

STI571 Prospective International Randomised Trial 2: A phase III, prospective randomised comparison of imatinib (STI571, Glivec®/Gleevec®) 400 mg daily versus dasatinib (Sprycel®) 100 mg daily in patients with newly-diagnosed chronic phase chronic myeloid leukaemia

Submission date 17/04/2008	Recruitment status No longer recruiting	☐ Prospectively registered ☐ Protocol
Registration date 09/10/2008	Overall study status Completed	☐ Statistical analysis plan ☒ Results
Last Edited 20/03/2020	Condition category Cancer	☐ Individual participant data

Plain English summary of protocol

<http://www.cancerresearchuk.org/about-cancer/find-a-clinical-trial/a-trial-looking-at-imatinib-and-dasatinib-for-newly-diagnosed-chronic-myeloid-leukaemia>

Contact information

Type(s)

Scientific

Contact name

Ms Corinne Hedgley

Contact details

Newcastle University
Academic Haematology
School of Clinical & Laboratory Sciences
Leech Building, Medical School
Framlington Place
Newcastle upon Tyne
United Kingdom

NE2 4HH
+44 (0)1280 814 916
c.a.hedgley@ncl.ac.uk

Additional identifiers

ClinicalTrials.gov (NCT)
NCT01460693

Clinical Trials Information System (CTIS)
2007-006185-15

Protocol serial number
4443

Study information

Scientific Title

STI571 Prospective International Randomised Trial 2: A phase III, prospective randomised comparison of imatinib (STI571, Glivec®/ Gleevec®) 400 mg daily versus dasatinib (Sprycel®) 100 mg daily in patients with newly-diagnosed chronic phase chronic myeloid leukaemia

Acronym

SPIRIT 2

Study objectives

To compare 5-year Event Free Survival (EFS) between the treatment arms. The study is powered to demonstrate superiority of the dasatinib arm over the imatinib arm.

Ethics approval required

Old ethics approval format

Ethics approval(s)

London Research Ethics Committee in 11/2007 (ref: 07/H0718/90)

Primary study design

Interventional

Study design

Phase III, multicentre, open-label, prospective randomised controlled trial

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Newly diagnosed, chronic-phase, chronic myeloid leukaemia

Interventions

Arm 1: Imatinib (oral) 400 mg daily, to be taken for a minimum of 5 years

Arm 2: Dasatinib (oral) 100 mg daily, to be taken for a minimum of 5 years

All endpoints will be assessed at regular timepoints throughout the trial for a minimum of 5 years per patient.

Contact details of Principal Investigator:

Dr Stephen O'Brien
Newcastle University
Academic Haematology
School of Clinical & Laboratory Sciences
Leech Building, Medical School
Framlington Place
Newcastle upon Tyne
NE2 4HH
United Kingdom

Intervention Type

Drug

Phase

Phase III

Drug/device/biological/vaccine name(s)

STI571 (Glivec®/ Gleevec®) and dasatinib (Sprycel®).

Primary outcome(s)

Event -free survival at 5 years

Key secondary outcome(s)

1. To compare the rate of complete cytogenetic response after 2 years
2. To compare the treatment failure rates (TFR) at 5 years
3. To compare the rates of complete haematologic response (CHR). Duration of follow-up: 60 months
4. To compare the level of 'molecular' response (BCR-ABL/ABL ratio by real time polymerase chain reaction [PCR]). Duration of follow-up: 60 months
5. To compare the tolerability between the regimens. This will in part be incorporated into the treatment failure assessment. Duration of follow-up: 60 months
6. To assess quality of life by the EQ-5D and the Functional Assessment of Cancer Treatment-Biological Response Modifier (FACT-BRM) questionnaires. Timepoints of assessment: at screening and then Months 1, 2, 3, 6, 12, 24, 36, 48, 60
7. To assess the broad comparative costs between the regimens
8. To compare overall survival at 2 and 5 years

Completion date

30/06/2016

Eligibility

Key inclusion criteria

1. Male or female patients ≥ 18 years of age
2. Patients must have all of the following:
 - 2.1. Be enrolled within 3 months of initial diagnosis of chronic myeloid leukaemia - chronic phase

(CML-CP) (date of initial diagnosis is the date of first cytogenetic analysis)

2.2. Cytogenetic confirmation of the Philadelphia chromosome or variants of (9;22) translocations; patients may have secondary chromosomal abnormalities in addition to the Philadelphia chromosome

2.3. <15% blasts in peripheral blood and bone marrow

2.4. <30% blasts plus promyelocytes in peripheral blood and bone marrow

2.5. <20% basophils in peripheral blood

2.6. $\geq 100 \times 10^9/L$ platelets

2.7. No evidence of extramedullary leukaemic involvement, with the exception of 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: any tyrosine kinase inhibitor (e.g., imatinib, dasatinib, nilotinib); busulphan; interferon-alpha; homoharringtonine; cytosine arabinoside; any other investigational agents (hydroxycarbamide and anagrelide are the only drugs permitted). NB: Patients will be ineligible for the study 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) mobilisation for haematopoietic progenitor-cell transplantation (It is allowable to collect unmobilised PBPCs at diagnosis)

4. Patient 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 ≥ 3

6. Patients with serum bilirubin, aspartate aminotransferase (SGOT/AST), alanine aminotransferase (SGPT/ALT), or creatinine concentrations $> 2.0 \times$ the institutional upper limit of the normal range (IULN)

7. Patients with International normalised ratio (INR) or partial thromboplastin time (PTT) $> 1.5 \times$ 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 3/4 cardiac problems as defined by the New York Heart Association Criteria

9. Patients with known positivity for human immunodeficiency virus (HIV); baseline testing for HIV is not required

- 10. Patients who have undergone major surgery within 4 weeks of Study Day 1, or who have not recovered from prior major surgery
- 11. Patients who are:
 - 11.1 Pregnant
 - 11.2. Breast feeding
 - 11.3. Of childbearing potential without a negative pregnancy test prior to Study Day 1
 - 11.4. Male or female of childbearing potential unwilling to use barrier contraceptive (Amenorrhoeic for at least 12 months to be considered of non-childbearing potential)
- 12. 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
- 13. Patients with a history of non-compliance to medical regimens or who are considered potentially unreliable

Date of first enrolment

30/06/2008

Date of final enrolment

30/06/2016

Locations

Countries of recruitment

United Kingdom

England

Study participating centre

Newcastle University

Newcastle upon Tyne

United Kingdom

NE2 4HH

Sponsor information

Organisation

Newcastle-upon-Tyne Hospitals NHS Foundation Trust (UK)

ROR

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

Funder(s)

Funder type

Industry

Funder Name

Bristol Myers-Squibb (USA)

Alternative Name(s)

Bristol-Myers Squibb Company, Bristol Myers Squibb, Bristol-Myers Company, BMS

Funding Body Type

Government organisation

Funding Body Subtype

For-profit companies (industry)

Location

United States of America

Results and Publications

Individual participant data (IPD) sharing plan**IPD sharing plan summary****Study outputs**

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	12/07/2012	10/04/2019	Yes	No
Results article	results	04/04/2013	10/04/2019	Yes	No
Basic results				No	No
Study website	Study website	11/11/2025	11/11/2025	No	Yes