**Supplementary tables: Quality of Inpatient Antimicrobial Use in Haematology and Oncology patients**

**Table S1- Multivariate logistic regression analysis for compliance with national guidelines versus local guideline comparator**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Antifungal prophylaxis** | **Medical antibacterial prophylaxis** | **Neutropenic fever** |
| **Category** | **OR for NG use\***  | **95% CI for OR** | **P value** | **OR for NG use\***  | **95% CI for OR** | **P value** | **OR for NG use\***  | **95% CI for OR** | **P value** |
| Medical group |  |  |  |  |  |  |  |  |  |
|  Non-cancer | 1.0 | Reference |  | 1.0 | Reference |  | 1.0 | Reference | - |
|  Oncology | 0.8 | 0.25-2.62 | 0.741 | 0.7 | 0.5-1.1 | 0.110 | 0.64 | 0.37-1.10 | 0.108 |
|  HaemBMT | 1.7 | 1.14-2.39 | 0.007 | 0.4 | 0.4-0.5 | <0.001 | 0.55 | 0.34-0.89 | 0.016 |
| Age (yrs) |  |  |  |  |  |  |  |  |  |
|  18-40 | 1.0 | Reference |  | 1.0 | Reference |  | 1.0 | Reference | - |
|  41-60 | 0.7 | 0.45-0.94 | 0.021 | 1.4 | 1.0-1.8 | 0.022 | 0.90 | 0.58-1.41 | 0.657 |
|  61-80 | 1.0 | 0.68-1.38 | 0.852 | 1.6 | 1.2-2.1 | <0.001 | 1.62 | 1.06-2.51 | 0.027 |
|  >80 | 1.5 | 0.70-3.20 | 0.299 | 3.4 | 2.2-5.3 | <0.001 | 1.54 | 0.74-3.21 | 0.247 |
| Gender |  |  |  |  |  |  |  |  |  |
|  Female | 1.0 | 0.78-1.33 | 0.901 | 1.1 | 0.9-1.3 | 0.331 | 1.12 | 0.85-1.49 | 0.419 |
| AAL |  |  |  |  |  |  |  |  |  |
|  Present | 0.96 | 0.70-1.31 | 0.792 | 0.8 | 0.6-1.0 | 0.029 | 1.01 | 0.72-1.41 | 0.948 |
| Principal ref. |  |  |  |  |  |  |  |  |  |
|  Yes | 1.1 | 0.69-1.71 | 0.733 | 0.5 | 0.3-0.6 | <0.001 | 0.83 | 0.56-1.22 | 0.332 |
| Private hosp. |  |  |  |  |  |  |  |  |  |
|  Yes | 23.4 | 9.79-55.84 | <0.001 | 1.9 | 1.2-3.1 | 0.006 | 5.31 | 2.64-10.67 | <0.001 |
| Remoteness |  |  |  |  |  |  |  |  |  |
|  Major city | 1.0 | Reference |  | 1.0 | Reference |  | 1.0 | Reference |  |
|  Regional | 1.2 | 0.66-1.99 | 0.620 | 1.0 | 0.7-1.5 | 0.838 | 1.11 | 0.73-1.70 | 0.625 |
|  Remote | Empty |  |  | 3.3 | 0.4-26.4 | 0.257 | Empty |  |  |

\* With local guidelines as comparator. OR>1 is reflective of tendency to national guideline (NG) use, OR<1 is tendency to locally-endorse guideline (LG) use

**Table S2-** **Antifungal and medical antibacterial prophylaxis prescriptions non-compliant with guidelines- factors**

|  |  |  |
| --- | --- | --- |
|  | **Antibacterial Prophylaxis (medical)** | **Antifungal Prophylaxis** |
| **Non-compliance factor** | **HaemBMT****(n=33)** | **Oncology****(n=53)** | **Non-cancer****(n=410)** | **HaemBMT****(n=52)** | **Oncology****(n=21)** | **Non-cancer****(n=32)** |
| Allergy mismatch | 0/33 | 0/53 | 1/410 | 0/52 | 0/21 | 0/32 |
| Microbiology mismatch | 0/33 | 0/53 | 7/410 | 0/52 | 0/21 | 0/32 |
| Incorrect route | 0/24 | 0/26 | 5/273 | 2/38 | 0/13 | 3/19 |
| Incorrect dose or frequency | 28/31 | 32/43 | 84/295 | 22/44 | 17/19 | 6/21 |
| Incorrect duration | 1/24 | 1/26 | 29/285 | 0/38 | 0/13 | 4/19 |
| Spectrum too broad | 1/24 | 4/27 | 28/282 | 3/39 | 0/13 | 4/19 |
| Spectrum too narrow | 0/24 | 0/26 | 8/277 | 2/38 | 2/13 | 0/19 |
| Antimicrobial not indicated | 2/25 | 7/26 | 142/304 | 11/40 | 3/14 | 12/23 |