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PP08 Prognostic Factors For Survival In Adults With Burkitt Lymphoma: A Systematic Review And Meta-Analysis

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Introduction: Burkitt lymphoma (BL) is a rare and highly aggressive subtype of non-Hodgkin's lymphoma. Several studies have identified prognostic factors (PFs) for disease progression and mortality among adults with BL. However, there is no consensus on risk stratification based on PFs. This study aims to identify, critically assess, and synthesize the available evidence on PFs for survival in adults with BL.
Methods: A systematic review of the literature was conducted. MEDLINE, Embase, and CENTRAL were searched from inception to 22 February 2022. Randomized or non-randomized clinical trials and longitudinal observational studies were eligible for inclusion. Reference screening, data extraction, and risk-of-bias assessment using the Quality in Prognosis Studies (QUIPS) tool for prognostic factor studies were conducted independently and in duplicate. Publication bias was examined by visual inspection of funnel plots. Effect measures and the corresponding 95% confidence intervals were pooled with an indirect variance estimation in meta-analyses using Review Manager 5, and sensitivity analyses were conducted. Certainty of evidence was assessed using GRADE.
Results: The search identified 1,119 references after duplicate removal. Of these, 76 potentially relevant papers were selected for full-text assessment and 36 studies (N=10,882) reported in 39 articles were eligible for inclusion. Older age, higher performance status, and central nervous system involvement were associated with poorer overall survival (OS) and progression-free survival (PFS). Black patients exhibited significantly lower OS and relative survival. Bone marrow involvement and higher albumin levels were associated with poorer OS. Treatment with rituximab and treatment with methotrexate were associated with better OS and PFS. No significant differences in survival were found for HIV status, sex, and risk stratification.
Conclusions: This study, framed within a collaboration with European Reference Network EuroBloodNet, provides a comprehensive and methodologically rigorous evidence review on PFs in adults with BL. Several significant associations of PFs and survival estimates were observed, providing data to inform treatment decisions and to improve patient care.

PP09 Fecal Immunochemical Tests For Patients With Symptoms Suggestive Of Colorectal Cancer: A Systematic Review And Multiple-Threshold Meta-Analysis

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Introduction: Extending fecal immunochemical tests for hemoglobin (FITs) to primary care patients with high-risk symptoms suggestive of colorectal cancer (CRC) could reduce colonoscopy waiting lists, enabling earlier treatment. Higher FIT thresholds could decrease referrals but increase missed disease compared with lower thresholds. We aimed to systematically review and synthesize test accuracy data across thresholds for use in a cost-effectiveness analysis.
Methods: Searches across ten sources were conducted (December 2022). Included were diagnostic accuracy studies of HM-JACKarc, OC-Sensor, FOB Gold, QuikRead go, NS-Prime, and four Immunodiagnostik (IDK) tests in patients presenting to, or referred from, primary care with symptoms suggestive of CRC using any reference standard. Risk of bias was assessed with QUADAS-2. Syntheses of sensitivity and specificity at all reported thresholds were planned for each test to provide summary estimates at all possible thresholds within the observed range. Sensitivity analyses investigating population type and reference standard, and subgroup analyses by patient characteristics (e.g., anemia, age, sex, ethnicity) were conducted.
Results: HM-JACKarc (n=16 studies) sensitivity ranged from 95.9 percent (95 percent credible interval [95% CrI]: 92.7, 97.9) to 46.3 percent (95% CrI: 37.4, 54.9) and specificity from 65.1 percent (95% CrI: 55.6, 74.8) to 97.7 percent (95% CrI: 94.7, 99.2) (thresholds 2 and 400 µg hemoglobin/g feces [µg/g], respectively). OC-Sensor (n=11) sensitivity ranged from 94.2 percent (95% CrI: 91.2, 96.7) to 54.2 percent (95% CrI: 48.4, 60.2) and specificity from 62.7 percent (95% CrI: 47.4, 77.2) to 97.3 percent (95% CrI: 92.9, 99.3) (thresholds 4 and 200 µg/g, respectively). FOB Gold (n=3) sensitivity ranged from 91.4 percent (95% CrI: 71.6, 99.6) to 73.9 percent (95% CrI: 53.8, 91.2) and specificity from 78.1 percent (95% CrI: 70.0, 86.0) to 96.4 percent (95% CrI: 92.6, 98.9) (thresholds 2 and 150 µg/g, respectively). There were limited or no data on the other tests.
Conclusions: Sensitivity and specificity were synthesized for three tests only, since data for the remaining tests were extremely limited or absent. Even at the lowest threshold, none of the tests had perfect sensitivity. Future studies should further investigate comparative

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accuracy and the impact of patient characteristics, patient recruitment criteria, and the reference standard on estimates of diagnostic test accuracy.

PP10 Addressing The Challenge Of Environmental Sustainability Between Management And Health Technology Assessment At The Hospital Level

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Introduction: Several organizations specializing in health technology assessment (HTA), at various levels, are exploring avenues to integrate the dimension of environmental sustainability (ES) within their assessments. However, evidence remains scant on how best to do this. Across the different levels, hospital-based HTA (HB-HTA) also needs to comply with the leadership and strategies of the hospital and adapt to the existing resources and established partnerships.
Methods: The purpose of this study is threefold: to provide an overview of the progress achieved by hospitals with respect to the integration of ES into HB-HTA; to detect consistencies between HB-HTA activities and hospital ES strategies; and to explore possible approaches and methods for integrating ES into HB-HTA. The methodology is structured in two steps: (i) a literature review on HB-HTA and environmental impact/sustainability to identify emerging approaches and methods for integrating environmental sustainability into HB-HTA; (ii) data collection by means of a questionnaire submitted to hospitals/organizations based on their membership of Health Technology Assessment International.
Results: Preliminary results highlight a widespread awareness of the importance of integrating ES issues into HTA at the different levels at which it is performed. The incorporation of ES issues into HB-HTA is still in its infancy. There are some factors hindering the development of methods, such as the absence of scientific evidence on emerging approaches and the scarce availability of data or difficulty in tracing data back to a specific technology.
Conclusions: The integration of the dimension of ES into HB-HTA still appears to be very immature. Coordination between the different actors in the system seems necessary to overcome the obstacles identified.

PP11 Evaluating Environmental Sustainability In Health Technology Assessment: A Multisectoral Systematic Review

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Introduction: Research widely reports healthcare technologies contribute substantial environmental impacts. Timely health technology assessment (HTA) environmental sustainability (ES) framework development is critical. A lack of multisectoral expertise, resource constraints, and consensus to assess environmental impact is delaying methodological progression. The study objective was to identify and critically evaluate methods supporting ES in HTA and formulate recommendations to underpin the development of an ES framework in HTA.
Methods: This multisectoral systematic review followed PRISMA guidelines. Maximizing the opportunity to evaluate applied environmental assessment methods, the databases Web of Science, Embase, PubMed, IEEE Xplore, EBSCOhost GreenFILE, Cochrane Library, and International Network of Agencies for Health Technology Assessment (INAHTA) were searched between 2008 and 2023. Full-text published studies applying both qualitative and quantitative methods to evaluate technology ES were included. Frameworks were critiqued for their comprehensiveness based on sustainability scope and in challenging barriers to decision-making. Studies were ranked according to how transparent and feasible frameworks were in their ability to assess technology ES and alignment with HTA principles.
Results: A total of 10 studies were identified and ranked in order of suitability in assessing technology ES in HTA. All studies applied a combination of methods to overcome issues such as data and resource constraints, expert knowledge, consensus in decision-making, and multiple criteria trade-off. Ranked highest, the One Health "extended" life cycle assessment (LCA) framework that utilized SimaPro LCA advanced software addressed the greatest methodological needs for HTA. Ranked second, the circular economy (CE) framework used in conjunction with an analytical hierarchy process (AHP) makes use of weighting and expert consultation to support multiple-criteria decision-making (MCDM).
Conclusions: This is the first systematic review to identify multidisciplinary frameworks, supporting evaluation of ES and decision-making in HTA. Providing valuable insight into potential methodological solutions where there is limited research, this study facilitates ES policy development in HTA. This study challenges limitations to methodological development highlighted by previous research. Further research should apply these recommendations in an HTA setting.

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