Supplemental method: Immunohistochemistry

Immunohistochemical staining was done using CD20, CD8, PCNA (from Dako, Carpinteria, CA) and CD4 (Novacastra, Vector Laboratories, Burlingame, CA) antibodies on all AR samples and selected samples with infection and drug toxicity. In addition, 31 archived AR biopsies were also stained with CD20. Sections were stained with monoclonal antibodies to human CD20 (dilution 1:400), CD8 (dilution 1:25), CD4 (dilution 1:10) and PCNA (dilution 1:100), using Biogenex I 1000 automated antigen retrieval system and Biogenex I 6000 automated stainer. The cores were scanned in a blinded fashion for CD20, CD4 and CD8 cell density. Each core biopsy was evaluated by a single pathologist for each IPOX antibody across the entire specimen, with all represented hpfs enumerated for the respective antibody. Cells were counted per hpf and the number of hpf counted were documented in each core. The overall core density in the histogram represents the density of cells in the entire core averaged for a single hpf. For each specimen, the single hpf with the highest CD20 count was then identified, and arbitrary threshold cell counts of > 275 and <100 over this hpf were used to assign "CD20 positive" or "CD20 negative" status. The CD20 density counts on the web site are the maximal CD20 densities over any single hpf after counts were completed over the entire core. Positive implies cell count of > 275 and negative <100 over the hpf of maximal density in the core.