- Ph +, BCR-ABL + CML, chronic phase, Sokal high risk\textsuperscript{11}
- Less than 6 months from diagnosis, untreated or pretreated only with Hydroxyurea
- Age $\geq$ 18 years
- Performance status (ECOG) $\leq$ 2
- Negative pregnancy test, and accepting the recommendations of a safe contraception
- No alcohol or drug addiction
- AST, ALT and bilirubine $< 3$ times upper normal limits
- Creatinine $< 20$ mg/L
- No disease or condition that by the advise of the responsible physician would make treatment dangerous for the patient, or would make the patient ineligible for the study, including physical, psychiatric, social and behavioral problems
- Ability to provide written informed consent