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US Infectious Disease Physicians' Perceptions About and Use of SARS-CoV-2 Antibody Tests, March 2022: A Qualitative Analysis and Lessons for the Future

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BACKGROUND

- Clinical applications of SARS-CoV-2 antibody tests during the COVID-19 pandemic were limited to identifying recent/prior infection.
- How these tests were used for clinical management of **COVID-19** patients is unknown.
- We consider US infectious disease (ID) physicians' perceptions about SARS-CoV-2 antibody tests to inform preparedness for future events.

METHODS

In March 2022, we surveyed Emerging Infections Network (EIN), a national network of >1,800 ID physicians on:

- use of SARS-CoV-2 antibody assays
- interpretation of results
- clinical scenarios for which such tests were considered



For more info on the main paper see: https://academic.oup.com/ofid/article/10/3/ofad091/7046111

In this poster, we analyzed comments from the 96 respondents who wrote in a free text field for key themes

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- "We use (in Pediatric ID) almost daily due to MIS-C issues as most of our patients have been un-vaccinated due to age limitations for vaccine."
- "Many clinicians order antibody tests but have no idea how to interpret or misinterpret, so guidelines on usage and when not to use would be extremely helpful."
- "I am concerned that (results) are used to argue against vaccination"

Example Quotes from Emerging Infections Network physicians

RESULTS

Overall, 96 respondents provided non-mutually exclusive free-text comments:

- 26 considered serology not useful for clinical decisionmaking.
- 23 recognized the limitations of the antibody tests, called for more studies, and indicated that additional guidance would be beneficial.
- 21 said most important need for SARS-CoV-2 antibody assays was to discern a correlate of immune protection.
- 14 used serology to assess patients with suspected MIS-C.
- 8 used serology in individuals with immunocompromising conditions, e.g. organ transplant recipients and those with human immunodeficiency virus (HIV) infection, for example, when making decisions to utilize anti-SARS-CoV-2 mAbs (available at the time of the survey but no longer authorized for PReP or treatment.)

CONCLUSIONS

- Analysis provides historical insights into challenges practicing ID physicians faced in the midst of a pandemic
- Some respondents reported use of SARS-CoV-2 antibody assays including when making treatment decisions.
- As diagnostic & treatment modalities evolve, federal agencies, medical societies, and academic partners can consider providing guidance on appropriate use of novel tests in clinical practice for future responses.

