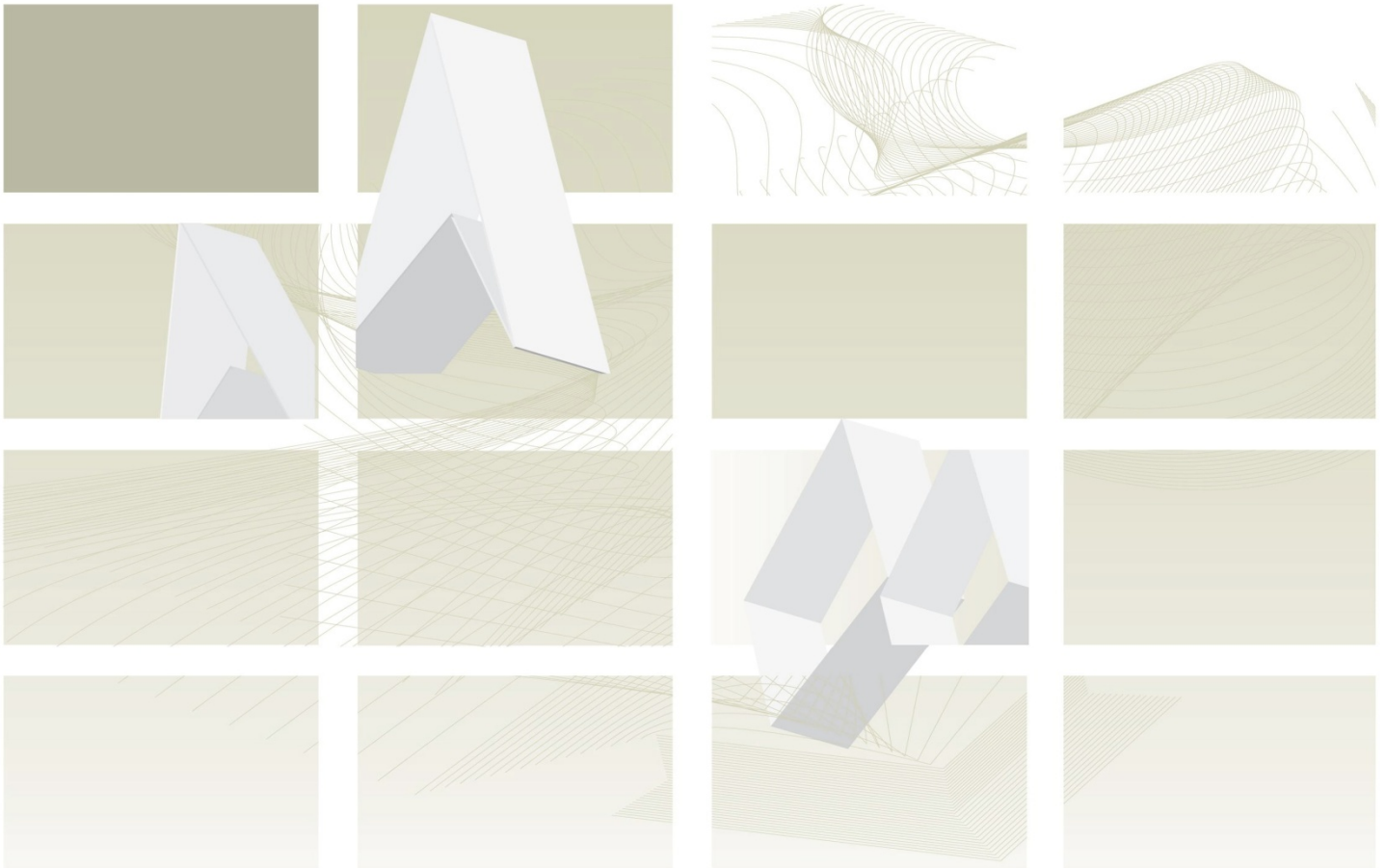




# UK Standards for Microbiology Investigations

**Review of Users' Comments** received by  
Working Group for Microbiology Standards in Clinical  
Bacteriology

## B 2 Investigation of Bacterial Eye Infections



Recommendations are listed as ACCEPT/ PARTIAL ACCEPT/DEFER/ NONE or PENDING

Consultation: 25/02/2013 – 20/05/2013

Version of document consulted on: B 2df+

**PROPOSAL FOR CHANGES**

<b>Comment Number</b>	1		
<b>Date Received</b>	05/05/2013	<b>Lab Name</b>	St Georges Healthcare NHS Trust
<b>Section</b>	Page 13, Page 14, Page 14.1.3		
<b>Comment</b>			
<p>a. Page 13 - Acanthamoeba, needs a comment to say that E. coli seeded plates should not be sent to the patient's bedside/clinic.</p> <p>b. Page 13 - Chlamydial – should cross reference relevant SMI.</p> <p>c. Page 14 - Safety – Amies with charcoal – liquid swabs should also be mentioned for automated inoculation systems.</p> <p>d. Page 14 1.3 - Alcohol fixed smears may be used, this is not standard in all hospitals.</p> <p>e. SMI should mention PCR for acanthamoeba.</p>			
<b>Recommended Action</b>	<p>a. <b>ACCEPT</b> UK SMI amended.</p> <p>b. <b>ACCEPT</b> Suitable cross reference has been inserted.</p> <p>c. <b>ACCEPT</b> UK SMI amended.</p> <p>d. <b>NONE</b> It may not be standard but the test does still add value in certain diagnostic presentations.</p> <p>e. <b>NONE</b> The UK SMI does mention PCR for the diagnosis of Acanthamoeba.</p>		

<b>Comment Number</b>	2		
<b>Date Received</b>	01/03/2013	<b>Lab Name</b>	Conquest Hospital
<b>Section</b>	pages 8 and 20		
<b>Comment</b>			
Ophthalmia neonatorum is no longer a notifiable disease.			
<b>Evidence</b>			

Health Protection (Notification) Regulations 2010. List of notifiable diseases is on PHE website.

**Recommended Action**

**ACCEPT**  
Reference removed.

<b>Comment Number</b>	3		
<b>Date Received</b>	05/04/2013	<b>Lab Name</b>	Bristol
<b>Section</b>	Introduction		
<b>Comment</b>			
<p>a. Bullet points of organism names do not look right with full stop after name - inconsistently applied across all SOPs.</p> <p>b. 2.5.2 - we find it better to flood the plate with the <i>E.coli</i> and remove excess rather than use a swab to inoculate acanthamoeba plate as the swab makes tracks in the agar.</p> <p>c. We also issue corneal scrape kits to our ophthalmologists. They scrape the cornea then send the blade in 1ml BHI broth in a bijou (all inside a plastic sputum container for additional safety) for us to culture. We then vortex vigorously then inoculate plates and a normal BHI + serum as culture. This method was recommended by Liverpool.</p>			
<b>Recommended Action</b>	<p>a. <b>ACCEPT</b> This is being corrected in all UK SMIs as part of the transfer to the PHE template.</p> <p>b. <b>ACCEPT</b> This is outlined in the SMI.</p> <p>c. <b>NONE</b> This is a local agreement.</p>		

<b>Comment Number</b>	4		
<b>Date Received</b>	20/05/2013	<b>Lab Name</b>	Centre for Infection and Immunity Queen's University Belfast
<b>Section</b>	2.5.3 and page 10		
<b>Comment</b>			
<p>a. Section 2.5.3 While the involvement of <i>Propionibacterium acnes</i> in these infections is mentioned, it would be helpful if the identification only to the level of 'Anaerobes' could be changed to the identification of anaerobes to at least the genus level, in particular in relation to infections arising from <i>Propionibacterium acnes</i>. More detail in relation to isolation and procedures for <i>P. acnes</i> would be</p>			

useful. Please see quotation from publication (Kao et al 2011) below in relation to chronic *P. acnes* infection to substantiate the need for identification. It should be noted that a lack of correct anaerobic handling of specimens can result in a lack of diagnosis.

- b. In relation to Page 10 of 21 'Canaliculitis' ('Canaliculitis is a rare condition. Infections are usually chronic and caused by anaerobic actinomycetes such as *Actinomyces israelii* or by *Propionibacterium propionicus* 15,16. Swabs of samples of the canalicular pus are preferable to eye swabs for diagnosis.')The species name is 'propionicum' not 'propionicus'

**Evidence**

- a. Andrew A. Kao, MD Darlene Miller, DHsc Sander R. Dubovy, MD Harry W. Flynn, Jr., MD Retinal Physician, Issue: March 2011 Chronic Endophthalmitis Caused by *Propionibacterium acnes*: A Clinicopathologic Report 'The findings of chronic *P. acnes* endophthalmitis are often subtle, and these patients may lack the severe pain, poor vision and hypopyon often seen in acute-onset endophthalmitis.3,5,7 The classic clinical sign of *P. acnes* endophthalmitis is the presence of a white, creamy, intracapsular plaque that consists of peripheral lens cortex and sequestered organisms, as was noted in our patient.3-5,7 The inflammation may initially respond to topical steroids but often recurs with steroid tapering. Definitive diagnosis is achieved by Gram stain of the specimen and anaerobic cultures are necessary to confirm growth. Anaerobic cultures should be held for at least one to two weeks, as *P. acnes* is a slow-growing organism.1-5,7 Polymerase chain reaction may also be used to identify the organism in cases with negative smears and cultures.5,8' See also: Cornea. 2009 Jan;28(1):36-9. doi: 10.1097/ICO.0b013e3181839b1a.The prevalence and pathogenicity of *Propionibacterium acnes* keratitis. Ovodenko B, Seedor JA, Ritterband DC, Shah M, Yang R, Koplín RS.
- b. Reference: Patrick, S & McDowell, A 2012, 'Order XII Propionibacteriales ord. nov.'. in M Goodfellow, P Kampfer, H-J Busse, M Trujillo, K-I Suzuki, W Ludwig & WB Whitman (eds), Bergey's Manual of Systematic Bacteriology: The Actinobacteria, Part B. 2nd edn, vol. 5, Springer, New York, pp. 1137-1155.)A good reference to cite relating to *P. propionicum* infections is: Hall, V., 2006. Anaerobic Actinomyces and Related Organisms, in: Principles and practice of Clinical Bacteriology., 2nd ed. John Wiley & Sons. Ltd, Chichester, UK, pp. 575-586.

**Recommended Action**

a. **NONE**

This pathogen is mentioned in the document to bring it to people's attention but the majority of laboratories would not identify to species level routinely.

b. **ACCEPT**

The UK SMI has been amended.

**RESPONDENTS INDICATING THEY WERE HAPPY WITH THE CONTENTS OF THE DOCUMENT**

<b>Overall number of comments: 4</b>			
<b>Date Received</b>	02/04/2013	<b>Lab Name</b>	Dept of Clinical Microbiology, Royal Cornwall Hospital
<b>Date Received</b>	05/04/2013	<b>Lab Name</b>	Bristol
<b>Date Received</b>	18/04/2013	<b>Lab Name</b>	Golden Jubilee National Hospital
<b>Date Received</b>	13/05/2013	<b>Lab Name</b>	Spire Pathology Services