

between the hospital responsibilities perceived by physicians and their medical professionalism practices in Chinese public hospitals, and the moderating effects of variables such as sex, hospital level, working period, department, and reason for career choice on the correlation model.

Methods. A pre-developed, reliable, and valid scale for the physicians' psychological contract was developed. Survey data from 123 public hospitals in three provinces in the east, central, and west areas of China were analyzed. The authors constructed and tested the correlation mechanism model and then analyzed the effects of particular variables.

Results. The fulfillment of hospital ideological responsibility has a significant positive effect on physicians' medical professionalism practices, with occupational satisfaction mediating the effect. In addition, hospital transactional, developmental, and relational responsibility can improve physicians' medical professionalism practices through fairness perception and work pleasure. Hospital level, working period, department, and reason for career choice had a moderating effect on the correlation mechanism model, with the effects varying between different paths.

Conclusions. The fulfillment of hospital responsibilities can have a positive effect on physicians' practices of medical professionalism, especially in the domain of ideological responsibility where the largest and most direct impact was observed. Furthermore, the results suggested that hospital administrators need to consider the differences between various types of physicians in order to improve the effects of guidance and motivation in these health professionals.

PP194 Research On The Correlation Mechanism Between The Psychological Contract Of Physicians In Public Hospitals And Their Turnover Intention

Chao Lyu (19211020103@fudan.edu.cn)
and Ping Zhou

Introduction. Guiding and motivating doctors' attitudes and behaviors in the public welfare of public hospitals is the key to promoting medical reform. This study explored the correlation between the hospital responsibilities perceived by physicians and their turnover intention in Chinese public hospitals, as well as the moderating effects of variables such as sex, hospital level, working period, department, and reason for career choice on the correlation models.

Methods. A pre-developed, reliable, and valid scale for the physicians' psychological contract was developed. Survey data from 123 public hospitals in three provinces in the east, central, and west areas of China were analyzed. The authors constructed and tested the correlation mechanism model and then analyzed the effects of particular variables.

Results. The fulfillment of hospital transactional and developmental responsibility had a significant negative effect on the intent of physicians to leave the hospital and front-line clinical practice, respectively. Working pleasure, fairness perception, and occupational satisfaction were mediator variables in the impact.

In addition, hospital level, working period, department, and reason for career choice had a moderating effect on the correlation mechanism model, with the effects varying between different paths.

Conclusions. The fulfillment of hospital transactional responsibility had a more negative effect on the intent of physicians to leave the hospital than other responsibilities, whereas fulfillment of hospital developmental responsibility had a more negative impact on the intent of physicians to leave front-line clinical practice. Furthermore, the results suggested that hospital administrators need to consider the differences between various types of physicians in order to improve the effects of guidance and motivation in these health professionals.

PP229 Surrogate Outcomes In Health Technology Assessments Of Oncology Drugs: The Osimertinib Case

Milton Rodriguez-Zuniga (milton_rz@hotmail.com),
Paola Rivera-Ramirez and Fabian Fiestas-Saldarriaga

Introduction. Decision making in publicly funded healthcare systems must rely on patient-relevant outcomes that directly measure clinical benefit, such as overall survival and quality of life (QoL). However, studies that support market authorization of oncology drugs usually assess surrogate outcomes, without having previously demonstrated that these intermediate outcomes reliably predict clinical outcomes. As part of an HTA process, we evaluated the clinical benefit of osimertinib, compared with platinum-pemetrexed combination chemotherapy, in patients with epidermal growth factor receptor (EGFR) T790M mutation-positive advanced non-small cell lung cancer (NSCLC) that has progressed after first-line EGFR tyrosine kinase inhibitor (TKI) therapy.

Methods. We conducted a systematic search of the PubMed database for randomized controlled trials (RCT) published from inception to January 2019. The clinical outcomes of interest were overall survival and QoL. Where trials reported surrogate outcomes, we conducted additional PubMed searches for evidence of validity for predicting clinical outcomes and used guidance on surrogate outcome validation in oncology from the Institute for Quality and Efficiency in Health Care.

Results. Evidence on osimertinib, compared with chemotherapy, for patients with T790M-positive advanced NSCLC that has progressed after EGFR-TKI therapy was obtained from the AURA3 trial. In this study, overall survival data were immature and the results for QoL and symptom domains were not clinically meaningful. In addition, median progression-free survival (PFS) was six months longer for osimertinib than for chemotherapy. However, to date, no study has demonstrated that PFS reliably predicts longer survival or better QoL.

Conclusions. Our HTA suggested that, unless proven, PFS should not be used as a valid surrogate outcome for decision making in public health. For example, the results of the AURA3 trial showed that osimertinib has an effect on the surrogate outcome of PFS in patients with EGFR T790M-positive advanced NSCLC that has progressed after first-line EGFR-TKI therapy, but not on the

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), M^a
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), M^a
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