Another exciting month in the EMJ awaits us all as we cover a real range of topics and problems pertinent to the international community of emergency and prehospital care.

Steroids in back pain
Well, we’ve tried them for just about everything else so there is perhaps no surprise that researchers in Australia have investigated the use of single dose steroids in the treatment of low back pain with radiculopathy. This randomized controlled trial demonstrates an interesting approach to a group of patients for whom we currently offer little more than analgesia and sympathy. Although small the study suggests that there may be a beneficial effect for the type of patients we see in the ED. I’d like to see other trials confirm this result but if you ever wonder what to do next with the patient with low back pain this is a must read.

White counts in sepsis: are ratios better?
In my humble opinion the white count has a bit of a bad reputation in clinical practice. Clinicians talk of it’s inability to rule in or rule out disease and to some extent that’s true if you use a single cut off. However, might there be more information if we delve into the detail? Lowsby and colleagues have looked at Neutrophil: Lymphocyte ratio in patients suspected of sepsis. The results suggest that although the ratio performs better than CRP it’s still not good enough to guide clinical practice in most circumstances.

Jet injection devices to reduce pain in EM
If you are in a department that conducts lumbar punctures then you will know that these are painful procedures that can be distressing for patients. Reducing the pain of the procedure is clearly an admirable aim so researchers in Iran have examined the use of a jet injection technique to anaesthetize the skin and soft tissues prior to lumbar puncture needle insertion. The results are interesting as they have found a reduction in pain during the initial local anaesthesia and also during the lumbar puncture itself. The mechanism for this is unclear, but if it might help then it may be worth consideration.

Time or Tired?
There is ample evidence around that good ‘quality’ CPR improves survival and success in defibrillation. We also know that it’s pretty hard work and that performance tails off pretty quick even when we are working to two minute cycles. Changing too often can result in unnecessary pauses, yet leaving it too long reduces effectiveness. With this in mind Jo et al compared 2 strategies for changing rescuers. Either changing every 2 minutes, or when the rescuer felt tired. Interestingly changing when tired is better than by the clock, so perhaps we should reconsider whether we can last 2 minutes?

EBM in the community
The chain of survival in cardiac arrest, and arguably in trauma too, does not start with health professionals. It starts with the public thus public education and empowerment is an essential component of an effective resuscitation system. What are the public actually taught though? It’s a question raised by researchers in Germany who looked at the content and conduct of Basic Life Support courses. Worryingly the content was often non evidence based or incomplete. The question is whether similar concerns are apparent in other countries.

In-water resuscitation
Drowning is an important cause of death worldwide, with challenging rescue and resuscitation environments. In arguably the most dramatic paper this month colleagues in Germany describe how to deliver CPR to drowning victims, in a boat, delivered by helicopter. Honestly, on the scale of dramatic resuscitation this an 11. It’s a rather interesting concept that certainly looks spectacular and although it is only a proof of concept paper using mannequins, for those involved in the heli rescue of drowning victims the concepts shown here may well be useful.

Balancing analgesia
My anaesthetics training taught me the importance of balance in pharmacotherapy. Too much of a single drug may invite side effects and a rationale for giving smaller doses of multiple analgesics or sedatives was the norm. It’s a concept that is increasingly used in the ED as described in an Iranian study this month. In a double blind randomized controlled trial the authors have investigated the potential benefits of adding IV paracetamol to IV morphine for patients with biliary colic. Bottom line is that it may have benefits in reducing opiate dosing.

An alternative to the C-spine collar?
I’m sure that everyone is aware of the increasing controversy around the routine use of cervical collars in trauma. Some prehospital services have abandoned rigid collars for soft following concerns about their effectiveness and complications such as pressure sores and rises in intracranial pressure. This month Benger and colleagues describe a novel device that immobilizes the spine without the constriction of the hard cervical collar. Perhaps this is a method for protecting the spine without the associated complications of the hard collar.

Lastly
Please read the editorials this month. Steve Goodacre on the concerns around before and after studies and a really important comment on antimicrobial stewardship in the ED by Celene Pulcini. This is an incredibly important topic that we all need to understand if we are to secure the future of effective anti-infective drugs. Should your ED have an antimicrobial stewardship program?