



Second Opinion For: Mrs. Jane Doe:

- 1. Reason for Request:** Mrs. Doe has been diagnosed with Breast Cancer. She has requested a review of her case to determine the best chemotherapy options.
- 2. Disease History:** Mrs. Doe was diagnosed with left sided Breast Cancer 3 months ago. She underwent lumpectomy and axillary (under the arm) lymph node dissection. Her pathology reports show that the cancer was 1.3cm in diameter. Two of the eleven lymph nodes removed contained cancer cells. Her cancer was reported as positive for estrogen receptors, progesterone receptors, and Her-2/neu.
- 3. Other Past Medical History:** Ms. Doe was healthy at the time of her diagnosis. Her only medical condition was high blood pressure.
- 4. Medications:** Mrs. Doe's only medication at the time of diagnosis was HCTZ 25mg 1 a day.
- 5. Review of Mrs. Doe's Medical Issues:** There are several issues involved in the selection of chemotherapy for Breast Cancer. In the case of Mrs. Doe, her primary cancer in her breast was >1cm. In addition, the cancer was found in 2 lymph nodes. These are both indications for chemotherapy.

Choice of chemotherapy is largely based of the receptor status of the cancer. In the case of Mrs. Doe, the cancer was both estrogen and progesterone receptor positive. This means that the cancer uses both estrogen and progesterone to help it grow. At 62, it is likely that Mrs. Doe is post-menopausal and has lower estrogen and progesterone levels than she had when she was younger. However, a 62 year old still has some estrogen and progesterone being produced by her adrenal glands.

Her-2/neu is a protein found on certain types of Breast Cancer cells. Cancers with Her-2/neu often grow faster than other Breast Cancers. However, recent chemotherapy advances have been specifically directed at Her-2/neu. As a result, Her-2/neu Cancers are no longer considered more life threatening than other types of Breast Cancer, although they do require different chemotherapies.

- 6. Specific Discussion of Second Opinion Question:** Mrs. Doe's case was reviewed by Dr Andrew Jeffries, an oncologist. His qualifications follow at the end of this report. He has recommended consideration of a chemotherapy regimen that includes Docetaxel, Carboplatin, and Herceptin all given together every 3 weeks for a total of 6 doses of each. After completion of this 18 week regimen, she should continue to receive just Herceptin every 3 weeks for a total of one year. The Herceptin is specifically used to target the Her-2/neu protein. Dr. Jeffries believes this is a superior regimen to a commonly used alternative combination of chemotherapies that uses Doxorubicin instead of Docetaxol. Doxorubicin has a low risk of causing heart failure. Because Mrs. Doe needs to receive Herceptin, the risk of Doxorubicin induced heart failure goes up. Therefore, he feels that avoiding Doxorubicin is preferable.

It is very likely that Mrs. Doe will lose her hair on this regimen, but it is expected to grow back. Docetaxel can be associated with neuropathy (tingling and loss of sensation) in the fingertips which is frequently temporary but can be permanent.

On completion of her primary chemotherapy, Mrs. Doe should receive five years of hormonal therapy. The hormonal therapy, which is used only for estrogen and progesterone receptor positive cancers, essentially cuts off the food supply for any residual cancer cells which may survive chemotherapy. For a pre-menopausal patient, this would mean tamoxifen, which blocks estrogen from both the ovaries and adrenal glands. As Mrs. Doe is likely menopausal however, anastrozole or letrozole should be used instead. These two medications, called aromatase inhibitors, block only adrenal estrogen, but do so better than tamoxifen. They should not be started until Mrs. Doe completes the Docetaxel and Carboplatin portion of her therapy, but can be started while she is still taking Herceptin.

7. Additional Recommendations: Although not Mrs. Doe's specific question, Dr. Jefferies has chosen to review other steps that may be indicated in Mrs. Doe's ongoing treatment. First, He believes radiation therapy is appropriate, because she had a lumpectomy as opposed to a mastectomy. However, he feels the chemotherapy should be given first. Radiation therapy should not be administered while receiving Docetaxel and Carboplatin.

Next, Dr. Jefferies recommends additional imaging studies. He would recommend a PET scan of her entire body. As not all hospitals have PET scanners, a CAT scan of her chest, abdomen, and pelvis combined with a bone scan would, in his opinion, be an acceptable alternative. Some physicians recommend an MRI of the brain as well, but Dr. Jefferies does not feel that the MRI is necessary unless Mrs. Doe is having neurologic symptoms.

Please contact Activ with any further questions.

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Activ Doctors Online

Consultant
Andrew Jefferies, MD
Medical School: Brown University
Training: Sloan-Kettering Hospital, NY
Current Position: Director of Oncology – Monongahela Valley Hospital

As this is a sample second opinion, only one consultant was used. For an actual second opinion, your file will be sent to at least two consultants for expert review.