



## PROSE

### January 2005 Newsletter

#### HAPPY NEW YEAR!

We would like to introduce the first in a quarterly series of newsletters that we will use to provide you with updates on the PROSE Study.

#### GRANT SUBMISSION:

A competing continuation for years 5-10 of the PROSE grant was submitted November 1, 2004. I will contact you with the results of this review, probably in February or March 2005. The aims of this grant are as follows:

Specific Aim 1: Evaluate the effect of post-BPO HRT use on breast cancer risk reduction.

Specific Aim 2: Evaluate whether the timing of BPO with respect to age and reproductive events affects the magnitude of cancer risk reduction.

Specific Aim 3: Evaluate the effect of HRT and BPO on histopathological and biomarker-based characteristics in breast tumors, considering tumors arising from inherited BRCA1 and BRCA2 mutations separately.

#### PUBLICATIONS:

A paper titled "Effect Of Short Term Hormone Replacement Therapy On Breast Cancer Risk Reduction After Bilateral Prophylactic Oophorectomy In *BRCA1* and *BRCA2* Mutation Carriers", was submitted to JCO 12/9/2004. The abstract of this paper is as follows:

**Background:** Bilateral prophylactic oophorectomy (BPO) is widely used for cancer risk reduction in women with *BRCA1/2* mutations. Many premenopausal women choose to take hormone replacement therapy (HRT) after undergoing BPO to abrogate immediate symptoms of surgically-induced menopause. Thus, we evaluated whether the breast cancer risk reduction conferred by BPO in *BRCA1/2* mutation carriers is altered by use of post-BPO HRT.

**Methods:** We identified a prospective cohort of 462 women with disease-associated germline *BRCA1/2* mutations at twelve medical centers to evaluate breast cancer risk after BPO with and without HRT. We determined the incidence of breast cancer in 155 women who had undergone BPO and in 307 women who had not undergone BPO in whom we had complete information on HRT use. Post-operative follow-up was 3.6 years.

**Results:** Consistent with previous reports, BPO was significantly associated with breast cancer risk reduction overall (HR=0.40, 95%CI: 0.18-0.92). Using mutation carriers without BPO or HRT as the referent group, HRT of any type after BPO did not significantly alter the reduction in breast cancer risk associated with BPO (HR=0.37, 95% CI: 0.14-0.96).

**Conclusions:** Short term HRT use does not negate the protective effect of BPO on subsequent breast cancer risk in *BRCA1/2* mutation carriers.

#### **DATA ACCRUAL:**

##### **PROSE Data Collection Summary as of 1/5/2005**

<b>Center ID</b>	<b>No. in Study</b>	<b>Data last updated</b>
UC	44	11/11/03
CR	197	12/2/03
DF	200	6/15/04
FC	59	12/9/04
GU	84	3/3/03
NK	127	11/1/02
UP	326	12/22/04
RM	47	8/1/2004
SM	189	11/14/03
UT/UCI	288	6/15/04
WC	67	4/15/04
YA	103	10/15/04
<b>Total</b>	<b>1731</b>	

#### **DATABASE/WEBSITE:**

Steven Gallagher at Penn has been working on building a new database for the study. This is a database built in filemaker pro. If interested, sites may access their data over a secure web server. Let Tara Friebe

([tfriebel@cceb.med.upenn.edu](mailto:tfriebel@cceb.med.upenn.edu)) know if you would be interested in exploring this option. You would be able to make updates, changes and add new information to your own data over the web.

A new section was added to the codebook. Susan Domcheck is exploring the ER/PR status of breast tumors, so there have been additional questions added to address this concern. Please note the changes in the codebook.

The PROSE web site is located at: [www.cceb.upenn.edu/prose](http://www.cceb.upenn.edu/prose). Information contained on this web site includes contact information, protocols, forms, and research progress.

To note: If your site participates in both the PROSE study and the Modifiers study (collectively referred to as the Carrier Study), you will receive two newsletters, with some overlapping information. In addition, the content of the databases also overlaps substantially.

**RESEARCH PLANS:**

Title	Date to begin analysis (data collection should be complete)	Date of first draft to be completed by	Leader	Aims
BPO/BPM and Mortality	February 15, 2005	March 15, 2005	T. Rebbeck (Penn)	Survival analysis of prophylactic surgeries and risk of death in BRCA1/2 mutation carriers
ER/PR Status in post-BPO breast cancers	March 1, 2005	Spring/Summer 2005	S. Domcheck (Penn)	Comparison of ER/PR status in breast tumors of women who have and have not undergone BPO
Modifiers of breast cancer risk by reproductive history: CART analysis	February 15, 2005	March 15, 2005	S. Collila (Penn)	CART analysis of reproductive risk factors and surgery to predict breast cancer in BRCA1/2 mutation carriers