Observational study to determine the rate of occurrence of invasive mould disease and treatment outcomes in at-risk patients: a European prospective invasive mould disease audit (PIMDA)

PIMDA Study – Brief Synopsis

Refer to complete Study Design document for details

Introduction:

The European Confederation of Medical Mycology (ECMM) is conducting an observational study to determine the rate of occurrence of invasive mould disease (IMD) and treatment outcomes in at-risk patients. It is the first study of its kind in IMD.

Limited multi-centre data exists documenting the incidence of IMD in Europe, nor quantifying the impact of pre-emptive therapy on patient outcomes. Such data would provide a firm foundation for the development of recommended targeted treatment strategies, including the place of specific therapeutic agents, and would in turn support the implementation of local integrated care pathways to improve patient outcomes.

European hospitals with haematology units and/or transplant centres that frequently treat patients for AML/MDS, or recipients of an allogeneic HSCT, or both, have been invited to take part. The target number of patients is 1,000 adults. This ECMM study is supported by an independent investigator research grant from Pfizer.

Study aims:

Primary:

a) To estimate the rate of occurrence of possible, probable and proven invasive mould disease (IMD) in patients who are expected to develop neutropenia of at least 7 days duration after receiving chemotherapy to induce or maintain remission of acute myeloid leukaemia (AML) or myelodysplastic syndrome (MDS), and recipients of allogeneic stem cell transplantation.

Secondary:

b) To determine the treatment outcome 12 weeks after starting antifungal therapy.

c) Comparison of the survival rate of patients with and without possible, probable or proven IMD for up to 6 months.

d) Exploration of the feasibility of adopting a diagnostic-driven approach to initiating antifungal therapy.

Eligible patients

a) Patients (aged ≥18 years) about to receive either
   i. chemotherapy to induce or maintain remission of AML or MDS (Appendix B), or
   ii. conditioning treatment for allogeneic stem cell transplantation (Appendix C)

b) Patients (aged ≥18 years) expected to develop neutropenia (<0.5 x 10^9/litre granulocytes) of at least 7 days duration.

Enrolment and follow-up

a) All participating centres will enrol patients during the same 12-week period.
b) All eligible patients who are admitted to hospital during the 12-week enrolment period should be registered within 3 working days of starting chemotherapy or conditioning regimen.
c) All enrolled patients will be followed for a fixed observational period of 12 weeks.
d) Those patients who are treated for IMD during the observational period will be followed for 12 weeks after starting antifungal therapy to assess the outcome of treatment of the IMD.
e) All enrolled patients will be assessed at 6 months after enrolment to determine survival.

The maximum study duration is, therefore 38 weeks.

Diagnosis / Centre requirements

a) Participating centres should routinely use a diagnostic work up that includes CT scanning, and the Platelia EIA test for galactomannan (GM) to diagnose IMD, with no more than 7 days between the CT scan and GM test for each case.

Diagnostic Work Up and treatment

As this is a period prevalence observational study, no change to the usual diagnostic work-up or treatment regimen employed at the participating centre is required; all centres are expected to follow their existing local diagnostic work up and treatment protocols. No tests or drugs will be supplied.

Each participating centre should provide a copy of their local protocol or standard of care for the diagnosis and treatment of invasive mould disease (send to PIMDA Study Administration).

Data collection

Data will be collected using a secure, encrypted, online database – for further information, see separate document 'Database Operations and Security'. Data storage is at a secure facility in The Netherlands. Principal data collection points are at patient enrolment, 12 weeks after enrolment, and 6 months after enrolment.

Patient data will be anonymous. Patients will be identified by Reference Number only, and no personal information will be stored apart from age and sex. Each participating centre must keep their own records to link their actual patients to the PIMDA-allocated reference number. One password-protected online account will be created for each participating centre. A paper copy of the CRF has been supplied as a separate document.

Compensation

Participating centres/investigators will receive Euro 300 for each patient who completes the study, and payment will be made at the end of the study on submission of an invoice to the ECCM Treasurer.

PIMDA Steering Committee and General Contact Information

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