Reviewer's report

**Title:** Availability and Quality of Paraffin Blocks Identified by the Shared Pathology Informatics Network (SPIN): A Multi-institutional Study

**Version:** 2  Date: 1 March 2006

**Reviewer:** Andrew G Glass

**Reviewer's report:**

General

This article addresses an important issue: how to provide archival pathology samples for investigators of markers, genes, etc. and how to know that the material that has been requested will indeed contain tumor and enough material to be useful. The authors are from an NCI-sponsored consortium tasked to develop a computer system (SPIN) that will catalog pathology specimens at many labs around the country, will allow searches (and I presume requests for tissue, ultimately) and will be sufficiently robust that investigators will find it efficient and effective.

Unfortunately, the article as presented only scratches the surface of these tasks and promises a great deal more than it delivers.

The project, as I understand it, essentially assigned the following task to the four participants: Identify 200 cases of cancer from your files, go to the archives and see how many of the slides and blocks you can gather, review them and tell us what you found. An extra wrinkle was that 100 of these cases would be common cancers, 25 each of lung, breast, prostate and colon and 100 would be uncommon cancers, 25 adenoid cystic, 25 GIST, 25 adrenal cortical and 25 mycosis fungoides. It is hard to decipher exactly what was done at each site, but it is safe to say that it wasn't all the same thing. Thus, one site used some of the SPIN technology and another used its Tumor Registry and a third a program developed just for its own use.

So how does one know if the SPIN technology will work? All we know, so far, is that each site can identify these cases, can find a variable number of cases and can review slides and blocks for the presence or absence of cancer tissue suitable for further marker studies. It is hard to see if this exercise gives us more information than would a simple request to each lab to pull a list of cases that were generated in any other way. Where is the added value of SPIN demonstrated? The authors keep talking about the millions of specimens available but they haven't convinced me with this paper that they are on the way to finding them. Why didn't everyone do it the same way? Were there organizational, logistic or human reasons that made this first step so complicated and so confounded the potential analysis?

Given the rather marked differences in the manner of identification of specimens, I don't know what to make of the several differences in retrieval rates pointed out between the common and rarer cancers or between the several types of malignancies. When the analysis tries to compare statistics in the smaller cells represented by the individual cancers and individual sites, the numbers are just too small to draw any conclusions.

As with many on-line papers, this one is just too long given the relatively modest results. A single table would suffice to describe the different methods applied at each site. I am not sure which tables and figures to include as I envision a major rewrite of the whole paper.
Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

As stated above, the focus of this paper needs to be on the SPIN activity, how it has/will advance the field and how the current study fits into that. In any case, the text needs to be significantly shortened at the time of focussing on the key questions. If these things can be done, the paper is worth publishing.

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

Discretionary Revisions (which the author can choose to ignore)

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:

I declare that I have no competing interests.