KIR3DL2 expression in cutaneous T-cell lymphomas: a widely-shared target

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INTRODUCTION

KIR3DL2 (CD158k): killer cell immunoglobulin like receptor normally expressed by 1/3 of NK cells, and about 9% of CD8+ T cells, 25% of γδ T cells, 3% of CD4+ T cells.

- Ablation expression in clonal malignant cells in Sezary syndrome (SS), transformed MF (IMF) and cutaneous ALCL.

- Enables accurate diagnosis and follow-up of circulating tumor burden in SS (flow cytometric detection)

- Promising target in SS patients: KIR3DL2-directed IPH4102 mAb under development (phase I IPH4102-101 clinical study ongoing)

What about KIR3DL2 expression in all CTCL? KIR3DL2 prognostic value?

MATERIAL and METHODS

Monocentric retrospective cohort of 134 CTCL patients

- 11 healthy patients,
- 10 erythrodermic inflammatory diseases (EID)
- Controls: Monocentric retrospective cohort of 134 CTCL patients*

KIR3DL2 immunohistochemistry: monoclonal Ab MOG1-12B11 (Innate Pharma) specific for KIR3DL2 (no cross-detection of KIR3DL1) – independent assessment by 2 pathologists

Other data collected: age, sex, TNMB stage, large cell transformation (LCT), status at last follow-up

RESULTS

KIR3DL2 is expressed in >5% cells in 66% of CTCL.

High KIR3DL2 expression (>50%) is characteristic of tMF, SS, cALCL, CD8+ AETCL, γδ T-cell lymphoma, and some MF, TNK lymphoma, T nos lymphoma.

KIR3DL2 is associated with disease progression in MF/SS and a putative independent factor of OS in CTCL.