Abstracts, EORTC–NCI–ASCO Annual Meeting on "Molecular Markers in Cancer"

Speakers' Summaries

S1

American Society of Clinical Oncology 2007 Update of Recommendations for the Use of Tumor Markers in Breast Cancer

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Purpose: To update the recommendations for the use of tumor marker tests in the prevention, screening, treatment, and surveillance of breast cancer.
Methods: For the 2007 update, an Update Committee composed of members from the full Panel was formed to complete the review and analysis of data published since 1999. Computerized literature searches of Medline and the Cochrane Collaboration Library were performed. The Update Committee's literature review focused attention on available systematic reviews and meta-analyses of published tumor marker studies. In general, significant health outcomes (overall survival, disease-free survival, quality of life, lesser toxicity, and cost-effectiveness) were used for making recommendations. Levels of Evidence defining quality of the data on a given marker were considered for each recommendation.
Recommendations and Conclusions: Thirteen categories of breast tumor markers were considered, six of which were new for the guideline. The following categories showed evidence of clinical utility and were recommended for use in practice: CA15-3, CA 27.29, CEA, ER, PgR, HER2, UPA, PA-1, certain multiparameter gene expression assays. Not all applications for these markers were supported, however. The following categories demonstrated insufficient evidence to support routine use in clinical practice: DNA/ploidy by flow cytometry, p53, Cathepsin D, Cyclin E, Proteomics, certain multiparameter assays, detection of bone marrow micrometastases and circulating tumor cells.

S2

Recommendations for collection and handling of specimens from group breast cancer clinical trials, from onsite collection through shipping to the central bank

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Abstract: Recommendations for specimen collection and handling have been developed for adoption across breast cancer clinical trials conducted by the Breast International Group (BIG) Groups and the National Cancer Institute (NCI)-sponsored North American Cooperative Groups.
Purpose: These recommendations are meant to promote identifiable standards for specimen collection and handling within and across breast cancer trials, such that the variability in collection/handling practices that currently exists is minimized and specimen condition and quality are enhanced, thereby maximizing results from specimen-based diagnostic testing and research.
Methods: Three working groups were formed from the Cooperative Group Banking Committee, BIG Groups, and North American breast cancer Cooperative Groups to identify standards for collection and handling of (1) formalin-fixed, paraffin-embedded tissue; (2) blood and its components; and (3) fresh/frozen tissue from breast cancer trials. The working groups collected Standard Operating Procedures from multiple Group specimen banks, administered a survey on banking practices to those banks, and engaged in a series of discussions during late 2005–2007. Their contributions were then synthesized into a single guidelines document (forthcoming). These guidelines focus primarily on collection and handling to the point of shipment to the central bank, although also offer some guidance to central banks.

S3

Cancer biobanking: The American perspective

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Introduction: The quality, quantity, and accessibility of human tissue is a critical issue in cancer research. Recent advances in genomic and proteomic technologies are accelerating advances in translational research and driving progress in personalized cancer medicine. With new opportunities to conduct translational research using genomic and proteomic technologies, the demand for hiqh-quality, clinically annotated human biospecimens has greatly increased, but biospecimen resources of sufficient quality to meet the technical demands of the new analysis tools are limited. As a result, the dearth of high-quality human biospecimen resources has been repeatedly identified as a critical problem and a major barrier to progress in cancer research over the next decade. The National Cancer Institute (NCI) is committed to moderniize and standardize biospecimen and biorepository management on a national level in order to better support the field of molecular medicine. The NCI has created the Office of Biorepositories and Biospecimen Research (OBBR) to lead this new initiative.