

Results. A total of 27 studies with 5,701 lung nodules were considered. The pooled sensitivity, specificity, positive likelihood ratio, negative likelihood ratio, diagnostic odds ratio and the area under the curve of SROC for AI-assisted diagnosis technology for lung nodules classification respectively were 0.892 (95% confidence interval [CI]: 0.854–0.920), 0.876 (95% CI: 0.833–0.909), 7.190 (95% CI: 5.194–9.955), 0.124 (95% CI: 0.089–0.171), 58.102 (95% CI: 32.391–104.219) and 0.95 (95%CI: 0.92–0.96).

Conclusions. Of note, several limitations should be considered when interpreting the findings of this meta-analysis. Data acquisition is not comprehensive enough because the language of the literature search was limited to Chinese and English. Furthermore, heterogeneity caused due to the difference of lung nodule size affected the study results. Despite these limitations, our study suggests that AI-assisted diagnosis technology for benign-malignant lung nodule classification on CT images obtains high diagnostic accuracy, and it can be used as a novel method to differentiate benign and malignant pulmonary nodules.

OP608 The Diagnostic Accuracy Of Quantitative Flow Ratio In Myocardial Ischemia Of Coronary Artery Disease: A Meta-Analysis

Guo Huang and Di Xue (xuedi@shmu.edu.cn)

Introduction. Quantitative flow ratio (QFR) is a novel approach to derive fractional flow reserve (FFR) from coronary angiography. QFR based on 3-dimensional reconstruction of angiographic images assesses the significance of coronary artery disease (CAD) without using an invasive pressure wire. This study aimed to evaluate the diagnostic accuracy of quantitative flow ratio in myocardial ischemia of coronary artery disease.

Methods. A meta-analysis was conducted of published research articles on diagnostic accuracy of QFR between January 2016 and September 2019 in the databases of PubMed, EMBASE, Cochrane Library, China National Knowledge Infrastructure, Wanfang Data Knowledge Service Platform and China Bio-medicine Database. Statistical analysis was performed with software Meta-Disc 1.4 and Stata 12.0, and the summary receiver operating characteristic (SROC) curve was drawn to evaluate accuracy of the method.

Results. A total of 11 articles were retrieved, including 1,782 patients and 2,054 vessels. The pooled sensitivity, specificity, positive likelihood ratio, negative likelihood ratio and diagnostic odds ratio for quantitative flow ratio respectively, were 0.86 (95% confidence interval [CI]: 0.85–0.89), 0.89 (95%CI: 0.87–0.91), 7.51 (95%CI: 6.40–8.82), 0.15 (95%CI: 0.10–0.23), 54.18 (95%CI: 34.09–86.12), and the pooled AUC was 0.9458.

Conclusions. Several limitations should be considered when interpreting the findings of this meta-analysis. First, despite the extensive literature search, the number of included studies was small; however, the number of patients and vessels enrolled was satisfactory, thereby decreasing type II error. Furthermore, data acquisition is not comprehensive enough because the language of the literature search was limited to Chinese and

English. Despite these limitations, our study suggests with a definition of ischemia as $FFR \leq 0.8$, the QFR obtains high diagnostic efficacy in myocardial ischemia of CAD. It can be used as a non-invasive novel method to screen CAD patients with myocardial ischemia.

OP611 Breast Cancer Classification In Histopathological Images Using Artificial Intelligence Assisted Diagnosis Technology: A Meta-Analysis

Guo Huang and Di Xue (xuedi@shmu.edu.cn)

Introduction. Artificial Intelligence (AI) is an important product of the rapid development of computer technology today. It has a far-reaching impact on the development of medical diagnostic technology especially in combination with medical imaging. The aim of this study was to analyze the diagnostic accuracy of AI-assisted diagnosis technology for classification of breast cancer in histopathological images.

Methods. A meta-analysis was conducted of published research articles on diagnostic accuracy of AI-assisted diagnosis technology for breast cancer classification between January 2010 and September 2019 in the databases of PubMed, EMBASE, Cochrane Library, China National Knowledge Infrastructure, Wanfang Data Knowledge Service Platform and China Bio-medicine Database. Statistical analysis was performed with software Meta-Disc 1.4 and Stata 12.0, and the summary receiver operating characteristic (SROC) curve was drawn to evaluate accuracy of the method.

Results. A total of 18 studies with 13,573 breast histopathological images were considered for the analysis. The pooled sensitivity, specificity, diagnostic odds ratio and the area under the curve of the SROC for AI-assisted diagnosis technology for classification of breast cancer respectively, were 0.94 (95% confidence interval [CI]: 0.93–0.85), 0.84 (95% CI: 0.93–0.94), 255.47 (95% CI: 168.33–387.73) and 0.98 (95%CI: 0.96–0.99).

Conclusions. Several limitations should be considered when interpreting the findings of this meta-analysis. First, despite the extensive literature search, the number of included studies was small; however, the number of images enrolled was satisfactory, thereby decreasing type II error. Second, data acquisition is not comprehensive enough because the language of literature search was limited to Chinese and English. Furthermore, the heterogeneity caused due to different sources of data affected the study results. Despite these limitations, our study suggests AI-assisted diagnosis technology for breast cancer classification in histopathological images is a highly accurate and reliable diagnostic method for clinical application.

OP615 Implementing EUnetHTA Products: The Implementation Experiences In Italy

Alessandra Lo Scalzo (loscalzo@agenas.it), Antonio Migliore, Simona Paone and Nicola Vicari

Introduction. The Italian National Agency for Regional Health Services (AGENAS) participation in the European network (EUnetHTA) allowed capacity building and the spread of knowledge, tools and methodologies built by the network. In the latest Joint Action, AGENAS is implementing both EUnetHTA tools/methodologies and assessments. This was done both by the “adaptation” of most relevant EUnetHTA assessments to Italian context or by “translation” of EUnetHTA assessments’ Summaries. Language barriers have been highlighted from local HTA partners who acknowledged that contents written in Italian could have a higher potential for dissemination.

Methods. To adapt a EUnetHTA report we evaluate if the PICOD fits our context with clinicians and stakeholders. We thus update systematic review and/or add other context specific domains. The EUnetHTA report summaries were translated into Italian and reviewed by clinicians. The HTA Core Model® was incorporated into national processes (Procedure Manual, HTA report templates, assessment elements, the Planned and On going Projects (POP) database was also used.

Results. Implementation of EUnetHTA’s tools and products consisted of i) Production of national assessment reports based on EUnetHTA assessments; ii) Dissemination of EUnetHTA assessment iii) Translation of EUnetHTA assessments summaries and publication on Agenas website iv) Use of EUnetHTA POP Database for the national HTA programme; v) Embedment Integration of the EUnetHTA HTA Core Model®

Conclusions. The use of the Core Model® allowed a better standardisation of AGENAS’ outputs. The Assessment Element based structure assists authors with the choices of relevant research questions; and the Domain-based structure allowed an efficient division of work among the authors. The use of the Core Model® among European partners facilitated the adaptation of other national HTA reports to our context. The adaptation and translation of EUnetHTA assessments provides more homogenous choices among Italian regions and European countries, and so does the use of the POP database as a source of information about technologies that are on other EU Countries agenda.

Poster Presentations

PP21 Use Of Real-World Evidence For Healthcare Decision Making: Infliximab Versus Etanercept And The Risk Of Tuberculosis

Paola Andrea Rivera-Ramirez (p_rivera_ramirez@hotmail.com) and Fabián Alejandro Fiestas-Saldarriaga

Introduction. In the absence of direct evidence from randomized controlled trials (RCTs), real-world evidence (RWE) can play an important role in healthcare decision making. As part of a health technology assessment, we assessed the comparative risk of

tuberculosis (TB) associated with using infliximab and etanercept in patients with rheumatoid arthritis.

Methods. We performed a systematic literature search using the PubMed database to identify relevant meta-analyses.

Results. We located two relevant meta-analyses: one based on RCTs and one based on observational studies. Evidence from seven RCTs on infliximab (2,686 patients; 12 TB events) and two RCTs on etanercept (663 patients; 2 TB events) suggested no significant differences in the risk of TB between the two treatments, compared with placebo. In contrast, evidence from ten observational studies that directly compared the two treatments (443,941 patients; 253 TB events) indicated a significantly higher risk of TB with infliximab than with etanercept.

Conclusions. Although RWE is prone to confounding and bias, in this case it had the advantage of providing direct comparisons with larger sample sizes and longer follow up than evidence from RCTs. As a result, RWE was used to inform decision making on the risk of TB with infliximab and etanercept in patients with rheumatoid arthritis.

PP138 Current Status Of Healthcare Decision Making And Future Perspective Of The Health Technology Assessment Implementation Roadmap In Turkey

Enver Kagan Atikeler (ecz.kagan@hotmail.com), Ahmad Nader Fasseeh, Bert Leufkens and Wim Goettsch

Introduction. Turkey’s health reforms, which started in 2003, have led to increased access to health care and pharmaceuticals as well as rising public pharmaceutical expenditures. The need to improve healthcare decision making by implementing health technology assessment (HTA) has become an important priority for Turkey. This study sought to provide a tailor-made HTA implementation roadmap, drawing on insights from national stakeholders. Our study aimed to describe the current HTA environment in Turkey and to explore long-term perspectives and suggestions from a wide spectrum of Turkish stakeholders regarding the preferred status of HTA in ten years (by 2029).

Methods. We conducted an online survey using a questionnaire previously applied in other HTA research. We assessed the current evaluation of medical and economic decision-making processes and examined the need for HTA. We also ascertained stakeholder perspectives on potential developments that can be done together with policymakers, representatives of pharmaceutical companies, and patient organizations. We also included general information about the pharmaceutical market and decision making processes in Turkey.

Results. The survey was sent to various stakeholders from different areas within the health system. Additional face-to-face interviews were conducted with a few respondents to clarify some of their answers. A total of twenty-seven Turkish stakeholders completed the survey. Of these, twenty-one (78%) participants were employed in the public sector and six (22%) were from the private sector. The majority of the participants would introduce HTA for