WHAT RESEARCH DO CLINICIANS WANT? A SURVEY OF INFECTIOUS DISEASES PHYSICIANS.

BROWN TM[1], PATERSON DL[1,2]

*On behalf of the Australasian Society of Infectious Diseases (ASID) Clinical Research Network Steering Group.

[1] Infection and Immunity Theme, The University of Queensland Centre for Clinical Research
[2] The Royal Brisbane and Women's Hospital, Queensland

BACKGROUND

The Australasian Society for Infectious Diseases Clinical Research Network (ASID CRN) is a community of experienced clinicians and researchers across Australia and New Zealand, who strive to improve patient outcomes through quality advancements in infectious diseases research. In 2012, the ASID CRN devised a series of surveys targeted at identifying what Australasian infectious diseases clinicians and researchers perceive as the top research priorities that need addressing through clinician-initiated studies. Initial results displayed an enthusiastic acknowledgment of over 100 perceived top research priorities, with an end result converging into a well diversified "short list" of top-identified current research topics.

METHODS

- A self-reported online survey was designed and distributed to infectious diseases (ID) physicians via an Australasian ID e-mailing server.

- Over 100 potentials for studies were identified within the topics of:
  - ❖ Randomised Controlled Trials (RCTs)
  - ❖ Epidemiology
  - ❖ Observational/Registry in infectious diseases

- A rating scale (1 being of little clinical significance and 5 being of greatest clinical significance) was used to produce a top ranked "short list".

- This "short list" was selected by the ASID CRN to be distributed and evaluated by the Australasian ID community.

- Survey questions pertaining to barriers of recruitment including site feasibility were also assessed.

Top 10 Ranked RCTs

Early prosthetic joint infection - following debridement and retention, RCT of 6 weeks intravenous antibiotics versus 2 weeks intravenous plus 4 weeks of oral antibiotics. (mean rank 3.97)

Six weeks of intravenous antibiotics versus 2 weeks intravenous therapy plus long course oral therapy for **native joint septic arthritis or osteomyelitis.** (mean rank 3.83)

Uncomplicated *Staphylococcus aureus* bacteraemia treatment: 2 weeks of vancomycin/flucloxacillin vs. 1 week of intravenous therapy followed by orally administered therapy for 1 week. (mean rank 3.82)

An all oral regimen versus prolonged intravenous antibiotics for **diabetic foot infections.** (mean rank 3.74)

Randomised trial of meropenem versus piperacillin/tazobactam for **serious infections due to ESBL producers.** (mean rank 3.43)

Enterococcal endocarditis: RCT of ampicillin/gentamicin versus ampicillin/ceftriaxone. (mean rank 3.38)

RCT of fosfomycin versus ertapenem for **UTI due to an ESBL producer.** (mean rank 3.30)

Daptomycin versus vancomycin for **MRSA bloodstream infection** with a vancomycin MIC of 2 mg/L. (mean rank 3.26)

Short (2 day) versus standard (5 day) **intravenous treatment for cellulitis.** (mean rank 3.25)

14 day versus 7 day antibiotic course for **bloodstream infection due to Gram negative bacilli.** (mean rank 3.23)

CONCLUSION

Clinician-initiated research has many advantages over industry sponsored research. It seeks to answer areas of greatest priority for clinicians. The potential cost benefits of reducing duration of antibiotics or comparing outcomes with inexpensive generic antibiotics should be driving forces for increasing funding of this type of research activity. From the illustrated results of our survey, individual steering groups for the top 10 ranked RCT research priorities have been established comprising of members throughout the Australasian infectious diseases community. Forward actions in producing these top ranked research topics into active clinical studies and trials are currently underway.

RESULTS

122 infectious diseases physicians responded to the survey. The top ranked epidemiologic studies were in the fields of: **prospective study of prosthetic joint infections** (mean rank 4.13), **defining quality indicators in the management of *Staphylococcus aureus* bloodstream infection** (mean rank 3.47), **prospective cohort study of native joint septic arthritis** (mean rank 3.41), **assessment of the length of carriage of ESBL and carbapenem resistant gram negative bacilli** (mean rank 3.30) and **validation of risk factors for healthcare associated infections to improve empiric prescribing in the emergency department** (mean rank 3.29). **Lack of funding** (mean rank 4.26), **research staffing resources** (mean rank 4.00) and **time-constraints with existing clinical duties** (mean rank 3.92) were highly ranked amongst feasibility barriers to sites performing future clinical research.

For further information regarding this poster please contact:
Tiffany Brown
t.brown3@uq.edu.au

ASID