In a 2004 paper by Hans and colleagues it was suggested that immunohistochemistry with antibodies to CD10, bcl-6, and MUM1 could be employed to stratify diffuse large B cell lymphoma (DLBCL) into prognostically distinct groups corresponding to the molecularly defined "germin center B cell-like" (GCB) and activated B cell-like (ABC) subtypes. However, follow-up studies have been inconsistent in confirming these data, in part owing to the poor reproducibility of one or more of these markers, and likely because of the addition of rituximab to standard chemotherapy for DLBCL.

In a recent interinstitutional study of DLBCL stratification, Choi et al. have demonstrated a new immunohistochemical algorithm employing antibodies to CD10, bcl-6, MUM1 and two novel markers, GCET1 (germinal center B cell-expressed transcript 1) and FOXP1 (a transcription factor highly expressed in ABC-DLBCL). In a training set of 84 cases of CHOP-treated patients with DLBCL, use of this new algorithm closely approximated the subclassification of these same lymphomas by gene expression profiling (93% concordance vs. 86% concordance when the Hans algorithm was applied to the same data set). In a separate validation set of 63 DLBCL patients treated with CHOP-rituximab, the new algorithm was able to stratify patients into two distinct prognostic groups with 3-year survival rates of 87% (the GCB subset) and 44% (the ABC subset), simulating the predictive power of gene-expressing profiling of these same tumors.

PhenoPath Laboratories has recently validated both the GCET1 and FOXP1 antibodies, and is now pleased to offer this new IHC-based subclassification of DLBCL to our hematology/oncology colleagues for assistance in selecting the most appropriate therapy for their DLBCL patients.


PhenoPath Profile

PhenoPath Laboratories is pleased to announce the January 1, 2010 appointment of Sara M. Duesterhoeft, M.D. as a Pathologist and Associate Director of Hematopathology. Sara’s duties involve the entire range of PhenoPath diagnostic hematopathology testing, including immunohistochemistry, flow cytometry, FISH, and PCR.

Sara attended the University of Minnesota – Twin Cities Medical School where she earned her M.D. She completed her residency in Anatomic Pathology and Laboratory Medicine at the University of Washington Medical Center. Following her residency, Sara fulfilled a Fellowship in Pediatric Pathology at Seattle Children’s Hospital/University of Washington Medical Center, and a Fellowship in Hematopathology at the University of Washington Medical Center/Seattle Cancer Care Alliance. Sara is board-certified in Anatomic and Clinical Pathology, as well as Hematopathology.

Sara’s professional expertise and interest are in Hematopathology. In her spare time, she likes spending time with friends enjoying the amazing food, wine, and scenery of the Pacific NW, traveling, running, and following the Portland Trailblazers. Her interests also include art and architecture, and she aspires to claim amateur status in the realms of cooking and photography as well.

Sara M. Duesterhoeft, M.D.
The majority of follicular lymphomas (FLs) contain the t(14;18) juxtaposing the BCL2 gene on chromosome 18 with immunoglobulin heavy chain gene on chromosome 14. Germinal center B cells bearing this translocation express the bcl-2 protein at high level, leading to aberrant inhibition of apoptosis, and representing a critical step in lymphomagenesis. In the large majority of t(14;18)-positive FLs, strong cytoplasmic bcl-2 protein overexpression can be confirmed by immunohistochemistry with the most common anti-bcl-2 antibody in diagnostic use, clone 124 (raised against bcl-2 amino acids 41-54). However, there are rare cases of t(14;18)-positive FL that lack detectable bcl-2 protein with clone 124, but do show detectable bcl-2 by immunohistochemistry with the alternative clone C2 (raised against roughly the first 200 amino acids of bcl-2), presumably due to alteration in the clone 124 epitope in these cases. Therefore, we have validated clone C2 for use as an alternative anti-bcl-2 antibody in cases of probable FL that appear bcl-2-negative by initial immunohistochemistry with clone 124.

United States & Canadian Academy of Pathology, 99th Annual Meeting

The United States and Canadian Academy of Pathology’s mission is to provide pathologists with high quality continuing medical education at the investigative and applied practice level and to reinforce and update attendees’ knowledge of pathology in their area(s) of interest and need in the understanding of pathologic processes.

This annual week-long meeting regularly attracts over 3000 pathologists from the United States and Canada, as well as several hundred scientists from abroad.

Visit PhenoPath at Booth #220 to learn more about PhenoPath offerings.

Lectures by PhenoPath pathologists:

March 21, 2010, 1:30-5:30 PM:
ASIP/USCAP Companion Meeting: "Molecular Markers for Diagnosis and Prognosis: What and When"
Allen M. Gown, MD presents "Breast Cancer, The New and The Old"

March 22, 2010, 7:50 AM to 1:00 PM:
Special Course: Basic Principles and Practice of Molecular Pathology in Cancer
Allen M. Gown, MD presents "Integration of the Molecular Classification of Breast Cancer into Current Practice"

Posters including PhenoPath pathologists:

Monday, March 22, 2010, 9:30 AM, Poster Session I

Poster # 298: Stowell-Orbison/Surg Path/Autopsy Awards
Thyroid Transcription Factor (TTF-1) Expression in Breast Carcinomas
Authors: JN Robens, LC Goldstein, AM Gown, SJ Schnitt

Poster # 1017: Stowell-Orbison/Surg Path/Autopsy Awards
Aberrant Staining Patterns for Prostatic Adenocarcinoma (PCA) in Needle Biopsies Using Triple Cocktail Immunohistochemistry (IHC): An Experience of 469 Cases with Rationale for the Selective Inclusion of Novel Cancer Specific Nuclear Marker MYC
Authors: DE Westfall, DJ Luthringer, AM Gown, RS Parakh, M Vankalakunti, MB Amin

Monday, March 22, 2010, 10:00 PM, Poster Session II

Poster # 204: Markers of Metastatic Breast Cancer: Correlations between GCDFP-15 or Mamgloglin Expression and Tumor Grade, Hormone Receptor, and HER2 Expression
Authors: AM Gown, LC Goldstein, PL Kandalaft, HC Hwang, SJ Kussick, CC Tse

Poster # 82: Low Level MDM2 Gene Amplification and MDM2 Polysomy Are Found in Extra-Uterine and Uterine Leiomyosarcoma by Fluorescence In Situ Hybridization (FISH) Analysis
Authors: SJ Hwang, HC Hwang, CH Tse, LC Goldstein, AM Gown

Poster # 1008: Differential Immunohistochemical (IHC) Staining in Unusual and Morphologically Non-Classic Patterns of Testicular Germ Cell Tumors (GCT): Analysis with Traditional and Contemporary Markers
Authors: MP Venturina, RS Parakh, B Balzer, AM Gown, DE Westfall, LC Goldstein, MB Amin

Authors: RS Parakh, M Venturina, B Balzer, AM Gown, DE Westfall, M Vankalakunti, MB Amin

Tuesday, March 23, 2010, 9:30 AM, Poster Session III

Poster # 1006: An Analysis of INI1 Nuclear Expression in Collecting Duct Carcinoma (CDC) and Renal Medullary Carcinoma (RMC): Diagnostic and Pathogenetic Implications
Authors: M Vankalakunti, AM Gown, R Gupta, RB Shah, RS Parakh, DE Westfall, M Amin, DJ Luthringer, LC Goldstein, MB Amin

Tuesday, March 23, 2010, 1:00 PM, Poster Session IV

Poster # 138: Can Pathologic Features and Immunophenotype of ER+, Node Negative Breast Cancers Identify High and Low Risk OncotypeDX Subgroups?
Authors: KH Allison, SM Dintzis, PL Kandalaft, AM Gown, CH Tse, LC Goldstein

Wednesday, March 24, 2010, 9:30 AM, Poster Session V

Poster # 1005: Immunohistochemical (IHC) Expression of Ulex Europaeus Agglutinin-1 (UEA-1) in the Spectrum of Adult Renal Epithelial Neoplasms – A Study of 165 Cases
Authors: M Vankalakunti, DE Westfall, RS Parakh, R Gupta, RB Shah, M Amin, AM Gown, LC Goldstein, MB Amin

Online Posters2View™ Session: Gynecologic & Obstetrics

Poster # 1209: Pax8 Expression in Uterine Adenocarcinoma: Immunohistochemical Analysis of 94 Cases
Authors: A Yemelyanova, AM Gown, BM Ronnett, R Vang

For up-to-date information, visit our website: www.phenopath.com
Featuring

Dr. John Goldblum

At Our Spring Conference

John Goldblum, M.D., of the Cleveland Clinic in Cleveland, OH, will present “Controversies in the Diagnosis of Barrett’s Esophagus and Barrett’s-Related Dysplasia” at the PhenoPath Spring Conference on Thursday, April 8, 2010. The format of the conference is a social hour commencing at 6:30 PM, followed by Dr. Goldblum’s lecture at 7:30 PM. A light catered dinner will be served during the social hour.

Dr. Goldblum is the Chair of the Department of Anatomic Pathology at the Cleveland Clinic. He specializes in the interpretation of biopsy and resection specimens in the fields of soft tissue pathology and gastrointestinal pathology for Cleveland Clinic and non-Cleveland Clinic patients throughout the U.S. and foreign countries. He is the co-author of the world’s highest selling textbooks on soft tissue tumors with Dr. Sharon Weiss, and a GI pathology textbook with Dr. Robert Odze. In addition, he has published over 200 peer-reviewed articles. Dr. Goldblum is also a renowned speaker who has lectured extensively nationally and internationally in the field of anatomic pathology. A recipient of numerous awards, Dr. Goldblum was distinguished with The Arthur Purdy Stout Annual Prize Award in 2004.

Dr. Goldblum will also be giving a daytime lecture at 1:00 PM the same day, entitled, “Useful Ancillary Diagnostic Techniques in the Evaluation of the Most Common Morphologic Patterns in Soft Tissue Tumors”. All pathologists and residents are welcome to attend.