



European Cluster to
Improve Identification
of Endocrine Disruptors

Results of a stakeholder survey

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Stakeholder views, needs and expectations related to EDC test method development and international strategies and guidelines



These projects have received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 825161 (ATHENA), No. 825762 (EDCMET), No. 825759 (ENDpoiNTs), No. 825753 (ERGO), No. 825100 (FREIA), No. 825489 (GOLIATH), No. 825745 (SCREENED), No. 825712 (OBERON). This output reflects only the author's view and the European Union cannot be held responsible for any use that may be made of the information contained therein.

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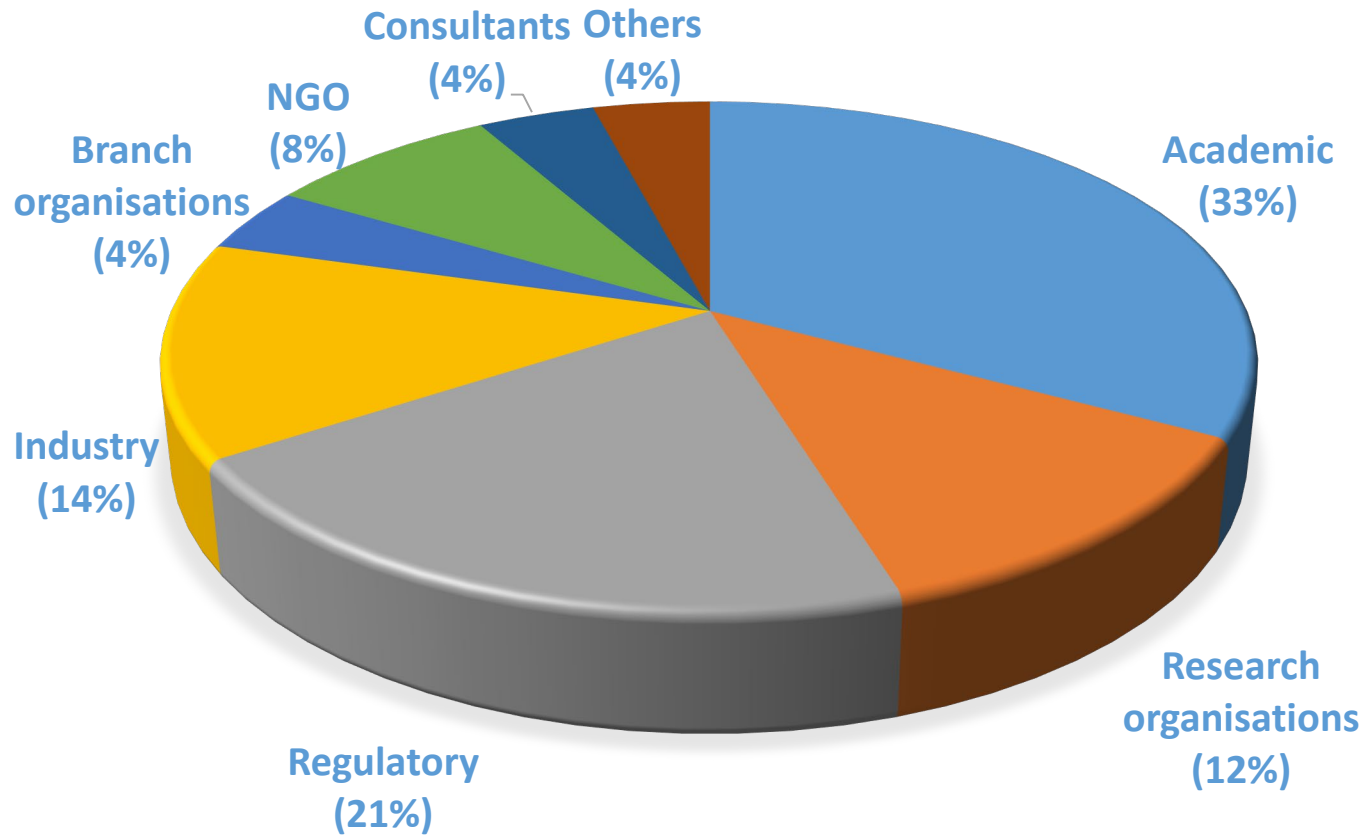
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Objectives

- To provide your opinion on the most important criteria to be considered for the development of new tests for endocrine disruptors (EDs) in EURION
- Your contribution allow us to develop new tests that are applicable and useful for hazard assessment of EDs



Survey participants (n=73)



Criteria for ED test methods

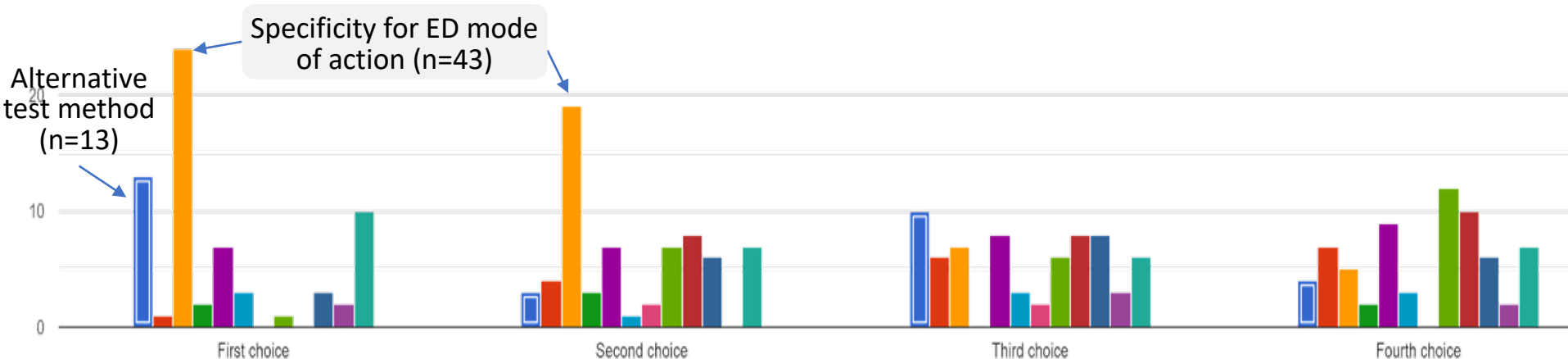
- Criteria for ED screening- and definitive test methods in relation to the **OECD Conceptual Framework (CF)**
- **Screening tests:** mainly providing information on mechanistic effects (OECD CF level 1-3)
- **Definitive tests:** providing also information on ED specific adverse effects (OECD CF level 4-5)



Screening tests informing mainly about mechanistic effects

- Alternative test method (*in vitro*, *in chemico/silico*, whole organism embryos)
- High throughput
- Specificity for ED mode of action
- Whole organism
- OECD accepted
- Simplicity
- Low cost
- High sensitivity
- High specificity
- Adverse outcome pathway-based
- Short duration
- Suitable for screening

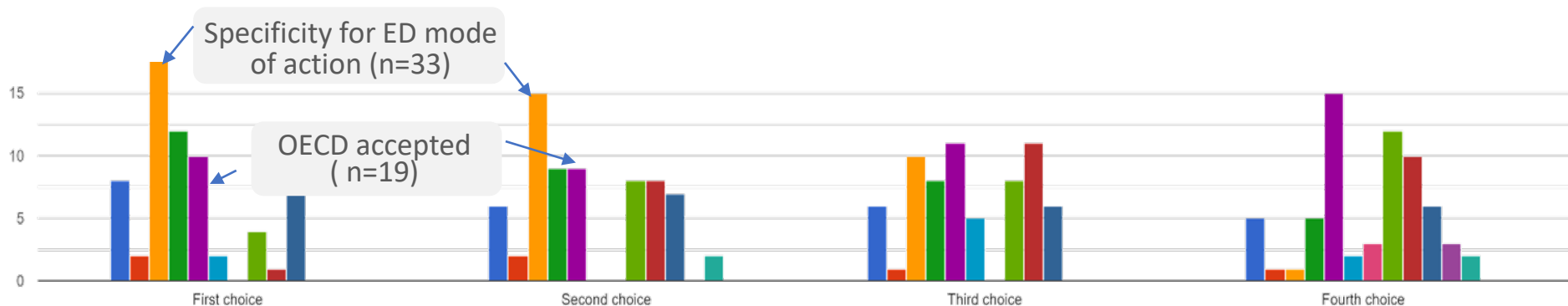
Rank the six most important ones.
First choice: Highest importance.



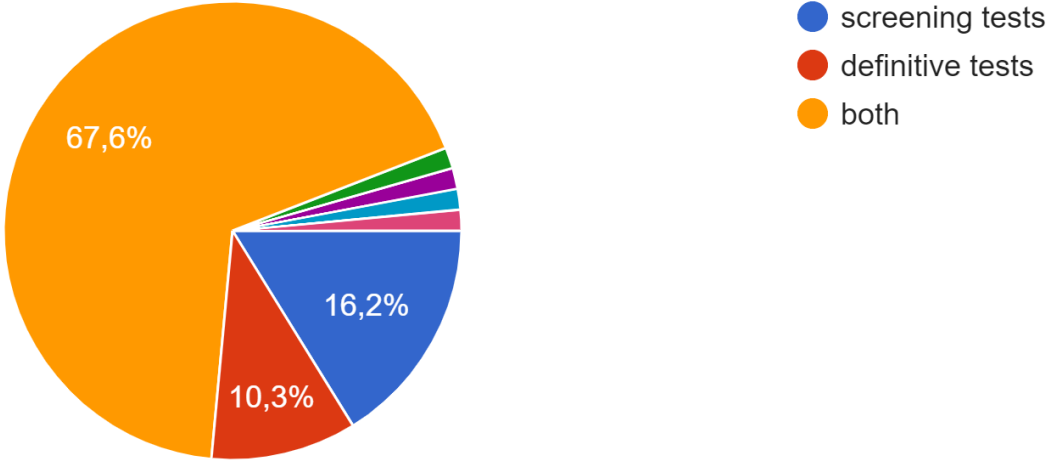
Definitive tests informing about mechanistic and adverse effects

- Alternative test method (*in vitro*, *in chemico/silico*, whole organism embryos)
- High throughput
- Specificity for ED mode of action
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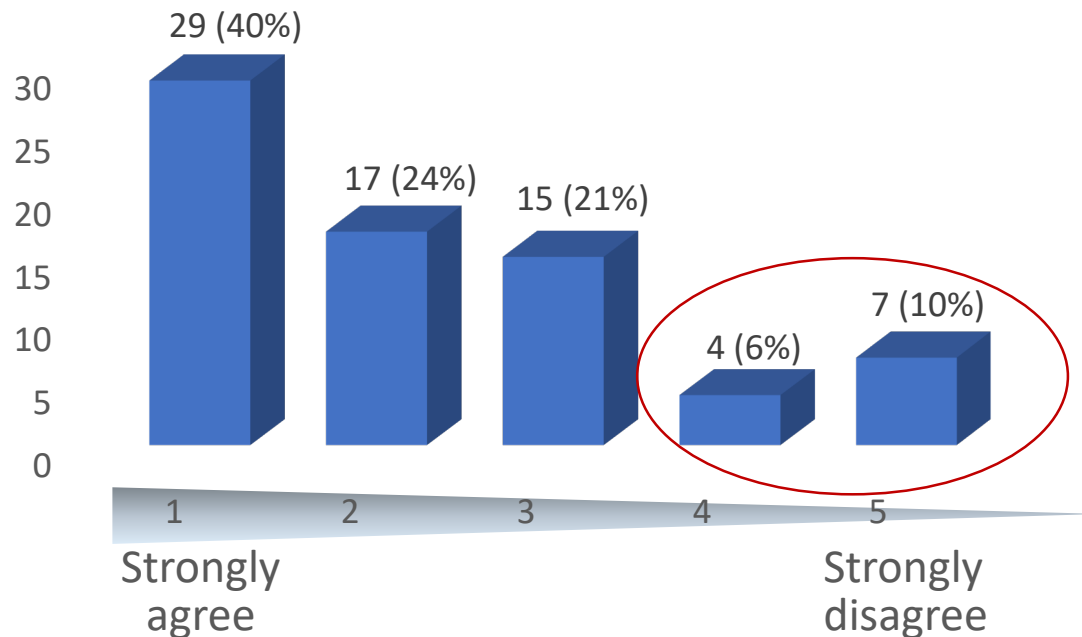
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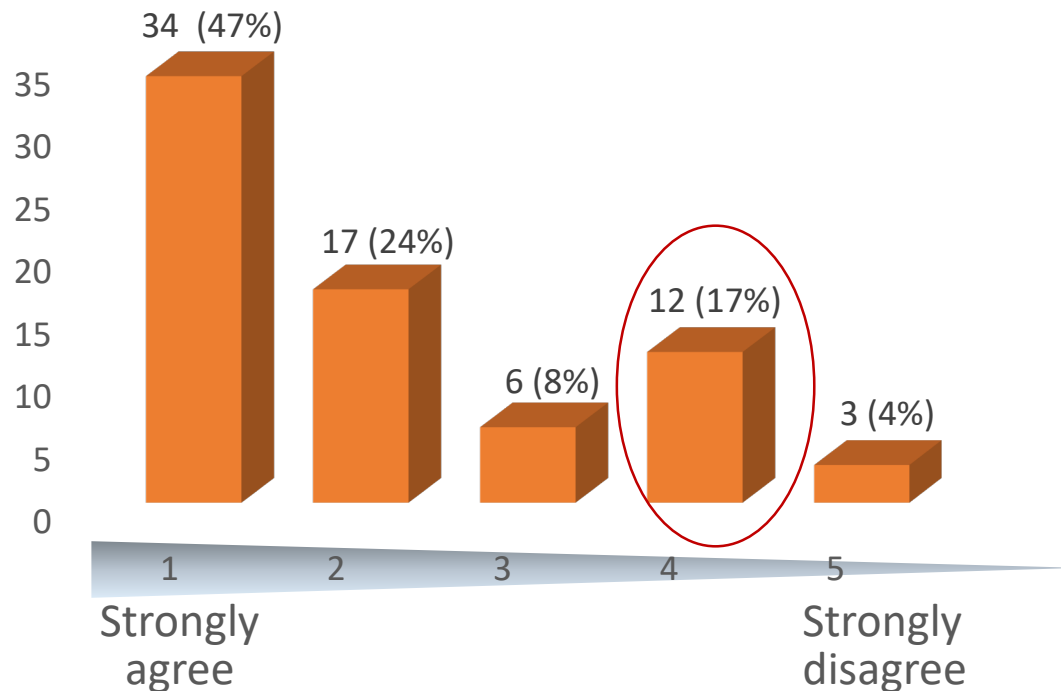
Method development within EURION should mainly focus on



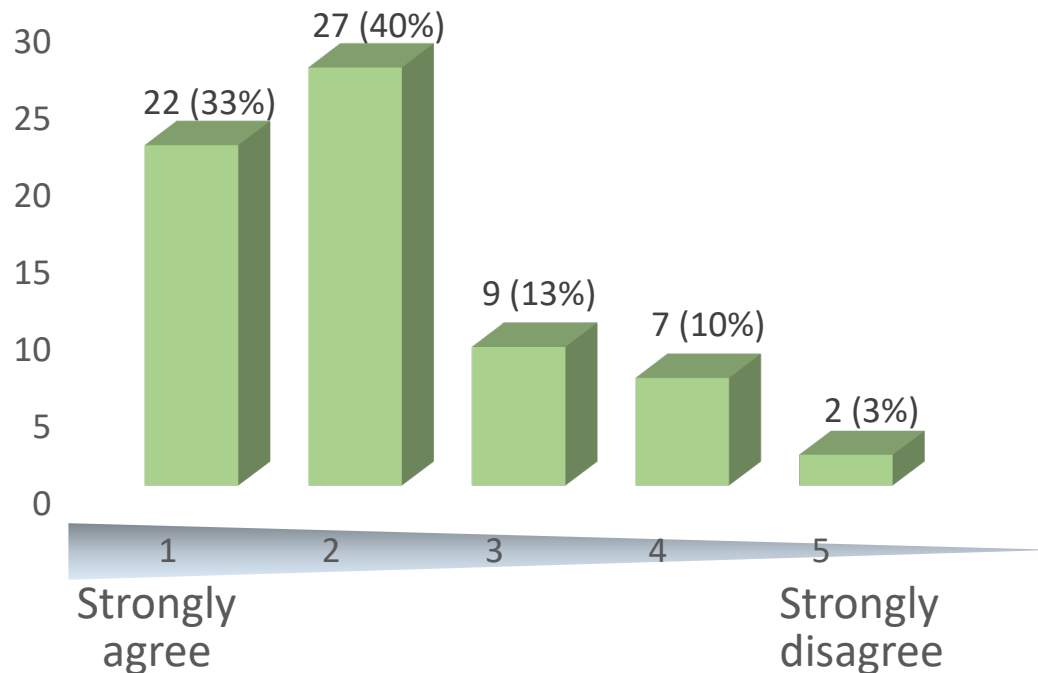
Adding molecular readouts (e.g. transcriptional/metabolomic changes) to existing OECD guidelines is valuable



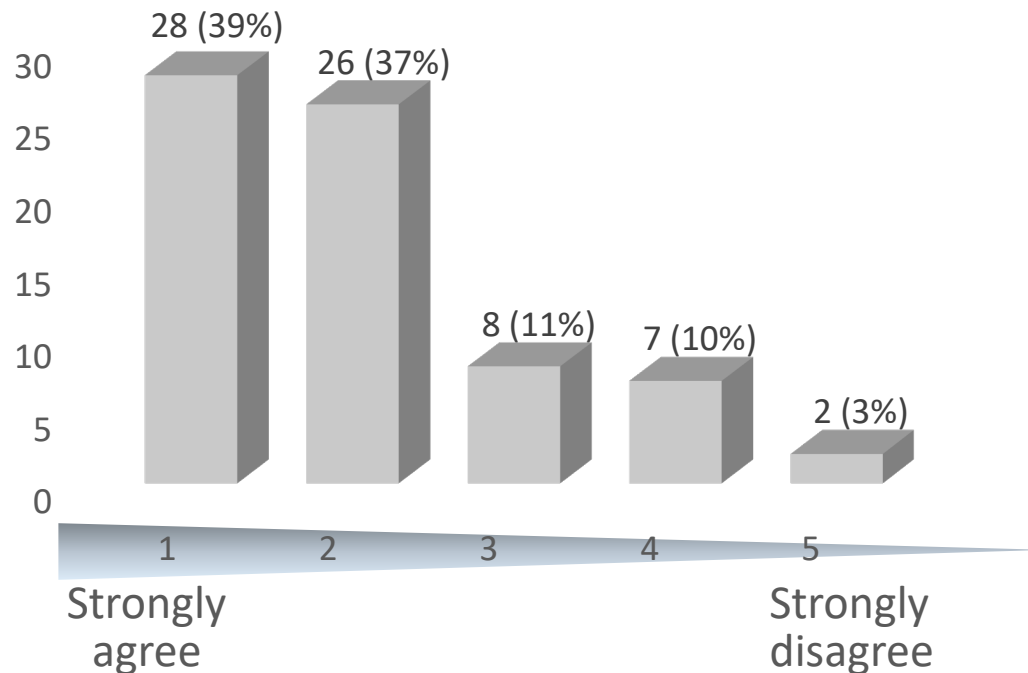
Grouping of substances and read-across (predicting properties from one chemical to other similar chemicals) for assessing ED is valuable



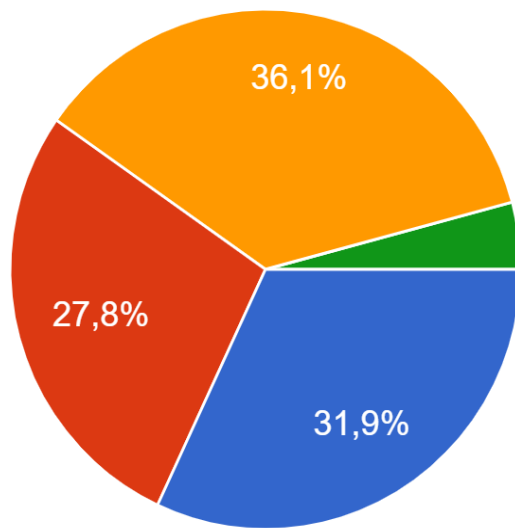
Read-across between vertebrate classes (e.g. mammals and amphibians) for assessing ED is valuable



Adverse Outcome Pathways (AOPs) are useful in the context of developing ED tests



In order to base a testing method on an AOP, the AOP has to be...



- qualitative
- quantitative
- OECD accepted
- AOPs are not useful in this context



Additional comments by participants

- Thanks for your detailed comments, additions, and views on the development of new tests for EDs in EURION
- These will be discussed in the group discussions and further discussed in EURION





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Thank you!



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