Human mast cell lines as in vitro models for mastocytosis

**Human mast cell lines and donors**
- HMC-1 → patients with mast cell leukemia
- LAD1/2
- LUVA
- ROSA → CD34+ cells of non-mastocytosis donors
- MCPV-1

**KIT activating mutations in human neoplastic mast cells**
- pediatric patients
- pediatric patients
- familial cases of mastocytosis
- only a few adult patients with systemic mastocytosis
- HMC-1.1 and HMC-1.2 MCL-like cell lines
- >80% adult patients with mastocytosis
- 30% children with cutaneous mastocytosis
- HMC-1.2 and ROSA\textsuperscript{KITD816V} MCL-like cell lines

*Arock et al., Haematologica, 2018*