

## End of Life Management of Patients with Myeloma at University Hospitals Birmingham

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### INTRODUCTION & AIMS

Patients with haematological cancers have low rates of hospice enrolment and higher rates of aggressive medical care at the end of life (EoL) in comparison to patients with solid organ malignancies, as identified by Thi et al (2011) and O'Connor et al (2014).

They identified the rising use of Hospice services but concomitant rises in 'late' enrolment ( $\leq 3$  days before death). Odejide et al (2018) recognised that symptom burden increased as disease progressed and that care should be focussed on quality of EoL care.

We aimed to assess if we managed myeloma patients aggressively at the EoL at University Hospitals Birmingham (UHB), according to 6 aggressors of EoL care (see table). Myeloma was specifically selected due to the similarities with solid organ malignancies (pain, incurability) as well as its similarities to haematological malignancies such as dependence on blood transfusions and increased infection risks. In addition, myeloma carries its own unique features such as end organ damage. We attempted to determine if any improvements could be made for patients at EoL.

- Chemotherapy use within 14 days of death
- $\geq 2$  ED visits within 30 days of death
- $\geq 2$  hospitalisations within 30 days of death
- Hospital stay more than 14 days and within 30 days of death
- At least 1 ICU admission within 30 days of death
- Death in a hospital

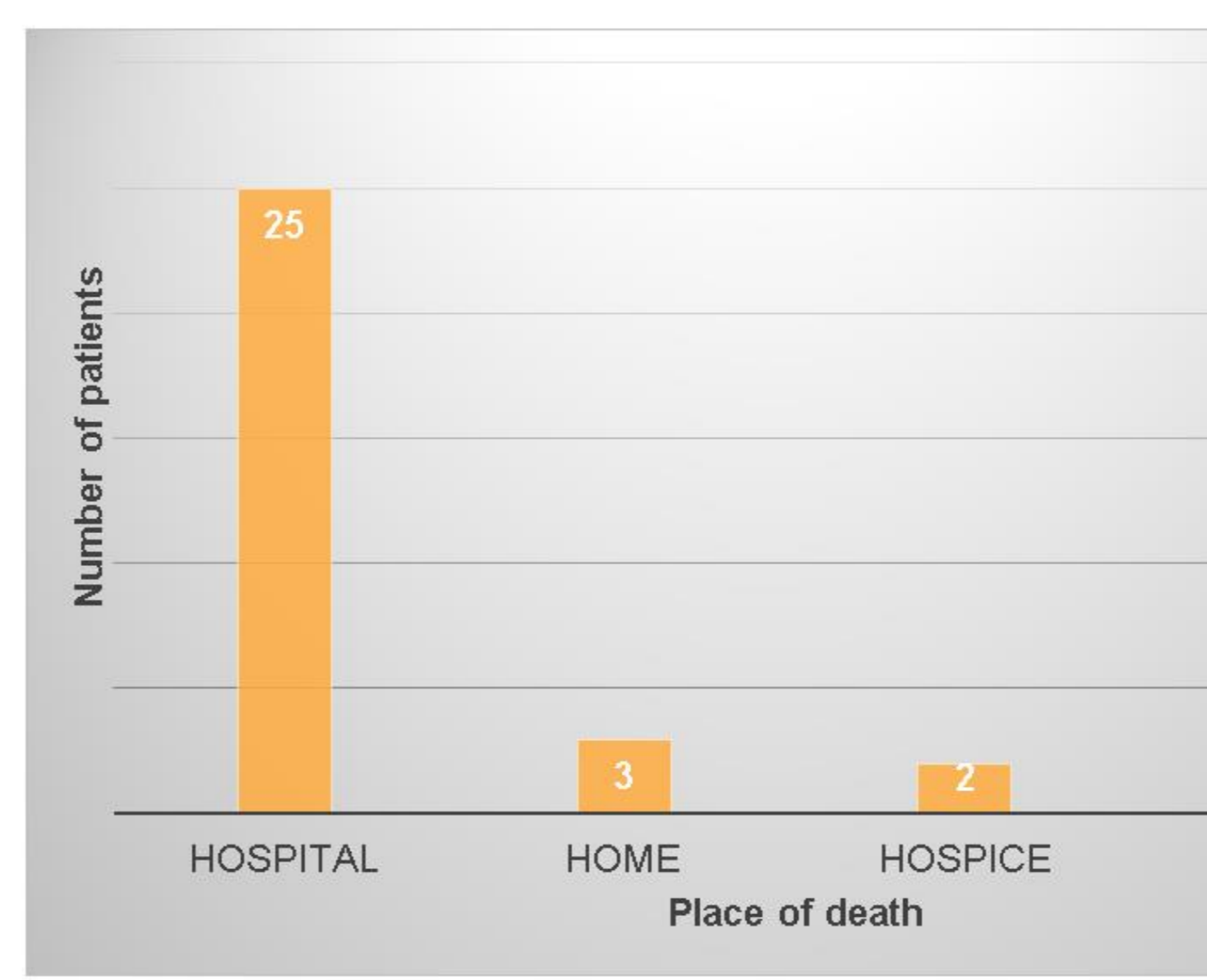
Earle, C. et al., (2004) Trends in the aggressiveness of cancer near the end of life. *Journal of Clinical Oncology*, 22: 315-321

### RESULTS

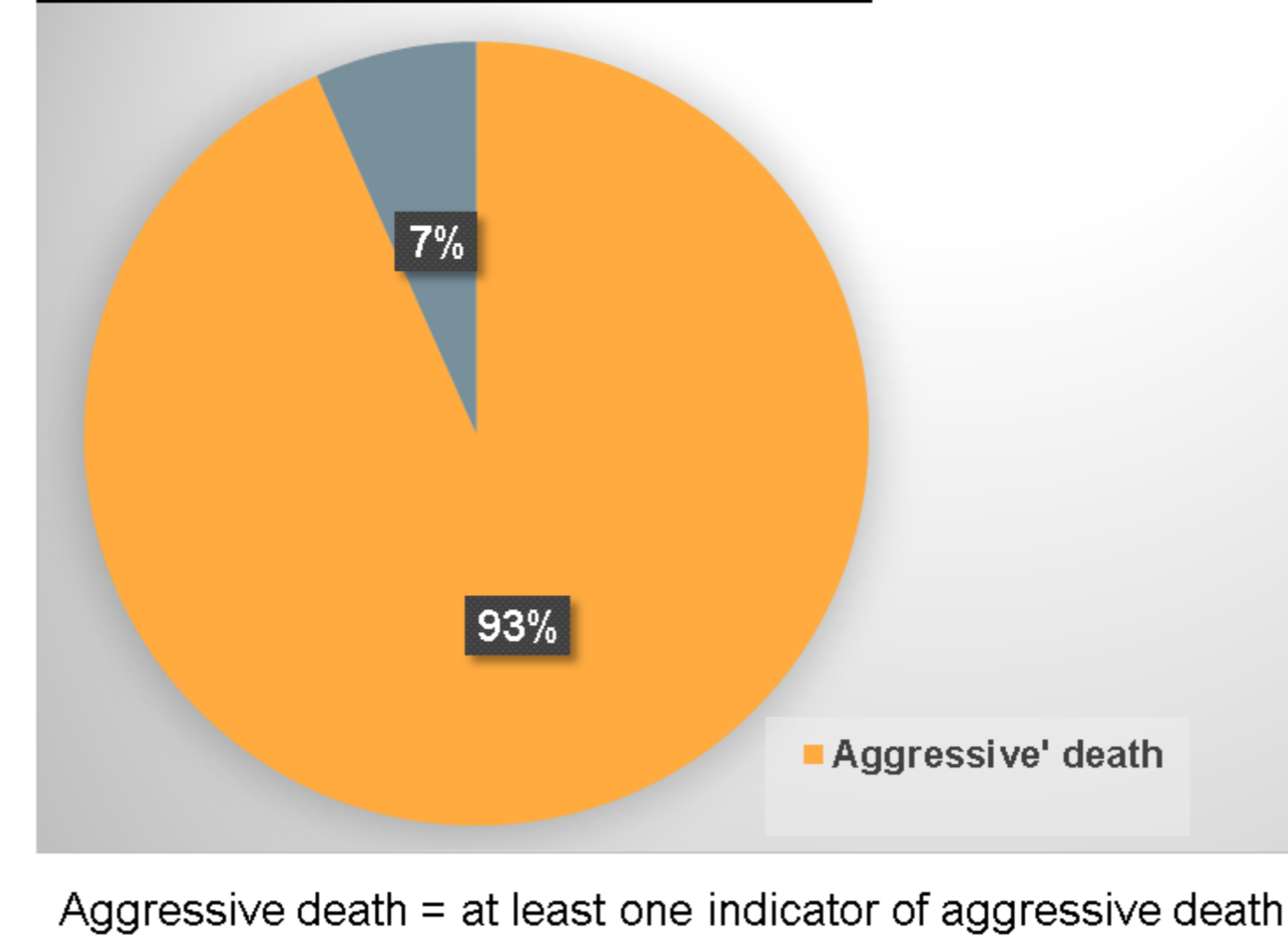
#### Patient demographics

- 30 patients in total
- 21 males and 9 females
- Mean age at death: 75.2 years (Range 34-89 years)

#### Place of Death



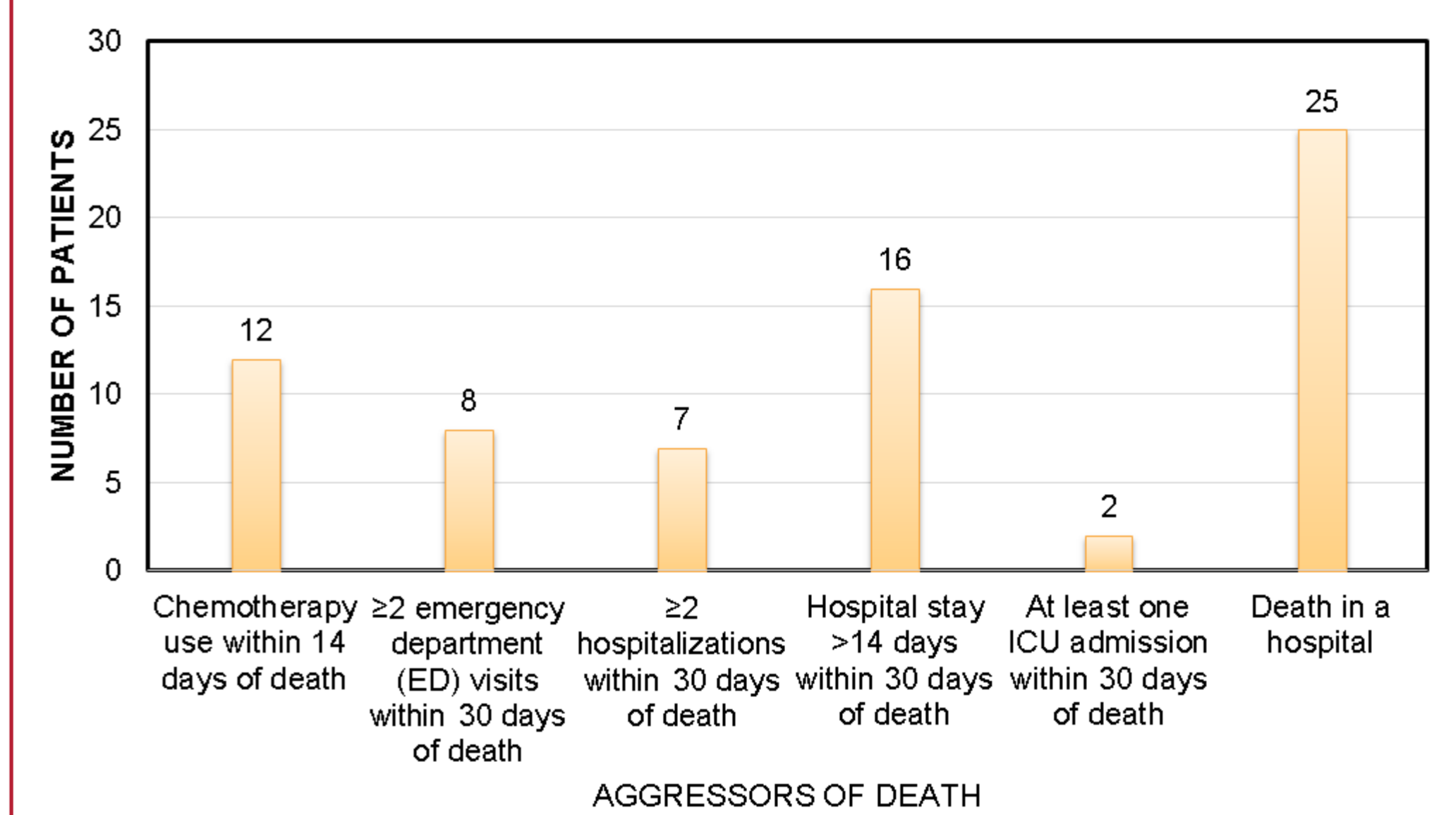
#### How many patients had an 'aggressive death'?



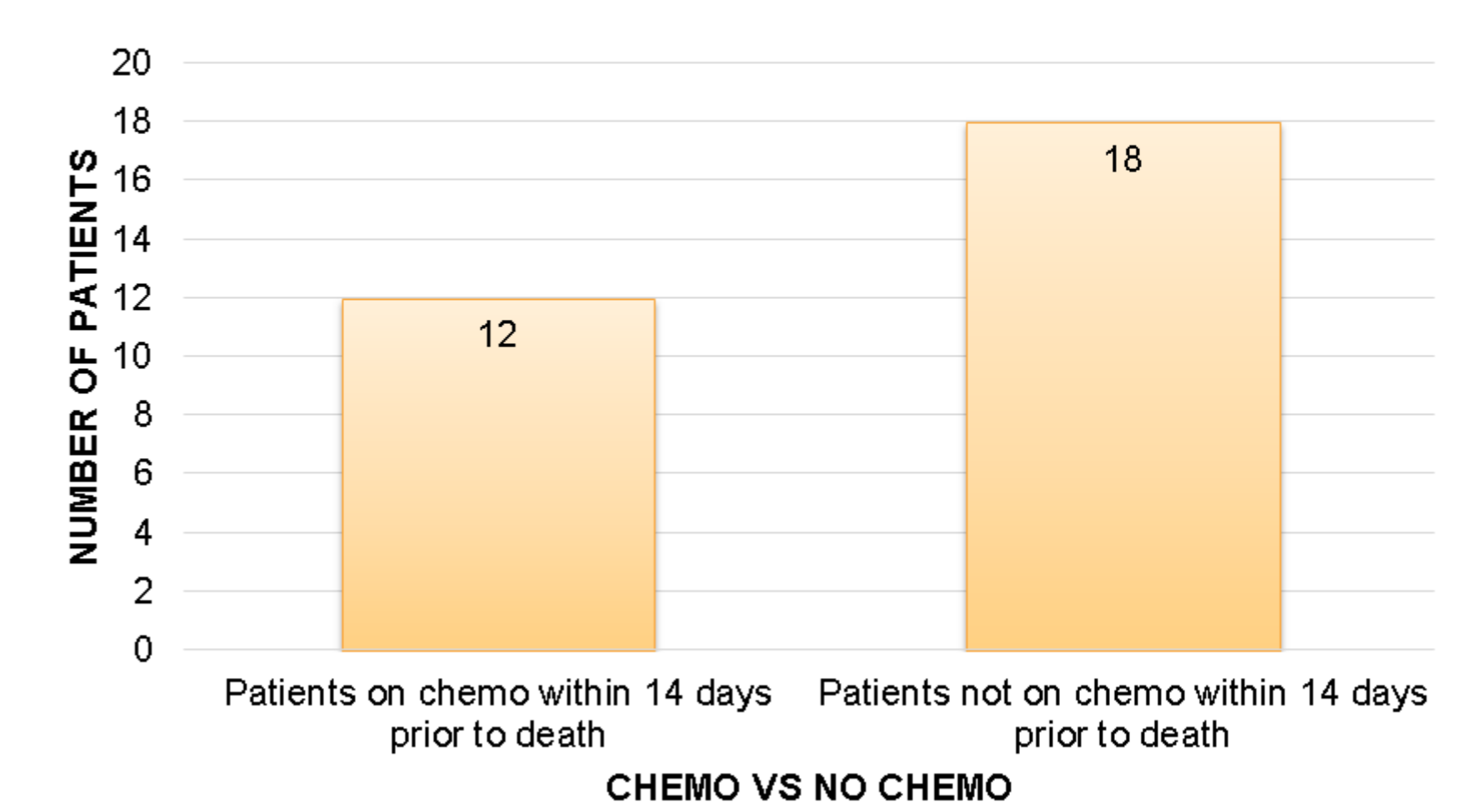
#### Cause of death

- 18 patients died from myeloma and treatment related complications including:
  - Myeloma (10)
  - Bronchopneumonia (5)
  - Neutropenic sepsis (1)
  - Malignant encephalopathy (1)
  - Multiple organ failure (1)
  - PE (1)
  - Plasma cell leukaemia (1)
- 6 patients died from a non malignancy or non treatment related death (3 with MI and 1 with non-traumatic intracranial haemorrhage, 1 pulmonary oedema & 1 from CUP)
- 4 patients cause of death is unknown

#### Most Frequent 'Aggressor'



#### Patients who received chemotherapy within 14 days prior to death



### METHOD

A retrospective analysis of patients with myeloma who died between April 2018 and March 2019 was conducted.

Data was collected from electronic, MDT and data management records. Indicators of aggressive EoL care used were those established by Earle et al. (2004).

Patients with myeloma or plasmacytoma were included irrespective of age or date of diagnosis. Patients with amyloidosis (2) were excluded as well as those with incomplete data (2). There were 30 deaths within the cohort, 21 males and 9 females (mean age = 75.2 years).

### CONCLUSIONS

According to the 6 aggressive death criteria by Earle et al (2004) aggressive death was a common theme in this audit. 93% of patients had at least 1 indicator of aggressive EoL care, most frequent was death in hospital (n = 25) and least frequent was ICU admission (n= 2). 18 patients died from myeloma and treatment related complications, 6 patients died from non-myeloma related causes. The cause of death for 4 patients was unknown. The most frequent aggressor was death in a hospital (25), 3 died at home and 2 in a hospice; however patient preference was not audited. 12 patients were on treatment within 14 days of death and 21 patients were on treatment within 30 days of death. For patients who had  $\geq 3$  lines of myeloma treatment, more aggressive EoL care was used, with some patients having 2-3 aggressors on average. 18 patients had a RESPECT form (collaborative EoL decision making tool), 4 of which were completed on the day of death. For 12 patients, there was no documentation of RESPECT forms.

Recommendations from this audit include timely discussions with patients regarding EoL and the processes involved, potentially from the time of progression beyond the 3rd line of treatment. Discussion of EoL care depends on health care professionals recognising EoL accurately. An exploration of clinician reticence to discuss and initiate EoL planning would be important to explore. At UHB, a Myeloma clinical nurse specialist (CNS) was introduced in July 2018 and re-auditing EoL management in myeloma patients to establish whether this has changed practice would be interesting. Preferred place of death and patient preference was not included in the remit of this audit and would be a suitable addition for a further re-audit.

### REFERENCES

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