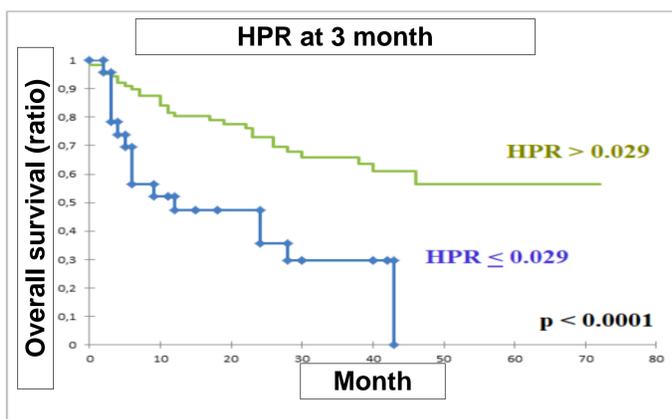
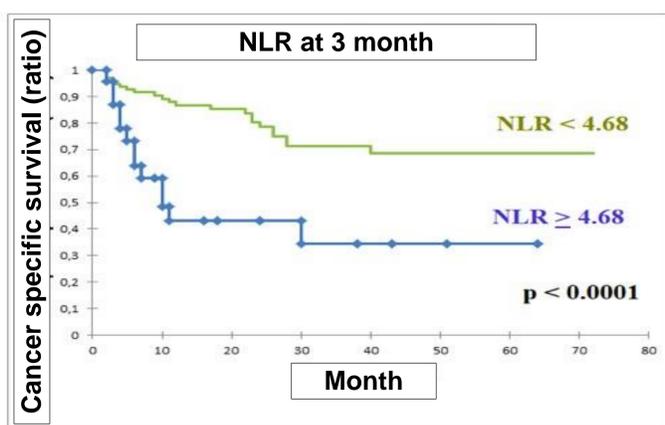


Introduction

- Inflammatory biomarkers have already been evaluated in urothelial bladder cancer in the preoperative setting.
- Paucity of evidence on the role of post-operative measurement of inflammatory biomarkers.
- Aim of the current study is to determine the prognostic value of neutrophil-to-lymphocyte ratio (NLR), monocyte-to-lymphocyte ratio (MLR), hemoglobin to platelet ratio (HPR) and C-reactive protein (CRP) on recurrence and survival before and after radical cystectomy for bladder cancer

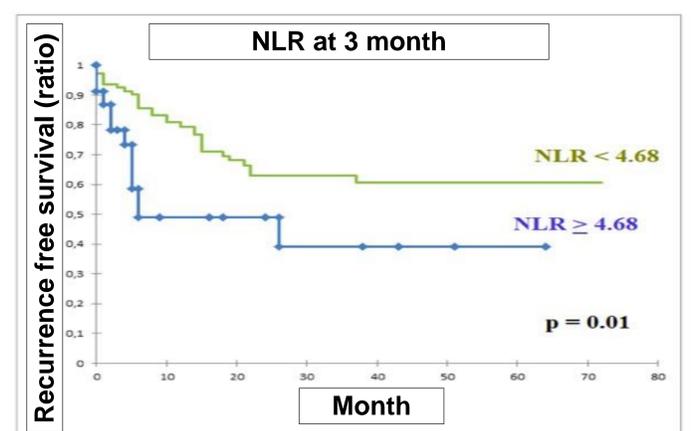
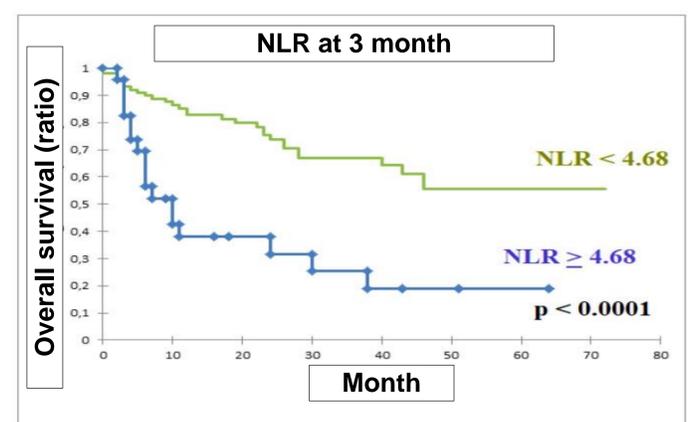


Results

- On univariate logistic regressions, preoperative CRP ≥ 9.1 , CKD-EPI ≥ 60 , preoperative NLR ≥ 3.88 and HPR ≤ 0.039 were significantly associated with locally advanced bladder cancer ($\geq pT3$) and nodal invasion (pN+).
- Pre-op CRP > 9.1 and NLR > 4.68 at 3 months were significantly associated to RFS on multivariate cox regressions, corrected for pT.
- At 3 months, NLR (HR 2.94; 95%CI 1.15-9.16; p=0.05) and HPR (HR 3.22; 95%CI 1.41-7.33; p=0.005) were significantly associated to worse CSS on multivariate analysis.
- Pre-operative HPR < 0.039 and NLR > 4.68 , HPR < 0.029 , MRL < 1.74 at 3 months were all significantly identified as risk factor for OS on univariate analysis.

Methods

- Evaluation of 134 patients who underwent radical cystectomy from January 2013 to January 2018
- Inflammatory biomarkers were measured 10 days before surgery and 1, 3, 6 and 12 months post-operatively
- Logistic regressions, KM curves and Cox proportional hazards models were used to predict the association between the different biomarkers and recurrence free survival (RFS), cancer specific survival (CSS) and overall survival (OS)



Conclusions

- Post-operative NLR and HPR at 3 months appear to be closely associated with RFS, CSS and OS.
- Further studies are needed on these post-operative biomarkers to establish their potential impact on a tailored therapeutic approach for each patient.

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