Recommended references for the afternoon session of the

Pediatric Subcommittee of the Oncologic Drugs Advisory Committee

September 12, 2000

Brief reviews of the application of diagnostic techniques

Young, RA Biomedical Discoveries with DNA Arrays Cell 102:9-15 2000 Survey of types of information that can be learned from analysis of DNA microarrays

Glassman AB Cytogenetics, in situ hybridization and molecular approaches in the diagnosis of cancer. Ann Clin Lab Sci. 1998 Nov-Dec; 28(6): 324-30. Brief survey of the application of cytogenetics to cancer diagnosis and classification with an example using samples from patients with chronic myelogenous leukemia

Patel AS, Hawkins AL, Griffin CA Cytogenetics and cancer. Curr Opin Oncol. 2000 Jan; 12(1): 62-7. *Commentary on the use of fluorescence in situ hybridization (FISH) technology to solid tumor diagnosis*

Joshi, VV, Balurezo, F, Hicks, MJ, Mierau, GW, Tsongalis, GJ Approach to Small Round Cell Tumors of Childhood Pathology Case Reviews 5(1): 26-41 2000 Discussion of the criteria used to diagnose small round cell tumors, which comprise about 20% of pediatric solid tumors

The following four reports are intended to illustrate the application of different techniques to classify tumors and are intended as examples.

Ginsberg JP, de Alava E, Ladanyi M, Wexler LH, Kovar H, Paulussen M, Zoubek A, Dockhorn-Dworniczak B, Juergens H, Wunder JS, Andrulis IL, Malik R, Sorensen PH, Womer RB, Barr FG EWS-FLI1 and EWS-ERG gene fusions are associated with similar clinical phenotypes in Ewing's sarcoma. J Clin Oncol; 17(6):1809-14 1999

Welford SM, Gregg J, Chen E, Garrison D, Sorensen PH, Denny CT, Nelson SF Detection of differentially expressed genes in primary tumor tissues using representational differences analysis coupled to microarray hybridization. Nucleic Acids Res; 26(12):3059-65 1998

Lawlor ER, Mathers JA, Bainbridge T, Horsman DE, Kawai A, Healey JH, Huvos AG, Bridge JA, Ladanyi M, Sorensen PH Peripheral primitive neuroectodermal tumors in adults: documentation by molecular analysis. J Clin Oncol; 16(3):1150-7 1998

Sorensen PH, Wu JK, Berean KW, Lim JF, Donn W, Frierson HF, Reynolds CP, Lopez-Terrada D, Triche TJ Olfactory neuroblastoma is a peripheral primitive neuroectodermal tumor related to Ewing sarcoma. Proc Natl Acad Sci U S A; 93(3):1038-43 1996

Special considerations of tumors of the central nervous system

World Health Organization on Classification of Tumors Pathology and Genetics of Tumours of the Nervous System Edited by Paul Kleihues & Webster Cavanese IARC Press and Oxford University Press The table of contents of the WHO classification is a comprehensive listing of tumors of the central nervous system.

Smirniotopoulos JG The new WHO classification of brain tumors. Neuroimaging Clin N Am; 9(4):595-613 1999 General commentary on the WHO classification of central nervous system tumors

Gilles FH, Brown WD, Leviton A, Tavare CJ, Adelman L, Rorke LB, Davis RL, Hedley-Whyte TE Limitations of the World Health Organization classification of childhood supratentorial astrocytic tumors. Children Brain Tumor Consortium. Cancer; 88(6):1477-83 2000 Critique on some aspects of the WHO classification as applied to pediatric oncology

Clinical trial design

Parmar MK, Ungerleider RS, Simon R Assessing whether to perform a confirmatory randomized clinical trial J Natl Cancer Inst; 88(22):1645-51 1996 *Considerations on the design of performing confirmatory clinical studies*