

We know that desmoid tumors have several types of estrogen receptors and that some tumors in fact regress or become quiescent with medications that target these receptors. At Vanderbilt Medical Center and the Vanderbilt Ingram Cancer Center, we'd like to learn more about the number and function of these receptors in hopes of better understanding what makes desmoids start and stop growing so that more personalized treatment regimens can be designed.

At Vanderbilt University Medical Center, we have recently opened a new institutionally approved imaging based, non-therapeutic, pilot study investigating the use of 18F-FES-PET in adults with extra-abdominal desmoid tumors. 18F-FES is a biologically active form of estrogen, (FES) labeled with radioactive fluorine-18 (18F) that can be imaged using standard PET imaging techniques. The safety of 18F is well-established.

We are looking for adult males and females (age 18 or older) with biopsy proven extra-abdominal desmoids that are growing. That growth should be documented with an imaging study, like an MRI, or by a physician via clinical exam. Study participants must not currently be taking estrogen medication for birth control, menopause, or other reason and should not have been treated with an anti-estrogen medication for control of their desmoid tumor for at least 6 months. We welcome both sporadic tumors and those in patients with familial syndromes.

Prior to imaging, all patients are required to not eat or drink for 2 hours. Females will have a blood pregnancy test. When you arrive, we will start an IV and inject the labeled estrogen into that IV. Patients will be imaged 1 hour after injection. The imaging will take about 30 minutes and requires lying supine and still in a machine that appears similar to a CT scanner. We will do some additional tests on the tissue sample obtained at previous biopsy and compare that information to what we find on the images. Participants will be compensated \$400.00.

If you are interested or for more information, please contact Dr. Kate Hartley at (615) 343-3765 or [kate.hartley@vanderbilt.edu](mailto:kate.hartley@vanderbilt.edu).