This strategy provided a diagnostic validity of 43%, which was higher in late-stage ovarian cancer (56% versus 35%), and a specificity of 100%.

Conclusions. Prospectively designed studies are required to assess the safety and effectiveness of the PapSEEK test in screening settings, as well as studies comparing the technology with conventional screening methods. No cost-effectiveness studies have been conducted for the PapSEEK test.

PP152 Epigenetic In Vitro Diagnostic Test For Early Diagnosis In Lung Cancer: An Early Assessment

Ana Isabel Hijas-Gómez (ahijas@outlook.es), Mar Polo-de-Santos, Setefilla Luengo-Matos and Luis Maria Sánchez-Gómez

Introduction. Lung cancer is a leading cause of morbidity and mortality, and early diagnosis is essential for patient survival. Epigenetics is an innovative discipline that provides biomarkers to aid in early diagnosis, patient risk classification, or outcome prediction. Each type of tumor may present specific patterns of gene methylation, the analysis of which may be useful as a diagnostic tool. The aim of this study was to conduct an early assessment of novel in vitro diagnostic (IVD) tests based on the identification of DNA hypermethylation epigenetic signatures developed for the early detection of lung cancer.

Methods. We identified this technology through the Early Awareness and Alert System "SINTESIS-new technologies" of the Agencia de Evaluación de Tecnologías Sanitarias - Instituto de Salud Carlos III. A literature search of PubMed, the Trip Medical Database, the International Clinical Trials Registry Platform, ClinicalTrials.gov, and the Cochrane Central Register of Controlled Trials was conducted. Studies published up to November 2019 were reviewed.

Results. Three tests were identified. Epi proLung® analyzes the hypermethylation status of SHOX2/PTGER4 genes in blood samples using polymerase chain reaction (PCR) and showed good discrimination capacity with respect to healthy controls (area under the curve [AUC] = 0.91) and patients with non-malignant lung diseases (AUC = 0.86). The Epi proLung BL Reflex Assay® for determining the hypermethylation state of the SHOX2 gene in bronchoalveolar lavage samples by PCR had modest sensitivity (69%, 95% confidence interval [CI]: 64–75) and high specificity (96%, 95% CI: 97–100). A test in development for determining the hypermethylation state of BCAT1/CDO1/TRIM58/ZNF177 genes in aspirated or bronchoalveolar lavage samples by pyrosequencing yielded a sensitivity of 85 percent and a specificity of 81 percent, with an AUC of 0.91 at the optimal cutoff point.

Conclusions. The evidence for the three tests showed promising results in terms of diagnostic validity. However, although personalized medicine is becoming increasingly widespread in the field of cancer diagnosis, more studies are needed to evaluate the clinical utility of these diagnostic tests, either as a complementary or a screening test, and the economic impact of their use.

PP162 Use Of The RenalGuard® System To Prevent Contrast-Induced Nephropathy

Perizat Bektassova, Valeriy Benberin, Andrey Avdeyev (avdeyev.andrey@yahoo.com), Nasrulla Shanazarov, Ruslan Akhmedullin, Makhabbat Okesh, Tansholpan Aimanova and Gulzada Bariyeva

Introduction. Contrast-induced nephropathy (CIN) is a common cause of hospital-acquired acute kidney injury (AKI) following the administration of contrast media for coronary interventions or procedures such as diagnostic coronary angiography. The optimal way of preventing CIN remains uncertain. However, preliminary intravenous hydration, minimizing the volume of contrast media, and avoiding the use of nephrotoxic drugs are recommended in current management guidelines. The aim of this analysis was to compare the RenalGuard® system with standard care.

Methods. A comprehensive literature search was conducted in PubMed and Google Scholar to identify evidence on the clinical and economic effectiveness of forced diuresis with matched hydration using the RenalGuard system for preventing CIN. Multiple criteria decision analysis (MCDA) was used to assess the performance of the method in hospital settings, compared with alternative options.

Results. Several systematic reviews with meta-analyses demonstrated that forced diuresis with matched hydration using the RenalGuard system was associated with a significantly lower relative risk of CIN among high-risk patients with chronic kidney disease. However, the evidence supporting the advantage of the proposed method over current forced diuresis techniques with manual calculation of the volumes for matched hydration in the hospital setting was limited.

Conclusions. Although the effectiveness of the RenalGuard system has been demonstrated in meta-analyses, its clinical advantage over forced diuresis with manual hydration calculation is uncertain. It is also worth noting the lack of evidence to date on this technology, the fact that it is still at the research stage in some countries, and that it is not included in CIN management guidelines.

PP165 Bridging The Gap Of Health Services During The COVID-19 Pandemic Through Telemedicine

Pedro Galvan (ibiomedica@iics.una.py), Ronald Rivas, Luciano Recalde, José Ortellado, Carlos Arbo, Juan Portillo, Juan Mazzoleni and Enrique Hilario

Introduction. Health care for patients with chronic pathologies was scarce and limited worldwide during the COVID-19

https://doi.org/10.1017/S0266462321001227 Published online by Cambridge University Press