Titel des Beitrags:
Investigation of IL-23 (p19, p40) and IL-23R identifies nuclear expression of IL-23 p19 as a favorable prognostic factor in colorectal cancer: a retrospective multicenter study of 675 patients.

Abstract:
IL-23 is a heterodimeric cytokine involved in inflammatory diseases; its role in cancer progression is controversial. Here we analyse the expression of IL-23 subunits (p40 and p19) and IL-23R in colorectal cancer with regard to disease progression, clinical-pathological and molecular aspects. Immunohistochemistry for IL-23p19, IL-23p40, IL-23R and CD8 was performed on a multi-punch tissue microarray of 195 colorectal cancers (cohort 1), matched normal tissue, adenoma and lymph node metastases. Results were compared with clinical-pathological features and CD8+ T-cell counts, then validated on two patient cohorts (cohort 2: n=341, cohort 3: n=139). Cytoplasmic/membranous expression of IL-23 (p19 and p40 subunits) and IL-23R, respectively were over-expressed in carcinomas versus adenomas and normal tissues (p<0.0001) but were reduced in lymph node metastases (p<0.0001). Nuclear IL-23p19 expression was observed in 23.1% and was associated with early TNM stage (p=0.0186), absence of venous (p=0.0124) and lymphatic
invasion (p=0.01493), favorable survival (p=0.014) and absence of distant metastasis (p=0.0146; specificity: 100%). This unexpected cellular localization was confirmed by cell fractionation. The beneficial effect of nuclear IL-23p19 was restricted to tumours with CD8+ high counts. Results were validated on Cohorts 2/3. This multicenter study underlines the possible CD8(+)--dependency and beneficial effect of nuclear IL-23p19 on overall patient survival.