clinically relevant outcomes of overall survival and QoL. Furthermore, currently available evidence has failed to prove that PFS reliably predicts outcomes that are clinically relevant. Despite this, osimertinib has been given marketing authorization and is widely recommended in clinical guidelines.

PP255 Epigenetic Profile Predicts Response To Immunotherapy In Patients With Non-Small-Cell Lung Cancer: An Early Assessment

Ana Isabel Hijas-Gómez (ahijas@isciii.es), Mª Mar Polo-de-Santos, Setefilla Luengo-Matos, Montserrat Carmona-Rodríguez and Luís María Sánchez-Gómez

Introduction. Epigenetics is an innovative discipline that aims to provide biomarkers to aid in early diagnosis, patient risk classification, or outcome prediction. The identification of therapeutic targets is of particular interest in cancer therapy for selecting groups of patients who may benefit most from an intervention. Understanding the relationships between the immune system and tumor cells has led to new immunotherapy-based therapies that provide a promising alternative to conventional cancer therapies. The aim of this study was to conduct an early assessment of a novel epigenetic signature (EPIMMUNE) that could predict response to programmed cell death protein 1 (PD-1) inhibitor immunotherapy in patients with non-small cell lung cancer (NSCLC).

Methods. We identified the novel epigenetic signature EPIMMUNE through the Early Awareness and Alert System, "SINTESIS-new technologies" of the Agencia de Evaluación de Tecnologías Sanitarias in Spain (AETS-ISCIII). A literature search of PubMed, Embase, the Web of Science, the Trip database, the International Clinical Trials Registry Platform, ClinicalTrials.gov, The Cochrane Library, and the Centre for Reviews and Dissemination databases was conducted. Clinical studies on EPIMMUNE published in English or Spanish up to August 2019 were reviewed.

Results. Only one retrospective study was found. Identification of EPIMMUNE was accomplished through interrogation of the DNA methylation status of CpG sites in 142 samples from adult patients with NSCLC who were treated with PD-1 inhibitors. EPIMMUNE was defined by 301 CpG sites whose methylation status was significantly associated with clinical response (progression-free and overall survival). No studies assessing the long-term clinical utility, impact on therapeutic decision making, or economic implications of EPIMMUNE were found.

Conclusions. The EPIMMUNE signature could provide an accurate and valid biomarker for identifying patients with NSCLC who may benefit from treatment with PD-1 inhibitors. However, the technology is under development, and there is only a single study on detecting the EPIMMUNE epigenetic profile and identifying the DNA methylation profiles associated with increased survival after PD-1 inhibitor therapy. More diagnostic accuracy studies and prospective, long-term trials are needed to evaluate the clinical impact this technology may have on

therapeutic decision making. Given the limited evidence available, further research is needed before the technology can be disseminated.

PP256 Cost-Utility Analysis of Robot-Assisted Partial Nephrectomy Versus Open Or Laparoscopic Radical Nephrectomy In Korean Patients With Renal Cancer

Jeonghoon Ahn (ahnjeonghoon@g.ewha.ac.kr), Yejee Kang, Juyeon Lee, Seowoo Bae, Minkyung Shin and Ataru Igarashi

Introduction. Partial nephrectomy is recommended over radical nephrectomy for the surgical treatment of patients with stage cT1 renal cancer in multiple guidelines. The objective of this study is to examine the cost effectiveness of robot-assisted partial nephrectomy (RAPN), compared with open radical nephrectomy (ORN) or laparoscopic radical nephrectomy (LRN), for treating stage cT1 renal cancer in Korea.

Methods. A Markov model was applied in patients with cT1 renal cancer that consisted of the following six health states: post-surgery, normal, chronic kidney disease (CKD), dialysis, death from renal failure, and natural death. Utilities and transition probabilities were obtained from systematic literature reviews. Costs were obtained from the current Korean National Health Insurance fee schedule, the Korean medical literature, and 2016 Health Insurance Review and Assessment Service inpatient claims data. Univariate and probabilistic sensitivity analyses were performed to check for uncertainty.

Results. RAPN was the dominant treatment, costing KRW 2.1 to 3.6 million (USD 1,700 to 2,900) less than the comparators while providing 0.45 to 0.61 more utility. Univariate sensitivity analysis showed that the most sensitive parameter was the relative risk reduction of CKD after partial nephrectomy. The sensitivity analysis also showed that the acceptability of RAPN at a cost-effectiveness threshold of KRW 30.5 million was high relative to both comparators (85.9% against LRN and 78.9% against ORN).

Conclusions. Though there might be uncertainties in non-Korean utility data and some transition probabilities derived from Japanese data, the current study suggested that partial nephrectomy is a more cost-effective option than ORN or LRN in Korea for patients with stage cT1 renal cancer.

PP262 PapSEEK: Liquid Biopsy For Endometrial And Ovarian Cancer Screening

Ana Isabel Hijas-Gómez (ahijas@isciii.es), Mª Mar Polo-de-Santos, Setefilla Luengo-Matos and Luís María Sánchez-Gómez

Introduction. Endometrial and ovarian cancer are the first and second leading causes of death from gynecological cancer in