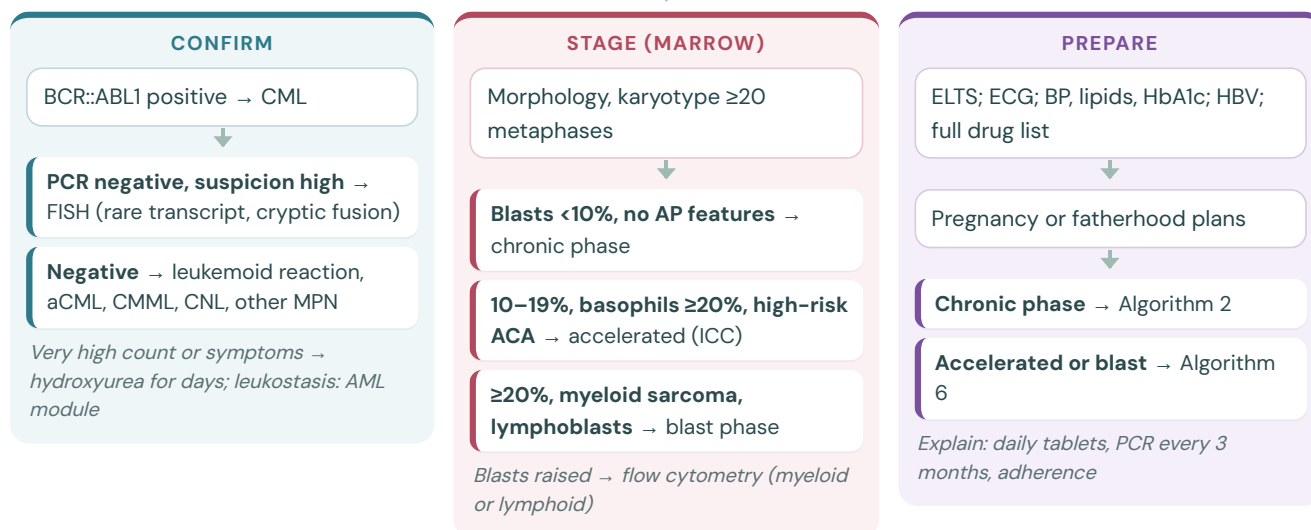


Chronic Myeloid Leukaemia: Suspected CML: from a high white count to a phase and a plan

Dr. Haritha Chiramana

MD, DM · Senior Medical
Oncologist & Hemato-
Oncologist

Leukocytosis with myelocytes and basophils, often a big spleen → blood film; blood BCR::ABL1 (qualitative + quantitative PCR) or FISH; spleen size in cm before any hydroxyurea



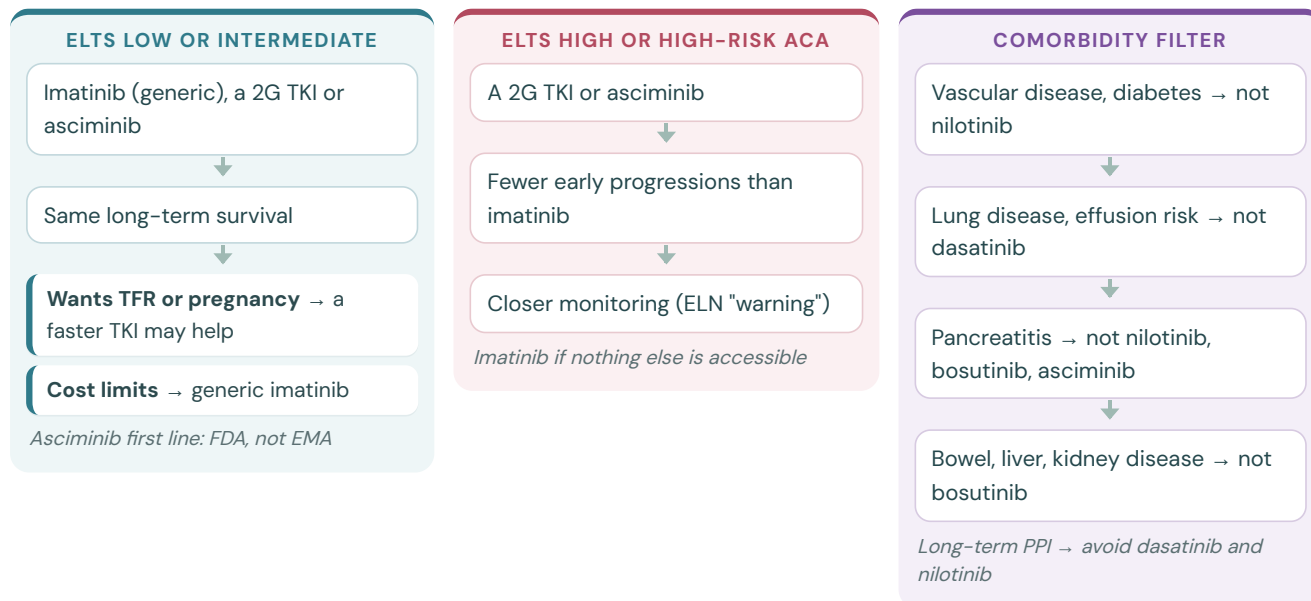
Before treatment: transcript type recorded · one IS-standardised laboratory for every PCR · drug access arranged (generic or assistance programme).

Chronic Myeloid Leukaemia: Chronic phase: choosing the first TKI

Dr. Haritha Chiramana

MD, DM · Senior Medical Oncologist & Hemato-Oncologist

Chronic phase confirmed → ELTS risk, comorbidities, interacting drugs, goals (stopping, pregnancy), cost



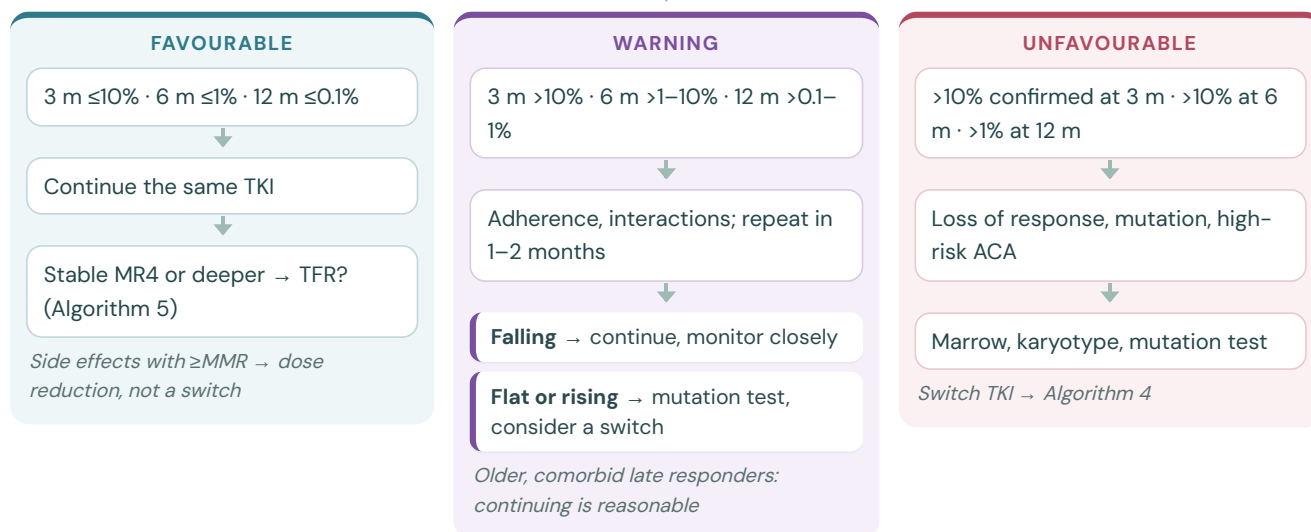
All: CBC every 2 weeks until CHR · BCR::ABL1 (IS) at 3, 6 and 12 months (Algorithm 3) · ECG 1–2 weeks after starting nilotinib or dasatinib · treat cardiovascular risk factors.

Chronic Myeloid Leukaemia: Monitoring: what to do with each BCR::ABL1 result

Dr. Haritha Chiramana

MD, DM · Senior Medical
Oncologist & Hemato-
Oncologist

BCR::ABL1 (IS) at 3, 6 and 12 months, then every 3–6 months in MMR → compare with ELN 2025 milestones; look at the trend



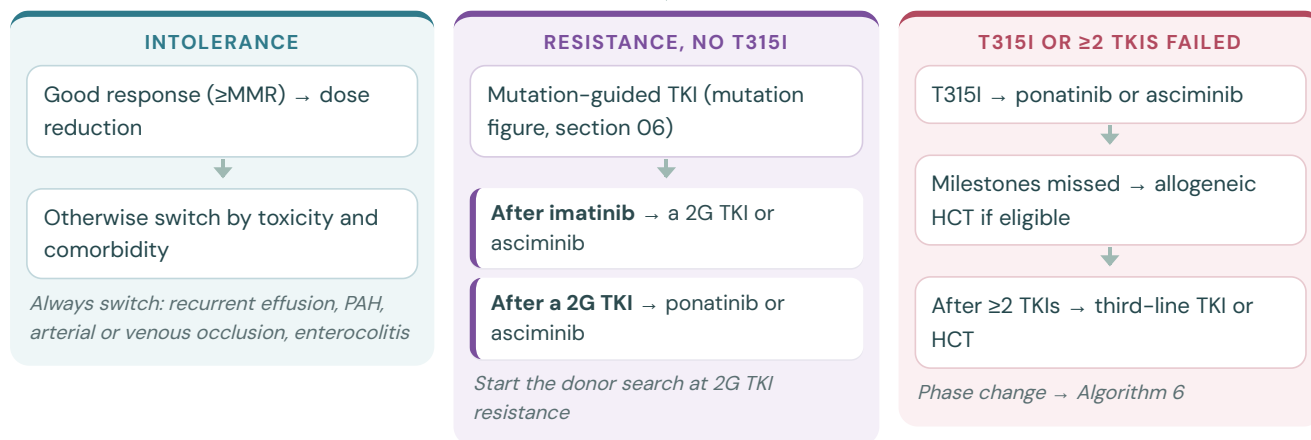
Same milestones for 2nd and 3rd line · a rising PCR without explanation is resistance until proved otherwise · confirm results near a threshold before acting.

Chronic Myeloid Leukaemia: Resistance or intolerance in chronic phase

Dr. Haritha Chiramana

MD, DM · Senior Medical Oncologist
& Hemato-Oncologist

Off track or intolerant → confirm with repeat PCR; adherence, interactions; marrow and kinase-domain mutation if resistant



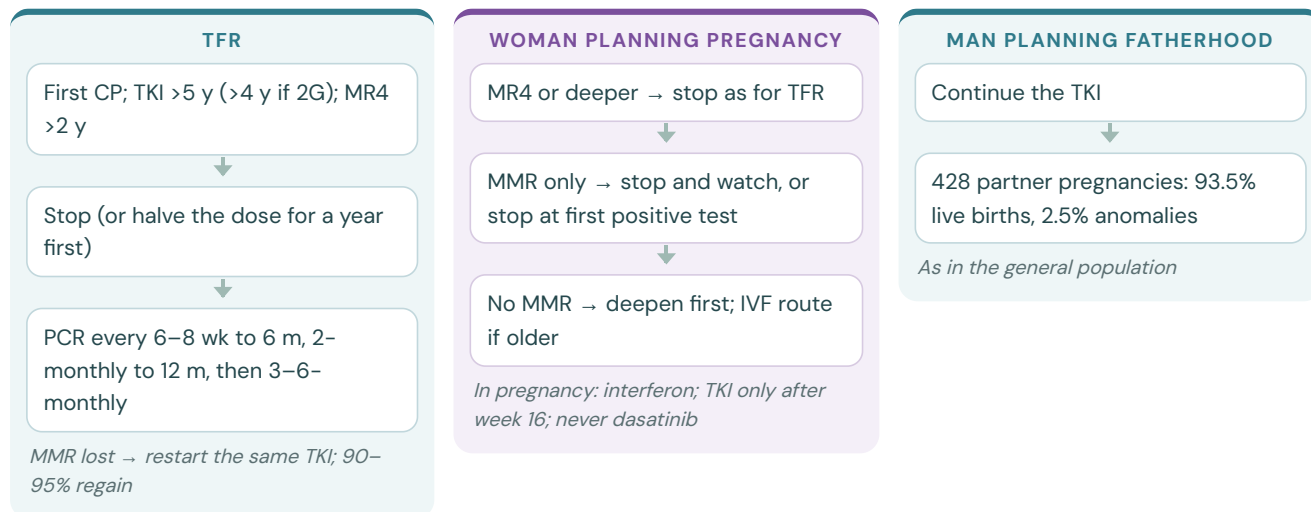
Response targets on 2nd and 3rd line are the same as first line · ASCSEMBL: asciminib beat bosutinib after ≥2 TKIs · India: check access to ponatinib and asciminib early.

Chronic Myeloid Leukaemia: Stopping treatment (TFR) and planning a pregnancy

Dr. Haritha Chiramana

MD, DM · Senior Medical
Oncologist & Hemato-
Oncologist

Stable deep response, or a wish for pregnancy → ELN 2025 criteria; reliable IS PCR with fast results; an informed patient



No TKI while breastfeeding · aches after stopping in 20–30% · children: stopping succeeds less often (STOP IMAPED: 28.6% at 6 months).

Chronic Myeloid Leukaemia: Accelerated and blast phase

Dr. Haritha Chiramana

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Hemato-Oncologist

Accelerated or blast phase (new or on a TKI) → marrow with flow cytometry and karyotype; kinase-domain mutation (NGS); fitness; HLA typing now

ACCELERATED PHASE

De novo → a 2G TKI

Transformed → TKI by mutation

Transformed and eligible →
allogeneic HCT

No TFR attempt in accelerated phase

MYELOID BLAST PHASE

TKI + AML-type induction

Intensive, or HMA ± venetoclax if
older

Remission → allogeneic HCT

*Not fit: TKI ± consolidation; TKI alone is
palliative*

LYMPHOID BLAST PHASE

TKI + Ph+ ALL regimen

Or TKI + blinatumomab or
inotuzumab

Lumbar puncture; CNS therapy

*Remission → HCT; not fit: TKI +
maintenance*

TKI by prior TKI and mutation, not lineage · avoid imatinib · T315I → ponatinib · leukostasis, tumour lysis, infection: AML module · Ph+ ALL regimens: ALL module.

Chronic Myeloid Leukaemia: Follow-up and survivorship plan

Dr. Haritha Chiramana

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Hemato-Oncologist

Help the treatment work

- Take the tablet every day, at the same time
- Follow the food rules for your TKI
- Ask before any new medicine, antacid or herb
- Same laboratory for every PCR test
- Tell us early if money or travel is a problem

Red flags to report

- Chest pain, leg pain on walking, weakness of a limb
- Breathlessness or cough (dasatinib)
- Severe belly pain, vomiting
- Bleeding, black stools, new bruises
- Fever with bone pain or a growing spleen

Do not forget

- Pregnancy plans: tell us before trying
- Never stop on your own; stopping is planned
- Blood pressure, sugar and lipids checked
- PCR every 3 months until told otherwise
- Keep the written treatment summary