An International Landscape of Cancer NGS Reporting Practices

Survey from the VICC VMTB working group

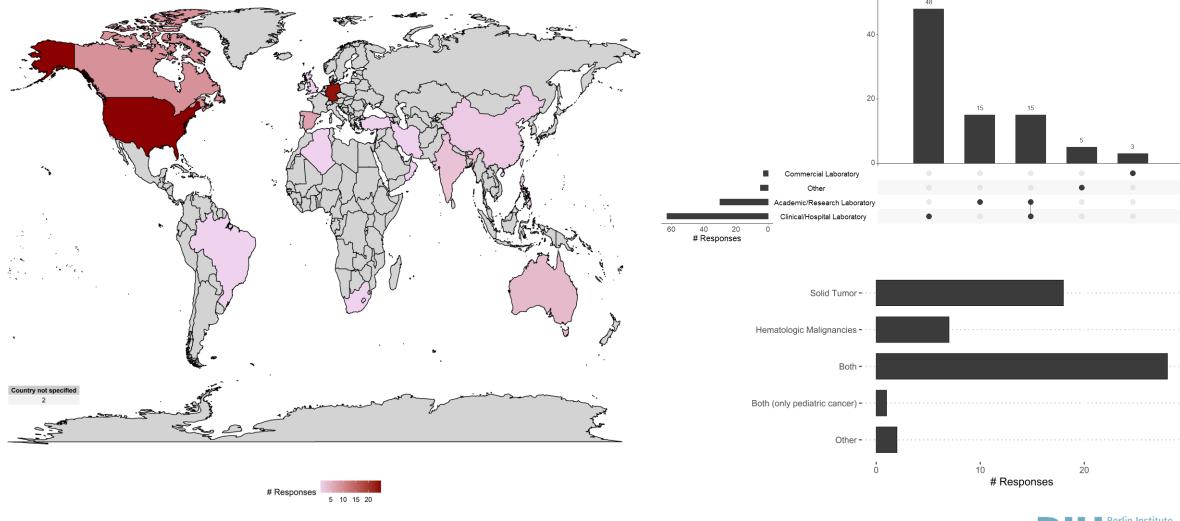
Beth Pitel, Manuela Benary and Variant Interpretation for Cancer Consortium







Responses coming from countries all around the world





Survey structure follows general reporting structures

General type of questions

- Is the type of information **essential**?
- Do you report this type of information?



$$SE = \frac{E + 0.5P - N}{\#responses}$$



Survey structure follows general reporting structures

General type of questions

-1 0.5 1
not recommended preferred essential

- Is the type of information essential?
- Do you report this type of information?

$$SE = \frac{E + 0.5P - N}{\#responses}$$

Based on report examples seen in the VMTB working group (VICC)

- General information on patients / tumors
- General information on variants (focus on SNVs and small indels)
- Functional assessment of variants
- Treatment recommendations and annotations
- Disclaimers
- Additional complex information (e.g. mutational signatures)
- Additional information for clinical trials
- Free form results



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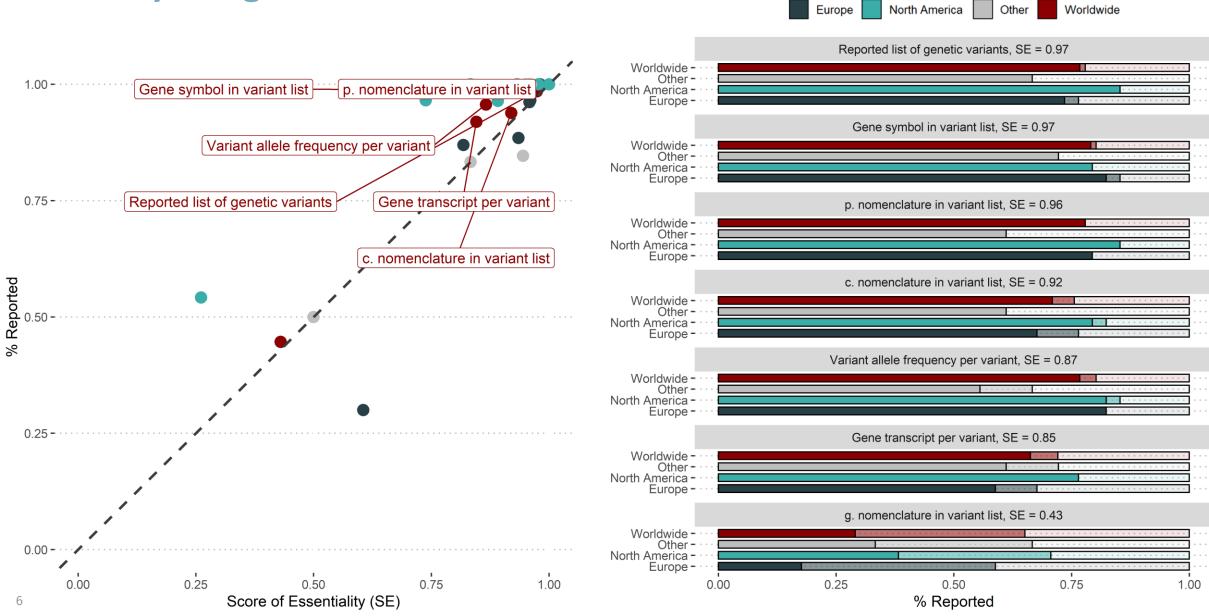
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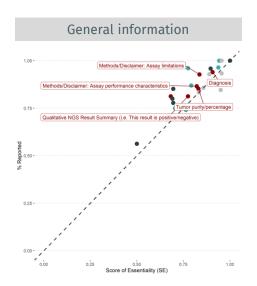
Are we reporting essential elements?

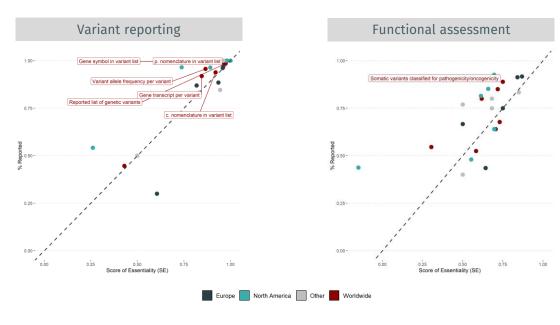


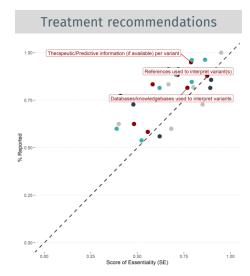
Not Reported

Discussion and open ideas

- High consistency between essential elements and the frequency of reports
- More complex variants and profiles are part of NGS reports with increasing frequencies
- Differences between continents / countries might be due regulation differences





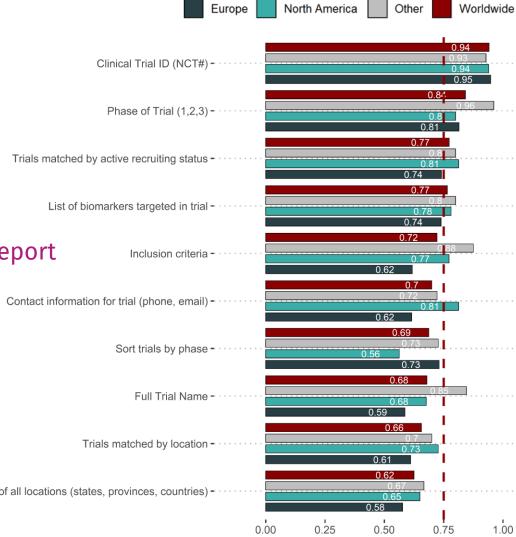








Discussion and open ideas



Score of essentiality as a measure for creating a modular report

List of all locations (states, provinces, countries) -Score of Essentiality







Discussion and open ideas

- High consistency between essential elements and the frequency of reports
- More complex variants and profiles are part of NGS reports with increasing frequencies
- Differences between continents / countries might be due regulation differences
- Score of essentiality as a measure for creating a modular report
- Structured core data (molecular report elements)

Questions?

Explore:

https://mbenary.github.io/VICC_NGSreporting/

https://cancervariants.org/projects/vmtb/

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