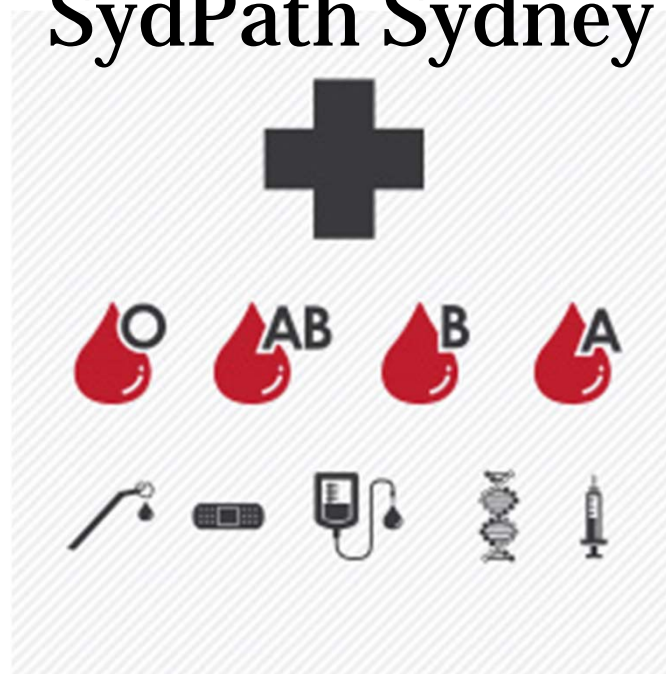


# Group A Subgroups

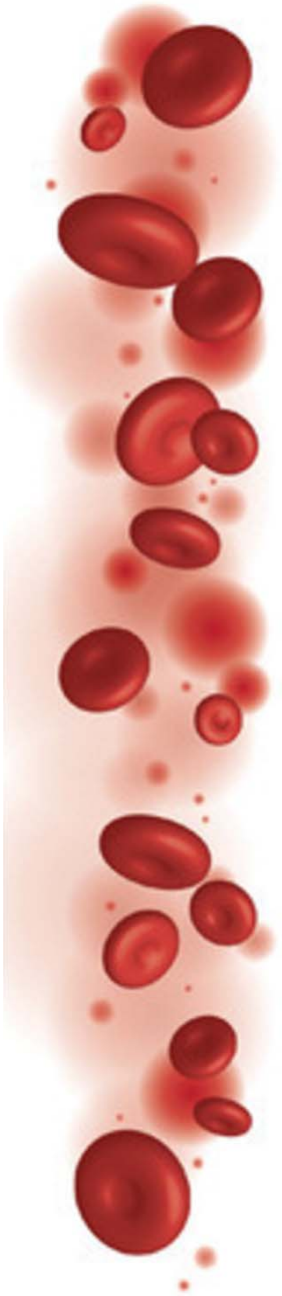
Nichole Bevel

SydPath Sydney



# A Subgroups

- 38% of Australia population are grp A
- 1911 von Dungern described 2 different A antigens
- Most common are A1 and A2 sub groups
- Also includes A3, Ax, Aend, Am, Ay, and Ael



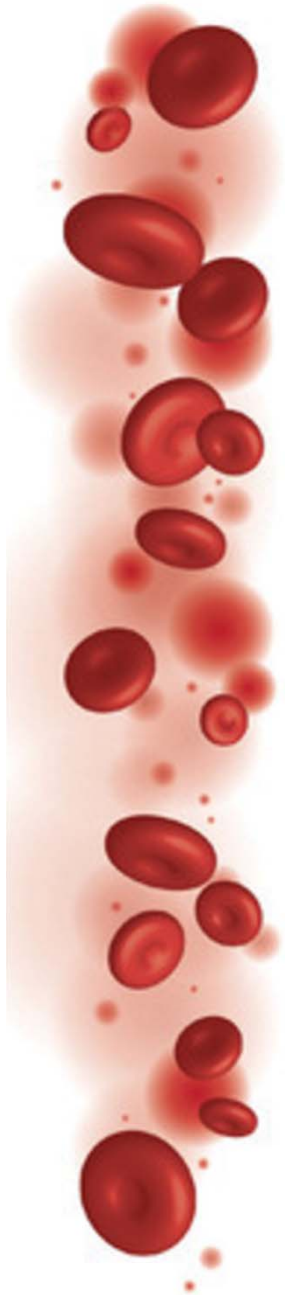


# Case Study

- 71 YO male Pre Admission
- Blood Analyser: Forward group O  
Back Group A
- Tube at RT IS: Anti A: 0 A1 cells: 0
- Tube RT 10 min: Anti A: MF1 Micro  
A1 cells: 0
- End result: A Subgroup Rh(D) Pos
- Red Cross suspects Aend Subgroup

# Grouping Reactions

Method	Anti-A	Anti-B	A1 cells	B cells	Group
Tube Immediate Spin	Neg	Neg	Neg	4+	Inderminant
Tube 10mins @ RT	0.5 MF	Neg	Neg	4+	? weak A subtype
Analyser	Neg	Neg	Neg	4+	Indeterminant





# A end Subgroup

- Demonstrates mixed field agglutination with anti- A and anti- AB
- Affects ~0.003% of the population of Group A patients
- No clinical significance



# References

- Harmening, D., 2005, *Modern Blood Banking & Transfusion Practices*, The ABO Blood Group System, vol 5, pp. 114-118.
- Better Health 2013, *Blood groups*, Victoria, viewed 10 March 2016, <https://www.betterhealth.vic.gov.au/health/conditionsandtreatments/blood-groups>
- [Red cell reference report ID: S145005]. (2016 July 29). [Raw Data]. Australian Red cross Blood Service, Alexandria, NSW
- Initial testing was performed at Sydpath Pathology at St Vincent's Hospital, Sydney

