While responses to most TDF items relating to clinical practice were positive, the majority (n=24) disagreed that they had sufficient time to practise.

For prescribing, 16 of the 24 active NMPs were prescribing daily, six weekly and only one ad hoc. They were prescribing in all renal conditions (n=13), dialysis (n=11), transplantation (n=10), anaemia (n=7) and bone mineral disease (n=6). TDF items for prescribing were mostly positive but (n=11) disagreed that they had sufficient time to practise.

Conclusion Results of this survey indicate high levels of complex clinical practice including widespread NMP activity, demonstrating development of practice, including prescribing, since the previous systematic reviews. Qualitative research is required to provide further in-depth insights to practice.

REFERENCES AND/OR ACKNOWLEDGEMENTS
No conflict of interest.

**Pharmacist Interventions: The Success of an Antimicrobial Stewardship Team**

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Background Pharmacist involvement in antibiotic stewardship helps to ensure compliance with the standards set by the National Health Service. Collection and evaluation of antimicrobial utilisation data are important for assessing the impact of antibiotic stewardship intervention in hospitals.

Purpose Reduce number of inappropriate prescriptions, duration of antibiotic therapy and, therefore, decrease the antimicrobial resistance.

Material and methods Prospective study in a single centre. The antibiotics prescriptions between June 2015 and February 2017 were screened by a pharmacist who checked all prescriptions and sent to the antimicrobial stewardship physicians the ones without approval of therapeutic protocols or analytical results. Statistical analysis was performed using R Studio 3.5.1 (5% significance level).

Results We identified 1242 patients with mean (SD) age of 67.9 (16.6) years and 54.5% males, resulting in 1027 prescriptions of carbapenems (67.2%) and 502 prescriptions of quinolones (32.8%). The most common site of infection was the urinary tract, accounting for 28% of prescriptions. According to the prescribed therapeutic intervention, 261 (17%) discontinuation, evaluation of the drug withdrawal response and cost savings.

Results Sixty-nine MDS cases were analysed by NGS. Mutational risk profile: high (six), low (21), intermediate (18), very high (seven) and very low (17). Seventeen cases were detected as MDS associated with del(5q) and five of them showed positive TP53 mutation and were treated with hypomethylating agents instead of Lenalidomide. Seven of them showed DMN3A, ASXL1, SF3B1 and TET2 mutations. Eleven patients were treated with Lenalidomide, the treatment was discontinued in six of them due to side effects and the dose reduced in three cases due to intolerance. Reported side effects: Grade 4 neutropaenia, rhabdomyolysis, erythematous reactions and haemolytic crisis. All patients in which Lenalidomide was discontinued, maintained complete haematological and cytogenetic response, reaching a mean monitoring time of 12 months since the withdrawal of Lenalidomide. The cost saving associated with the discontinuation of Lenalidomide 10 mg was €48 000 per patient per year.

Conclusion The use of NGS permits the selection of the mutational profile of each patient, resulting in a change in therapeutic decision-making, the selection of more cost-effective drugs and a directed and personalised treatment. Discontinuation of Lenalidomide, due to side effects or intolerance, involves a clinical benefit to those patients who maintain a complete haematological response after interruption of the treatment.

**REFERENCE AND/OR ACKNOWLEDGEMENTS**

No conflict of interest.

**Clinical Impact of Genomic Biomarkers Predictors of Response and the Therapeutic Strategy in Patients with Myelodysplastic Syndrome Associated with Del(5q)**

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Background According to OMS-2016, myelodysplastic syndrome (MDS) associated with del(5q) is manifested by a transfusion-dependent progressive bone marrow failure, with Lenalidomide acting as the intended drug to treat this syndrome.

Purpose To analyse the clinical impact of the directed risk-stratification therapy and to evaluate the clinical benefit associated with the discontinuation of the Lenalidomide treatment due to side effects or intolerance.

Material and methods Three-year prospective observational study on 69 cases of MDS in a third-level hospital, 17 of them with del(5q). Mutational profile analysis using a Next Generation Sequencing (NGS) on a panel of 28 genes mutated in haematologic malignancies prior to Lenalidomide treatment decision-making, with TP53 mutation as ultra-high-risk profile for discouraging its use. Variables considered: beginning of treatment, Lenalidomide mean dose, ending of treatment and beginning of discontinuation, side effects, time after

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