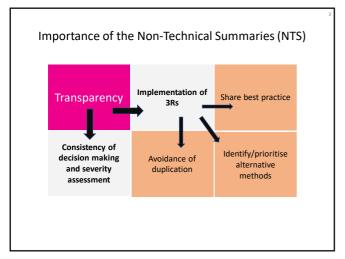


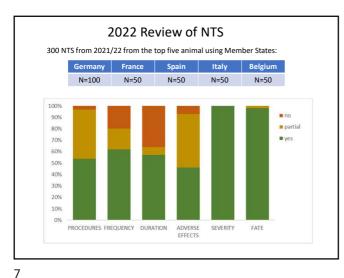
2



2013 In the context of what is being done to the animals, what are the expected adverse effects on the animals, the likely/expected level of severity and the fate of the 2020 Elements in Predicted harms section Completed? In what procedures will the animals typically be used (for yes/partial/no example, injections, surgical procedures)? ...Indicate the number [frequency] yes/partial/no ...and duration of these procedures. yes/partial/no yes/partial/no What are the expected impacts/adverse effects on the animals, for example pain, weight loss, inactivity/reduced mobility, stress, abnormal behaviour, and the duration of those effects? What are the expected severities and the numbers of animals in yes/partial/no each severity category? What will happen to the animals kept alive at the end of the yes/partial/no procedure? [fate]

3 6

1



Issues with procedural information

- Too vague
  - E.g. 'treated with', 'administered', 'receive', 'induced'
- - E.g. percutaneous instrumentation, cecal ligation and puncture, laparotomy
  - E.g. detail on surgical procedures
  - E.g. use of abbreviations e.g. IV, SC, IP, CT, CLP
- Missing aspects
  - E.g. what is being injected, route of administration, details of behaviour tests E.g. duration of the experiment
- Would it help to have common terminology?

10



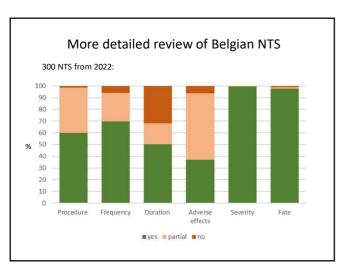
Issues with adverse effect information

- Talking in terms of severity level ascribed to the project, i.e. mild, moderate,
- Forgetting the impact of what they are administering to the animal
- Ignoring the impact of any genetic modification
- Struggling to use terms other than pain, weight loss, suffering, stress
- Using humane endpoints instead of actual effects
- Description at odds with severity level
- Missing 'the duration of these effects'



8

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## Unnecessary information

- All operations will be carried out by trained personnel, so that they will always cause a minimum duration of inconvenience
- General health will be monitored daily/ the animals will be closely monitored
- The expected negative effects in this study will be reduced to a minimum
- The time required for handling the animals is kept to a minimum and all measures are taken to limit stress
- When the mice show signs of severe pain or other unnecessary suffering, they will be euthanized
- The animals will be euthanized at the end of the trial

9 12

## Issues with keywords

- Not bad!
  - General research area, e.g. immunology and organ/disease of interest, e.g. cancer
- Too technical/specific

  e.g. MRI useful?
- Too general!

  E.g. preclinical, therapy, mouse model
- Repeating words in the title
- Using different terms to say same thing
- Consistency would be useful
  - Disease in lay person terms, e.g. 'cancer' instead of tumor or oncology Animal model type- e.g. EAE, CLP, GM model



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## Recommendations

Users should be encouraged to read the updated NTS guidance document - it does address most of these issues

Competent authorities should be checking the NTS

Competent authorities could consider assisting in the development of agreed wording for:
 keywords
 common procedures
 adverse effects of standard procedures



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