

A twenty year review of
Gastrointestinal Stromal Tumours
(GISTs) Diagnosed
at Royal Devon and Exeter Hospital

JL Forrest¹, EW Toy¹, R Awasthi²,
P Sarsfield².

1: Department of Clinical Oncology

2: Department of Histopathology

Royal Devon and Exeter Hospital

Rationale for Study

- Management of GIST predominantly surgical
- GIST are resistant to conventional chemotherapy and radiotherapy
- Recently new immunohistochemistry antibody for CD117 (C-KIT)
- New treatment: Glivec for metastatic / recurrent disease directed against C-KIT
- Triggered by a case of recurrent metastatic “leiomyosarcoma” being reclassified
- Unethical not to do this study

Aims

- Are there patients that may benefit from Glivec not on routine follow up?
- What is the impact likely to be on the local health service?

Materials and Methods

- Histology reports and slides of all mesenchymal tumours of the GI tract were reviewed
 - stratified into probably benign, indeterminant, probably malignant¹
- Slides were then stained with CD117
- Data collected on:
 - patient demographics, treatment received, disease progression and overall survival.

1: Miettinen M et al Am J Surg Pathol January 2005

Results

- 78 patients - 66 GISTs (85%)
 - Probably Benign 25 (38%)
 - Indeterminant 16 (24%)
 - Probably Malignant 25 (38%)
- Diagnosis changed:
 - to GIST in 32 (41%)
 - CD117 already done 14

Annual incidence 9.4 per million

Tumour Location

Similar to other studies

Results for the Probably Benign Group n=25

Median Overall Survival

12.6 yrs (95%CI 7.6yrs-17.6yrs)

<u>No of Patients</u>	<u>Alive</u>	<u>Dead</u>
Total	14	10
NED	14	8
UK		2

1 patient no information

NED = no evidence of disease, DP = Disease Progression, UK =
Unknown

Results for the Uncertain Malignant Potential Group n=16

Median Survival not reached

<u>No of Patients</u>	<u>Alive</u>	<u>Dead</u>
Total	11	5
NED	8	3
DP	3	2

NED = no evidence of disease, DP = Disease Progression,
UK = Unknown

Results for the Probably Malignant Group n=25

Median Survival 2.5 yrs (95%CI 0-6yrs)

<u>No of Patients</u>	<u>Alive</u>	<u>Dead</u>
Total	7	18
NED	5	4
DP	2	10
UK		4

NED = no evidence of disease, DP = Disease Progression,
UK = Unknown

Conclusion

- 10 patients alive with history of GIST not currently being followed up, in the intermediate to high risk groups
- who may potentially benefit from targeted therapy as per NICE guidelines
- 4 of these newly classified as GIST
- 3 patients alive with known recurrence/ mets
 - 1 patient offered and refused Glivec
 - 2 patients not followed up with known metastatic disease.

Discussion

- Financial implications cost is £18,000 a year, median time to progression about 2 years,
 - currently 2 patients on Glivec
 - possibly 2 extra patients, plus 7 not on follow up
- Clinical Implications:
 - we have written to all GPs of patients diagnosed in last 5 years not on follow up and to the surgeons following up other patients
 - discuss cases in MDT
- Demetri NEJM 2002

Conclusion

- this study highlights need for clinical and pathological review in the light of evolving diagnostic and therapeutic technologies, even in a smaller hospitals

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