



Identification of Enterococcus species

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Background

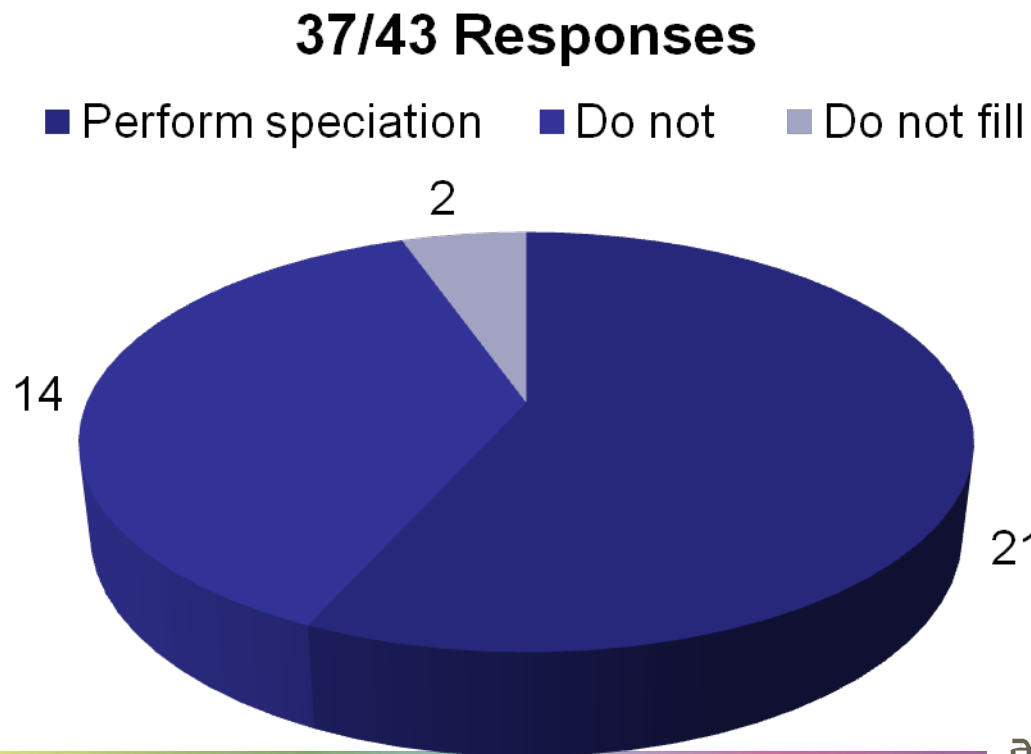
- Monitoring of antimicrobial resistance
 - *Enterococcus faecium*
 - *Enterococcus faecalis*
- Not mandatory
- EFSA guidelines
 - Correct species identification
 - Some species are intrinsically resistant to glycopeptides or Quinupristin/dalfopristin

Goal

- Collect of information on methodologies used
- Interaction between laboratories
- Discuss relevant methodological issues
- Harmonization of identification procedures

Survey on speciation methods of enterococcus species

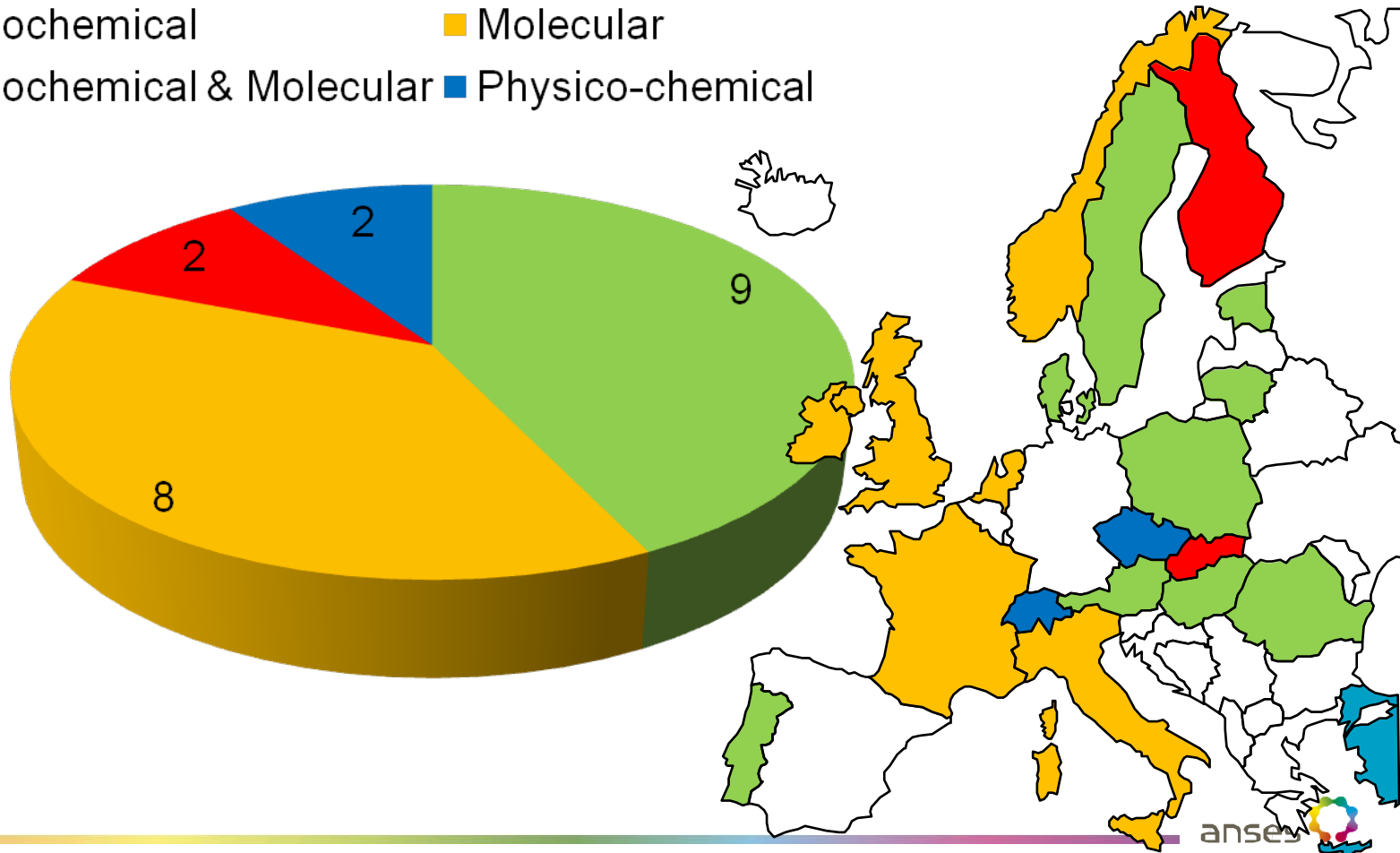
- On line questionnaire
- Sent by EURL-AR
- To all NRLs



Methodologies

Principles

- Biochemical
- Molecular
- Biochemical & Molecular
- Physico-chemical

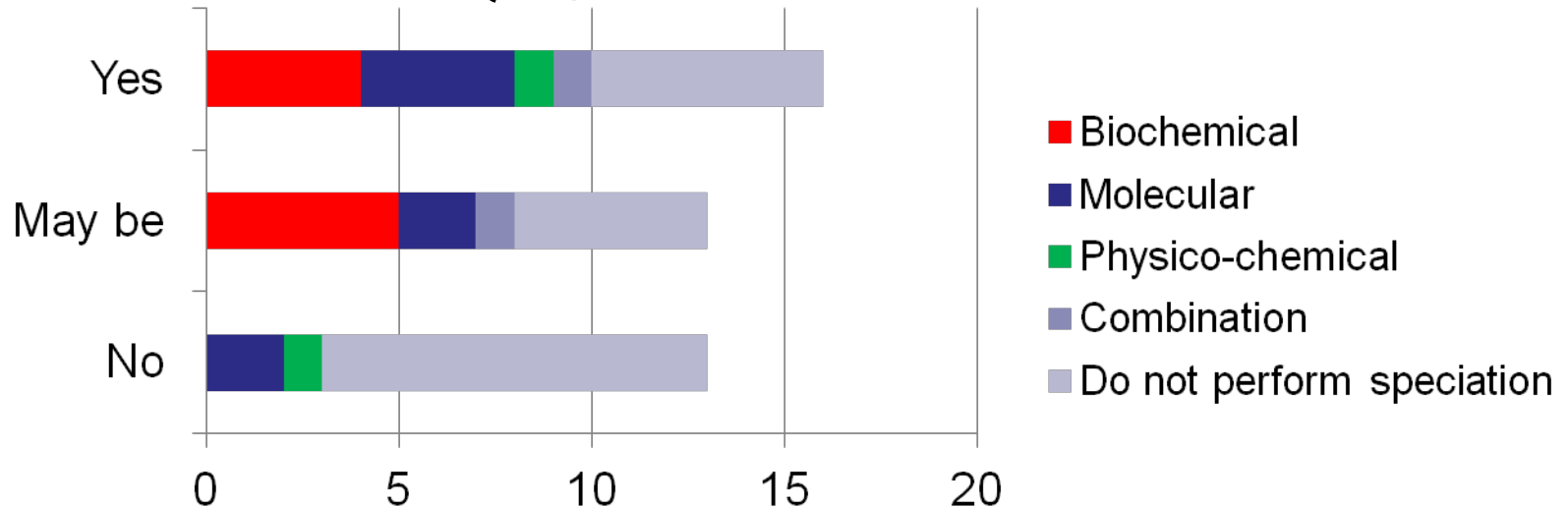


Methodologies

- Biochemical (n=11)
 - Selective media (Slanetz-Bartley, Bile esculine)
 - Biochemical system (API, Vitek)
 - Carbohydrates fermentation
- Molecular (n=10)
 - PCR (8) Dukta malen 5/8, 1 Unknown other dept
 - RT-PCR (2)
- Physico-chemical : MALDI-TOF 2
 - 1 combined with MicroSeq® 500 16S rDNA Bacterial Identification Kits

Quality assurance

- Species identification in the scope of accreditation : 7/21
 - Biochemical (2) Combination (1), Molecular(2)
 - Physico-chemical (2)
- Interest for EQAS of Enterococcus identification



Discussion

- Proficiency test
 - Participants used their own routine method
 - Speciation is recommended but not assessed in current EQAS.
- Goal ?
 - % of deviation <10 % for identification
- Protocol :
 - Use strains sent for MIC Test
 - Few non *Ent. faecium* or *faecalis* strain(s)
 - Score correct identification Ef, Efs or non Ef(s)
- Open discussion