

Intrinsic and Extrinsic Mechanisms of Clonal Expansion in Del(5q) MDS

1. *Csnk1a1* haploinsufficiency plays an important role in driving clonal advantage and disease persistence in del(5q) MDS (this thesis, Schneider et al. 2014)
2. Genetic barcoding is a method to trace hematopoietic clones of varying genetic backgrounds for long-term clonal development in transplant models (this thesis)
3. The cellular and humoral microenvironment of the bone marrow and lymphoid organs is crucial in supporting healthy growth of hematopoietic stem cells but can be utilized by malignant clones to their advantage (this thesis)
4. Alarmins such as S100a8/S100a9 are produced by hematopoietic and non-hematopoietic cells and can influence hematopoiesis in a disease-relevant manner (this thesis)
5. Inflammatory signaling by components of the bone marrow participates in driving fibrotic transformation of the mesenchymal niche (this thesis)
6. Because of the complexity of the bone marrow niche, modeling it in vitro is highly challenging and results should be considered with caution
7. Gene expression dosage and protein expression dosage are often understudied details that can be of enormous significance for cell functions
8. MDS is a challenging bone marrow stem cell disorder that should be treated – if possible - within clinical studies and trials
9. The mutational background of MDS stem cells will become even more important in the future in light of development of targeted drug strategies and personalized medicine
10. “The first principle is that you must not fool yourself and you are the easiest person to fool” *Richard P. Feynman*
11. De meeste mensen zijn andere mensen