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 CxCa at IMSS represents during the first 5 years a significant improvement 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; was assessed using a standardised form and checked by a second. Meta-analysis was performed 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 the effects of FeNO on asthma. 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 the effects of FeNO on asthma.

**CONCLUSIONS:** FeNO for asthma. 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 evaluate and improve the use of a minimally invasive wearable cardiac monitor (ICM). ICMs are leadless subcutaneous devices that continuously monitor the heart rhythm and record events, allowing for the diagnosis of infrequent rhythm abnormalities that can be the cause of palpitations, syncope and stroke.

**METHODS:** A systematic literature search using PubMed database was performed to identify data on test performance, clinical and economic impact of automated, on-demand testing.

**RESULTS:** Two flow diagrams modelling the diagnostic process has been improved.

**PM08**

**PUBLISHED DIAGNOSTIC DISCORDANCE OF LYMPHOMA AND POTENTIAL IMPACT ON PATIENT CARE**

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**OBJECTIVES:** To determine the published frequency of diagnostic discordance leading to treatment management of 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 hematopoietic malignancies was published. The search string used was: (((pathology) OR diag- nosis)) AND discordance[Title/Abstract] AND 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 the effects of FeNO on asthma.

**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.

**PM09**

**THE CONSEQUENCES OF REPLACING THE FLEISCHNER 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 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 Fleischner Recommendations are compared with a software based volume doubling time (VDT) based diagnostic pathways is 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 Fleischner Recommendations. Furthermore, $\$188,394.66 was saved in the simulation when VDT was used. The sensitivity of VDT could decrease with 7 percent in order to be as good as Fleischner Criteria, and was still cheaper.

**CONCLUSIONS:** The replacement of the Fleischner Recommendation by software based VDT can lead to a decrease of false positives and false negatives. Since the total costs of VDT are lower than the costs of the Fleischner Recommendation also a reduction in health care costs is possible. However, since this was an early-stage research more detailed evidence should be collected in the future.

**PM10**

**ASSIGNING 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 a literature review and a retrospective feasibility study. Two flow diagrams modelling the diagnostic process has been improved.

**RESULTS:** 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 the effects of FeNO on asthma.

**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.

**PM11**

**ANALYSIS OF BREAST CANCER PATIENTS’ CLINICAL PATHWAY BEING DIAGNOSED BY MAMMOGRAPHY BREAST SCREENING PROGRAM**

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**OBJECTIVES:** To determine the published frequency of diagnostic discordance leading to treatment management of 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 hematopoietic malignancies was published. The search string used was: (((pathology) OR diagnosis)) AND discordance[Title/Abstract] AND 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 the effects of FeNO on asthma.