CD133 marks a stem cell population that drives human Primary Myelofibrosis

Patient-derived circulating CD133+ cells (variable JAK2-V617F+)

NGS mouse

Primary Myelofibrosis - Chronic phase
- myeloid (JAK2-V617F+) but no lymphoid cells
- atypical megakaryocytes (JAK2-V617F+)
- initiation of prefibrotic state, splenomegaly
- splenic fibrosis
- >10 months engraftment

Primary Myelofibrosis - Acute phase
- acute myeloid leukemia transformation (CD34+/CD33+)
- 1 from 2 mice (1 patient)
- EZH2-D265H+
- JAK2-V617F-

Trivai et al., Haematologica, 2015