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Follicular Lymphoma

A Study Evaluating the Effects of the Body on and the Safety and Effectiveness of Mosunetuzumab in Patients with Relapsed or Refractory Follicular Lymphoma.

An Open-label, Multicenter, Phase I Trial Evaluating the Pharmacokinetics, Safety and Efficacy of Mosunetuzumab as a Single-agent in Patients with Relapsed or Refractory Follicular Lymphoma

Trial Status Trial Runs In Trial Identifier
Recruiting 1 Countries Y043555

The source of the below information is the publicly available website ClinicalTrials.gov. It has been summarised and edited into simpler language.

Trial Summary:

A study to evaluate the effects of the body on, safety and effectiveness of mosunetuzumab when given as a single-agent in patients with relapsed or refractory follicular lymphoma.

F. Hoffmann-La Roche (USA) Sponsor		
YO43555 Trial Identifiers		
Eligibility Criteria:		
Gender Both	Age >=18 years	Healthy Volunteers No

Follicular lymphoma (FL) is a type of cancer that originates in the white blood cells of the body. It is a slow-growing cancer but most patients either experience disease worsening (relapse) after a temporary improvement in symptoms, that lasted a little over 6 months after completion of the last treatment or develop refractory FL (FL that is resistant to treatment or that progressed less than 6 months after completion of the last treatment) (R/R FL). Mosunetuzumab is a trial drug, which means health authorities have not yet approved mosunetuzumab for the treatment of R/R FL. The aims of this study are:

 To understand how mosunetuzumab is absorbed, distributed, and eventually removed from the body

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- To understand how safe and tolerable mosunetuzumab is when given by itself
- To assess how effective mosunetuzumab is when given by itself to treat R/R FL
- To determine how the immune system responds to mosunetuzumab
- To assess the health status of patients using questionnaires

Who can participate?

People who are over 18 years of age with FL relapsed or refractory to at least two lines of previous systemic therapy.

What does the study involve?

Participants may be asked to be in the study for 1 day or more than 40 months depending on how their cancer responds to the treatment. This includes:

- A screening period of up to 28 days before the start of the study where tests will be done to check if the participants are eligible to take part in the study.
- A treatment period where participants will have to visit the clinic roughly every week
 for the first month, followed by every 3 weeks for receiving treatment. The duration
 of a visit may be between 2-10 hours. Treatment will be administered under the
 guidance of a doctor.
- A safety follow-up period where participants will have a check-up 28 days after receiving the last dose of mosunetuzumab.

Mosunetuzumab will be given by inserting a needle into a vein in the participant's body (intravenously; IV) over 4 hours during the first cycle. The infusion time will be reduced to 2 hours if there are no infusion-related side effects. The dose will be gradually increased every week during the first cycle. Each cycle is 21 days. Beyond the first cycle, participants will receive the same dose of mosunetuzumab throughout a cycle for 8 or 17 cycles depending on how the tumour is responding to the study treatment. The treatment may be discontinued earlier if FL worsens, or the participant is unable to tolerate the treatment. To help prevent side effects from mosunetuzumab participants will receive a pain reliever/fever reducer (acetaminophen), and an anti-allergic (diphenhydramine) before every dose. In addition to these a corticosteroid (dexamethasone or a similar medication) will be given before the first four injections (and maybe more depending on whether participants experience certain side effects).

Participants may be allowed to repeat treatment with mosunetuzumab based on how their tumour responds to initial treatment.

What are the possible benefits and risks of participating?

Participants will not receive any benefit from participating in this study, but the information that is learned may help people with certain cancers in the future.

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Participants may have side effects from the drugs or procedures used in this study that may be mild to severe and even life-threatening, and they can vary from person to person. Mosunetuzumab is designed to trigger the body's immune system to fight cancer. This can cause swelling (inflammation) within the tumour and the normal tissues. Therefore, mosunetuzumab may cause several different kinds of side effects related to inflammation. Mosunetuzumab has had limited testing in humans. The known side effects of this drug, as well as potential side effects based on human and laboratory studies or knowledge of similar drugs, are listed below.

Identified risks:

- Cytokine release syndrome/infusion reaction: this is a very common condition that
 is caused when the immune system releases some proteins called cytokines during
 study drug infusion. This could cause symptoms of headache, fevers, chills, shortness
 of breath, rapid heartbeat, changes in blood pressure, and/or muscle aches in the
 hours or days following the infusion of mosunetuzumab.
- Neutropenia: a decrease in the number of neutrophils (a type of white blood cell) is another common side effect. A low white blood cell count increases the risk of infections. Symptoms of infection may include fever, pain, redness, and/or difficulty breathing.
- Increased risk for infections such as pneumonia (infection of the lungs) which can be severe or fatal, due to the effect of the drug on the immune system.
- Tumour flare is caused by the action of mosunetuzumab on the cells of the immune system. It can cause symptoms such as shortness of breath (dyspnoea), decreased oxygen levels (hypoxia), elevated levels of compounds that indicate liver damage (liver enzymes and bilirubin, a compound that is produced by the breakdown of red blood cells]), and inflammation of the intestine. Tumour enlargement could also occur, and this may have side effects such as difficulty breathing, or affect major organs, such as the heart or blood vessels, depending on the location of the tumour.
- Tumour lysis syndrome: this is a condition caused by the rapid destruction of a large number of tumour cells. It may be mild (resulting in some minor changes in blood tests) to severe (resulting in kidney damage).

Potential risks:

- Thrombocytopenia (low numbers of platelets, a component of the blood that helps it to clot). A low platelet count increases the risk of bleeding (such as nosebleeds, bruising, stroke, and/or digestive system bleeding).
- Hemophagocytic lymphohistiocytosis (a severe uncontrolled inflammatory reaction with signs and symptoms that may be similar to those caused by cytokine-release syndrome)
- A flare-up of past infections (like hepatitis B virus)
- Progressive multifocal leukoencephalopathy, a rare viral infection

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- There is a chance that the immune system might develop antibodies to this drug, called anti-drug antibodies. Antibodies are proteins made in the body that respond to a substance that is foreign to the body. If these anti-drug antibodies develop, it may affect the body's ability to respond to mosunetuzumab in the future
- Effects on the nervous system, with symptoms such as headache, dizziness, confusion, speech disorders, tremor, or seizure
- Liver damage (elevated liver enzymes)

There may be a risk in exposing an unborn child to the study drug, and all risks are not known at this time. Women and men must take precautions to avoid exposing an unborn child to the study drug. Participants who are pregnant, become pregnant, or are currently breastfeeding, cannot take part in this study

Where is the study run from?

F. Hoffmann-La Roche (USA)

When is the study starting and how long is it expected to run for? June 2021 to July 2025

Who is funding the study?

F. Hoffmann-La Roche (USA)

Who is the main contact?

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