

Special points of interest:

- FIDSSA 4WARD
- Say no to Ciprofloxacin for gonorrhoea
- New country-specific map for YF recommendations in Africa
- EHEC hits Germany

News from the FIDSSA Office 2

Cert ID(SA) 2

Frontline News from IDSSA 3

Optimal therapy for Gonorrhoea 4

Pertussis in Bloemfontein 5

New country-specific recommendations for Yellow Fever 6

Feedback from ECCMID 7

FIDSSA 4WARD, Durban 8-11 September 2011



Final Announcement & Call for Abstracts

Deadline Dates

- Abstract Submissions: 24 June 2011 • Early Registration: 1 July 2011
- Durban Hotel Accommodation: Special Rates Offer Closes 4 July 2011

Congress Highlights

- Pre-Congress Workshop
- Interactive Academic Programme • Reduced Accommodation Rates Offered
- CPD & Ethics Points • Outstanding Panel of International & Local Speakers
- Exciting Social Programme

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fidssa federation of infectious diseases societies of southern africa



4WARD 2011
4th FIDSSA CONGRESS
8-11 SEPTEMBER
THE ELANGENI HOTEL
DURBAN • SOUTH AFRICA

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With just over 2 months to go before the start of our biennial conference, the **24th June** abstract deadline is fast approaching!

Remember that this year we have a series of **FIDSSA awards**, including the top prize of **R10,000 for the best invited oral presentation** that will be judged during the conference. There are also R5000 awards for best poster and best presentation from a rural setting. So pull your finger out and getting submitting!

The following distinguished international Faculty will deliver plenaries on:

Eduardo Gotuzzo (Peru) - Typhoid fever

Nick White (Thailand) - Reducing malaria-related mortality

Patrice Nordmann (France) - Worldwide emergence of carbapenemase resistance

James Todd (USA) – Management of Septic Shock

Theresa Horan (USA) – Surveillance and reporting of Nosocomial infections

Francis Ndowa (Switzerland) – Counseling and management of STIs

Each speaker will also be involved in parallel sessions during the conference and will join a stellar line-up of local talent to complete a really excellent scientific programme. Professor Lucille Blumberg will deliver the annual Margharetta Isaacson lecture on behalf of SASTM. Parallel sessions during the conference will include:

- Neglected and Emerging Infections
- Key Topics in Paediatric Infectious Diseases
- Outbreak Africa
- Candida in Africa - Current State of the Art
- New Developments in the management of Malaria
- Controversies in HIV, and The changing face of ART in 2011
- Open papers in Clinical Microbiology
- IPC - Interventions, Improvements & Measurements
- Tuberculosis
- Vaccines - What next for the EPI?
- Management of bites and stings from land and sea
- Review of the top 5 papers of 2010-11 (adult & paed ID, Microbiology and IPC)
- New insights into old sexually transmitted diseases

Most sessions will also include abstract-driven presentations and ample time for discussion. To register, please go to <http://www.fidssa.co.za> and follow the Conference link. See you in Durban!

News from the FIDSSA Office – Lea Lourens



Membership and Conference fees

As we are approaching the FIDSSA conference I need to focus your attention on your membership status. Only fully paid up members will get the benefit of a discounted registration fee. If you are not sure whether your membership is paid up, please e-mail your query through to: info@fidssa.co.za. I can then either confirm your membership and resend your login details, or send you an invoice so that you can update and renew your membership.

SAJEI

Keeping the database correct so that you receive your SAJEI every time, needs some help from your side. Please visit the FIDSSA website www.fidssa.co.za to make sure that we have all your correct details or send your changes through to the Admin office.

CPD

Remember that every 'Case of the Month' gives you the opportunity to make up some CPD points! This is only for paid up members! You also have to make sure that we have your medical/council number. There are exercises to complete to gain Ethics points on the CPD section of the members website too.

FIDSSA-GlaxoSmithKline Research Fellowships

Applications for the 2011 FIDSSA-GSK Research Fellowships worth R100,000 each close at 1700 on Thursday 30th June. All paid-up members of FIDSSA (as of the closing date) who are southern African citizens are eligible to apply for one the 2 Fellowships on offer. More details and application forms can be found on the FIDSSA website or from Lea Lourens at info@fidssa.co.za. Late entries will NOT be accepted.

Cert ID(SA)



Many congratulations to Drs Philip Botha and Sarah Stacey on passing Cert ID(SA) Phy, and to Drs Angela Dramowski and Nicolette du Plessis who join the swelling ranks of paediatric ID sub-specialists after passing their Cert ID(SA) paed exams.

Philip, Sarah, Angela and Nicolette, like all other candidates who have passed the Cert ID(SA) exam, will only have to wait a few more months before Cert ID(SA) Phy, Paed and Lab will finally complete its path through the complex channels of the HPCSA and Government to be promulgated on the books of the HPCSA. Once this has been completed, all those who have completed the 2 year training programme and passed the Cert ID(SA) exam will be able to be registered with the HPCSA as an Infectious Diseases sub-specialist.

Frontline news



Enterohaemorrhagic E. coli is currently raging in northern Germany, with ~300 cases of haemolytic uraemic syndrome (HUS) and 9 deaths at the time of writing. Having studiously avoided Spanish cucumbers whilst in Hamburg this weekend, I can attest to the severe strain that this outbreak is having on the German health system, where all non-essential clinics at various institutes are cancelled so that nursing staff can be re-deployed to support renal units in other hospitals where patients with HUS are being managed. As Sweden has already reported 10 cases of HUS in recently returned travellers to Germany, it would be advisable for colleagues in Southern Africa to be cognisant of the current epidemic and have a low index of suspicion for EHEC in patients presenting with abdominal pain, bloody diarrhoea and/or renal impairment returning from northern Germany. Further information can be obtained from such sources as WHO (http://www.who.int/csr/don/2011_05_27/en/index.html) and ProMED mailing (<http://www.promedmail.org/pls/apex/f?p=2400:1000>).

The South African **Influenza** season has started uncharacteristically (although not unprecedentedly) early and is now in full swing. According to the May 2011 NICD Communique (available at www.nicd.ac.za or the FIDSSA website), Influenza A (H1N1)2009 has been detected in 49 patients and A(H3N2) in 2 patients since the start of the seasonal epidemic in week 18. SARI cases generally lag behind ILI, but influenza must be considered in any patient presenting with ILI and in patients presenting with community acquired pneumonia, particularly those who progress to ARDS. Treatment with oseltamivir 75mg bd for a minimum of 5 days should be started as early as possible. For further information on the management of influenza, see the Healthcare Workers Handbook on Influenza available at www.nicd.ac.za. Report all SARI cases, suspected/confirmed due to influenza to the NICD.

Following on from the successes of circumcision, tenofovir microbicides and the iPrEx trial, **HIV prevention** was dealt another boost recently, with the decision by the Data Safety and Monitoring Board of the HPTN 052 trial to recommend early release of the study's findings. This 13 site randomised controlled trial enrolled 1763 HIV-serodiscordant couples, the HIV-infected partner having a CD4 count of 350-550. HAART was either given immediately or was delayed until the CD4 count fell below 250 or the originally infected partner developed an AIDS-defining illness. 27 transmissions occurred within the 877 couples in the delayed ART group as opposed to 1 transmission in the immediate ART group (96% reduction in the risk of HIV transmission). Furthermore, 17 cases of EPTB occurred in the delayed ART group vs 3 in the immediate. The financial challenge facing South Africa in light of these results is formidable, particularly as we are not yet covering all patients with CD4 <350. However, the evidence for an even earlier start to prevent transmission has now been presented and the benefits of preventing transmission are clear to all.

Cefixime treatment for gonorrhoea in South Africa - An early warning and alert system



Sexually Transmitted
Diseases Society
of Southern Africa

Ciprofloxacin should no longer be used to treat presumptive gonococcal infections due to high prevalence of resistance within South Africa. In recent years susceptibility to the recommended first-line extended-spectrum cephalosporins namely ceftriaxone (injectable) and cefixime (oral) has also increased globally but both **still susceptible** in South Africa.

Oral cefixime is now South Africa's first-line treatment for presumptive gonorrhoea

First-line therapy to treat gonorrhoea should be preferably with oral cefixime (single 400mg dose). Cefixime has recently been made available in South Africa by Merck Serono and is available at pharmacies. Intramuscular (i.m.) ceftriaxone 250mg may be used as the alternative first-line therapy if oral cefixime is not available. For those with severe penicillin allergy (i.e. history of shock or anaphylaxis), alternatives include single dose Spectinomycin 2g i.m. (first choice, if available), Azithromycin 2g single oral dose (second choice) or single dose gentamicin 240 mg i.m. (third choice). Where these are not available, single dose ciprofloxacin 500mg may be tried with the understanding that it may only work in between 50-70% of patients. For those patients with a history of uncomplicated penicillin allergy (e.g. rash), it is warranted to prescribe oral cefixime or i.m. ceftriaxone as long as there is no previous history of allergy to cephalosporins.

The high likelihood of co-existent chlamydial infection in patients with gonorrhoea should be covered by co-treatment with either doxycycline 100 mg 12 hourly for 7 days (public/private sector) or Azithromycin 1g orally as a single dose (private sector).

Resistance to oral cephalosporins in the Western Pacific and other regions

Clinicians should be aware that strains of *Neisseria gonorrhoeae*, which are clinically resistant to oral cefixime, now exist in other continents. These strains first appeared in Japan at the turn of the millennium and have now increased in frequency to the extent that oral cephalosporins are no longer recommended in several countries in the Western Pacific Region. Recently, two cases of gonococcal genital tract infection, which failed treatment with oral cefixime, were reported in the UK. At the present time, within South Africa or Africa as a whole, there have been no gonococcal strains which exhibit confirmed clinical or microbiological resistance to oral cefixime. Therefore, single dose oral cefixime 400mg should remain the first choice oral agent to treat presumptive gonorrhoea infection.

An early warning system for the emergence of cefixime resistance in South Africa

Any clinicians seeing cases of gonorrhoea which fail to respond to oral cefixime should first rule out re-infection from an untreated partner, when re-treatment with cefixime is indicated. If re-infection is excluded and cefixime resistance appears a possibility, clinicians are asked to take a sample for *N. gonorrhoeae* culture at their nearest laboratory and request susceptibility testing for cefixime. In addition, a molecular assay is available at NICD/NHLS to look for mosaic *penA* genes, which are present in the majority of the resistant strains studied globally to date. Clinicians are asked to report any suspected cases of cefixime resistant gonorrhoea

Treatment of suspected cefixime resistant cases

Any cases of suspected cefixime resistant gonorrhoea should be treated with i.m. ceftriaxone 500mg. Please note that a higher dose than normal is recommended in the case of presumed cefixime resistance. The resistance mechanisms detected to date in strains non-responsive to oral cephalosporins do not impair the clinical efficacy of i.m. ceftriaxone.

Contribution: STI Reference Centre/NICD/NHLS

Pertussis in Bloemfontein



Southern African
Society of Paediatric
Infectious Diseases

In April 2008, we diagnosed the first case of pertussis in a 4 month old infant. There had been no recorded cases in the Free State between 1998-2002 and thereafter are no available records. Since then nearly 60 cases have been diagnosed at Pelonomi (regional hospital), the National District Hospital (primary care hospital), and also in the private sector. Doctors have developed a heightened sense of awareness for pertussis.

Useful clues that we noted were: unexplained apnoeic episodes in infants under 4 months of age, post-tussive vomiting, coughing spells and a white cell count above 25 000 per mm³. The inspiratory whoop has been uncommon. Upon clinical suspicion, a nasopharyngeal swab is submitted for *Bordetella pertussis* and *parapertussis* PCR in Johannesburg. This is currently regarded as the standard for diagnosis, as identification by culture is difficult. *Bordetella* is a "fastidious" organism, preferably cultured on special media immediately after the swab has been taken. Culture has unfortunately not been successful to date in Bloemfontein, but would be useful to look for antigenic shift from the vaccine strain as has been documented in Sweden and other northern hemisphere countries and also in Argentina.

More than half of the children were under 4 months of age and included neonates (<28 days of age). Infants below 4 month of age are regarded as "pre-vaccinated" (not yet, or only partly vaccinated) as full protection of the vaccine has not yet taken effect. About half of these infants required intensive care admission for ventilatory support. Of the older children, only one (age 9 months) required ICU care. Problems among the ICU patients included severe pneumonia, pneumothoraces (uni- and bilateral), myocarditis and white cell counts above 50 000 per mm³ causing the hyperviscosity syndrome. There were 2 deaths, both associated with myocarditis and hyperviscosity. The cost of ICU care has been enormous.

Many children had co-morbidities, mainly underweight, iron deficiency and diarrhea. HIV exposure or infection did not seem to be a factor. Two children had proven pulmonary tuberculosis at the same time as pertussis (culture-positive gastric aspirates) at the time of hospitalization.

From our experience, it is clear that the main burden of disease morbidity (and mortality) is infants who are not yet protected by vaccination. Antibody protection wanes around adolescence, and this, and perhaps an antigenic shift, could lead to outbreaks of pertussis in young infants, as recorded in recent years in Australia and other developed countries. A re-think on vaccination policy regarding pertussis is indicated in the Bloemfontein area and possibly elsewhere if our experience is replicated. Pertussis is probably vastly under diagnosed. Further studies, also including adolescents and adults might shed more light on the extent of the problem.

U Hallbauer
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New country-specific Yellow Fever Recommendations - Pete Vincent



South African
Society of
Travel Medicine

From 2008 through 2010, CDC, the World Health Organization (WHO), and other yellow fever and travel medicine experts reviewed available data and revised the criteria and maps that describe the risk of yellow fever virus (YFV) transmission.

Using the revised criteria for yellow fever risk classification, the country-specific information designates three levels of yellow fever vaccine recommendations:

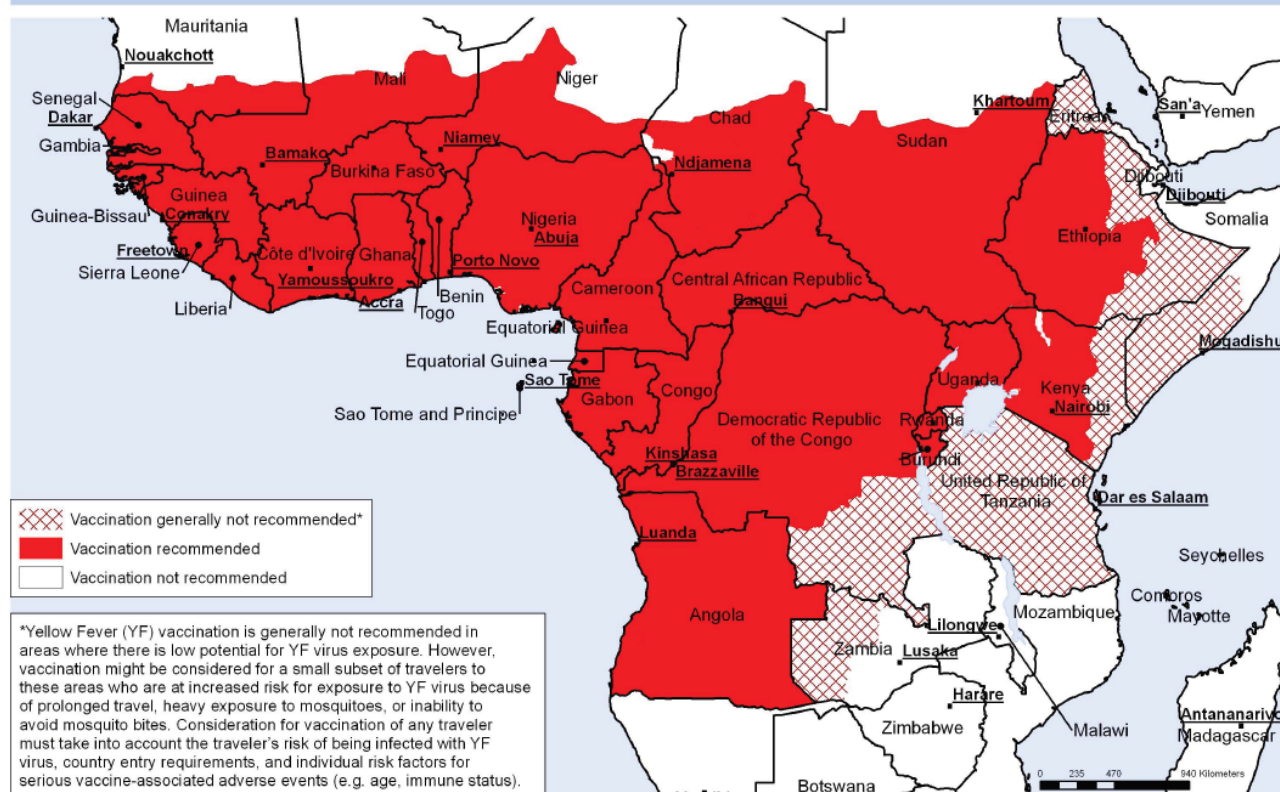
Recommended	Vaccination recommended for all travelers ≥ 9 months of age to areas with endemic or transitional yellow fever risk, as determined by persistent or periodic YFV transmission.
Generally not recommended	Vaccination generally not recommended in areas where the potential for YFV exposure is low, as determined by absence of reports of human yellow fever and past evidence suggestive of only low levels of YFV transmission. However, vaccination might be considered for a small subset of travelers who are at increased risk for exposure to YFV because of prolonged travel, heavy exposure to mosquitoes, or inability to avoid mosquito bites.
Not recommended	Vaccination not recommended in areas where there is no risk of YFV transmission, as determined by absence of past or present evidence of YFV circulation in the area or environmental conditions not conducive to YFV transmission.

The format of the new yellow fever maps (see below) have been changed to depict vaccine recommendations rather than yellow fever risk. Based on these updated recommendations, changes have been made for Argentina, Brazil, Colombia, Democratic Republic of the Congo, Ecuador, Eritrea, Ethiopia, Kenya, Panama, Paraguay, Peru, São Tomé and Príncipe, Somalia, Tanzania, Trinidad and Tobago, Venezuela, and Zambia.

SASTM has been in discussion with DOH and this is the policy that the DOH will be following with regards to the changes in the Yellow Fever Recommendation African Map

1. **TANZANIA:** Although classified by the WHO as '*low risk*' for acquiring yellow fever it is nonetheless "yellow fever affected" and therefore the requirement for proof of vaccination against yellow fever for travellers from or transitting through Tanzania remains essentially UNCHANGED: PROOF OF YELLOW FEVER VACCINATION REQUIRED FOR ALL TRAVELLERS UNLESS IN POSSESSION OF A VALID WAIVER LETTER BASED ON MEDICAL GROUNDS ALONE.
2. **ZAMBIA:** As Zambia is now (again) classified by the WHO as a country affected by yellow fever albeit '*low risk*' it is nonetheless "yellow fever affected" and therefore the requirement for proof of vaccination against yellow fever for travellers from or transitting through Zambia has CHANGED: PROOF OF YELLOW FEVER VACCINATION REQUIRED FOR ALL TRAVELLERS UNLESS IN POSSESSION OF A VALID WAIVER LETTER BASED ON MEDICAL GROUNDS ALONE.
3. The Department adheres to its stance that ALL travellers through airports in countries classified as yellow fever affected must show proof of vaccination against yellow fever irrespective of the duration of transit as it is (a) impossible to accurately assess transit time at our ports of entry on an individual basis and (b) there is no proof that all airports in yellow fever affected countries are indeed controlling vectors of disease at the airports as is assumed by the IHR.

Yellow Fever Vaccination Recommendations in Africa, 2010



Feedback from the European Congress of Clinical Microbiology and Infectious Diseases (ECCMID)

From our man in Milan, Andrew Whitelaw, on behalf of ICSSA and SASCM



Having been coerced into writing a joint piece on the ECCMID congress for ICSSA and SASCM, I would like to express my thanks to Drs Heidi Orth and Warren Lowman for their assistance in doing the feedback – they obviously take much better and more legible notes than I do. Please also bear in mind that space is limited, and what is presented here reflects personal opinions of what was new and/or interesting.

Infection Control

Prod Didier Pittet presented one of the Keynote lectures, on the life of Ignaz Semmelweis. This was one of the highlights of the congress for me – the lecture was brilliantly presented, and drew parallels between Semmelweis' research into "childbed fever" and his struggles to control it, and the challenges facing many infection control practitioners today. It is still amazing that despite the striking evidence of a reduction in cases of puerperal sepsis after implementing his hand hygiene practice, there was still so much opposition to his ideas (maybe fuelled in part by his choice of hand disinfectant!) By all accounts though, he was incredibly determined, obsessive and probably very thick skinned – traits that are still required to be an effective IPC practitioner. Unfortunately he was also not very diplomatic – another critical trait in IPC.

The other highlight of the lecture was a video, put together by a team of professional dancers under the direction of the WHO, demonstrating how to perform hand hygiene. It's available on YouTube, (<http://www.youtube.com/user/hygienedesmains>) and we will put a link to it on the ICSSA section of the FIDSSA website. Well worth watching, and could be used as a training tool.

Professor Seto and Dr Bonten reviewed the year in infection control. They made the point that their opinions on what was new / important was very subjective. Among the reports that they highlighted were: The rate of MRSA infections in the year before and the year of the SARS outbreak did not differ significantly, although there was much better hand hygiene during SARS outbreak. However, Gram negative infections were significantly reduced during year of the SARS outbreak, except for *Acinetobacter*. This possibly reflects the environmental persistence of MRSA & *Acinetobacter*. It was suggested that patients with MRSA and *Acinetobacter* may benefit more from isolation in single rooms to prevent spread of these organisms. Control of resistant Gram negative bacilli may be achievable with good hand hygiene, without the isolation.

NDM carbapenemase-producing *Klebsiella* had been found in the sewage and water systems in New Delhi. These highly resistant organisms have spread to other countries such as Greece and Israel.

A randomised controlled trial demonstrated that surgical site infections in nasal carriers of *S. aureus* can be prevented by using pre-operative mupirocin.

Antibiotic Stewardship

These sessions, while interesting overviews of the issues, unfortunately didn't offer much in the way of insights into how to tackle the problem locally. The presentations emphasised the potential benefits of some form of "approval system", review of current practices, education, selective reporting of antibiotics and the availability of guidelines. Electronic decision support systems have been developed, but are costly, need good clinical, laboratory and IT backup, and there has been little uptake as yet. Ongoing education in the field of antibiotic use is important, and one needs to use effective knowledge transfer strategies such as interactive education sessions and spaced education. A useful reference for available resources is: [Clin Infect Dis](#). 2009 Mar 1;48(5):626-32.

Microbiology:

Automation in microbiology had a strong presence in the trade exhibitions, as well as some sessions. It appears to be growing in Europe and the US. Some amazing systems were on display, and are able to do everything from uncapping the container, inoculation, streaking, sending to the right incubator by conveyor belt, taking plates out after 18 hours and taking pictures of colonies. A technologist then decides which colonies need to be followed up, highlights them on the screen, and using mapping software, the instrument picks off the colony, prepares for identification by MALDI-TOF, prepares an inoculum for susceptibility testing, and will even tab plates with appropriate antibiotic discs based on the MALDI-TOF identification. The use of new identification systems (such as MALDI-TOF and ESI-MS) appears to be growing

Carbapenemases and MRSA were well represented. The issue of detection of carbapenemases was the subject of a symposium, and the main message is that the methodology that one chooses to use is dependent on the local epidemiology. Thus it is imperative to determine what types of carbapenemases are prevalent, in which organisms they occur, and then use that knowledge to apply more robust screening and confirmatory detection methods.

For MRSA, there were a few sessions on management. Daptomycin (possibly in combination with an aminoglycoside) is regarded by many as a better agent than vancomycin, especially for deep seated infections such as endocarditis and prosthetic joint infections. Some preliminary data from the Zephyr study was presented suggesting that linezolid may be superior to vancomycin for MRSA pneumonia – however this is a subset analysis, and has yet to be published.

In the field of fungal sepsis, there was some encouraging data for the use of posaconazole prophylaxis in HSCT patients, with reduced CXR infiltrates, 100-day mortality and proven/ probable IFI. Echinocandins are regarded as superior to azoles and polyenes, and new European guidelines for empiric therapy of candidiasis now have echinocandins as the first choice, followed by liposomal amphotericin B or voriconazole, and then fluconazole or amphotericin B (I do not think these have been published yet). One issue about the echinocandins is that they have poor ocular penetration. Although there does not seem to be an increased risk of developing ocular involvement in patients treated with echinocandins, in patients with confirmed ocular involvement, an azole may be preferable. In terms of antifungal AST, the only significant difference between CLSI and EUCAST at this point are the echinocandins clinical breakpoints, which is primarily due to methodological differences.