The Significance of C-Reactive Protein Value and Tumor Grading for Malignant Tumors: A Systematic Review

Adrian Boicean

Sibiu County Emergency Clinical Hospital, Romania

Background: Malignant tumors represent a significant pathology with a profound global impact on the medical system. The fight against cancer represents a significant challenge, with multidisciplinary teams identifying numerous areas requiring improvement to enhance the prognosis. Facilitating the patient's journey from diagnosis to treatment represents one such area of concern. One area of research interest is the use of various biomarkers to accurately predict the outcome of these patients. A substantial body of research has been conducted over the years examining the relationship between C-reactive protein (CRP) and malignant tumors. The existing literature suggests that combining imaging diagnostic modalities with biomarkers, such as CRP, may enhance diagnostic accuracy. Methods: A systematic review was conducted on the PubMed and Web of Science platforms with the objective of documenting the interrelationship between CRP value and tumor grading for malignant tumors. After the application of the exclusion and inclusion criteria, 17 studies were identified, published between 2002 and 2024, comprising a total of 9727 patients. Results: These studies indicate this interrelationship for soft tissue sarcomas and for renal, colorectal, esophageal, pancreatic, brain, bronchopulmonary, ovarian, and mesenchymal tumors. Conclusions: Elevated CRP levels are correlated with higher grading, thereby underscoring the potential utility of this biomarker in clinical prognostication.

Biography

Adrian Boicean is an Associate Professor and the Faculty of Medicine at the Universitatea Lucian Blaga of Sibiu, Romania. He has published 12 to 14 papers from 2020 to 2024. His research subjects are Infectious Diseases, Oncology, and Womens Studies. His research interest are fecal microbiota transplantation, inflammatory bowel disease, neonatal transportation, sick neonatal score, and metabolic syndrome.

adrian.boicean@ulbsibiu.ro