Material and methods We built a cost-effectiveness model based on meta-analyses (direct or indirect) conducted between 2015 and 2021. We gathered all the effectiveness information (American College of Rheumatology (ACR)) through a PICO-S strategy including infliximab, etanercept, certolizumab, tocilizumab, golimumab, tofacitinib and upadacitinib. Two reviewers evaluated the inclusion of the studies and assessed their quality using the PRISMA-NMA Checklist. Efficiency score was cost per number needed to treat (NNT) versus placebo (PLC). The model was designed from a hospital perspective (only direct costs) and with a 1-year horizon. Cost data (€ 2021) were obtained from Spanish datasets and literature review. Using all this information, a cost-effectiveness analysis between ADA and the suitable alternatives was performed. A probabilistic sensitivity analysis (PSA) was performed.

Results Two meta-analyses met the inclusion criteria and fulfilled on average 70.6% of the 32 points on the PRISMA-NMA Checklist of items. Tarp *et al* (2017) showed no statistically significant difference in NNT between infliximab, ADA, etanercept, certolizumab, tocilizumab and golimumab for ACR-50. Song *et al* (2019) showed no significant difference in NNT between ADA, tofacitinib and upadacitinib for ACR-20.

Total annual cost was € 4529 ADA versus € 4650–€ 10 001 for the other treatments. As no effectiveness difference was seen, a cost minimisation analysis was performed. Hence ADA was the most cost-effective treatment. In the PSA, only ADA and infliximab performed as the best alternative, with ADA showing the highest probability of being cost-effective.

Conclusion and relevance According to our model, ADA was the most cost-effective option for RA treatment in Spain.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest Corporate sponsored research or other substantive relationships: Axentiva Solutions recieved fees from Fresenius Kabi España, S.A.U.

4CPS-084 MANAGING BREAST CANCER TREATMENT PATHWAYS IN THE COVID-19 ERA

P Cornes*, U Gudat. *Comparative Outcomes Group, Clinical Pathways Research Project, Bristol, UK*

10.1136/ejhpharm-2022-eahp.118

Background and importance Over the last 2 years the COVID-19 pandemic (C-19) has severely impacted the diagnosis and treatment of patients suffering from cancer. Considering breast cancer (BC) as a case study; fewer women than expected have been diagnosed, predicting a backlog of cases that could overwhelm the current infrastructure. In addition, measures directed at reducing viral spread such as social distancing or increased sanitary practices limit current resource utilisation.

Targeted measures are advised to offset these constraints to assure that affected women are effectively cared for in a timely manner, despite health care budgets that have been severely impacted by the pandemic, for example, by managing treatment toxicity to limit emergency hospital attendance or admissions.

Aim and objectives To identify evidence of possible interventions that could favourably impact (1) treatment capacity, (2) planned and unplanned attendance at hospitals and clinics and (3) the overall costs of treatment.

Material and methods The key steps in the patient journey through BC systemic adjuvant therapy were identified. At each step a systematic and structured literature search using PubMed, Clinical Trials Registries and Google Advanced Search was conducted to identify candidate interventions, the level of evidence, quantifiable risks and benefits and statistical significance.

Results Safer care during C-19 requires increased separation of patients and staff, impacting treatment capacity. A broad range of possible effective interventions were identified including validated patient preassessment tools, shortened treatment schedules, rapid infusion delivery, dose-banding, enhanced toxicity monitoring and prevention, the subcutaneous and co-administration of therapeutics, home delivery of treatments and wider use of cost-effective treatment options created by generic and biosimilar products. Each step is identified on the patient pathway map of the poster.

Conclusion and relevance Hospital pharmacists have a catalogue of targeted, evidence-based measures at their disposal to assure that women with breast cancer can be effectively cared for in a timely manner despite the impact of C-19 and resulting challenges in treatment capacity and health care budgets.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest Corporate sponsored research or other substantive relationships: This work received no external funding. Dr Cornes discloses recent past funding or meeting sponsorship from Accord Healthcare, DuoPharma, European Commission, Medicines for Europe, Mylan/Viatris, Pfizer, Sandoz.

4CPS-086 INHALED SEDATION WITH HALOGENATED AGENTS IN THE INTENSIVE CARE UNIT: A LITERATURE MINI-REVIEW

[1]JM Del Río Gutiérrez*, [1]L Domenech Moral, [1]HC Garcia Diaz, [1]P Sanchez Sancho, [1]P Lalueza Broto, [2]RS Contreras Medina, [1]A Gracia Moya, [1]AG Arevalo Bernabe, [1]A Puertas Sanjuan, [1]J Santander Revoreda, [1]JC Juarez Gimenez. *[1]Vall d'Hebron Hospital, Pharmacy, Barcelona, Spain; [2]Vall d'Hebron Hospital, Intensive Care Unit, Barcelona, Spain*

10.1136/ejhpharm-2022-eahp.119

Background and importance Sedatives are administered to reduce anxiety and stress in mechanically ventilated, critically ill patients. Midazolam and propofol are the sedatives of choice, but their behaviour is difficult to predict in this type of patient. Inhaled sedation with halogenated agents has emerged as an alternative because of their speed of action and elimination.

Aim and objectives To review the available evidence on the use of sedative inhaled gases in the intensive care unit (ICU).

Material and methods A literature search was conducted through the medical databases PubMed and Google Academics using the terms 'Inhaled sedation' and 'Critical care'. Articles comparing inhaled sedation directly with conventional sedation, or describing pioneering uses of inhalation sedation, were selected. Another search with the same keywords was performed using TripDataBase and UpToDate to locate meta-analyses and clinical practice guidelines.

Results 236 articles were located and 25 were selected. No randomised clinical trials were found. Four meta-analyses were located.

Inhaled sedation is described to be effective to achieve deep sedation and to reduce sedation and extubation time; it also favours a decrease in troponin levels. Its use is also relevant in patients who do not achieve adequate sedation with conventional sedation. The gases used were isoflurane and sevoflurane.

There are clinical practice guidelines developed by different societies: American Society of Anesthesiologists, National Institute for Health and Care Excellence, Spanish Society of Intensive Care Medicine and The American Society of Intensive Care Medicine. They consider inhaled sedation as an alternative in patients with bronchospasm and in patients who are difficult to sedate.

Conclusion and relevance It can be concluded that the use of inhaled gases reduces the extubation and awakening time in critically ill patients. A reduction in troponin concentration is observed. However, these are not 'hard' variables that demonstrate an important clinical impact.

Their use may be of interest in patients with bronchospasm or in those who do not achieve an adequate sedation with conventional high-dose sedatives.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest

4CPS-087 THE USE OF PATIENT-REPORTED OUTCOME INSTRUMENTS IN IMMUNE CHECKPOINT INHIBITOR THERAPY FOR CANCER IN CLINICAL PRACTICE: A SYSTEMATIC REVIEW

M Espinosa-Bosch*, B Mora-Rodriguez, R Tamayo-Bermejo, I Muñoz-Castillo. *Hospital Regional Universitario de Málaga, Unidad de Gestión de Clínica de Farmacia, Malaga, Spain*

10.1136/ejhpharm-2022-eahp.120

Background and importance Immune checkpoint inhibitors (ICI) have shown significant clinical benefit for patients diagnosed with varied types of cancer. With an increasing use of these therapies, it is of urgent interest to achieve a comprehensive understanding of the overall patient experience and to confirm if the results of patient reported outcome (PROs) in clinical ICI trials are reflected in clinical practice.

Aim and objectives We conducted a systematic review of the published literature to identify and categorise PRO instruments and examine related utility and measurement issues in studies reporting on ICI.

Material and methods Literature was searched using PubMed and Embase (October 2021). Search terms included controlled vocabulary and specific keywords related to: (1) ICI, (2) PRO and (3) Oncology. Two reviewers independently screened titles/abstracts followed by a full-text selection based on predefined criteria. We included qualitative and quantitative studies in clinical practice.

Results We screened 235 references and included 14 publications in our analysis: 6 reported PRO data from cross-sectional survey, 4 were prospective observational studies, 2 were case-control studies, 1 was a randomised controlled pilot trial and 1 as a qualitative study. 10 were single-centre and 4 were multicentre studies. The median number of patients included was 67 (range 6–412), 7 focused on melanoma patients, 2 on lung cancer, 1 on genitourinary cancer and 4 included various diagnostics. Regarding treatment, 7 studies were carried out in patients undergoing treatment and 7 in long-term survivors. The most frequent questionnaires used were cancer-specific (6 EORTC-QLQ-C30, 2 FACT-G), although the variability between the studies was very important, with 16 different scales identified, of which 9 were evaluated in a single study.

Conclusion and relevance Cancer-specific or generic quality-of-life (QoL) questionnaires are the most widely used PRO measures in clinical practice ICI studies. As ICI therapies exhibit unique characteristics different from conventional cancer therapies, such broad instruments may not capture the specific ICI-related symptoms, toxicities, and impact on the patient's QoL. Hence, the adaptation or development of ICI-specific PRO tools should be further investigated.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest

4CPS-088 INDIRECT COMPARISON OF NIVOLUMAB, PEMBROLIZUMAB AND CAMRELIZUMAB IN PATIENTS WITH UNRESECTABLE AND/OR ADVANCED SQUAMOUS CELL CARCINOMA OF THE OESOPHAGUS IN A SECOND-LINE SETTING

[1]E Pérez Cano, [1]Y Jiménez López*, [2]MI Sierra Torres, [1]R Pérez Cano. *[1]Hospital Universitario de Jaén, Pharmacy, Jaén, Spain; [2]Hospital Universitario Reina Sofia, Pharmacy, Córdoba, Spain*

10.1136/ejhpharm-2022-eahp.121

Background and importance Established treatment for advanced, recurrent or unresectable oesophageal squamous cell cancer (ESCC) includes systemic therapy, definitive chemotherapy and/or palliative treatment depending on the stage of the cancer. These drugs increase the therapeutic options available.

Aim and objectives To determine if nivolumab, pembrolizumab and camrelizumab can be considered equivalent second-line therapeutic alternatives (ATE) by using a common comparator, for patients with unresectable and/or advanced ESCC.

Material and methods A bibliographic search was conducted to select phase III randomised clinical trials of second-line treatments for ESCC. Indirect comparisons were made by using the Bucher method using nivolumab as the reference drug and overall survival (OS) as the main variable. The maximum acceptable difference as a clinical non-inferiority standard Delta (Δ), and its inverse were set at 0.65 and 1.54, respectively. They were established by ESMO-Magnitude of Clinical Benefit Scale.

Results Three similar clinical trials were selected: ATTRACTION-3, KEYNOTE-181 and ESCORT, one for each drug evaluated.

Limitations found: chemotherapy used as comparator: ATRACCTION-3 nivolumab vs paclitaxel/docetaxel; KEYNOTE-181 pembrolizumab vs paclitaxel/docetaxel/irinotecan; ESCORT camrelizumab vs docetaxel/irinotecan.

KEYNOTE-181 study divides OS in patients with PDL-1 >10%, with ESCC and in all patients, with higher statistical significance ($p<0.008$) for the population with ESCC.

After applying the Bucher method, the following hazard ratio (HR) values (95% CI) were obtained for OS: nivolumab 0.77 (0.62 to 0.96), pembrolizumab 0.77 (0.63 to 0.96) and camrelizumab 0.71 (0.57 to 0.87).

The results of the comparison with nivolumab were adjusted pembrolizumab HR=1 (0.738–1.355) and adjusted camrelizumab HR=0.922 (0.694–1.225). The HR of OS for both drugs is within the limits of Δ and its 95% CI does not exceed the neutral value and the equivalence margin.