BCCA Protocol Summary for Therapy for Advanced Breast Cancer Using a LHRH Agonist and an Aromatase Inhibitor

Protocol Code *BRAVLHRHA*

Tumour Group *Breast*

Contact Physician *Dr. Vanessa Bernstein*

ELIGIBILITY:

- Premenopausal women (defined as those who have menstruated in the last three months or who are biochemically premenopausal) with locally advanced inoperable or metastatic endocrine receptor positive breast cancer who are unable to receive tamoxifen due to a contraindication (i.e. thromboembolic disease or tamoxifen intolerance)

EXCLUSIONS:

- suitable candidates for tamoxifen use

TESTS:

If clinically indicated: serum cholesterol, triglycerides

TREATMENT:

Drug	**Dose**	**BCCA Administration Guideline**
letrozole or anastrozole or exemestane	2.5 mg daily 1 mg daily 25 mg daily	PO PO PO
buserelin (base) depot (SUPREFACT DEPOT®)* or goserelin (ZOLADEX®)* or leuprolide (LUPRON®)*	6.3 mg every 6 weeks x 2 treatments then every 8 weeks 3.6 mg every 4 weeks 7.5 mg every 4 weeks	SC SC IM

Continue treatment until disease progression. Strongly consider surgical oopherectomy in responding patients.

*Once response has been established, the following long-acting agents may be substituted at the physician's discretion. Menstrual function, and if necessary, hormone levels can be monitored to ensure effective dosing.

Drug	Dose	BCCA Administration Guideline
buserelin (base) depot (SUPREFACT DEPOT®)	9.45 mg every 12 weeks	SC
or goserelin (ZOLADEX®)	10.8 mg every 12 weeks	SC
or leuprolide (LUPRON®)	22.5 mg every 12 weeks	IM

PRECAUTIONS:

1. Hepatic dysfunction: Aromatase inhibitors are considered safe in mild-to-moderate hepatic dysfunction but have not been studied in severe hepatic dysfunction.
2. Bone density: The long-term effects of aromatase inhibitors on bone density is unknown. Supplementation with calcium and vitamin D and regular weight bearing exercise is recommended. A bisphosphonate should be considered if clinically indicated. Caution in patients with an already established diagnosis of clinically significant osteoporosis.
3. Hyperlipidemia: An increase in cholesterol or triglyceride levels may occur when an aromatase inhibitor is initiated. Levels may need to be checked during the first few months of therapy, especially in those patients with prior significant lipid elevations.

Call Dr. Vanessa Bernstein or tumour group delegate at (250) 519-5500 or 1-800-670-3322 with any problems or questions regarding this treatment program.

Date activated: 01 June 2015

Date revised:

References:

1. Klijn JG, Beex LV, Mauriac L, et al. Combined treatment with buserelin and tamoxifen in premenopausal metastatic breast cancer: a randomized study. J Natl Cancer Inst 2000;92(11):903-11.
2. Klijn JGM, Blamey RW, Boccardo F, et al. Combined tamoxifen and luteinizing hormone-releasing hormone (LHRH) agonist versus LHRH agonist alone in premenopausal advanced breast cancer: a meta-analysis of four randomized trials. J Clin Oncol 2001;19(2):343-53.
3. Gnant M, Mlineritsch B, Schippinger W, et al. Endocrine Therapy plus zoledronic acid in premenopausal breast cancer. N Engl J Med 2009; 360:679-91.
4. Masuda N, et al. Monthly versus 3-monthly goserelin acetate in premenopausal patients with estrogen receptor positive early breast cancer. Breast Cancer Res Treat. 2011;126(2):443-51.