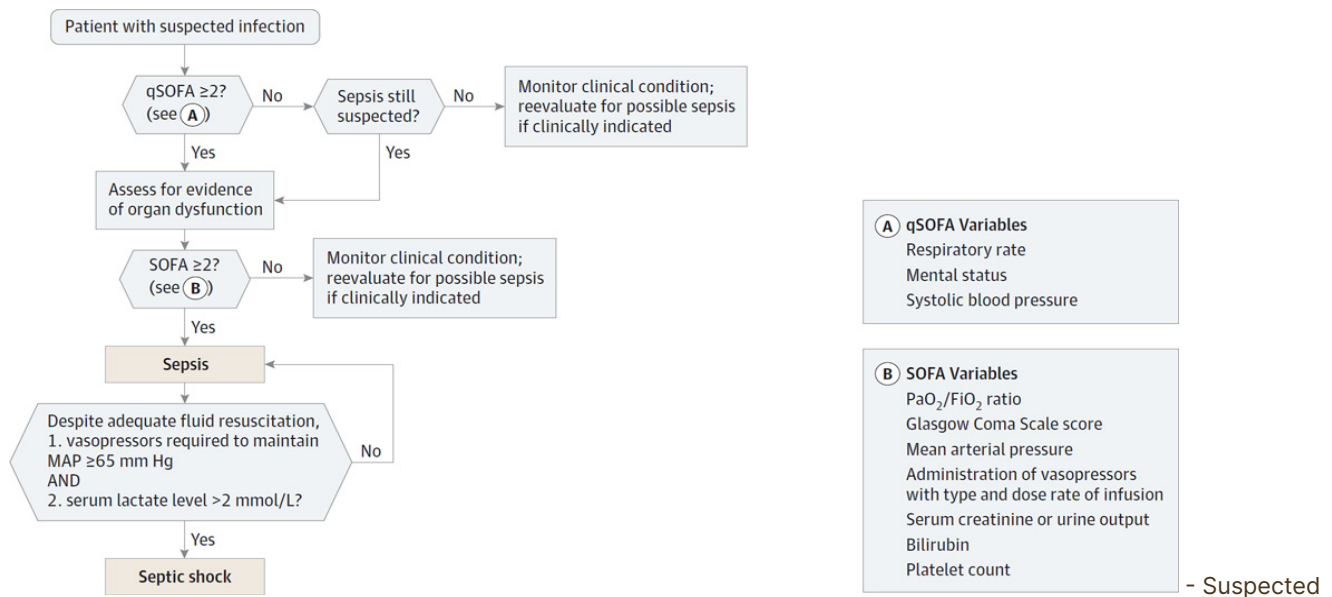


Supplementary Material

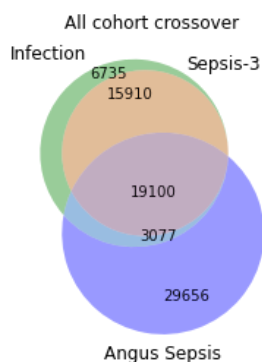
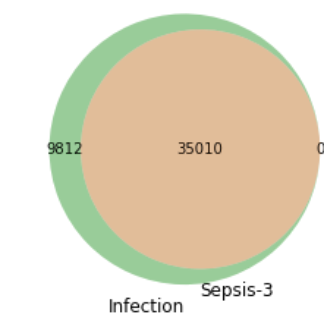
Cohort

Entrance Criteria

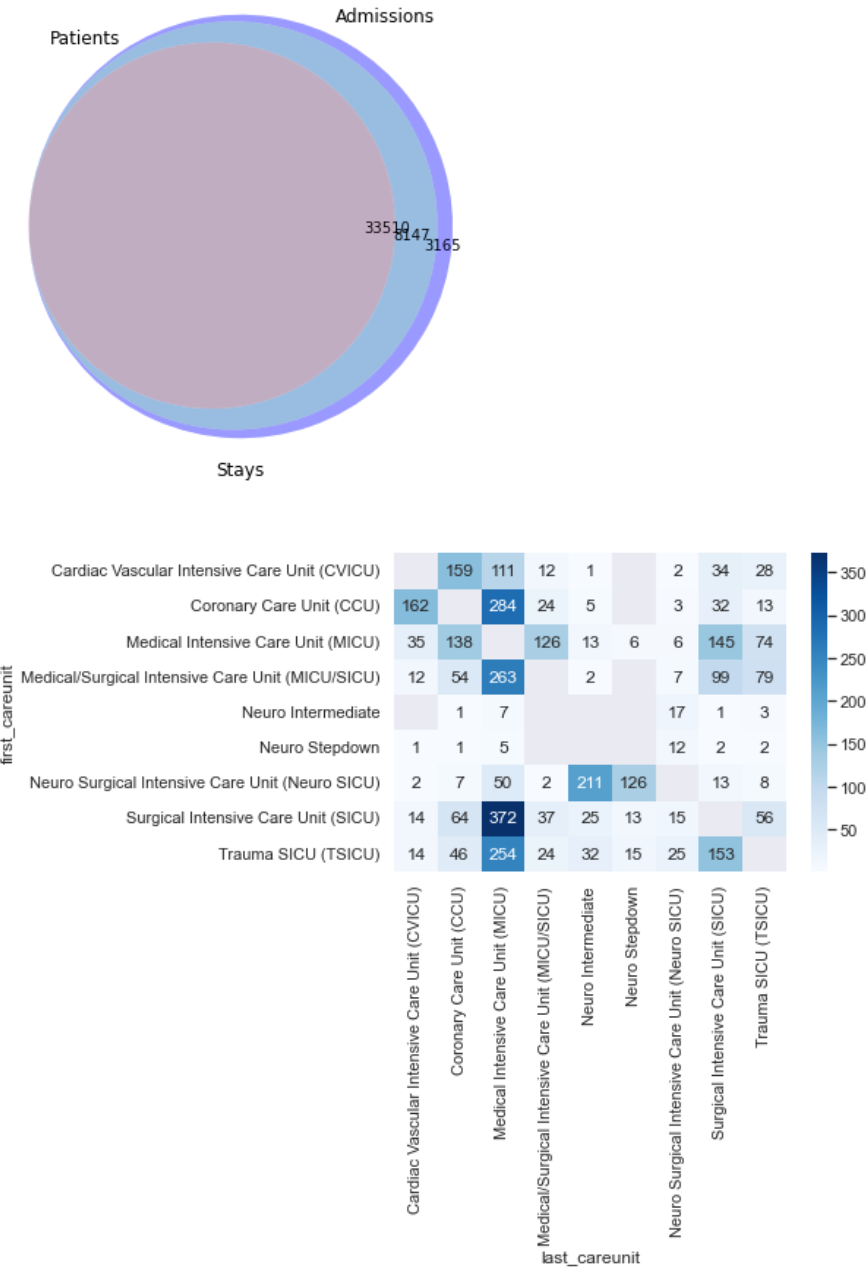


infection is defined as the concomitant administration of oral or parenteral antibiotics and sampling of body fluid cultures (blood, urine, cerebrospinal fluid, peritoneal, etc). For example, if the culture is obtained, the antibiotic is required to be administered within 72 hours, whereas if the antibiotic is first, the culture is required within 24 hours. - As such, we have a cohort where some have first an antibiotic followed by a culture taken, and others where they have a culture taken and then an antibiotic. - Sepsis then identified as suspected infection + a SOFA score of more than 2.

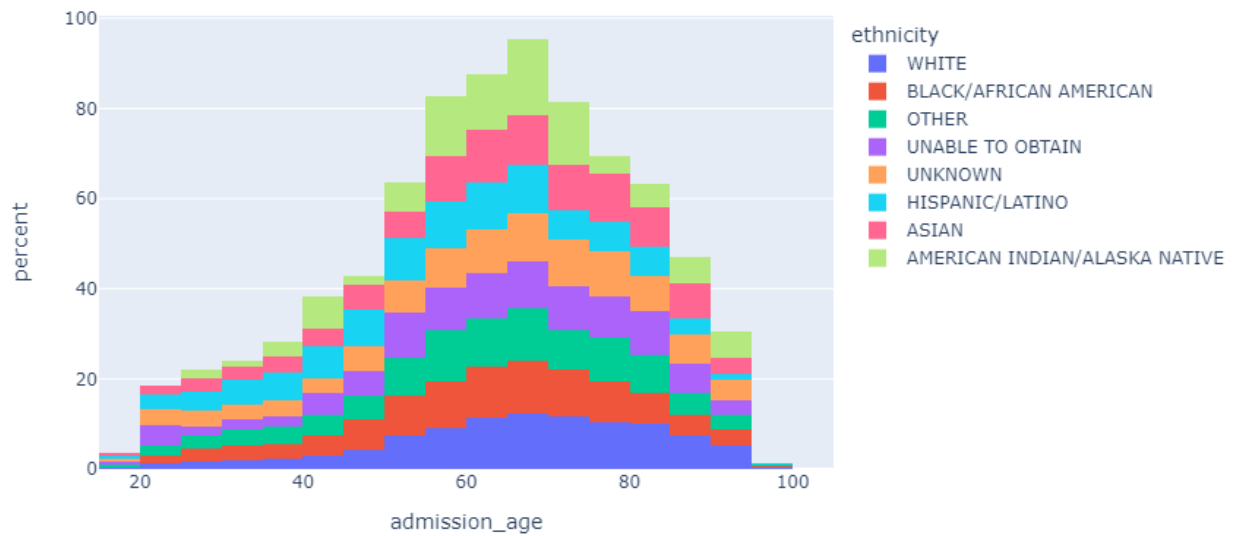
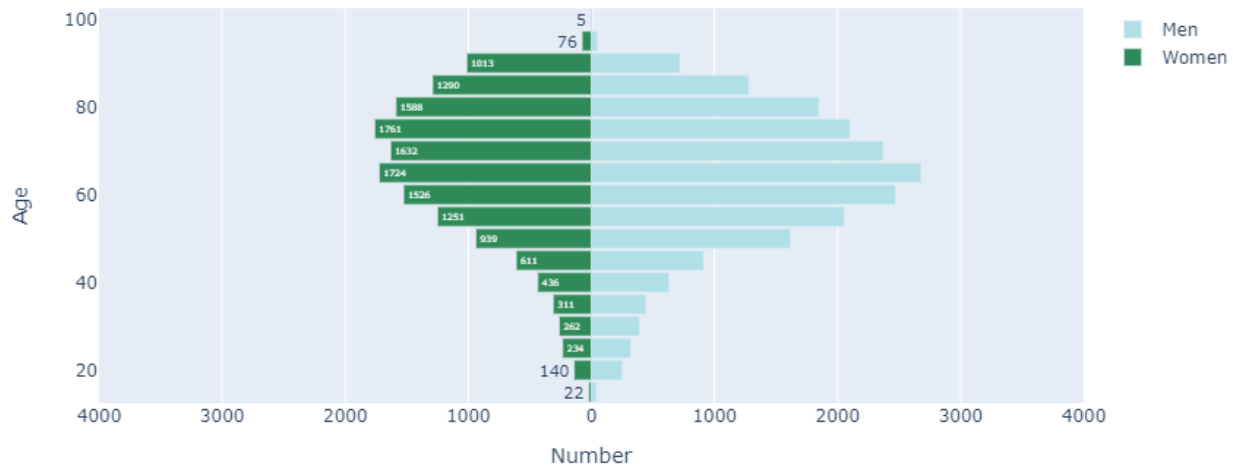
Infection and Sepsis-3 cohort crossover



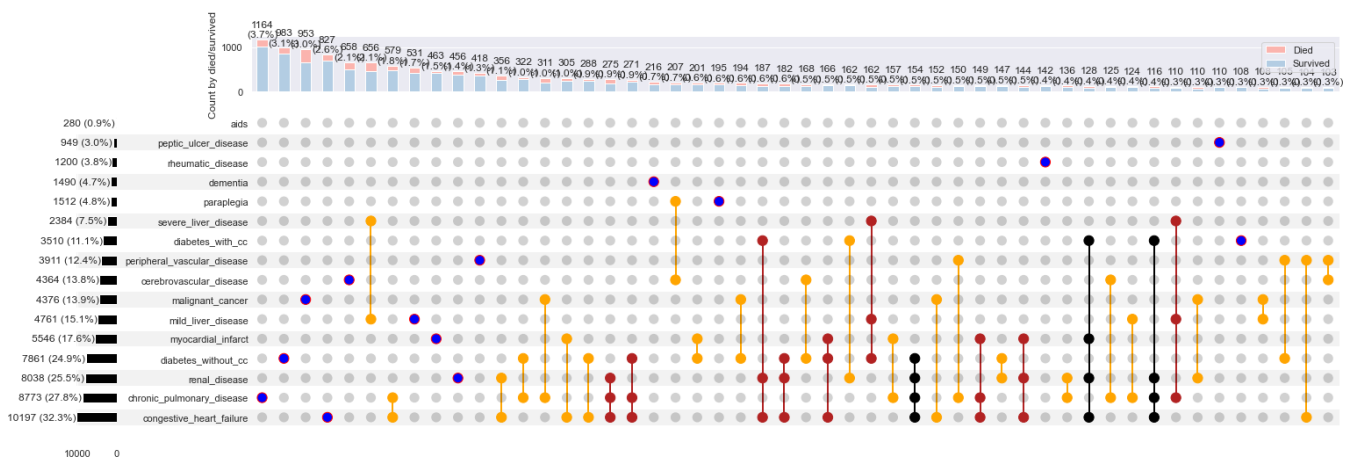
Crossover of infection patients, admissions and stays



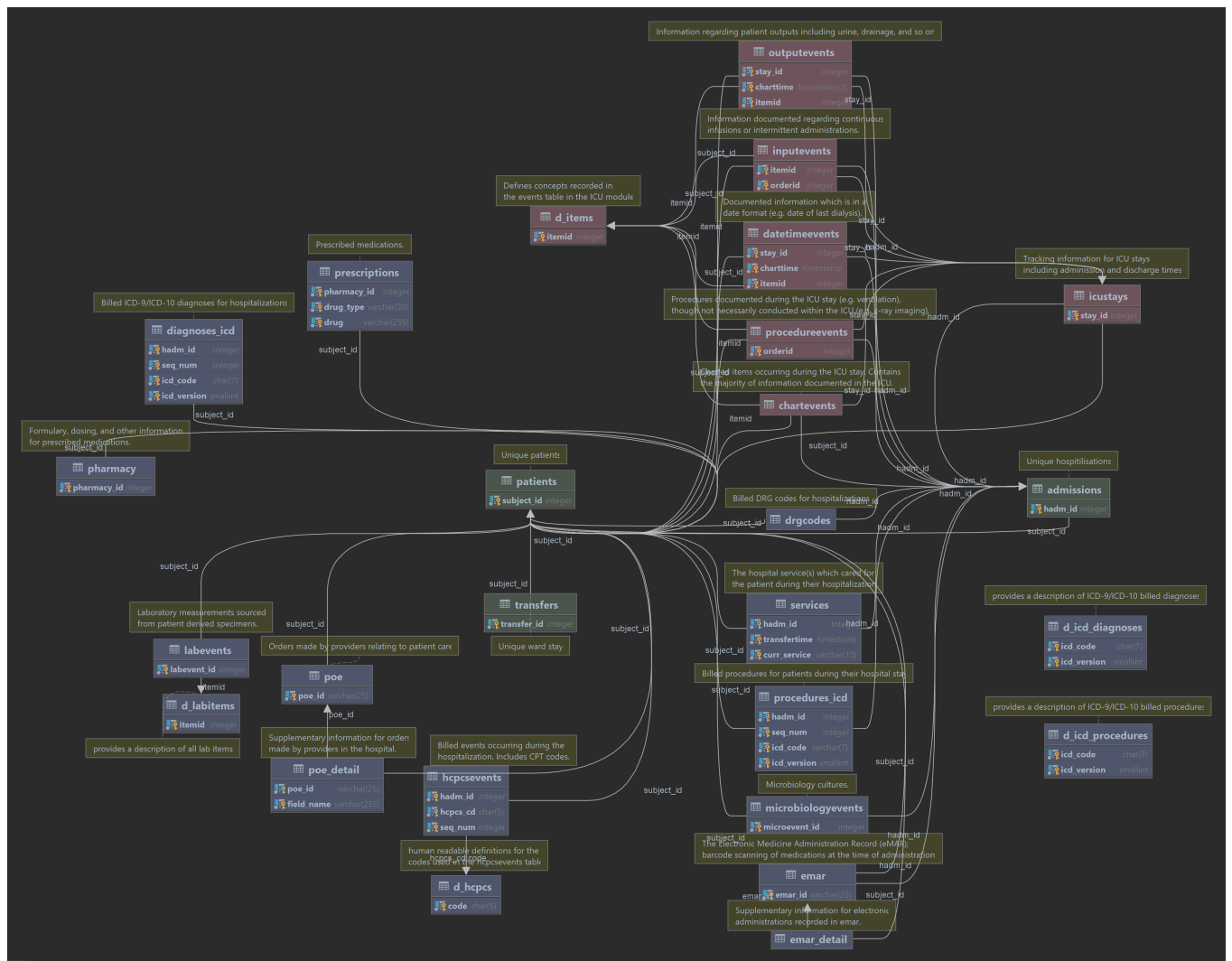
Demographics



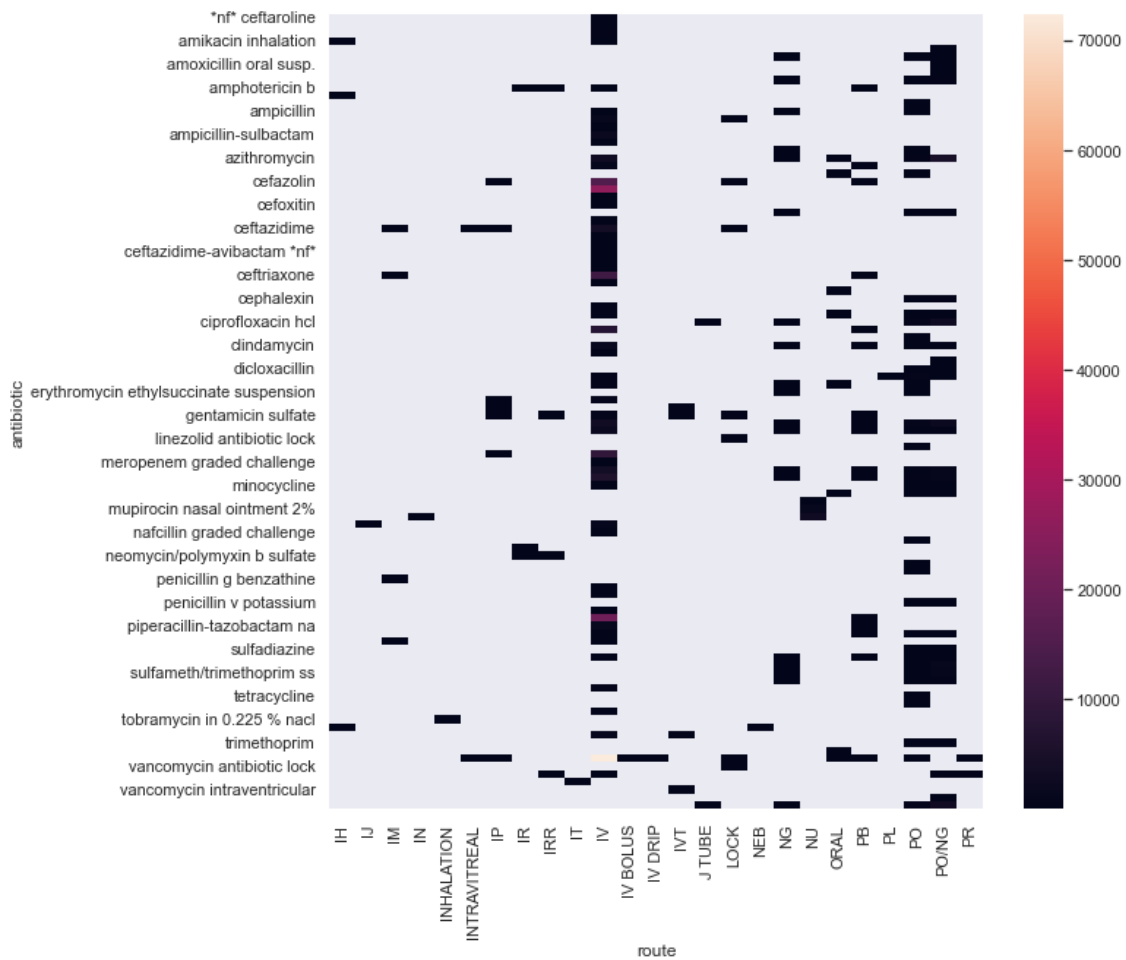
Most common comorbidity combinations for those with Sepsis-3 criteria in the ICU, with count by Died/Survived



Data

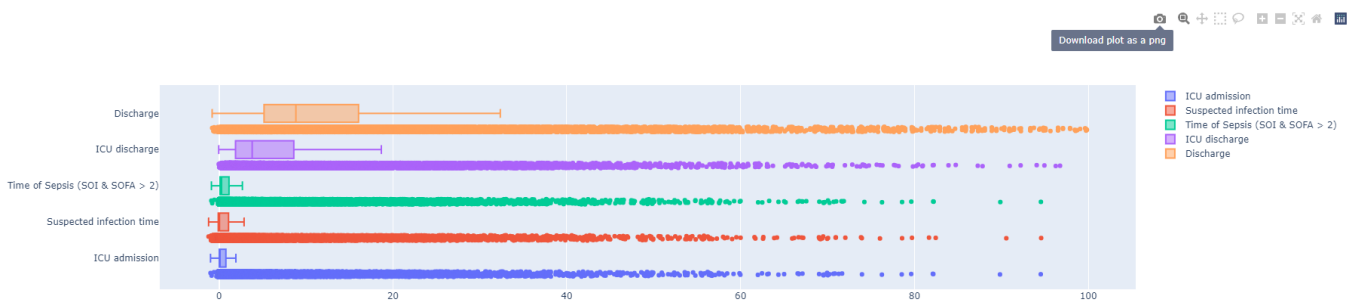


Antibiotics

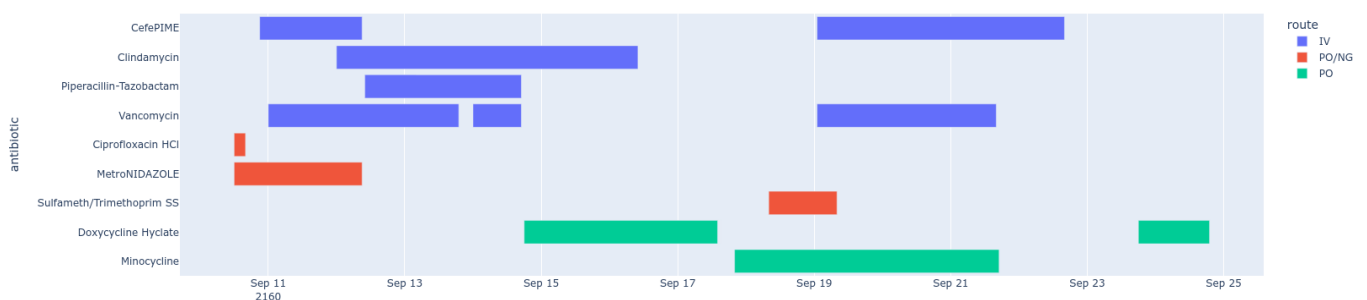


Timeline

- 82.6% first having a SOFA score > 2 at the same time as or after suspected infection, with an average time between suspected infection and sepsis of 7 hours and 47 minutes, and a median of 6 hours and 9 minutes.
- 17.4% had SOFA > 2 before suspected infection, with an average time from SOFA > 2 to suspected infection of 1 day, 6 hours and 46 minutes, and a median of 1 day, 17 hours, 48 minutes



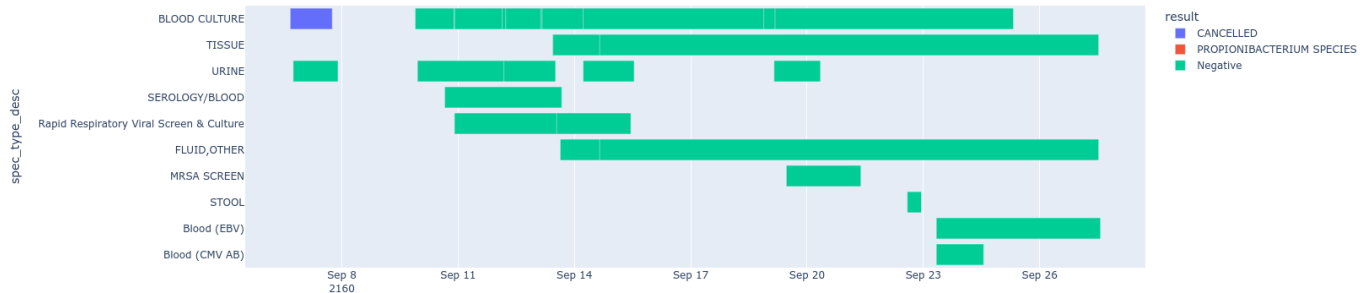
Timeline of antibiotics for an individual (colour shows route of administration)



- If septic, gold standard is IV straight away. High concentration immediately. Stomach will be 2-3 hours or longer. Step down to orals as improving.
- Some people cannot absorb, or NBM, can't give oral even if well or improving.
- Majority of abx are only available in IV preparations.
- Most used in sepsis only used IV anyway.

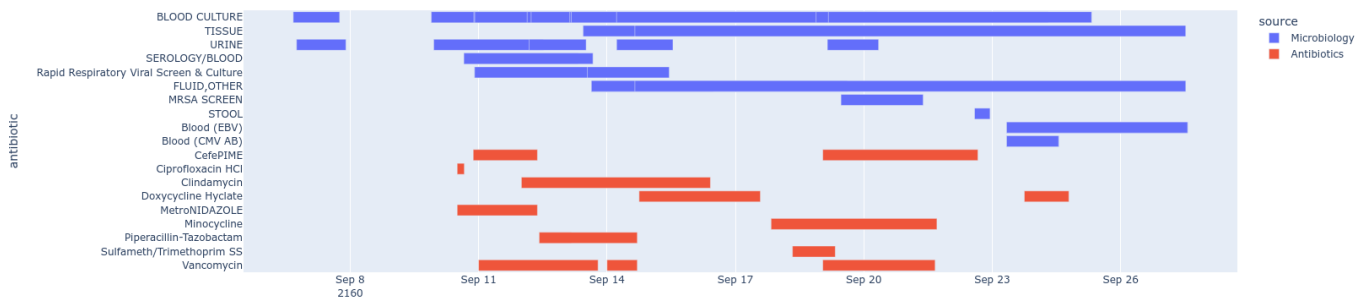
Timeline of microbiology for same individual**:**

- Start of each rectangle is when sample was taken, end of rectangle is when result was received from lab
- 1 positive culture supposed to be in red, but hidden



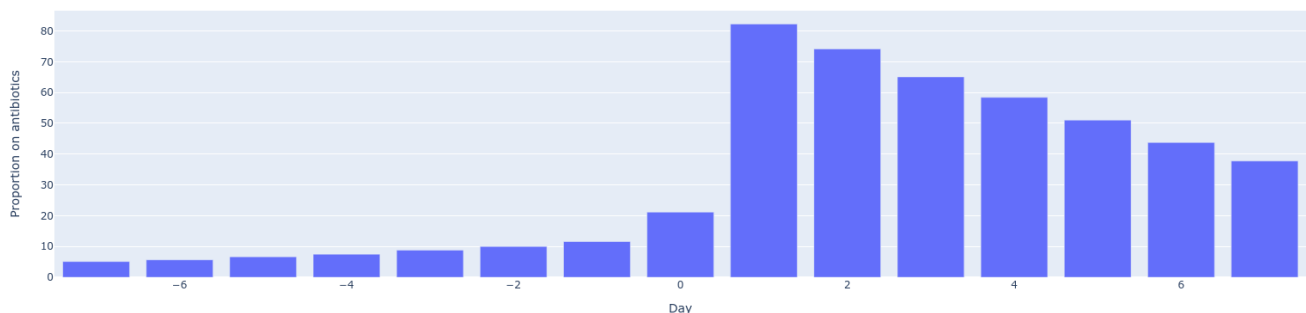
Antibiotics and Microbiology together:

- Positive culture identified on Sep 19 after sample taken Sep 13



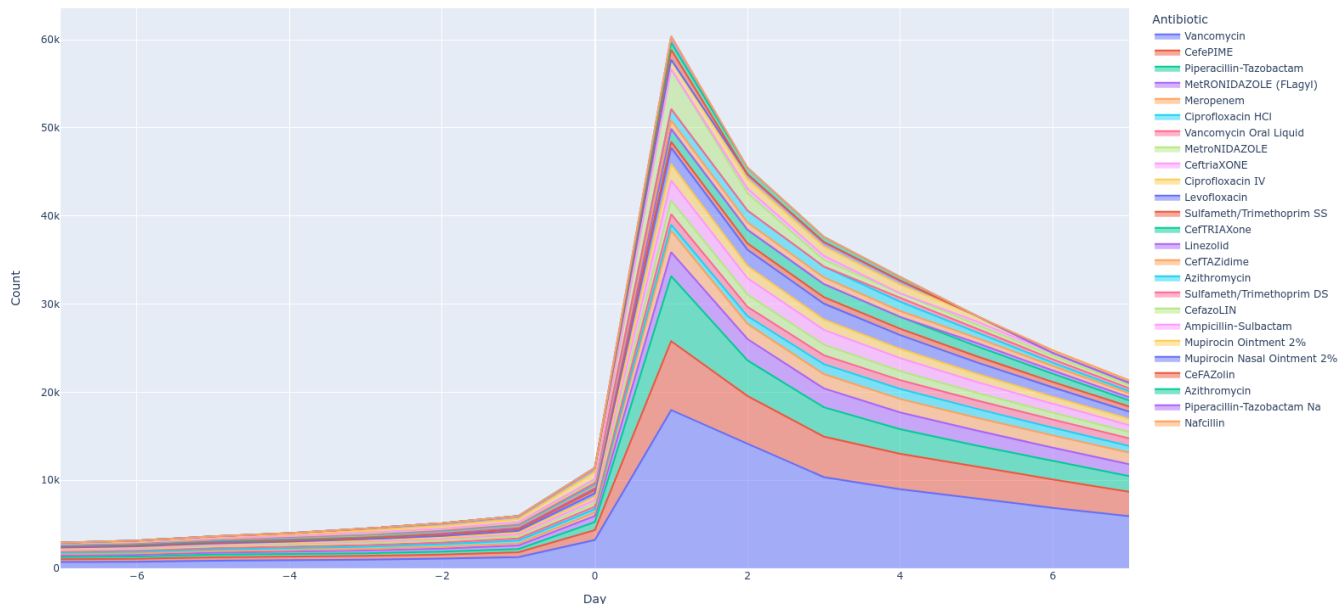
Proportion on antibiotics in the days surrounding admission to ICU:

- Day 0 for example is the 24 hours of the day that they were admitted to ICU

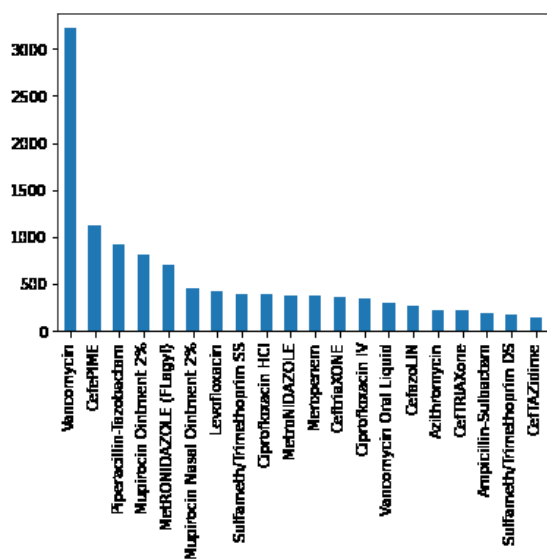


Antibiotics used on these days:

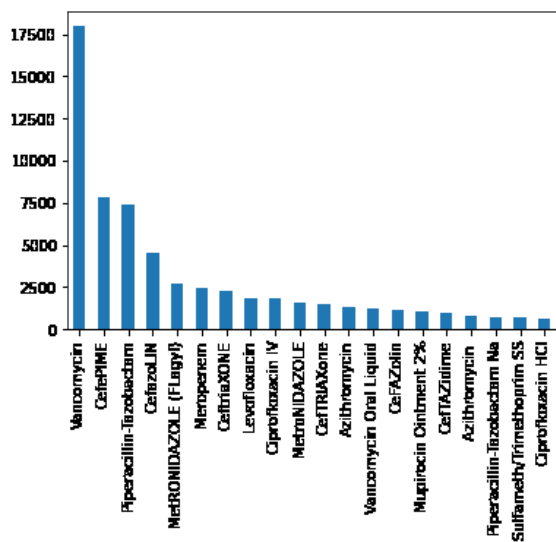
(Apologies for the terrible visualisation!)



Top antibiotics on day 0 (Admission)



Top antibiotics on day 1 (Day after admission)



Antibiotic use around admission