

Male Breast Cancer Pooling Project

Louise A. Brinton, Ph.D.

Division of Cancer Epidemiology and Genetics

Male Breast Cancer Pooling Project

- Pooling project established in 2008
- Eligible for inclusion were case control studies (n=11) and cohorts that could contribute at least 20 incident cases (n=10)
- 2,405 cases accrued across all investigations
- Contributions of questionnaires and biologic samples for assays of genetic factors (all designs) and hormones (cohorts only)

Initial Meeting of the MBCPP- May 2010

Representation from the U.S., Canada, Denmark, France, Greece, Italy, Sweden, United Kingdom



Challenges

- Data and material transfer agreements
- Data no longer available for 3 studies
- Harmonization of data
- Non-responsive contributor(s) led to project delays
- Absence of information for certain exposures or exceedingly small numbers
- Proper analytic approaches

Accomplishments to date:

Male breast cancer risk relations

- *Anthropometric and hormonal risk factors*
 - Brinton & Cook et al. J Natl Cancer Inst 2014;106:djt465.
- *Tobacco and smoking*
 - Cook et al. Cancer Epidemiol Biomarkers Prev 2015;24:520-31.
- *Endogenous estrogens*
 - Brinton et al. J Clin Oncol 2015;33:2014-50
- *Physical activity*
 - Arem H et al. Cancer Epidemiol Biomarkers Prev 2015; 24:1898-901.

Ongoing or other possible ventures

- Ongoing
 - Genetic assays: pooling efforts with a large UK collaborative project
- Planned (?)
 - Assessment of familial effects
 - Occupational exposures
 - Dietary factors

Lessons Learned

- Initial meeting of contributors helpful, but not much interest for continued meetings
- Individuals interested in analyzing pre-harmonized data, but not much enthusiasm for performing new harmonization
- Limited amount of biologic material from cohorts quickly depleted
- Some new directions suggested by analyses, but unclear how to realize these in a cost effective manner