

Stellingen behorend bij het proefschrift

## **B-cell precursor abnormalities in childhood acute lymphoblastic leukemia**

1. The majority of relapses in children with B-cell precursor acute lymphoblastic leukemia occurs in cases with a *BCR-ABL1-like* signature and/or a deletion in *IKZF1*. **(this thesis)**
2. A *BCR-ABL1-like* signature and *IKZF1* deletions are independent prognostic features in children with B-cell precursor acute lymphoblastic leukemia. **(this thesis)**
3. Good-risk *BCR-ABL1*-positive B-cell precursor acute lymphoblastic leukemia cases with wild-type *IKZF1* have a favorable prognosis. **(this thesis)**
4. All *IKZF1* deletion variants are correlated to an unfavorable clinical outcome in children with B-cell precursor acute lymphoblastic leukemia. **(this thesis)**
5. *TCF3*-rearranged leukemic cells are characterized by an abnormal pre-B cell receptor signaling pathway that can be inhibited by Ibrutinib. **(this thesis)**
6. "The extremely poor survival after relapse underscores the need to focus on improving the outcome of primary therapy for these patients who are unlikely to be salvaged if they relapse. Promising new therapies should be rapidly integrated into trials for subsets of higher risk patients at initial diagnosis." **(K Nguyen, et al. Leukemia 2008)**
7. "One of the most difficult challenges that oncologist face treating acute lymphoblastic leukemia in the frontline setting is early identification of patients who are going to fail current therapies before they relapse, rather than after they relapse. Understanding the biology is a key to that." **(JA Whitlock, Current Opin Oncol, 2013)**
8. "Global gene-expression profiling has the potential to reveal new dimensions of the pathologic features of acute lymphoblastic leukemia and to identify novel therapeutic targets." **(CH Pui, New Engl J Med 2006)**
9. "Certainly, the hypothesis that *IKZF1* deletion-associated adverse outcome would be a reflection of underlying genomic instability in aggressive leukemic clones, rather than lost or diminished IKAROS function caused by *IKZF1* haploinsufficiency, as originally proposed merits further investigation." **(C Palmi, et al. Haematologica 2013)**
10. "Het leven is kort, de kunst duurt lang." **(Hippocrates of Cos, 460 – 370 BC)**
11. "Icarus, zorg dat je in het midden van de lucht vliegt, als je lager zal gaan, zal het water jouw veren zwaarder maken, en als je hoger zal gaan, zal de zon jouw veren verschroeien." **(Ovidius, Metamorphoses VIII, sentence 203-216, AD 8)**

Arian van der Veer

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