

# A phase III, prospective randomised comparison of imatinib (STI571, Glivec/Gleevec) 400 mg daily versus imatinib 800 mg daily versus imatinib plus PEG interferon-alpha 2a (Pegasys) in patients with newly-diagnosed chronic phase chronic myeloid leukaemia

|                                        |                                                   |                                                                                                   |
|----------------------------------------|---------------------------------------------------|---------------------------------------------------------------------------------------------------|
| <b>Submission date</b><br>18/05/2001   | <b>Recruitment status</b><br>No longer recruiting | <input checked="" type="checkbox"/> Prospectively registered<br><input type="checkbox"/> Protocol |
| <b>Registration date</b><br>18/05/2001 | <b>Overall study status</b><br>Completed          | <input type="checkbox"/> Statistical analysis plan<br><input checked="" type="checkbox"/> Results |
| <b>Last Edited</b><br>16/05/2019       | <b>Condition category</b><br>Cancer               | <input type="checkbox"/> Individual participant data                                              |

## Plain English summary of protocol

<http://cancerhelp.cancerresearchuk.org/trials/a-trial-looking-at-different-doses-of-glivec-for-chronic-myeloid-leukaemia-with-or-without-interferon>

## Contact information

### Type(s)

Scientific

### Contact name

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## Additional identifiers

## Clinical Trials Information System (CTIS)

2004-001622-24

### Protocol serial number

G0100059

## Study information

### Scientific Title

A phase III, prospective randomised comparison of imatinib (STI571, Glivec/Gleevec) 400 mg daily versus imatinib 800 mg daily versus imatinib plus PEG interferon-alpha 2a (Pegasys) in patients with newly-diagnosed chronic phase chronic myeloid leukaemia

### Acronym

SPIRIT

### Study objectives

The only known curative therapy for Chronic Myeloid Leukaemia (CML) is allogeneic Stem Cell Transplantation (SCT) but the risks of this are considerable and it is only available to a minority of patients with CML. Imatinib (STI571, Gleevec, Glivec) has produced remarkable results in the treatment of CML although data on long term survival are not available.

In light of recent evidence, National Institute for Clinical Excellence (NICE) have recommended imatinib as the standard of care for newly diagnosed CML patients (<http://www.nice.org.uk/Docref.asp?d=89864>). SPIRIT aims to establish whether combining imatinib with other drugs, or increasing the dose to 800 mg daily can improve survival when compared to imatinib 400 mg daily. This is a crucial long-term study attempting to improve the survival for patients with CML and to determine the optimal non-transplant therapy for CML.

### Ethics approval required

Old ethics approval format

### Ethics approval(s)

The London main REC gave a favourable opinion for the trial on the 20th August 2004 (ref: O4/MREC02/13). Each participating site has gained Site Specific Assessment (SSA) approval from their local ethics committee prior to patient recruitment at that site.

### Primary study design

Interventional

### Study design

Randomised controlled trial

### Study type(s)

Treatment

### Health condition(s) or problem(s) studied

Chronic Myeloid Leukaemia

### Interventions

Arm A: Imatinib 400 mg daily for the duration of the study

Arm B: imatinib 800 mg daily for the duration of the study

Arm C: imatinib 400 mg daily plus weekly PEG interferon-alpha 2a for the duration of the study

Patients will be followed up for at least 10 years post study via the National Office of Statistics.

## **Intervention Type**

Drug

## **Phase**

Phase III

## **Drug/device/biological/vaccine name(s)**

Imatinib (STI571, Glivec/Gleevec), PEG interferon-alpha 2a

## **Primary outcome(s)**

To compare overall survival in the three arms at five years

## **Key secondary outcome(s)**

1. To compare molecular response at one year
2. Treatment tolerability after 5 years
3. health economics after 5 years
4. Quality of life after 5 years

## **Completion date**

01/01/2015

# **Eligibility**

## **Key inclusion criteria**

1. Male or female patients 18years or older
2. Patients must have all of the following:
  - a. Be enrolled within three months of initial diagnosis of CML-CP (date of initial diagnosis is the date of first cytogenetic analysis)
  - b. Be previously untreated for CML with the exception of hydroxyurea and/or anagrelide
  - c. Cytogenetic confirmation of the Philadelphia chromosome or variants of (9;22) translocations, patients may have secondary chromosomal abnormalities in addition to the Philadelphia chromosome
  - d. Less than 15% blasts in peripheral blood and bone marrow
  - e. Less than 30% blasts plus promyelocytes in peripheral blood and bone marrow
  - f. Less than 20% basophils in peripheral blood
  - g. More than or equal to  $100 \times 10^9$  l platelets
  - h. No evidence of extramedullary leukaemic involvement, with the exception of the hepatosplenomegaly
3. Written voluntary informed consent

## **Participant type(s)**

Patient

## **Healthy volunteers allowed**

No

**Age group**

Adult

**Lower age limit**

18 Years

**Sex**

All

**Key exclusion criteria**

1. Patients with Ph-negative, BCR-ABL-positive, disease are NOT eligible for the study
2. Any prior treatment for CML with busulphan, interferon-alpha, imatinib, homoharringtonine, cytosine arabinoside, or any other investigational agents (hydroxyurea and anagrelide are the only drugs permitted)  
N.B. patients will be ineligible for SPIRIT if they have received ANY prior therapy with interferon-alpha or imatinib. NO exceptions
3. Patients who received prior chemotherapy, including regimens used in Peripheral Blood Progenitor Cells (PBPCs) mobilization for haematopoietic progenitor-cell transplantation. It is allowable to collect unmobilized PBPCs at diagnosis
4. Patients who have had any form of prior haemopoietic stem cell transplant, either autograft or allograft
5. Patients with an Eastern Cooperative Oncology Group (ECOG) Performance Status Score more than or equal to three
6. Patients with serum bilirubin, Serum Glutamic Oxaloacetic Transaminase (SGOT)/aspartate aminotransferase (AST), Serum Glutamic Pyruvic Transaminase (SGPT)/alanine aminotransferase (ALT), or creatinine concentrations more than 2.0 x the Institutional Upper Limit of the Normal range (IULN)
7. Patients with International Normalised Ratio (INR) or Partial Thromboplastin Time (PTT) more than 1.5 x IULN, with the exception of patients on treatment with oral anticoagulants
8. Patients with uncontrolled medical disease such as diabetes mellitus, thyroid dysfunction, neuropsychiatric disorders, infection, angina, or Grade three/four cardiac problems as defined by the New York Heart Association Criteria
9. Patients with a prior history of significant psychiatric illness, particularly depression
10. Patients with known positivity for Human Immunodeficiency Virus (HIV); baseline testing for HIV is not required
11. Patients who have undergone major surgery within four weeks of Study Day one, or who have not recovered from prior major surgery
12. Patients who are:
  - a. Pregnant
  - b. Breast feeding
  - c. Of childbearing potential without a negative pregnancy test prior to Study Day one
  - d. Male or female of childbearing potential unwilling to use barrier contraceptive precautions throughout the trial (postmenopausal women must be amenorrheic for at least 12 months to be considered of non-childbearing potential)
13. Patients with a history of another malignancy either currently or within the past five years, with the exception of basal cell skin carcinoma or cervical carcinoma in situ
14. Patients with a history of non-compliance to medical regimens or who are considered potentially unreliable

**Date of first enrolment**

03/06/2005

**Date of final enrolment**

01/01/2015

## **Locations**

**Countries of recruitment**

United Kingdom

England

**Study participating centre****Department of Haematology**

Newcastle upon Tyne

United Kingdom

NE1 4LP

## **Sponsor information**

**Organisation**

Newcastle upon Tyne Hospitals Trust (UK)

**ROR**

<https://ror.org/05p40t847>

## **Funder(s)**

**Funder type**

Industry

**Funder Name**

Novartis Pharma AG (Switzerland)

**Funder Name**

Roche Pharmaceuticals (Switzerland)

# Results and Publications

## Individual participant data (IPD) sharing plan

### IPD sharing plan summary

Not provided at time of registration

### Study outputs

| Output type                                   | Details                       | Date created | Date added | Peer reviewed? | Patient-facing? |
|-----------------------------------------------|-------------------------------|--------------|------------|----------------|-----------------|
| <a href="#">Basic results</a>                 |                               |              | 16/05/2019 | No             | No              |
| <a href="#">Participant information sheet</a> | Participant information sheet | 11/11/2025   | 11/11/2025 | No             | Yes             |
| <a href="#">Study website</a>                 | Study website                 | 11/11/2025   | 11/11/2025 | No             | Yes             |