

S1900K, A Randomized Phase II Study of Tepotinib with or without Ramucirumab in Participants with MET Exon 14 Skipping Positive Stage IV or Recurrent Non-Small Cell Lung Cancer (Lung-MAP Sub-Study)

Frequently Asked Questions:

Lymphoscintigraphy scans

I'm not too familiar with lymphoscintigraphy scans. Can you provide some additional information that can help me discuss this with my patient?

Lymphoscintigraphy is a type of nuclear medicine scan that uses a radiolabeled substance, most often 99mTc-sulfur colloid, to visualize the lymphatics of a particular limb. It is, in this way, similar to the way a PET scan works. The most common use in oncology is for the detection of sentinel lymph nodes, or the first lymph node that a tumor might drain into, in patients with breast cancers or melanomas. Another use for lymphoscintigraphy is to identify blockages in the lymphatic system, as in the case of lymphedema. Because selective MET inhibitors like tepotinib commonly cause peripheral edema and because we hypothesize that this is because of deranged lymphatics that develop in response to tepotinib, lymphoscintigraphy is a scan that can help us to better understand the physiologic basis for lymphedema in our patients. Lymphoscintigraphy can help us to understand this in two ways. First, it can tell us if the lymphatics for a particular limb just aren't draining, because we don't see activity traveling up the limb. Second, it can tell us the severity of the blockage by allowing us to measure how long it takes for the tracer to move up the limb.

How are lymphoscintigraphy scans performed?

There's no special preparation required to undergo a lymphoscintigraphy scan. Patients can feel free to eat or take any medications around the time of the scan. Patients will be led to the imaging room where a nuclear medicine doctor or trained professional will outline the steps in the procedure, which includes preparing the site where the radiotracer will be injected. The injection is superficial, and will typically occur in the webbing between the fingers or toes of the affected limb (arms and/or legs). Lidocaine will be administered first to numb the area. Once the site is numb, the doctor or trained professional will inject the radiolabel, usually Tc99m-sulfur Colloid, in the same site. Massaging techniques and heat pads help to stimulate the lymphatic drainage. After this, images are obtained at different time points to follow the radiotracer. The total imaging time usually takes about 1.5 to 2 hours. The injections can be uncomfortable, though lidocaine is provided to minimize this discomfort. There are otherwise no side effects associated with the procedure.

My nuclear medicine department mentioned that 99mTc-tilmanocept is available as an alternative to 99mTc-sulfur colloid. Would it be ok to use this for the test?

While 99mTc-tilmanocept has advantages in localizing sentinel lymph nodes because of its rapid clearance from the injection site, the rapid clearance makes it less ideal for uniform assessment of lymphatic drainage kinetics. This makes 99mTc-sulphur colloid more suitable for this study's purpose and our strong recommendation is to utilize this radiotracer.

How many lymphoscintigraphy time-points are required for the study?

All patients will need to undergo baseline lymphoscintigraphy scans, ideally of both arms and both legs. This is to serve as a reference for any future scan that might occur. If no peripheral edema develops, then no additional lymphoscintigraphy scans will be required. Another set of lymphoscintigraphy scans will be required at the first sign of peripheral edema, whenever this develops. Scans would be required of the affected limb(s). If the patient's peripheral edema remains stable in grade, no additional scans will be required. If the patient's edema worsens in CTCAE grade, and for every worsening grade thereafter, another set of lymphoscintigraphy scans will be required of the affected limb(s).

Are the lymphoscintigraphy scans funded by the study?

S1900K provides funding for the baseline lymphoscintigraphy scan and the lymphoscintigraphy scan performed at the initial appearance of peripheral edema. Scans after this performed for every grade worsening of peripheral edema will fall under standard of care practice (given the presence and

worsening of peripheral edema). These scans will not be funded by **S1900K** and would be considered billable tests.

Who can I speak to if I have more questions about lymphoscintigraphy scans?

The best point of contact is your institution's nuclear medicine physician, who can answer questions regarding institution-specific workflows for these scans. Questions can be directed to the **S1900K** Study Chairs at S1900Kmedicalquery@swog.org.