

Spain. Survival is generally determined by stage at diagnosis, but there is no test currently used for early detection of both tumor types. PapSEEK is a test developed to diagnose endometrial and ovarian cancer by detecting aneuploidies and somatic mutations commonly associated with both tumor types through DNA next-generation sequencing (NGS) of liquid from Papanicolaou test (Pap smear) samples. The objective of this work was to assess the effectiveness and safety of PapSEEK.

**Methods.** PapSEEK was identified by the Early Awareness and Alert System, “SINTESIS-new technologies”, of the Agencia de Evaluación de Tecnologías Sanitarias in Spain (AETS-ISCIH). An early assessment of the technology was conducted through a literature search of the following databases: PubMed, Embase, the Web of Science, the Trip database, the International Clinical Trials Registry Platform, ClinicalTrials.gov, and The Cochrane Library. Clinical studies on the effectiveness and safety of PapSEEK published up to February 2019 were reviewed.

**Results.** The evidence comprised proof of concept and diagnostic accuracy studies, which showed good preliminary results regarding the accuracy of the test for diagnosing endometrial cancer (sensitivity ranged from 0.81 to 0.93), but not for ovarian cancer (sensitivity ranged from 0.33 to 0.45). The specificity for both tumor types ranged from 0.99 to 1.00. Since PapSEEK uses a sampling method that is routinely used in clinical practice (the Pap smear), no evidence was found in the literature on the safety of the test.

**Conclusions.** PapSEEK is a novel technology developed to diagnose endometrial and ovarian cancer by means of DNA-NGS of Pap smear samples. The identified studies showed good preliminary results regarding the ability of the test to diagnose endometrial cancer, but not ovarian cancer. PapSEEK may be useful as a screening tool for endometrial cancer. However, further research on PapSEEK is needed to prospectively evaluate its diagnostic accuracy, compare it with current tests used in the early diagnosis of both cancer types, evaluate its effect on patient survival and disease progression, and measure its economic impact.

## PP264 Effectiveness And Safety Of Pressurized Intraperitoneal Aerosol Chemotherapy For Peritoneal Carcinomatosis: A Systematic Review

Ana Isabel Hijas-Gómez ([ahijas@isciii.es](mailto:ahijas@isciii.es)),  
Nadia Lingán-Cubas, M<sup>a</sup> Mar Polo-de-Santos,  
Esther García-Carpintero, Setefilla Luengo-Matos  
and Luis María Sánchez-Gómez

**Introduction.** Pressurized intraperitoneal aerosol chemotherapy (PIPAC) is a minimally invasive therapeutic option for stage IV or terminal stage peritoneal carcinomatosis, which has a very low survival rate. PIPAC is aimed at patients whose only therapeutic alternative is systemic chemotherapy because they are unable to undergo other treatments, such as cytoreductive surgery with hyperthermic intraperitoneal chemotherapy. PIPAC consists of a micro-pump connected to a double-contrast injector, which is used to apply cytotoxic agents laparoscopically using pressurized aerosols. The objective of this study was to update the evidence regarding the effectiveness and safety of PIPAC.

**Methods.** A systematic review (SR) was conducted by searching PubMed, Embase, and The Cochrane Library database. ClinicalTrials.gov and the European Union Drug Regulating Authorities Clinical Trials Database were consulted to identify registered clinical studies. All articles published up to April 2019 were considered for inclusion. Abstracts, letters, single case studies, non-clinical and animal studies, and studies published in languages other than English or Spanish were excluded. Validated checklists were used to assess the quality of the included studies.

**Results.** Seventeen studies were included (three SRs and fourteen cases series) and eighteen ongoing clinical trials were identified. The quality of the SRs and cases series studies was low and moderate, respectively. Adverse events were categorized according to the National Cancer Institute Common Terminology Criteria for Adverse Events as grade 1–2 (mild-moderate: 11% to 40% of patients) and grade 3–4 (severe-fatal: 0% to 37% of patients). Overall complete histological regression according to the Peritoneal Regression Grading Score and the Peritoneal Cancer Index occurred in at least sixty percent of patients. The survival time ranged from 11 to 16 months.

**Conclusions.** Effectiveness data for PIPAC were promising, with high carcinomatosis regression rates. Most studies showed a moderate safety profile, with generally mild to moderate complications (nausea, abdominal pain, and vomiting). This is an advantage over systemic chemotherapy, which has severe systemic side effects. Economic evaluation studies are needed to estimate the cost effectiveness and cost utility of this technology. Diffusion of PIPAC is expected, but the criteria used to select patients in the studies carried out so far must be considered, as well as the need to follow strict safety protocols for preventing leakage of aerosolized cytotoxic drugs.

## PP265 Application Of A Case-Mix Method For Medical Consumables Management In Anhui Province, China Using Healthcare Big Data

Lin Tong ([tolly10000@163.com](mailto:tolly10000@163.com)), Qing-hua Xu,  
Hong Ye, Shuang Zhang and Chen Cao

**Introduction.** The case-mix method involves combining cases with similar complexities and medical services. The process of treating one episode of the disease and receiving treatment is the research unit, thus achieving different medical units. The feasibility of the calculation method is verified by calculating the public hospital consumption ratio, medical income, health materials expenditure indicators, and the differences between the various types of surgical combinations. A decision-making basis can then be provided for the creation of government indicator standards.

**Methods.** Medical records and data on the expenditure of medical consumables for the first and fourth quarters of 2017 were collected from seven third-class provincial hospitals. The medical consumption ratio for different diseases and surgical methods was calculated for the case-mix groups using a weighting method.

Data were analyzed by descriptive statistics and the independent samples t-test.

**Results.** There were significant differences in the proportions of combined use for different types of diseases. The same combination also had significant differences between different hospitals. In the fourth quarter of 2017, the operating group's consumption ratio was significantly lower than in the first quarter ( $p = 0.000$ ).

**Conclusions.** It is reasonable to calculate the proportion of consumption by combined weighted analysis, which is also fairer for hospitals with better technical levels. This calculation method can be used by governments to manage the use and cost of medical consumables in hospitals.

## PP268 Eliciting Meaningful Patient Preferences In Rare Diseases – Swing Weighting With Immunoglobulin A Nephropathy Patients In The United States And China

Kevin Marsh, Nancy Zaour, Kerrie-Anne Ho ([kerrie-anne.ho@evidera.com](mailto:kerrie-anne.ho@evidera.com)), Ankit Joshi, Rachel Lo, Aneesh Thomas George and Nigel S. Cook

**Introduction.** Reimbursement agencies are increasingly using patient preference data to evaluate health technologies. Discrete choice experiments (DCE) are commonly used to elicit patient preferences, but they require large sample sizes to obtain meaningful results. For this reason, it is often not possible to use DCE to elicit patient preferences in rare diseases. This study assessed a swing weighting method for eliciting preferences from a small sample: patients with immunoglobulin A nephropathy (IgAN) in the United States (US) and China.

**Methods.** Attributes and levels were selected based on a review of clinical studies and qualitative research on patients. Computer-assisted, interview-based swing weighting exercises were piloted in a focus group with five participants each from the US and China. Preferences were then elicited in interviews with twenty-five patients in the US and fifteen patients in China. Consistency tests were used to assess internal validity. Qualitative data were collected on the reasons for patients' preferences.

**Results.** *Preference consistency:* The weights for one attribute were elicited twice. The difference between initial and consistency test weights was not statistically significant ( $p < 0.1$ ), although this may partly reflect the small sample sizes. *Trade-offs:* Qualitative data were used to demonstrate the validity of interpreting participants' ratings as trade-offs. Using the partial value function for end-stage renal disease as an example, qualitative data demonstrated that patients were able to provide face-valid reasons for different shaped, non-linear preference functions. *Robustness of treatment evaluation:* Three hypothetical treatment profiles (using the attribute swings) were constructed. Preferences for these treatment profiles were robust to variations in patients' preferences; all patients preferred one specific profile. This finding was not sensitive to changes in weights.

**Conclusions.** This study supports the feasibility of collecting valid and robust preference data from small groups of patients using swing weighting. Further work could be done to test the performance of swing weighting in larger sample sizes.

## PP277 Analysis Of The Current Situation Of Using Hospital-Based Health Technology Assessment In Kazakhstan

Andrey Avdeyev ([avdeyev.andrey@yahoo.com](mailto:avdeyev.andrey@yahoo.com)), Aigul Kaptagayeva, Valeriy Benberin, Nasrulla Shanazarov, Larissa Makalkina and David Hailey

**Introduction.** Hospital-based health technology assessment (HB-HTA) in Kazakhstan is currently at the initial stage of development. The Medical Center Hospital of the President's Affairs Administration, Nur-Sultan is one of the first examples of implementing and using an HB-HTA system in practice, having included in its structure an HB-HTA unit in 2015.

**Methods.** In order to evaluate the current situation of using the principles of HB-HTA in Kazakhstan hospitals, a special questionnaire was developed. The questionnaire was sent in the form of an official request on behalf of the Ministry of Health Care. An official response was received from twenty-nine hospitals, of which nine were at the federal level, thirteen at the regional level, and seven at the city level.

**Results.** Of the twenty-nine hospitals that participated in the survey, only half (52%) indicated that they were aware of the principles of using the HB-HTA system and of the structure and functions of mini-health technology assessment reports (55%). Nonetheless, most hospitals (90%) noted that the results of HB-HTA may affect the final decision on implementing new technologies in practice, and that using the systematic approach of technology assessment is necessary.

**Conclusions.** In assessing the clinical and economic effectiveness of new health technologies in hospitals, and the viability of implementing them, there is a lack of standardized processes in managerial decision making. The assessment of clinical effectiveness and safety when implementing technologies is carried out mainly by technology applicants or by the main specialists who are responsible for the profile of evaluating technology. This can be regarded as a conflict of interest, since the applicant's wish to introduce the new technology may bias the evaluation process.

## PP284 Volume-Result Relationship Analysis In Digestive Oncological Surgery In Spain By Using Health Data Records

Laura Muñoz, Elisa Puigdomènech, Xavier Garcia Cuscó ([xavier.garciacusco@gencat.cat](mailto:xavier.garciacusco@gencat.cat)), César Velasco and Mireia Espallargues