INTRODUCTION

*E. faecalis* and *E. faecium* are common gastrointestinal commensal organisms acquiring resistance through the transfer of plasmids and transposons and recombination or mutation events. Infection with vancomycin-resistant enterococci (VRE) is a growing problem. The Belgian National Reference Centre (NRC) for enterococci received since 2012 an increasing number of enterococcal strains (mainly VRE) from all over Belgium. The aim of this study is to report the epidemiology of enterococcal isolated from infections/invasive sites in Belgium on strains received from hospital laboratories between 01/01/2011 and 31/10/2016.

**MATERIALS & METHODS**

Species identification was confirmed by conventional diagnostics, by MaldiToF Mass Spectrometry and by sod/ddl/16S rDNA-PCR and sequencing. Antibiotic susceptibility was determined by using disk diffusion and E-test and interpretation according to CLSI (up to 2012) and EUCAST from (from 2012 onwards). The following antibiotics were tested: ampicillin, vancomycin, teicoplanin, linezolid and tigecycline. PCR targeting vanA and vanB genes was applied to confirm VRE.

**RESULTS**

The number of enterococcal strains isolated from infections was steadily increased during the study period: n=59, 102, 152, 192, 275 and 207 in 2011, 2012, 2013, 2014, 2015 and 2016, respectively (Table 1). The VRE% ranged between 40.8% and 75.5% of which vanA increased from 45.5% to 91.4% in the same period. The number of isolates increased from 20 to 79, from 13 to 94, from 5 to 34 and from 3 to 10 for resp. isolates from blood, urine, wound infections and peritoneal fluids. Fig. 1-4 shows the proportions of vancomycin sensitive enterococci (VSE) and VRE per species for blood, urine, wound and peritoneal isolates.

**CONCLUSIONS**

In the last 6 years, the NRC received an ever increasing number enterococci isolated from an infection. The highest increase was found to be caused by vanA positive *E. faecium* isolated from urine. Yet, since Belgian laboratories for clinical microbiology are not legally bound to submit their VRE strains to the NRC one should be cautious about the interpretation.