

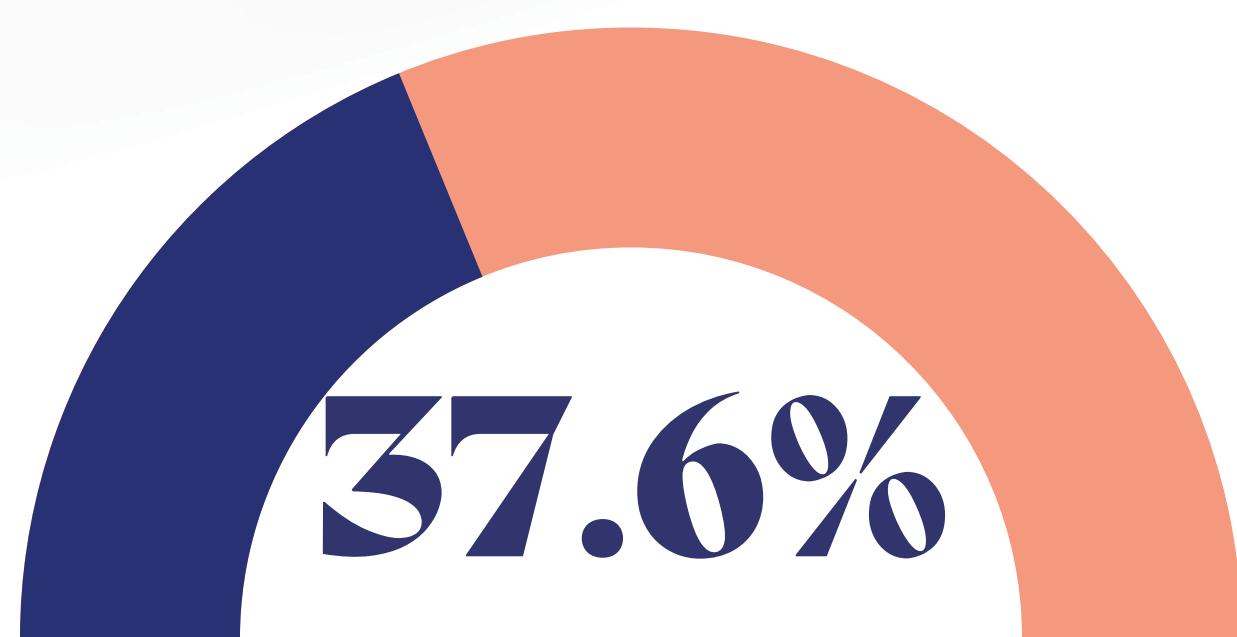
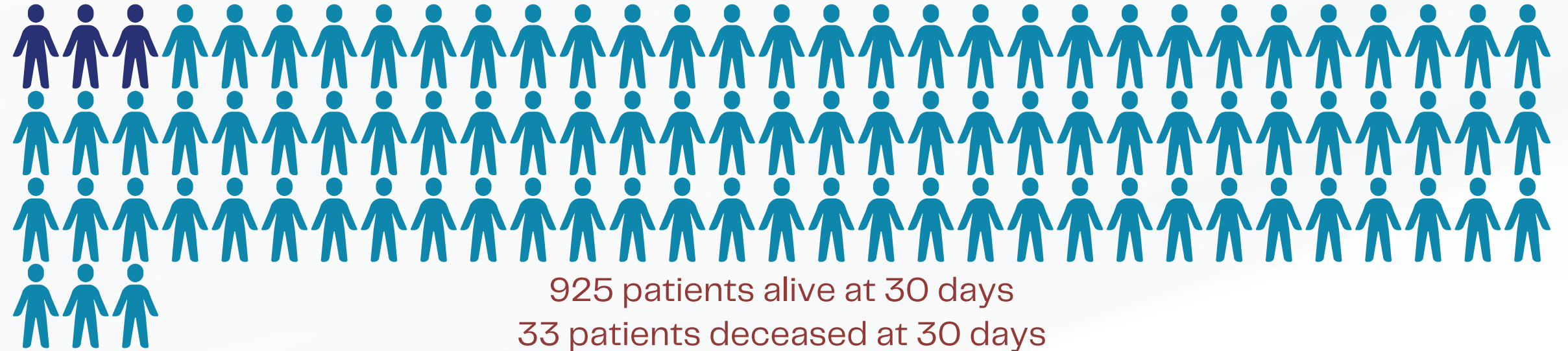
# A Retrospective Analysis of Rib Fracture Outcomes Between 2018–2023 in Aberdeen Royal Infirmary



Dr Jonathan Miller – Specialty Trainee Anaesthetics, NHS Grampian  
 Rachel Dee – 5th Year Medical Student, Aberdeen Medical School  
 Dr Colin Patterson – Consultant of Anaesthesia and Acute Pain, NHS Grampian

## 960 PATIENTS

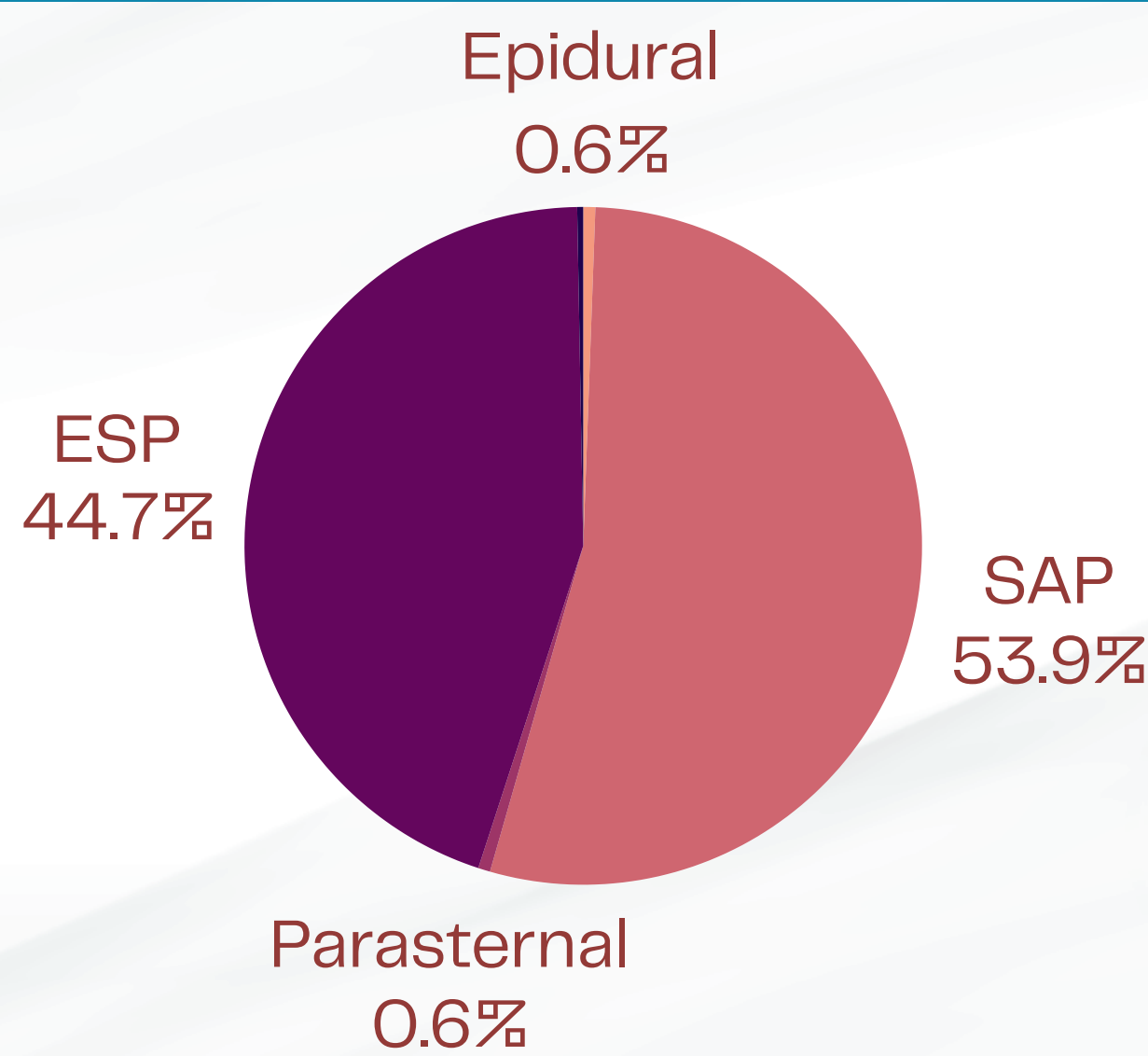
Referred to Aberdeen Royal Infirmary Acute Pain Team with rib fractures.



## % PATIENTS REGIONAL INTERVENTION

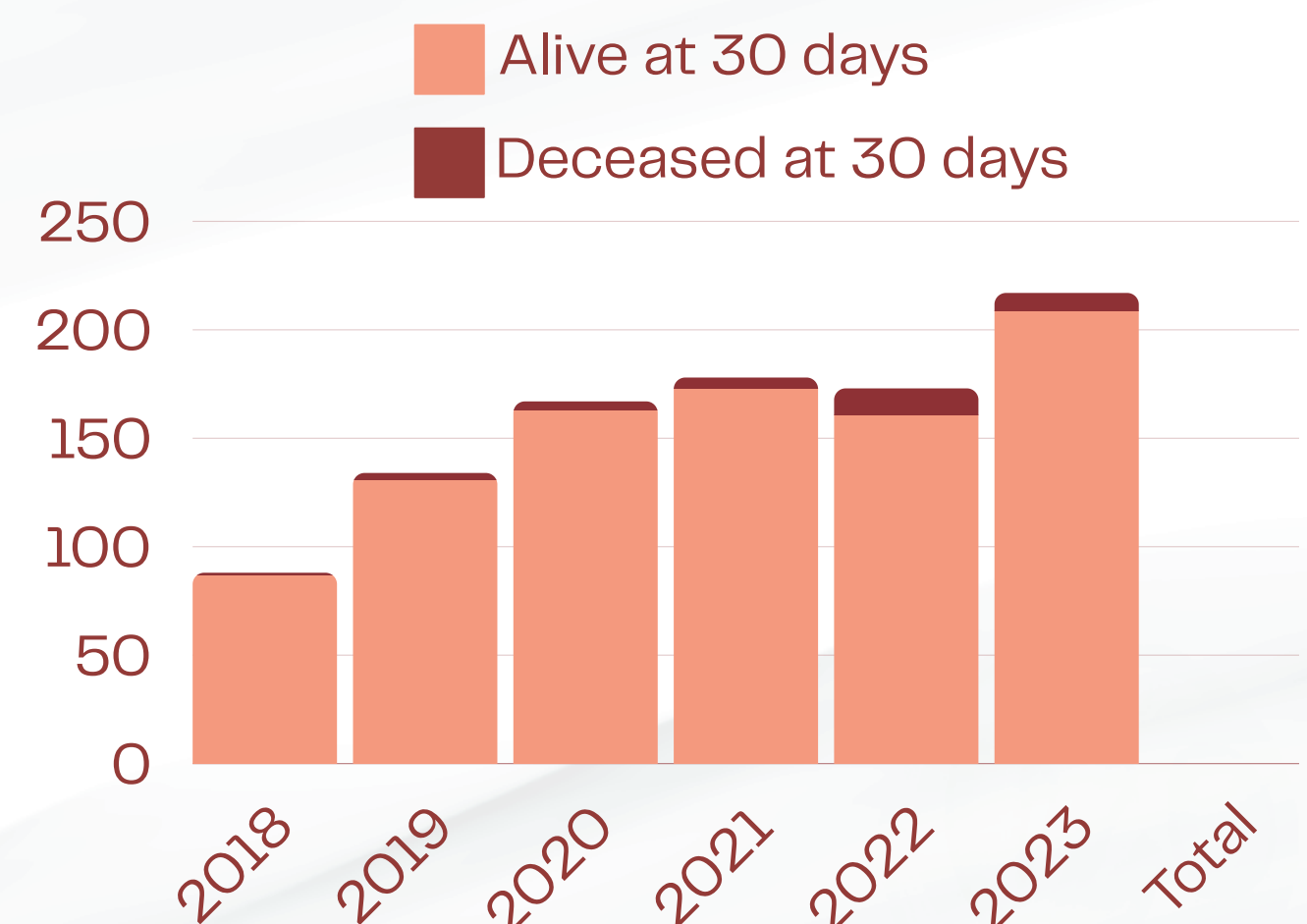
Average Rib # Score:  
 Block Group – 11.3      No Block Group – 7.7

Median Age:  
 Block Group – 69      No Block Group – 65



## Proportion of Blocks Performed

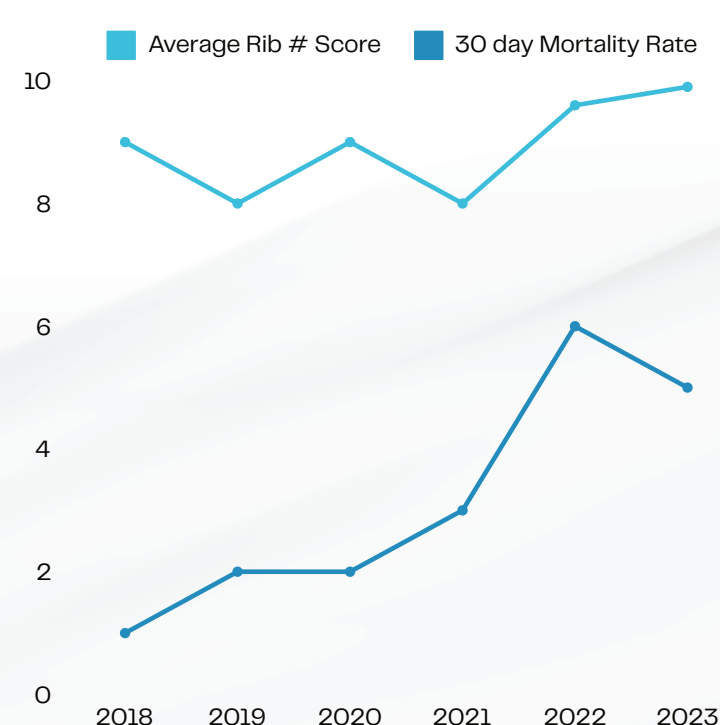
9 patients had a combination of blocks performed (ESP & SAP). Details of block could not be found in 4 patients



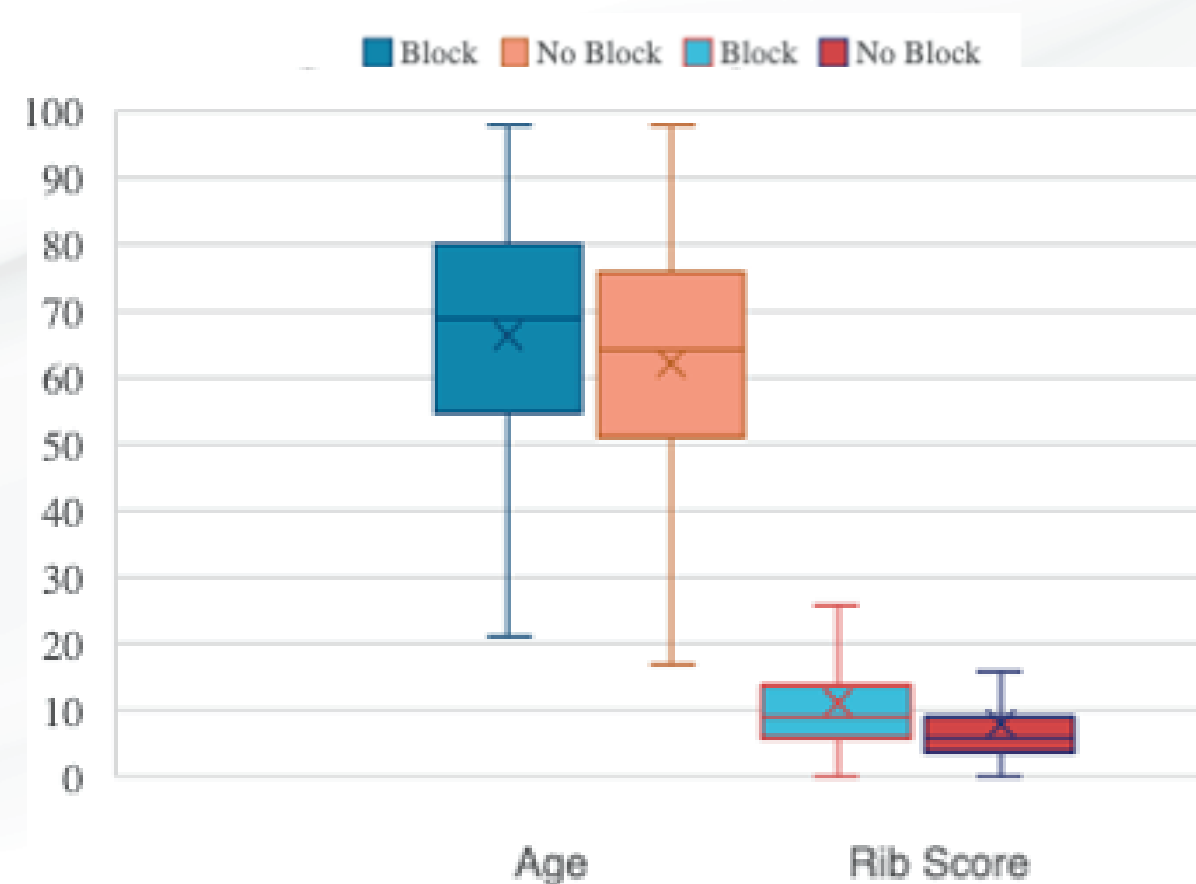
## Mortality by Year

Overall 30 Day Mortality 3.4%  
 Compares favourably with contemporary literature 5.7–22%<sup>1</sup>–22%<sup>2</sup>

## RIB # SCORE AGAINST 30 DAY MORTALITY BY YEAR



## Age/Rib Score By Block vs. No Block



## Main Findings

- We have identified a large patient cohort with a wide range of ages and injury patterns.
- A substantial proportion of our patients presenting with rib fractures received a block to assist pain management.
- Increasing age and severity of injury were associated with increased mortality.
- Patients undergoing blocks were likely to be older and have a greater severity of injury.

## References

1.Sirmali M et al. A comprehensive analysis of traumatic rib fractures: morbidity, mortality and management, European Journal of Cardio-Thoracic Surgery, Volume 24, Issue 1, July 2003, Pages 133–138, [https://doi.org/10.1016/S1010-7940\(03\)00256-2](https://doi.org/10.1016/S1010-7940(03)00256-2)  
 2.Bulger EM et al. Rib fractures in the elderly. J Trauma. 2000;48(6):1040–1046.  
[doi:10.1097/00005373-200006000-00007](https://doi.org/10.1097/00005373-200006000-00007)