OP279 Monitoring The Effectiveness Of Implementing And Using New Health Technologies In Hospital Practice

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Introduction. According to international experience in the field of hospital-based health technology assessment (HB-HTA), most of the implemented new health technologies must undergo a clinical and economic assessment (CEA) of their viability by creating a mini-health technology assessment report. However, HB-HTA should not be limited only to the initial CEA; further monitoring of the effectiveness of implemented new health technologies is necessary.

Methods. We developed a special reporting form for creating a CEA of implemented new health technologies and integrated it into the hospital information system. Indicators of clinical effectiveness are determined individually for each implemented technology. The main indicators of economic effectiveness are financial results (or net profit) and profitability—high-cost and high-tech health technologies have priority for monitoring.

Results. In order to ensure a more detailed and complete CEA of implemented health technologies, the following measures were proposed: (i) before implementing the technology, determine the key clinical effectiveness criteria for further monitoring for each implemented health technology; (ii) if possible, determine comparative technologies (alternatives or analogs) for conducting comparative CEA of the implemented health technologies; and (iii) carry out a prospective CEA of the implemented health technologies with a view to publishing the results.

Conclusions. The organization of a continuous monitoring process that analyzes the effectiveness and usage of new health technologies in hospital practice will allow assessment of the following: the clinical effectiveness and safety of the implemented technologies in comparison with world data; the economic effectiveness of the technology, including an accurate calculation of the payback period for investments; and the "real" data on the effectiveness of implemented health technologies in comparison with the initial request for implementation.

OP283 A Pipeline Analysis Of Advanced Therapy Medicinal Products (ATMPs) In Late-Stage Clinical Development

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Introduction. Advanced Therapy Medicinal Products (ATMPs) are innovative biologics (gene, cells and tissue-based products) with the potential to treat diseases with significant unmet clinical need. ATMPs pose distinct regulatory, health technology assessment (HTA) and patient access challenges, hence early identification and prioritization of ATMPs is now recognized as a key concern in England. The National Institute for Health Research Innovation Observatory (NIHRIO) uses a robust methodology to identify and monitor health technologies, including ATMPs that meet the remit of key HTA stakeholders in England. This analysis provides a global overview of the current ATMPs pipeline to administer useful insights for policymakers, funders and innovators.

Methods. NIHRIO's database tracks pharmaceuticals from phase I/II onwards, but this analysis focuses on late-stage development. The database (N > 12,000 records) was filtered to identify potential ATMPs using a predefined criteria based on the European Medicine's Agency's classification. Each record is categorized by stage: 'Active', (with an estimated three years to European licence); 'Monitoring' (in development with no licence date); and 'Finished', (output produced/discontinued and no longer tracked). Subsequently, records in 'Active' and 'Monitoring' were examined further.

Results. Analysis identified 636 ATMPs: five percent 'Active', 40 percent 'Monitoring' and 55 percent 'Finished'. ATMPs in the Active/Monitoring stages included: gene therapies (52%), somatic cells (43%) and tissue-engineered products (5%). Of these, 40 percent were oncological with the majority targeting hematological cancers (lymphomas). Prevalent non-oncology areas included musculoskeletal (10%) and ophthalmology (8%). Over one-third of trials were phase IIs, with almost half of all trials were based in the US.

Conclusions. The overarching findings here indicate increasing development of the ATMP pipeline towards indications with significant unmet clinical need. In oncology, the high prevalence of hematological ATMPs is largely due to recent chimeric antigen receptor T cells (CAR-T) innovation. In non-oncology areas, ATMP development is increasing due to advances in regenerative medicine. With a significant number of ATMPs projected to be licenced within three years, and many more in active late-stage trials, HTA bodies and health systems are challenged to prepare for the entry of these innovative therapies.

OP315 An Artificial Intelligence Approach To Improve Medical Diagnosis Of Ischemic Cardiopathy In Patients With Non-Traumatic Chest Pain

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Introduction. Current clinical practice is based on guidelines and local protocols that are informed by clinical evidence. This means that clinical variability is reduced, but can lead to inefficient clinical decision-making and can increase medical errors, decreasing patient's safety. The aim of the EXCON project is to investigate the innovative concept of Intelligent Clinical History (ICH), and to develop functional prototypes of high added-value in healthcare services.

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