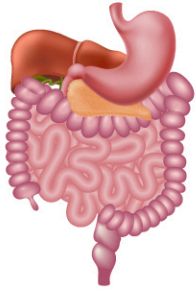


Genetic and phenotypic characterization of indolent T-cell lymphoproliferative disorders of the GI tract



10 indolent T-cell lymphoproliferative disorders of the gastrointestinal tract

CD4+ (n=4) CD8+ (n=4) CD4+/CD8+ (n=1) CD4-/CD8- (n=1)

Targeted next-generation sequencing

Comprehensive immunophenotypic analysis

80% had genetic alterations (recurrent mutations and novel rearrangements)

Immunophenotypic features

CD4+ (n=4) CD4+/CD8+ (n=1) CD4-/CD8- (n=1)

CD4+ (n=4) CD4+/CD8+ (n=1)

- 82% Alterations of the JAK-STAT pathway genes
- 50% STAT3 mutations
- 17% SOCS1 deletion
- 17% STAT3-JAK2 rearrangement
- 67% Concomitant mutations in epigenetic modifier genes (TET2, DNMT3A, KMT2D)

Heterogeneous Th1 (T-bet+), Th2 (GATA3+) or hybrid Th1/Th2 (T-bet+/GATA3+) profiles

CD8+ (n=4)

- 50% Structural alterations involving the 3' untranslated region of the IL2 gene

Majority of CD8+ (n=4) CD4-/CD8- (n=1)

Type-2 polarized (GATA3+) effector T-cell (Tc2) phenotype

CD8+ (n=4)

50% CD103 expression