Mesothelioma Articles

Extrapleural Pneumonectomy, IHOC Cisplatin and Gemcitabine With Amifostine and Sodium Thiosulfate Cytoprotection for Resectable Malignant Pleural Mesothelioma

This study is currently recruiting participants.
Verified by Dana-Farber Cancer Institute, December 2007

Sponsors and Collaborators:	**Brigham and Women's Hospital** Dana-Farber Cancer Institute
Information provided by:	Dana-Farber Cancer Institute
ClinicalTrials.gov Identifier:	NCT00571298

Purpose

RATIONALE: After removal of visible cancer in the chest, chemotherapy drugs are used to kill or stop tumor cells from dividing, so that they stop growing or/and die. Cisplatin is currently used safely as in intra-operative treatment for malignant pleural mesothelioma. This study is aimed to determine if the addition of gemcitabine as a second intracavitary chemotherapy can be accomplished safely.

PURPOSE: This is a Phase I trial to study the efficacy of combination chemotherapy consisting of gemcitabine and cisplatin administered in the operating room and put into the chest and abdomen for one hour. We are also looking at the effects of heating the chemotherapy to a temperature of 42 degrees Celsius and the effect of cytoprotection agents: amifostine and sodium thiosulfate to counteract potential side effects of chemotherapy.

Condition	Intervention	Phase
Malignant Pleural Mesothelioma	Procedure: Extrapleural pneumonectomy (EPP) Drug: cisplatin Drug: gemcitabine Drug: amifostine Drug: sodium thiosulfate	Phase I

ChemIDplus related topics: Cisplatin Amifostine Sodium hyposulfite Trichloroethylene

U.S. FDA Resources

Study Type: Interventional
Study Design: Treatment, Non-Randomized, Open Label, Single Group Assignment, Safety Study

Official Title: A Phase I Trial of Extrapleural Pneumonectomy, Intrathoracic/Intraperitoneal Hyperthermic (IOHC) Cisplatin and Gemcitabine With Intravenous Amifostine and Sodium Thiosulfate Cytoprotection for Patients With Resectable Malignant Pleural Mesothelioma

Further study details as provided by Dana-Farber Cancer Institute:

Primary Outcome Measures:
To establish the maximally tolerated dose (MTD) of intraoperative Intrathoracic/Intraperitoneal hyperthermic gemcitabine and cisplatin combination modulated by amifostine and sodium thiosulfate in patients with malignant pleural mesothelioma. [Time Frame: 2 years] [Designated as safety issue: Yes]

Secondary Outcome Measures:
To determine and quantitate the safety of this combination in these patients by defining the dose limiting toxicity. [Time Frame: 2 years] [Designated as safety issue: Yes]
To study the pharmacokinetics of gemcitabine and cisplatin combination administered in this way. [Time Frame: 2 years] [Designated as safety issue: No]

Estimated Enrollment: 36
Study Start Date: November 2007
Estimated Study Completion Date: January 2010

Detailed Description:

- This is a dose escalation study of gemcitabine with a fixed dose of cisplatin
- Patients will undergo surgery with Extrapleural Pneumonectomy, which entails the removal of the inner and outer lining of the lung (pleura) and the lung itself, including the lining overlying the pericardium and diaphragm. Resection of the pericardium and diaphragm are occasionally necessary to remove all visable tumor. This surgery is part of standard care for malignant pleural mesothelioma.
- After surgery, a one hour lavage with heated cisplatin and or gemcitabine will be administered to the hemithorax (and abdominal regions if the diaphragm is no longer present).
- Patients will remain hospitalized until they have recovered from surgery (usually 7-14 days).
- Patients will return to the hospital during the first month after their surgery to be evaluated by the medical staff.
- Dose escalation: 1) Three patients will be treated at the first dose level of gemcitabine. Labs will be monitored on a weekly basis, including a CBC, Chem-7, and LFT's. In the absence of developing dose-limiting toxicity (DLT) among the first 3 patients treated, dosages can be escalated. DLT will be defined as any grade 3 or higher renal toxicity, thrombocytopenia or other grade 3 toxicity not related to surgery 2) If none of these 3 patients have any toxicity, we will proceed to the next level of gemcitabine. 3) If DLT occurs in 1 of 3 patients at a given dose level, then 3 additional patients are added at that dose (for a total of 6 at this level)If no DLT occurs, we will proceed to the next level of gemcitabine. If DLT occurs in another patient, this dose is considered the maximum tolerated dose (MTD). 4) At any dose, 3 cases of DLT lead to discontinuation of recruitment at that dose and enrollment of 3 additional patients at a lower dose.

Eligibility

Ages Eligible for Study: 18 Years and older
Genders Eligible for Study: Both

Criteria

Inclusion Criteria:

- Histologically-proven diagnosis of stages I to III malignant mesothelioma of the pleura and negative mediastinal N2 lymph nodes (Malignancy is confined to the affected hemithorax)
- Adequate organ function including the following: adequate cardiac function, pulmonary function, renal and hepatic function and bone marrow reserve
- Adequate overall physical activity
- Surgical candidate for Extrapleural Pneumonectomy (EPP)

Exclusion Criteria:

- Extended disease outside the ipsilateral hemithorax as proven histologically, radiologically and/or intraoperatively
- Have received chemotherapy and or radiation therapy within the last 3 years at the time of study entry
- Serious concomitant systemic disorders

- Second active primary malignancy (to exclude non- melanoma skin cancer)
- Pregnancy at the time of the operation
- Psychiatric or addictive disorder which would preclude obtaining informed consent

Contacts and Locations

Please refer to this study by its ClinicalTrials.gov identifier: NCT00571298

Contacts

Contact: David Sugarbaker, M.D. 617-732-5004 dsugarbaker@partners.org

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Locations

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Sponsors and Collaborators

Brigham and Women's Hospital

Dana-Farber Cancer Institute

Investigators

Principal Investigator: David J Sugarbaker, MD Brigham and Women's Hospital

More Information

International Mesothelioma Program

Responsible Party:	Brigham and Women's Hospital International Mesothelioma Program, Division of Thoracic Surgery (David J. Sugarbaker, MD)
Study ID Numbers:	07-091
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Last Updated:	December 14, 2007
ClinicalTrials.gov Identifier:	NCT00571298
Health Authority:	United States: Institutional Review Board

Keywords provided by Dana-Farber Cancer Institute:
Extrapleural pneumonectomy
cisplatin
gemcitabine
amifostine
sodium thiosulfate

Study placed in the following topic categories:
Fever Mesothelioma

Trimethoprim
Amifostine
Cisplatin
Sodium thiosulfate
Trichloroethylene
Gemcitabine
Adenoma
Neoplasms, Glandular and Epithelial

Additional relevant MeSH terms:
Mesothelioma
Antimetabolites
Anti-Infective Agents
Radiation-Protective Agents
Antioxidants
Neoplasms by Histologic Type
Antimetabolites, Antineoplastic
Immunologic Factors
Neoplasms, Mesothelial
Antineoplastic Agents
Physiological Effects of Drugs
Enzyme Inhibitors
Immunosuppressive Agents
Antiviral Agents
Protective Agents
Molecular Mechanisms of Action
Pharmacologic Actions
Anti-Bacterial Agents
Neoplasms
Radiation-Sensitizing Agents

ClinicalTrials.gov processed this record on December 21, 2007

Source: www.ClinicalTrials.gov

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