

# Long-term observation reveals high-frequency engraftment of human acute myeloid leukemia in immunodeficient mice, even for subtypes previously considered non-engraftable



## Xenotransplantation assays of 19 AML cases

- Favorable 4
- Adverse 3
- Intermediate 10
- APL 2

## Engraftment assessment

- BM puncture and multiparameter flow cytometry analysis
- Every 4 to 5 weeks (one mouse /group/AML case)
- Engrafted if >0.1- 1% of human among total BM cells

### End-point



16 weeks  
standard analysis

### Engraftment

7/19

37% of transplanted AML cases were **standard engrafters**

↑ amount of AML (mostly of intermediate and favorable risk subtypes) were scored non-engraftable

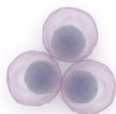


1 year  
Late analysis

18/19

58% of transplanted AML cases were **long latency engrafters**

↳ 10/11 were screened negative for human leukemic cells in routine BM biopsies performed at 8-10, 12 and 16 weeks post transplantation



Xenogeneic leukemic

- ↳ conserved immune phenotypes and genetic signatures
- ↳ were able to induce leukemia in re-transplantation assays