Critical Results: Whose Responsibility?
What is a critical result?

- A critical result is one that is so extremely abnormal that it represents a life threatening condition for which some corrective actions should be taken promptly

- Critical results and critical tests
  - Campbell CA, Horvath AR. Harmonization of critical result management in laboratory medicine. *Clinica Chemica Acta* 2014;432:135–147
RCPPath FBC cut-offs, 2010

- Lower cut-off limits:
  - Neutrophils $0.5 \times 10^9/L$
  - Hb $50 - 70$ g/L
  - Platelets $50 \times 10^9/L$

- Upper cut-off limits:
  - Neutrophils $50 \times 10^9/L$
  - Hb $190$ g/L
  - Platelets $1000 \times 10^9/L$

The Royal College of Pathologists (UK). Out-of-hours reporting of laboratory results requiring urgent clinical action to primary care: Advice to pathologists and those that work in laboratory medicine. London, UK: RCPPath; 2010.
ISO 15189: 2012

- Defines the need for a policy for the management of critical results

- Effective policy requires a list of critical results and tests

- ICSH 2014
  - International survey on current practice
Defining a critical result

- What should be considered critical?
  - Uniform alert thresholds for all patients?
  - Who defines critical tests and critical results?
  - What alert thresholds do you use?

- Should exemptions be allowed?
  - By category of patient
  - By ward/department/clinician

- Should results be repeated before reporting?
  - If yes, do you repeat ‘non-critical’ results
  - Does repeating tests just introduce delay
Notifying critical results/tests

- How quickly should results be notified?
- How are results notified?
- Who gives/receives results?
- How do you confirm receipt?

- Is information overload a danger?
- What action do you take if you can’t reach the responsible clinician or alternative?
- How do you balance the use of resources?
Critical results session

- When critical results reporting goes wrong
  - Dr Kate Ryan
- A clinician’s viewpoint
  - Dr William McKane
- A laboratory manager’s viewpoint
  - Ms Tracey Smith–Straney
- A medico–legal viewpoint
  - Dr Michael Devlin
- Discussion