Efficacy and toxicity analysis of Imatinib in Newly Diagnosed Patients of Chronic Myeloid Leukaemia: 18-years' experience at a single large-volume centre.

Rajan Yadav, Sonia Parikh, Harsha Panchal, Apurva Patel, Akanksha Garg, Kajal Shah, Poulami Basu, Vivek Patel, Seshagiri Rao Ganta, Shrikanth Ravichandran, Debanti Banerjee .

Department of Medical Oncology & Hematology , GCRI&BJMC ,Ahmedabad

Introduction

- Imatinib(IM) remains a path-breaking treatment for chronic myeloid leukaemia (CML).
- We report 18 years of experience in treating patients of CML with IM at a single large-volume centre.

Patients & Methods

- Retrospective analysis of 158 CML adult patients who received IM from September 2002 until August 2009 was done.
- Lost to follow ups excluded from analysis
- Analysis includes 132 patients ; 26(16.7%) lost to follow-ups were excluded from the analysis
- On progression dose of IM was sequentially increased to 600 and 800mg.
- Toxicity and Haematological Responses are reported

Results

Baseline Characteristics (n=132)	
Median age (IQR)	37(30-45)
Female	54%
Fatigue	41%
Abdominal Fullness	23%
Median Haemoglobin(IQR)	9.6 gm/dl (8.4-11.3)
Median Total Leucocyte count (IQR)	92 X 10^3 (32.2 X 10^3 -15.7 X 10^3)
Median Platelet (IQR)	38 (20.4-54.4)

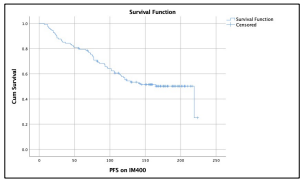
Haematological Toxicities* [n= 32(24%)]		
	Grade I/II	Grade III/IV
Anaemia	16	2
Leucopenia	14	3
Throbocytopenia	11	1

Non-Hematological Toxicities [n= 36(27.3%)]	
Dermatological (Rash, Hypopigmentation)	23
Fluid retention	13

* There was considerable overlap in hemaotological toxities in the three lineages

Outcomes (Median FUP 15.1 years)	
Progression on	Number(%) percentage progressed
Imatinib 400mg	58 (43.9%)
Imatinib 600mg	25(43.1%)
Imatinib 800mg	9(36%)
Mean time to CHR (months)(+ S.D)	2.6 (+ 0.7)
PFS on IM400	146.4 months

PFS on Imatinib 400



Mean PFS on IM 400 was 146.4 months (95% CI; 131-161)

Conclusions

- This 15.1-year median follow up has shown that IM is a highly effective and safe drug for first-line treatment of CML-CP.
- It is phenomenal in inducing CHR and CCyR with a safety profile to envy.
- For patients progressing on IM 400, the dose can sequentially and subsequently be increased to 600 and 800, with acceptable toxicity.
- This data should benefit low- and middle-income countries where second-generation TKIs are not a financially feasible option upfront.

Contact Info: rajan121@gmail.com

Acknowledgements :
Faculty and Residents Departments of Medical Oncology & Hematology and Pathology ; GCRI & BJMC ,Ahmedabad