

DEPARTMENT OF DIAGNOSTIC RADIOLOGY AND NUCLEAR MEDICINE

Patient Information Sheet

Quadramet Therapy for Bone Metastases

General Indications for the Procedure: This treatment is used to provide relief from pain due to the spread of cancer to the bones.

Description of the Procedure: A radioactive substance (samarium-153 lexidronam, brand name Quadramet®) is injected into one of a patient's veins. The radioactive substance goes to the bone and gives metastatic tumor(s) in the bone an internal radiation treatment. Some decrease in bone pain can be expected in approximately 75%-80% of patients. This decrease usually lasts for 2-4 months or longer in some cases.

Risks of the Procedure: At the time of the injection, there is about 1% chance of extravasation (leaking from the vein) of the radioactivity into the tissues at the site of the injection. This may lead to tissue damage at the injection site, although this injury would be expected to heal with time. There is a possibility that bone pain may temporarily increase after the treatment, because metastatic tumor(s) in the bones might temporarily swell as a result of the treatment. This can sometimes be prevented by treatment with steroid medication. Most patients will have some reduction in blood counts secondary to bone marrow depression. Small reductions cause no symptoms. However, if the drop in cell count is significant, then a patient may be more susceptible to infection and bleeding. In this case, the patient may need to receive appropriate therapy, which may include blood transfusions. Therefore, it is important for patients to have their blood counts checked every week for 8 weeks in their doctor's office. The patient's doctor decides if treatment is needed for any changes in blood counts.

Alternatives to the Procedure: Pain may be treated with pain medication, such as narcotics.

Probable Consequences of Refusing the Procedure: The pain caused by metastases in the patient's bones will be treated with usual pain medications.

Persons Performing the Procedure: The key portions of the procedure will be performed by an attending physician who is a member of the medical staff of Rush University Medical Center, or a resident or fellow who will be observed and supervised by a member of the medical staff. Residents are licensed physicians in an approved residency program. Fellows are licensed physicians who have completed a residency in radiology and are in an approved post-residency training program. The parts of the procedure a resident or fellow will perform will be based on their level of training and competence.