both phases is: 30.0% chemotherapy, 19.0% antiretroviral, 11.5% drugs for pulmonary hypertension, 9.5% biological, 9.0% other, 4.5% immunosuppressants, 3.5% anti-anemic, 3.0% anti-hepatitis C, 3.0% drugs for multiple sclerosis, 3.0% antibiotics, 2.0% drugs for idiopathic pulmonary fibrosis and 2.0% fertility drugs.

Conclusion and relevance There are drugs with a high budgetary impact that are commonly used in a limited number of patients. Suspensions of this type of treatment can leave a hospital with immobilised stock without possibility of use. The establishment of a network of exchanges to share resources between various centres can be a saving strategy with significant economic impact, as drugs that are not useful in one centre can be used in another.

REFERENCES AND/OR ACKNOWLEDGEMENTS

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2SPD-033 MAKING THE CASE FOR PRE-FILLED SYRINGES: DEVELOPMENT AND UTILISATION OF AN ECONOMIC MODEL

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Background and importance Parenteral medication is primarily delivered via conventional vial or ampoule and syringe in hospital settings; however, prefilled syringes (PFS) offer economic and clinical advantages, including reductions in preventable adverse drug events (pADEs), drug waste and supply costs, and increases in workflow efficiencies. The benefits of converting from vials and ampoules to PFS (denoted as 'V2P' hereafter) have been elucidated in previously developed economic models; however, these models are country-specific, therefore limiting generalisability of findings.

Aim and objectives To examine the potential impact of V2P, an economic model was developed to provide hospitals with a standardised tool for use across acute and emergency clinical settings.

Material and methods The Excel-based economic model estimates the potential benefit of V2P related to four key outcomes: pADEs, labour–time efficiency, unused drug, and cost of supplies. Built-in model defaults were derived from existing peer-reviewed literature sources, expert interviews, and national datasets. The model user can input specific information related to the hospital department and drug of interest. Users may also change built-in model defaults.

To investigate model utility, a hypothetical case study was conducted focusing on atropine administration in a UK cardiac intensive care unit (ICU) administering 35 doses/day of atropine. Literature-based inputs included drug costs of £0.82/ampoule dose and £5.03/PFS dose and vial drug waste levels at 85%. The built-in assumptions were 1.39 and 0.73 pADEs per 100 administrations for vials and PFS, respectively.

Results In the hypothetical case study, annual V2P cost savings associated with reductions in pADEs, unused drug, and costs of supplies were £64 126, £59 361 and £2667, respectively. While the annual cost of PFS was £53 783 greater than vials, the net budget savings of V2P was £72 372 per year. Additionally, preparation time decreased 893 hours per year. Full results will be presented.

Conclusion and relevance The model provides a generalisable framework with customisable inputs, allowing hospitals in any country to quantify the clinical and economic value of adopting PFS. In a hypothetical cardiac ICU switching from atropine ampoules to PFS, despite increased cost per dose with PFS, the analysis documented reductions in medication preparation time and a net budget savings owing to fewer pADEs and reduced drug wastage.

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2SPD-034 METHODOLOGICAL ANALYSIS OF PHARMACOECONOMIC STUDIES IN CAR-T: A SYSTEMATIC REVIEW

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Background and importance Chimeric antigen receptor T-cell therapies (CAR-T) are based on the ex vivo modification of T-lymphocytes for the expression of an antigen receptor that provides the specific union with tumour cells for their consequent destruction. CAR-T introduction into clinical practices presents challenges from a clinical and economic perspective. Traditional pharmacoeconomic studies may be limited in their ability to act as a valid decision-making tool in the access management of CAR-T and alternative methodological approaches may have to be considered.

Aim and objectives A literature review of CAR-T pharmacoeconomic studies has been carried out with the aim of reviewing the current literature on the economic evaluation of these drugs and to determine if traditional pharmacoeconomic studies represent a valid tool for decision-making in the access management of CAR-T.

Material and methods A systematic search was carried out in Scopus, Pubmed and Cochrane Library databases, using terms related to CAR-T and Pharmacoeconomics. We included published articles and accepted manuscripts written in English or Spanish up to 15 August 2021. For the quality evaluation of the identified studies, CHEERS and Drummon checklists were used.

Results 17 pharmacoeconomic studies were identified. The most studied CAR-T drug was tisagenlecleucel for diffuse large B-cell lymphoma in adults, with a median cost per quality-adjusted life year (QALY) of € 291 924.51. CAR-T therapies represent a clinically and potentially cost-effective therapeutic alternative. The quality of the identified studies was good according to the quality assessment scores.