have comparable cycles for both strategies a three-year time horizon was used for cost comparison. Total screening costs were 26% lower for HPV genotyping and only 21% higher for treatment costs, resulting in total savings of 1.6 million over cytology. CONCLUSIONS: Compared to cytology, incorporation of cobas HPV genotyping test as primary screening for Cx at IMSS represents during the first five years a potential savings. The pooling and major discordance in clinical benefits, such as reduction in the incidence and mortality due to CxCa.

PM06 EXHALED NITRIC OXIDE FOR THE DIAGNOSIS OF ASThma IN ADULTS AND CHILDREN: A SYSTEMATIC REVIEW
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OBJECTIVES: The fraction of exhaled nitric oxide (FeNO), a marker of eosinophilic inflammation, may be a useful diagnostic test in asthma. This systematic review aimed to identify and synthesise evidence relating to the diagnostic accuracy of FeNO for asthma. METHODS: Systematic searches of nine key biomedical databases and trial registers (including MEDLINE, EMBASE, the Cochrane library and clinicaltrials.gov) were carried out to November 2014. Records were considered by one reviewer and included if they: recruited patients presenting with the symptoms of asthma, used a single set of criteria (i.e. not case-control), measured FeNO in accordance with American Thoracic Society guidelines, 2005 (off-line measurements excluded); reported/allowed calculation of true positive, true negative, false positive and false negative patients as classified against any reference standard for asthma, as assessed using quality criteria II. Data was extracted by one reviewer using a standardised form and checked by a second. Meta-analysis was planned when clinical study heterogeneity allowed. Rule-in and Rule-out uses of FeNO were analyzed. RESULTS: 4863 records were identified and 32 studies were included. 5 studies recruited children and/or adolescents, and 27 studies recruited mixed ages or adults. Studies were sub-grouped by study characteristics. Week 30 to 6 weeks post discharge was Modelled using a fixed effects model. CONCLUSIONS: FeNO has variable diagnostic accuracy even within subgroups of studies with similar characteristics. However, FeNO could be informative within a diagnostic pathway involving other tests. Cut-off values should probably be lower in children.

PM07 HEALTH OUTCOMES EVALUATION OF NEW TECHNOLOGIES IN CLINICAL PRACTICE: THE CASE OF THE MINIMALLY INVASIVE INSERTABLE CARDiac MONITOR
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OBJECTIVES: To understand and quantify the clinical and economic impact of an automated, on-demand immunoassay for the diagnosis of HEPARIN-INDUCED THROMBOCYTOPENIA
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OBJECTIVES: To understand and quantify the clinical and economic impact of an automated, on-demand diagnostic test versus current diagnostic tests, for heparin-induced thrombocytopenia (HIT). METHODS: A mixed methods study combining review articles and interviews with a time series approach. A decision model with multiple databases to identify data on test performance, clinical and economic data. Semi-structured interviews (n=4) provided insight into current practice and challenges faced, validated by a larger survey (n=90). Two flow diagrams modelling a hypothetical cohort of 1000 patients were used to calculate the clinical and cost impact of automated, on-demand testing. RESULTS: The automated, on-demand test had comparable or lower sensitivity, and a higher specificity than other available tests. Clinical data and survey findings indicate that the specificity of the most widely used antibody tests (ELISA) is suboptimal. The survey revealed that half of patients are speculatively switched off of heparin and onto replacement therapy based on clinical assessment alone, rather than based on diagnostic testing and diagnostic test results as per guideline recommendations. Speculative treatment is driven by test turnaround time of 24 hours for >50% of respondents. The cost model indicated that the cost of replacement therapy whilst awaiting tests results of >24 hours’ turnaround time was between $7215 and $31268. Automated, on-demand antibody testing and switching patients off heparin based on test results reduced this cost to between $2735 and $13092. CONCLUSIONS: Automated, on-demand HIT antibody testing could enable physicians to use timely diagnostic test results with better specificity than current tests to make treatment decisions. This could potentially enable earlier treatment of HIT to reduce complications such as extensive platelet activation and deep venous thrombosis reducing costs. Also, earlier informed treatment decisions could yield pathway cost reductions through reducing the use of replacement therapies in non-confirmed and false positive cases.

PM08 PUBLISHED DIAGNOSTIC DISCORDANCE OF LYMPHOMA AND POTENTIAL FOR IMPACT ON PATIENT CARE
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OBJECTIVES: To determine the published frequency of diagnostic discordance leading to clinical management for patients with lymphoma. METHODS: A systematic literature search using PubMed database was conducted from 2000 to May 2015. Literature was restricted to articles published after 2000, the year the World Health Organization classification of hematologic malignancies was published. The search string used was: (((pathology)) OR diagnosis)) AND discordance([Title/Abstract]) AND lymphoma)) OR ((lymphoma[Title]) AND patient[Title]). The pooled major discordance frequency was calculated using Neyeloff, Fuchs and Moreira’s Excel random effects model (2012). Weighted averages using a random-effects model are reported with 95% confidence intervals with continuity correction. RESULTS: Eight (8) articles evaluating and differentiating discordance and major discordance in lymphoma diagnoses were included in this study. Major discordance is defined as diagnostic discrepancy between the preliminary or final diagnosis and second-opinion review that is determined by the study authors as could have an impact on patient management. The proportion of discordance that was major was ranged from 4.27% to 20.00%. The pooled proportion of major discordance was 9.10% (95% CI 5.86%-12.35%) in a pooled sample of 5,322 lymphoma patients. Only 1 study, a published abstract, analyzed the actual patients impact of discordant pathological results through chart review, determining 2.9% of patients were over-treated, under-treated, had significant change in treatment or incorrect treatment due to diagnostic error (Kolb et al, 2006). CONCLUSIONS: Clinical and economic impact of diagnostic discordance in lymphoma diagnoses could be incorrect to the point of impacting patient treatment management. The consequence of discordance that was major ranged from 4.27% to 20.00%. The pooled proportion of major discordance was 9.10% (95% CI 5.86%-12.35%) in a pooled sample of 5,322 lymphoma patients. Only 1 study, a published abstract, analyzed the actual patients impact of discordant pathological results through chart review, determining 2.9% of patients were over-treated, under-treated, had significant change in treatment or incorrect treatment due to diagnostic error (Kolb et al, 2006). Current diagnostic discordance results could be incorrect to the point of impacting patient treatment management.

PM09 THE CONSEQUENCES OF REPLACING THE FLEISCHER GUIDELINES BY A SOFTWARE-BASED VOLUME DOUBLING TIME TECHNIQUE: AN EARLY-STAGE RESEARCH
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OBJECTIVES: Currently various diagnostic pathways for incidentally detected pulmonary nodules are used and it is not clear which diagnostic pathway should be used for the detection of potential cancer. An early diagnosis of a possible malignancy in the lung is important in order to increase the survival chance of the patient. In this study the regular used Fleisher Recommendations are compared with a software based volume doubling time (VDT) diagnostic pathway. METHODS: Diagnostic pathways are developed and built in R. The used incidence rates of pulmonary nodules and lung cancer are obtained from literature. The primary endpoint is the incidence rate of lung cancer after one year. Secondary endpoints are the test results of the diagnostic pathways. Ten thousand patients were included in order to decrease bias and increase precision of the model. RESULTS: Diagnosis with help of VDT led to a lower rate of false positives and false negatives, compared to the Fleisher Recommendations. Furthermore, $188,394.66 was saved in the simulation when VDT was used. The sensitivity of VDT could decrease with 7% in order to be as good as Fleisher Criteria, and was still cheaper. CONCLUSIONS: The replacement of the Fleisher Recommendation by software based VDT can lead to a decrease of false positives and false negatives. Since the cost of VDT are lower than the costs of the Fleisher Recommendation also a reduction in health care costs is possible. However, since this was an early-stage research more direct evidence should be collected in the future.