

**HACKETTSTOWN REGIONAL MEDICAL CENTER
JOAN KNECHEL CANCER CENTER
ZEVALIN (Y-90) THERAPEUTIC REGIMEN**

Effective Date: January 2010

Cross Referenced:

Reviewed Date: 8/13, 6/14

Revised Date: 8/13, 6/14

Policy No: ROC NU 99

Origin: Radiation Oncology

Authority: Medical Director

Page: 1 of 2

SCOPE

All cancer patients receiving radiopharmaceutical therapeutic treatment utilizing Zevalin (Y-90)

PURPOSE

For the treatment of:

- 1) Follicular non-Hodgkin's lymphoma (NHL) refractory to Rituximab
- 2) Relapsed or refractory low-grade, follicular or transformed B-cell NHL

DEFINITIONS

N/A

POLICY

To specify the contraindications and the dose calculations in the administration of the Zevalin radiopharmaceutical for the therapeutic treatment of cancer patients.

Contraindications:

1. Platelet count < 100,000/mm³
2. Patients with known Type I hypersensitivity or anaphylactic reactions to murine proteins or to any component of this product, including Rituximab, yttrium chloride, and indium chloride
3. Pregnancy (to be determined as per standard department policy)

Dose:

The dose is based on weight and platelet count, not to exceed a maximum of 32 mCi, regardless of patient's body weight.

Platelets 100,000-149,000 -0.3mCi/Kg.

Platelets > 150,000 – 0.4mCi/Kg.

Procedure:

- 1) The Radiation Oncologist as the authorized user must complete the written directive (attached) and has determined that the patient meets all of the treatment criteria, with the date to administer, route of administration and the dosage required.
- 2) The Radiation Oncologist has educated the patient and obtains a signed written consent from the patient.
- 3) The Y-90 Zevalin Dose is ordered by the nuclear medicine staff based on the written directive signed by an authorized user (radiation oncologist).
- 4) Patient reports to the Infusion Center of the Joan Knechel Cancer Center for cold infusion of Rituximab, 250 mg/m² IV.
- 5) During the patient's infusion, the Infusion Nurse notifies Nuclear Medicine on the projected end time of the cold infusion.
- 6) After infusion, the patient goes to the Radiation Oncology Center.

**HACKETTSTOWN REGIONAL MEDICAL CENTER
JOAN KNECHEL CANCER CENTER
ZEVALIN (Y-90) THERAPEUTIC REGIMEN**

Effective Date: January 2010

Cross Referenced:

Reviewed Date: 8/13, 6/14

Revised Date: 8/13, 6/14

Policy No: ROC NU 99

Origin: Radiation Oncology

Authority: Medical Director

Page: 2 of 2

- 7) The Nuclear Medicine staff member allows for a maximum of four hours between end of cold infusion and the Y-90 Zevalin infusion.
- 8) Patient is seated in a chair and a chuck is placed on the table for protection. The patient should have an IV in place from the cold infusion.
- 9) When the dose is measured and verified, the authorized user (radiation oncologist) slowly pushes the micron filtered Y-90 Zevalin through the IV over a total of 10 minutes, followed by a saline flush. When the infusion is complete the nuclear medicine tech will remove the IV and properly store it in the hot lab.
- 10) The Y-90 Zevalin syringe is stored to decay 10 half-lives along with any other materials in contact with Y-90.
- 11) The authorized user and nuclear medicine technologist will also complete the record of administration section on the written directive (see attachment).

Discharge Instructions

The radiation oncology nurse will educate the patient on the following:

- 1) Assure the patient the radiation safety precautions are minimal
- 2) Patient is informed that the majority of the radiation will be excreted through the urine.
- 3) The patient requires no isolation
- 4) Patients should wash hands thoroughly after urination.
- 5) Any spillage of urine should be cleaned with soap and water immediately.
- 6) The patient must be informed to avoid sexual intercourse for one week following Y-90 Zevalin injection to minimize transfer of body fluids.
- 7) The patient will be provided this information on an Instruction Sheet signed by the patient and the nurse. (See Y-90 Zevlin Instruction Sheet)
- 8) Educate the patient that he/she will be required to have a CBC done weekly for 8 weeks after your injection to monitor their blood count.