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

Aythami De Armas-Castellano (aythami.dearmascastellano@sescs.es), Diego Infante-Ventura, Yadira González-Hernández, Tasmania del Pino-Sedeño, Beatríz Leon-Salas, Raúl Quirós-López, Mar Trujillo-Martín and EuroBloodNet Working Team

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. MED-LINE, 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

Sue Harnan (s.harnan@sheffield.ac.uk), Jean Hamilton, Emma Simpson, Mark Clowes, Aline Navega Biz, Sophie Whyte, Shijie Ren, Katy Cooper, Alex Ball, Sally Benton, Rachel Carten, Matt Kurien, Kevin Monahan, Laura Heathcote and Matt Stevenson

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 Immuno-diagnostik (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