that must be
fulfilled by this function: 1) if the screening test result does not
explain the mortality (i.e. HR_other(HR_target) = 1) of the
target disease it also does not explain mortality due to other
cases; 2) the function HR_other(HR_target) is strictly increasing
in HR_target; 3) the relationship of HRs below 1 is derived
by taking the reciprocal values of the corresponding HRs above
1; 4) the function has an upper bound; 5) in the range of HRs
above 1, HR_target exceeds HR_other; and 6) the function
HR_other(HR_target) is continuously differentiable. We created
a function sufficing all postulated properties and applied it in the
context of predictive coronary artery disease (CAD) screening.
We fitted the function based of published HRs. Finally, we
plied this function to hypothetic screening methods, for which
only the HRs due to CAD were assumed to be known. The
generated HR_other can be used by decision-analysts for incor-
poration into their CAD decision-analytic models. CONCLU-
SION: We created a useful function that can be used for the
adjustment of differential non-target-disease related mortality
among risk groups in decision-analytic screening models. This
should result in more valid modeling results.
A COMPARATIVE PHARMACOECONOMIC ANALYSIS OF
STATINS IN RUSSIA
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OB jectives: A comparative cost-effectiveness analysis of
generic versions of atorvastatin (atva) and simvastatin (simva)
with rosuvastatin (rosva) in patients with primary hypercholes-
terolemia in the RF . Methods: This study compared two
brands of atva—Atoris (KRKA) and Tulip (LEK), and one of
simva—Vasilip (KRKA) with rosva—Crestor (AZ). Efficacy data
in terms of percentage reduction in LDL cholesterol and propor-
tion of patients to European LDL cholesterol goals was taken
from the STELLAR trial. Price per pack data was obtained
in RUR from the wholesale Protek price-list (20.07.2006).
Exchange rate is 25.98 RUR per 1 USD and 34.75 RUR per 1
Euro. Meta-analysis of all available comparative clinical trials
has shown a relative effective dose of 1:3 for rosva compared
with atva and 1:8 for rosva vs simva. Hence cost and
efficacy data for rosva 10 mg is compared with atva 30 mg
(20 mg + 10 mg) and with simva 80 mg (40 mg + 40 mg) in the
form cost per patient per year and cost per patient to European
LDL cholesterol goals. RESULTS: The cost per patient to LDL-C
goal for Crestor 10 mg is 17,914 RUR, for Atoris 30 mg, Tulip
30 mg and Vasilip 80 mg is 25,968; 25,372 and 27,692 RUR
respective. Within a budget of 10 million RUR the number of patients at European LDL-C goal at 1 year is: 558 on Crestor, 361 on Vaslip, 385 on Atoris and 394 on Tulip. CONCLUSION: Based on the equi-effective dose of statins Crestor is shown to be cost-effective compared to atorvastatin and simvastatin even at low generic prices across all value metrics analysed.

**PCV75**

THE ANALYSIS OF HEALTH AND ECONOMIC BENEFITS AS THE CONSEQUENCE OF THE REALIZATION CARDIOVASCULAR SYSTEM DISEASES PREVENTION PROGRAMME AMONG THE CHILDREN AND YOUTH OF SCHOOL AGE IN POLAND

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OBJECTIVES: The purpose of this study was to evaluate health and economic benefits, throughout the country, as the consequence of the realization cardiovascular system diseases prevention programme among the children and youth of school age in Poland. METHODS: This was a health and economic evaluation using a simulation model based on 10,000 subjects. The frequency of incidence of cardiovascular system diseases was estimated using data from the Polish epidemiological trials programs and statistical yearbook. Costs of cardiovascular system diseases treatment were derived from medical services catalogue of The National Health Fund (NFZ). The effectiveness of preventive programmes was extracted from the INTERHEART study and other published sources. RESULTS: Correctly constructed and conducted prevention programme of cardiovascular system diseases among the children and youth of school age in Poland could reduce about 70% lipid disorders, 50% obesity, 50% arterial hypertension, 8% heart attack, 5% the diabetes mellitus type 2, and about 4% the cerebrovascular incident in adult life of the beneficiaries. The indirect results of prevention are the extending of life-span and the improvement of health quality of individuals as well as their families, the improvement of epidemiological situation and measurable financial profit throughout the country because of dangerous and chronic health complications prevention as well as lack of limitations of ability to work. CONCLUSION: The cost of analysed preventive programme of cardiovascular system diseases is about 15 times smaller than health care costs of these diseases.

**PCV76**

MEASUREMENT OF FRACTIONAL FLOW RESERVE IN PATIENTS WITH CORONARY ARTERY DISEASE TO GUIDE TREATMENT—RESULTS FROM A HEALTH TECHNOLOGY ASSESSMENT AND DECISION ANALYTIC MODEL

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OBJECTIVES: To perform a health technology assessment (HTA) commissioned by the German Federal Ministry of Health on coronary fractional flow reserve (FFR) to guide the decision on coronary stenting in patients with suspected mild coronary artery disease (CAD). METHODS: We performed a systematic literature search to identify clinical and economic studies on FFR-guided strategies. A meta-analysis on the diagnostic value of FFR and a review on economic evaluations were done. We developed a decision-analytic Coronary Artery Disease Outcome Model (CADOM) for the German health care context. Patients with angiographically suspected CAD without confirmed diagnosis were modeled in subgroups for age and gender (basecase: 60-year old man). Model parameters were derived from German databases and the published literature. We adopted the societal perspective, used a life-time horizon, and discounted costs and effects by 5% per year. RESULTS: We identified 10 diagnostic accuracy studies, 1 multicenter randomized clinical trial (RCT) for efficacy, and 1 decision-analytic cost-effectiveness study (US context). Pooled sensitivity and specificity of FFR was 81.7% (95%CI: 77.0–85.7%) and 78.7% (95%CI: 74.3–82.7%), respectively. Few studies used a sufficient goldstandard. The RCT investigated the efficiency of a FFR-based treatment strategy and showed advantages for patients in terms of major adverse cardiac events and freedom from angina. The cost-effectiveness study showed the FFR-based strategy being cost-saving in the US health care system. Results from German CADOM indicated a gain in (quality-adjusted) life-expectancy for the FFR-guided strategy compared to universal coronary intervention in all patients. The base-case discounted incremental cost-effectiveness ratio was Euro 16,000 per QALY gained. Uni- and multivariate sensitivity analyses showed robust results. CONCLUSION: This HTA suggests that FFR-guided treatment results in clinical benefits for patients with suspected CAD and should be cost-effective in the German context. FFR should be implemented in routine clinical decision making in patients with suspected CAD.

**PCV77**

RESPONSE-SHIFT IN HEART DISEASE: COMPARING INDIVIDUALIZED VS. DISEASE-SPECIFIC HRQL INSTRUMENTS

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OBJECTIVES: The phenomena of response-shift has recently entered the PRO literature and provided new insight how change scores in PRO measures such as HRQL-instruments can be interpreted. Methods have been provided to investigate the 3 types of response-shift: recalibration, reconceptualization and reprioritization. The aim of this study was to investigate to what extend response-shift occurs in individualized vs. disease-specific HRQL-instruments and how it can be captured. METHODS: In a prospective longitudinal study 100 patients with angiographically documented coronary artery disease were approached at 2 time points (hospital-baseline and 6 month-follow-up) with an individualized QoL-instrument (Schedule for the Evaluation of Individualized Quality of Life; SEIQoL) and a disease-specific HRQL-instrument (MacNew Heart Disease Quality of Life Questionnaire; MacNew). The SEIQoL is constructed allowing capturing two aspects of response-shift: reconceptualization (cues) and reprioritization (weights). In addition the “Then-Test” was applied to the MacNew at 6 month-follow-up to capture recalibration. RESULTS: Informed consent was given by 64 patients (61±7.5 years, 28.1% female, main symptom: 71.9% angina) and all patients were treated with percutaneous coronary interventions. 71.9% returned the six-month follow-up. Individualized QoL (SEIQoL-Index) did not improve over the 6 month-period (t0: 65.8±25.5; t1: 67.8±20.5, p = ns), in addition 25% of the participants showed response-shift effects of reconceptualization in at least one cue of the SEIQoL. No significant change in SEIQoL cue-weights occurred. Disease-specific HRQL scores changed significantly over time (t0: 4.7±1.2; t1: 5.3±1.1, p = 0.004); and no recalibration occurred (t0-then-test: 4.6±1.4, p = 0.418). CONCLUSION: This prospective study investigating the effects of percutaneous coronary interven-