

## **Ibrance (Palbociclib) and Hyperbaric Oxygen**

This drug is a “targeted” agent. It is taken orally in a typical dose of 125 mg/day X 21 days then 7 days off. It is usually taken along with fulvestrant a hormonal agent which blocks the effects of estrogens.

It is a kinase inhibitor and blocks the progression of cells from the G1 phase of the cell cycle to the S phase. It would do this for normal as well as malignant cells and could therefore interfere with the healing process which requires vascular endothelial cells, epithelial cells, fibroblast etc that are part of the healing process to go through cell cycle and proliferate.

In a textbook that I commonly use as a reference, Physician’s Cancer Chemotherapy Drug Manual , inhibition of wound healing is not mentioned as a common complication.

Based on its characteristics and mechanism of action, I would not predict an increased complication rate with hyperbaric oxygen.

There are no studies or even case reports that are available by literature search that give us any guidance as far as reported increased toxicities when HBO2 is combined with Ibrance.

Its dosing scheme of 3 weeks on followed by one week off and then repeat does not allow for sandwiching the HBO2 around the chemo during off days because there is not enough time between periods on the drug. My understanding is that women are often on this drug for prolonged periods of time (perhaps 5 years).

As always the decision to treat a patient with HBO2 on drugs for which we have no experience is the decision of the treating physician. Based on a review of the drug and its chemistry and reported toxicities I would predict no enhanced complications but until we have adequate experience, neither I or anyone else can predict for sure.