

## The (dis)continuing of antithrombotic drugs and its implications for occurrence of adverse cardiovascular and bleeding events in cancer patients during end of life

Sarah J Aldridge<sup>1</sup>, Ashley Akbari<sup>1</sup>, Adrian Edwards<sup>2</sup>, Kate Lifford<sup>2</sup>, Denise Abbel<sup>3</sup>, Suzanne Cannegieter<sup>3</sup>, Jamilla Goedegebuur<sup>3</sup>, Eva Kempers<sup>4</sup>, Anne Gulbech Ording<sup>5</sup>, Marieke Kruij<sup>4</sup>, Johanneke Portielje<sup>3</sup>, Mette Sjøgaard<sup>5</sup>, Chantal Visser<sup>4</sup>, and Simon Noble<sup>2</sup>

<sup>1</sup>Swansea University

<sup>2</sup>Cardiff University

<sup>3</sup>Leiden University

<sup>4</sup>Erasmus University Medical Centre Rotterdam

<sup>5</sup>Aalborg University & Aalborg University Hospital

### Background and Objectives

For patients receiving end-of-life care, adjusting polypharmacy and deprescription of potentially harmful medicines are important impactors on quality-of-life. Antithrombotic therapies (ATT) are used by 30-50% of patients with cancer, rising to 80% in older cancer patients, and are often continued until a quality-of-life-impacting bleeding event, or a patient is physically unable to take oral medication. We aimed to describe the use of ATT and occurrence of clinical outcomes in patients with cancer during end-of-life care.

### Approach

Linked health and administrative data in SAIL were used to identify end-of-life cancer patients diagnosed in Wales, focusing on cancer types with an estimated 1-year survival time. Survival analysis was used to describe current ATT usage and to investigate the associations between ATT usage and major cardiovascular and bleeding events.

### Results

21,880 individuals were diagnosed with the pre-defined cancer types between January 2013 and December 2019, 5,660 (26%) of these were taking ATT at diagnosis. During the study period 1670 (30%) were discontinued. Median survival time of patients taking ATT at diagnosis was 169 (IQR 158-180) days, while median time to deprescription was 206 (IQR 190-224) days. Among ATT-users diagnosis, 460 (8%) and 900 (16%) experienced a major bleed or a cardiovascular event, respectively, within 1 year following diagnosis, compared to 1100 (7%) and 1930 (12%) among those who were not prescribed ATT at diagnosis.

### Conclusions and Implications

Our research highlights the need for careful assessment and management of ATT in the interest of improving quality-of-life for patients with cancer during end-of-life care.

