2 Mayer LW, Reeves MW, Al-Hamdan N *et al.* Outbreak of W135 meningococcal disease in 2000: not emergence of a new W135 strain but a clonal expansion within the electrophorectic type-37 complex. *J Infect Dis* 2002; **185**: 1596–605.
3 International Air Transport Association. Medical Manual. 2004. www.iata.org/ps/publications/medical-manual.htm
4 Smith MJ. Meningococcal tetravalent conjugate vaccine. *Expert Opin Biol Ther* 2008; **8**: 1941–6.
5 Wilder-Smith A. Meningococcal vaccine in travelers. *Curr Opin Infect Dis* 2007; **20**: 454–60.

A new softening agent for use on formalin-fixed, paraffin wax-embedded tissue

Sir,

I read with interest the article by Orchard *et al*.[1] on the subject of softening agents for paraffin blocks in microtomy. Given that the authors were working in conjunction with CellPath, who provided them with reagents to test, I was surprised that no mention was made of an existing product of the same company, RDC Rapid Decalcifier. This reagent, when applied in a similar manner to that described by the authors, will soften and surface-decalcify the tissue in a trimmed paraffin block. The length of time of application will, of course, depend on the degree of hardness and/or calcification of the tissue. May I presume to suggest that the authors might, with advantage, include RDC Rapid Decalcifier in any further trials?

J. Difford
Adford Technical Services
Pinner
Middlesex HA5 4TY
Email: adford@compuserve.com

Reference

1 Orchard GE, Torres J, Poirier A et al. Investigation into a new softening agent for use on formalin-fixed, paraffin wax-embedded tissue. *Br J Biomed Sci* 2009: **66**; 63–6.

Sir,

In answer to my colleagues question regarding the recent article, I think it may be of value to clarify a few points. The original development of the new product did not in fact involve CellPath. The process of events followed a long and sometimes quite winding path. Having performed a literature search, it became apparent that there is not a standard and widely used tissue softener employed in histopathology. The majority of products are either commercially produced agents not primarily designed for use in histological laboratories, or are reagents which quite often contain noxious and harmful components, some of which are not popular with biomedical staff in many histopathology laboratories. Many of these products are also surface decalcifying agents and not tissue softeners in the true sense. The first publication involved an evaluation of a number of the non-decalcifying agents.[1] We attempted at this point to determine which reagents performed best on human nail tissue.

Following this publication, and having determined the most successful products, the chemist at CellPath was approached to provide guidance on identifying the components of these household reagents that most likely contributed to their successful application. Having determined the most likely components, formal collaboration with CellPath commenced and resulted in some trial samples.

At this stage, the desire was to produce a new histological product that would be CE-marked, would not have any significant health and safety risks, and would be produced for purpose and applicable for use in all histopathology laboratories.

What followed involved extensive communication between CellPath and the histopathology laboratory at St. John's, as various formulations were evaluated. This culminated in the second paper, to which my colleague refers,[2] and the introduction of the new softener, which was named CellSoft.

At this stage, consideration was given to comparing additional existing products which contained decalcifying agents. However, it was felt that this would be an option to explore with the development of a second version of CellSoft, and this is what we will be doing over the next 12 months. If successful, the new product would be called CellSoft2. In order to make this an appropriate test, we plan to incorporate all existing histopathology laboratories within GSTS Pathology services at Guy's and St. Thomas' NHS Trust in testing a full range of tissue types. The objective here is to produce a second version that will have all the benefits of the first, together with the advantage of applications to surface decalcify without significant increase in health and safety issues.

What is clear from the work carried out to date is that this area of histopathology is poorly understood. There is very little evidence in the literature of any analytical methodology being performed. There has been no attempt to establish any concept of working rationales. In the current climate of scientific research, this is essentially a 'Dickensian' perspective. Clearly, it is time to raise the bar, and it is essentially what these studies are attempting to do, and also to encourage debate.[3]

I thank my colleague for his comments and hope that I have offered a reasoned explanation to the queries raised.

G. E. Orchard
GSTS Pathology
St. Thomas' Hospital
Westminster Bridge Road
London SE1 7EH
Email: guy.orchard@gsts.com

References

1 Orchard GE, Torres J, Sounthararajah P. Use of softening agents to improve the production of formalin-fixed, paraffin-embedded sections of nail tissue: an assessment. *Br J Biomed Sci* 2008: **65**: 68–70.
2 Orchard GE, Torres J, Poirier A *et al*. Investigation into a new softening agent for use on formalin-fixed, paraffin wax-embedded tissue. *Br J Biomed Sci* 2009: **66**; 63–6.
3 Orchard G. Developing a new softener for histological use: demands, exasperation, trial and error. *The Biomedical Scientist* 2009: **53** (4): 288–90.