

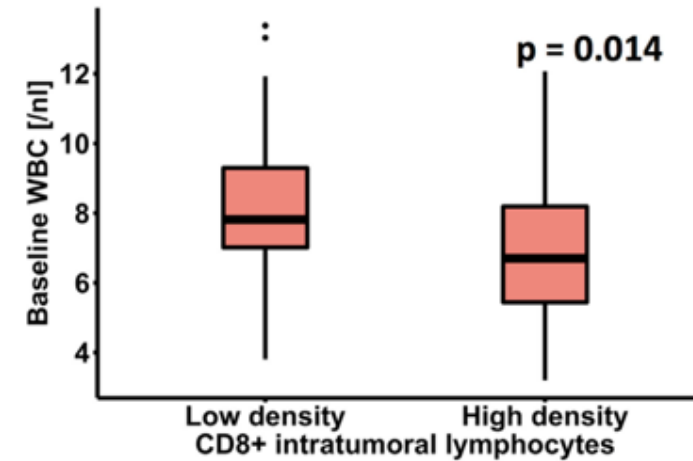
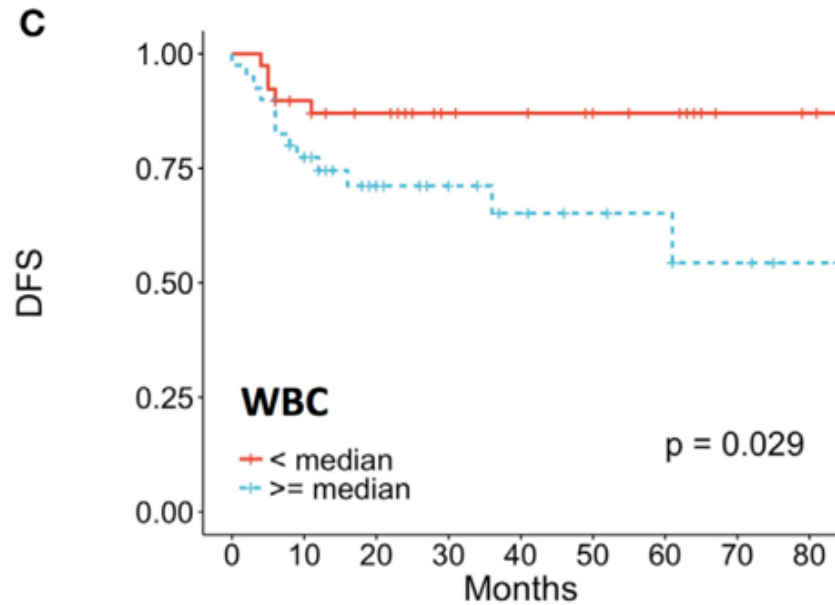
Tumor infiltrating lymphocytes in anal cancer

Tumor infiltrating lymphocytes (TILs) in anal cancer

Author	Patients (n)	Results
Grabenbauer	38	high CD3/CD4: decreased 3 years NED
Rubio	277	high CD3/CD8: increased 15 years survival
Hu	40	high intratumoral CD8: increased DFS high peritumoral CD8: increased OS
Gilbert	153	increased relapse-free survival

High TILs density is associated with a favourable tumor response and clinical outcome after primary chemoradiotherapy (CRT)

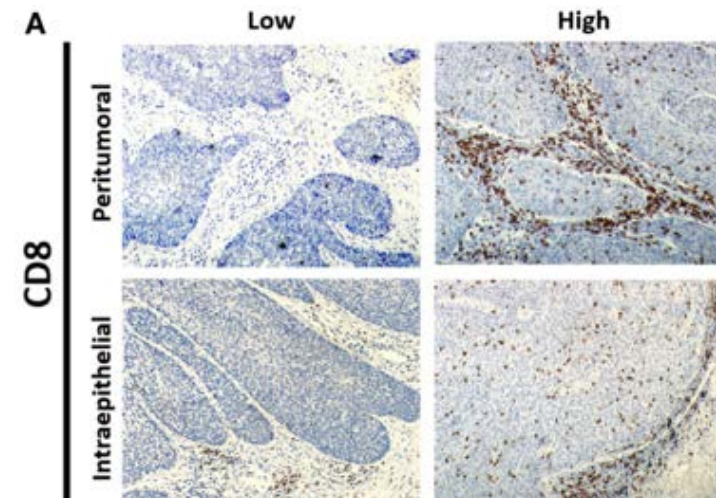
Inverse correlation of TILs and leukocytosis in anal cancer



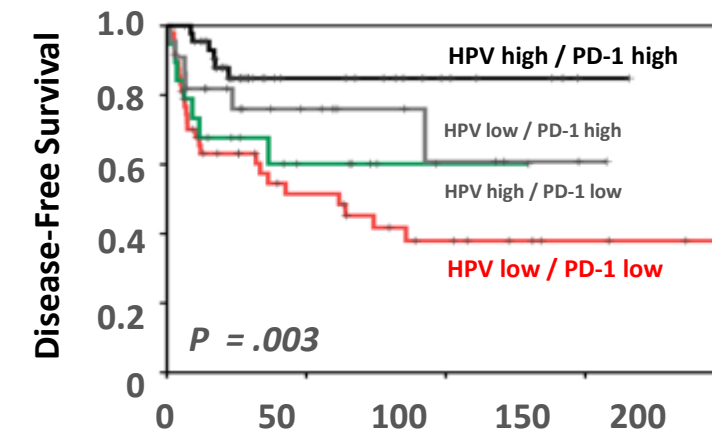
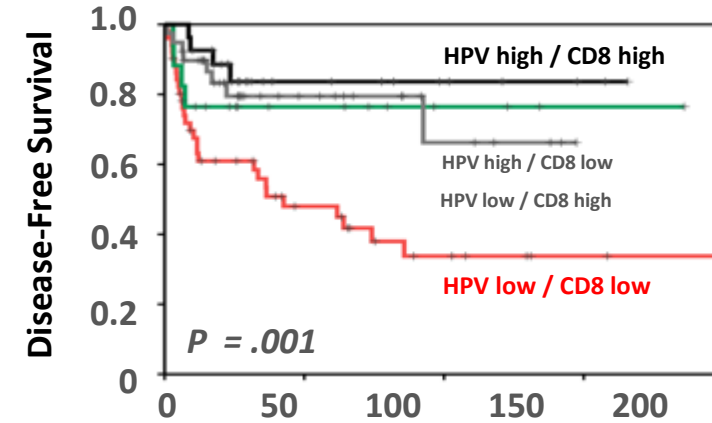
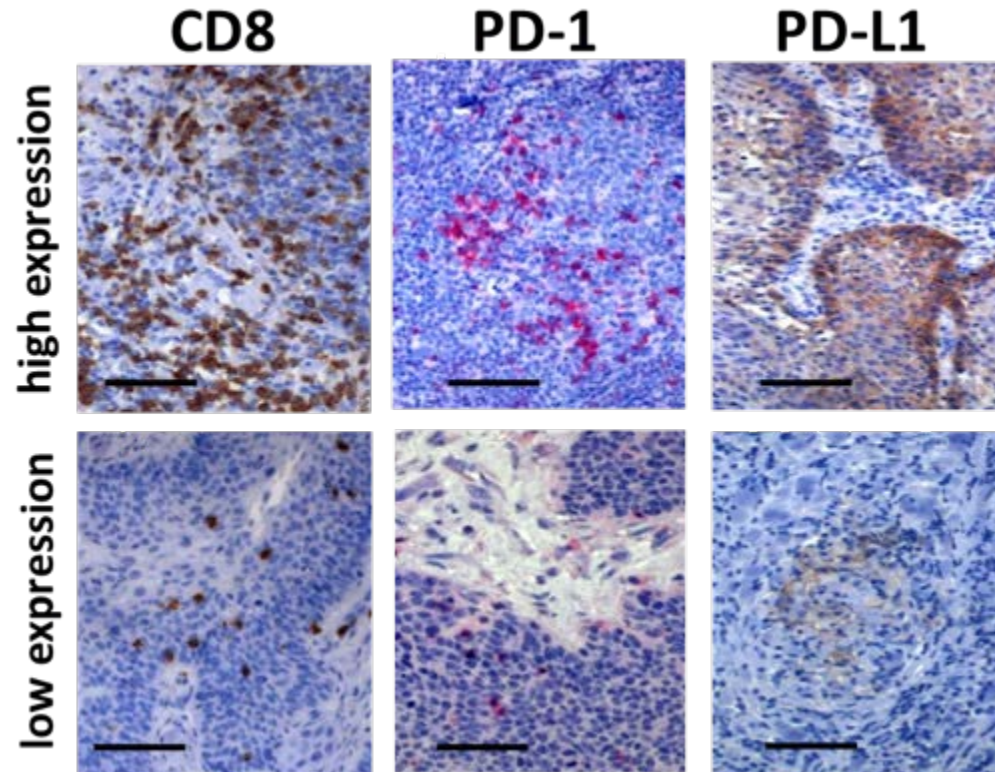
**Peripheral blood leukocytosis
(neutrophilia)**



Low tumor CD8+ TILs and worse DFS

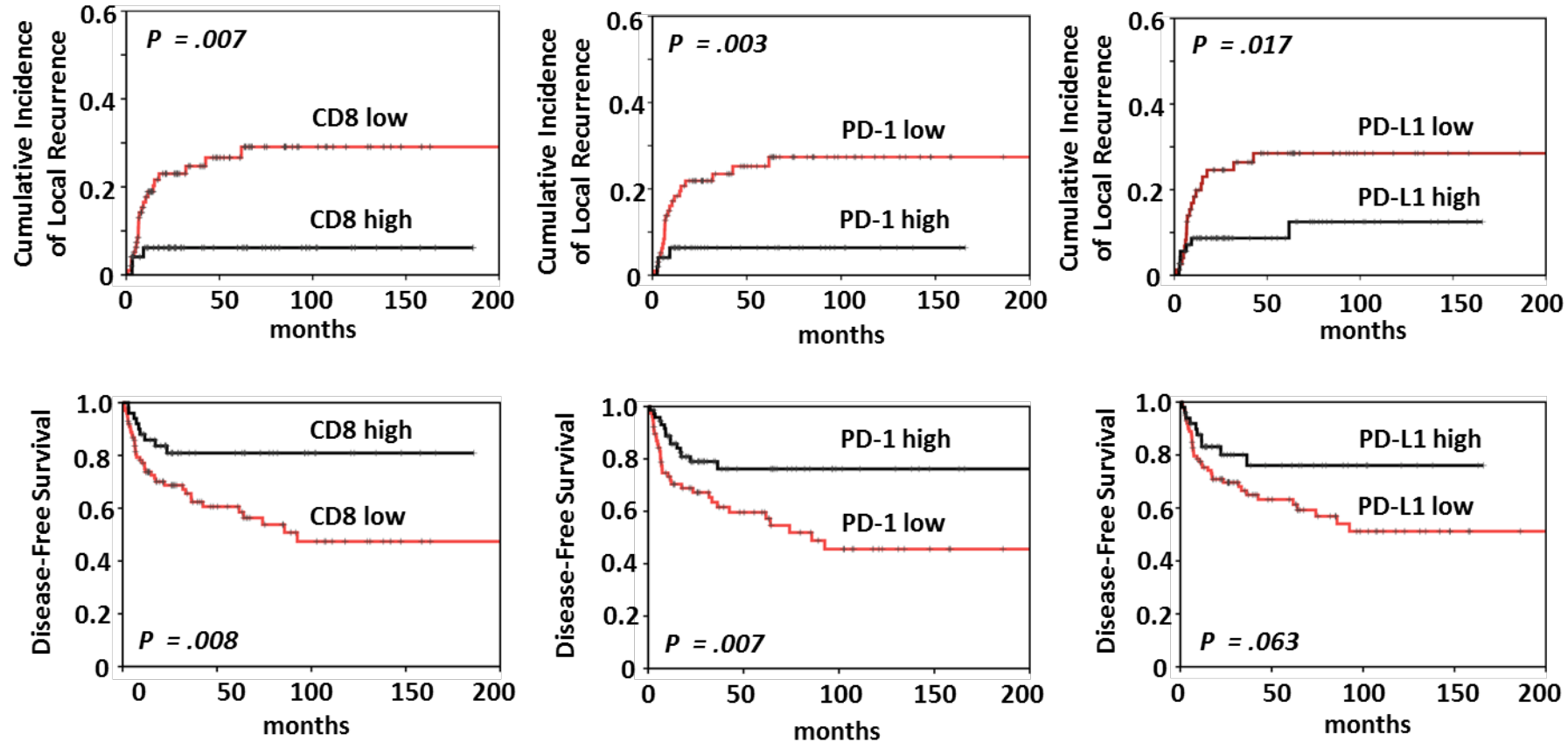


Human papilloma virus (HPV) and immune parameters



Positive correlation of HPV with CD8+ and PD1+ TILs, and PD-L1 expression

HPV, immune parameters and clinical outcome



HPV-positivity → Higher „immunogenicity“ → Better response to CRT in anal cancer

Conclusion

- High TILs density correlates with better clinical outcome after primary CRT in patients with anal cancer
- Peripheral leukocytosis (inflammation) is associated with low TILs density and poor prognosis
- HPV positivity correlates with a higher „immunogenicity“, providing an explanation for the better outcome in this patient subgroup