Background Acute lower gastrointestinal bleeding (ALGIB) is a common presenting condition in hospital with an estimated incidence of 33–87/100000. Recent national audit in the United Kingdom has shown that the bleeding stops in the majority of the cases without any intervention. In this retrospective study, we aim to describe patient characteristics and to identify factors that predict clinical outcomes.

Methods Haemodynamically unstable patients with ALGIB are admitted to the medical high dependency unit (MHDU) at Aberdeen Royal Infirmary for monitoring. Patients with a primary diagnosis of ALGIB between 01/05/2015 to 15/09/2017 were identified from the MHDU database. Patients who presented with haematemeses or had upper gastrointestinal (UGI) bleeding found at esophagagogastroduodenoscopy were excluded. Patient’s demographic data, laboratory results, medications, endoscopy and radiology reports were collected. Clinically relevant outcomes of the study included 28-day mortality and red cell transfusion requirement. Multivariable logistic regression analysis was used to identify factors independently associated with outcomes.

Results 130 patients (Median Age 73; male predominance 68%) were included in the study after excluding readmissions (n=8) and UGI bleedings (n=9). 51% had major comorbidity, 37% taking antiplatelets and 25% taking anticoagulants. 60% received blood transfusion and 31% required intervention (endoscopic therapy (n=17), mesenteric embolization (n=18) and surgery (n=5)). 72% had diagnostic endoscopy on admission with the majority being flexible sigmoidoscopy (n=74). Median Length of hospital stay was 6 days, and 12% experienced rebleeding on the same admission. 10 patients died within 28 days of admission. Low Haemoglobin (p = 0.027), raised C-reactive protein (CRP) (p=0.047) and no endoscopy performed on admission (p=0.014) were associated with 28-day mortality. Low Haemoglobin (p< 0.0001) was also significantly associated with red cell transfusion requirement.

Conclusions In our study, the majority of patients who were admitted with severe ALGIB were elderly with a high burden of co-morbidities and frequent antithrombotic use. Nevertheless, antithrombotic medication and co-morbidities were not significantly associated with mortality or red cell transfusion requirement.