De-escalation of high-dose imatinib in patients with newly diagnosed chronic phase chronic myeloid leukemia

Randomized German Chronic Myeloid Leukemia-Study IV

Patients with newly diagnosed chronic phase chronic myeloid leukemia (CML) randomized to the **800 mg imatinib** arm

Median time on high-dose imatinib therapy → **31 months**

Patients reduced **imatinib to 400mg** after they had achieved at least a stable major molecular response (Median age: 52 years; 71%: Male)

Median time on reduced-dose imatinib therapy → **34 months**

- **61** Patients (90%) maintained major molecular remission on imatinib at 400mg
- **2** Patients switched to more potent kinase inhibition to regain major molecular remission
- **7** Patients lost major molecular remission on the imatinib standard dose
  - 1-year RFS: 90% (95% CI: 81-96%)
- **5** Patients regained major molecular remission while still on 400mg imatinib

A deep molecular remission achieved with high-dose imatinib can be safely maintained with a reduction of treatment intensity in most patients

Michel et al., Haematologica, 2019