

Methods. The innovative EXCON project will take advantage of recent advances in technologies for coding, structuring and semantizing medical information. Thanks to this new structuring, the EXCON platform will be developed. The final users will be health professionals and other decision-makers. Doctors, nurses, epidemiologists and information specialists will be involved in the development and subsequent validation of the platform.

Results. The EXCON platform identifies profiles of patients with a high probability of ischemic heart disease. In the sample analyzed ($n = 4,700$), 17 percent of patients were admitted to a cardiology unit with suspected coronary heart disease. Of the patients admitted, 53.7 percent did not have ischemic heart disease at discharge. If we apply the algorithm developed by the EXCON project, 24.8 percent of patients would not have been admitted and did not have ischemic heart disease.

Conclusions. In coming decades, patient management will be impacted by the application of new advanced data analytics tools. This will allow for safer and more efficient clinical management, decrease variability in clinical practice, and improve equity. That is why the development and assessment of these technologies is necessary.

OP340 Adverse Clinical Events And Associated Risk Factors In Patients With Very-High-Risk Atherosclerotic Cardiovascular Disease

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Introduction. Clinical atherosclerotic cardiovascular disease (ASCVD) patients are judged to be very-high-risk if they had a history of multiple major ASCVD events, or one major ASCVD event with multiple high-risk conditions. Very-high-risk ASCVD patients are under high risk of adverse clinical events and need more attention in the management of secondary prevention. This real-world study aimed at estimating the prevalence of very-high-risk ASCVD and investigating the occurrence of adverse clinical events and associated risk factors among patients with very-high-risk ASCVD in China.

Methods. Data were obtained from the Urban Employee Basic Medical Insurance database in Tianjin, China. Very-high-risk ASCVD patients were identified from 2014 to 2015 through the history of ASCVD events and evidence of high-risk conditions, and followed for 24 months. Adverse clinical events were measured by major adverse cardiovascular events (MACE), a composite endpoint of stroke, myocardial infarction (MI) and death. A Cox regression model was used to identify risk factors of MACE, adjusting for potential confounders.

Results. The percentage of clinical ASCVD patients identified as very-high-risk was 35.2 ($N = 41,181$), while 34,740 patients with continuous enrollment were included (mean age: 67.1 years; 42.5% female). The percentage of patients who had MACE in the 24-month follow-up period was 27.7, with stroke (22.3%) as the most prevalent event followed by death (6.9%) and MI (1.3%). Male gender, older age, and having MI or ischemic stroke

(versus unstable angina) as the index major ASCVD event were risk predictors of MACE.

Conclusions. More than one-third of patients with clinical ASCVD are under very-high-risk in China, and among them 27.7 percent experience MACE during a 24-month follow-up period. Male patients, older patients, and patients who had MI or ischemic stroke are under higher risk of experiencing MACE. Future studies are warranted for comparing the differences in characteristics, pattern of drug use, occurrence of adverse clinical events and medical burden between very-high-risk ASCVD patients and ASCVD patients not at very-high-risk.

OP354 Cost-Effectiveness Analysis Of Different Prenatal Screening Strategies For Down Syndrome In China: Data From Shandong Province

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Introduction. There are large differences between the prenatal screening strategies for Down Syndrome (DS) in different provinces in China. In Henan province there is a serological triple screening in the second trimester (STS) strategy, while in Shandong province contingent non-invasive prenatal testing (NIPT) screening strategy (NIPT delivered to older pregnant women) is used, and there is a universal NIPT screening strategy in Anhui province. Moreover, many factors varied widely in different regions, such as the proportion of older pregnant woman and the ability of people to pay. This study aimed to determine the cost-effectiveness of current strategy in Shandong compared with strategies in other provinces.

Methods. A decision tree model was developed according to the screening strategies in different provinces. Four screening strategies were involved, universal STS strategy, contingent STS strategy, contingent NIPT strategy, and universal NIPT strategy. Cost-effectiveness analysis was conducted from a societal perspective in a simulated cohort of 100,000 pregnant women. The data of costs and epidemiologic parameters were collected from field surveys in Shandong and a literature review.

Results. The universal STS strategy, contingent STS strategy, contingent NIPT strategy, and universal NIPT strategy could prevent 17.0, 40.0, 46.2, and 53.6 DS births, respectively. There was no strategy dominated by others. The universal NIPT strategy and contingent NIPT strategy would decrease invasive procedures for prenatal diagnosis, resulting in fewer procedure-related miscarriages. The sensitivity analysis showed that the effectiveness of the screening strategy is significantly influenced by the resident's acceptance of NIPT.

Conclusions. From the perspective of maximizing the effect, the universal NIPT strategy is the optimal strategy. But taking into account the resident's and government's ability to pay, contingent NIPT Strategy may be appropriate for the current situation in Shandong. To ensure a better cost-effective advantage in the universal NIPT strategy, the government should provide health