

BACKGROUND

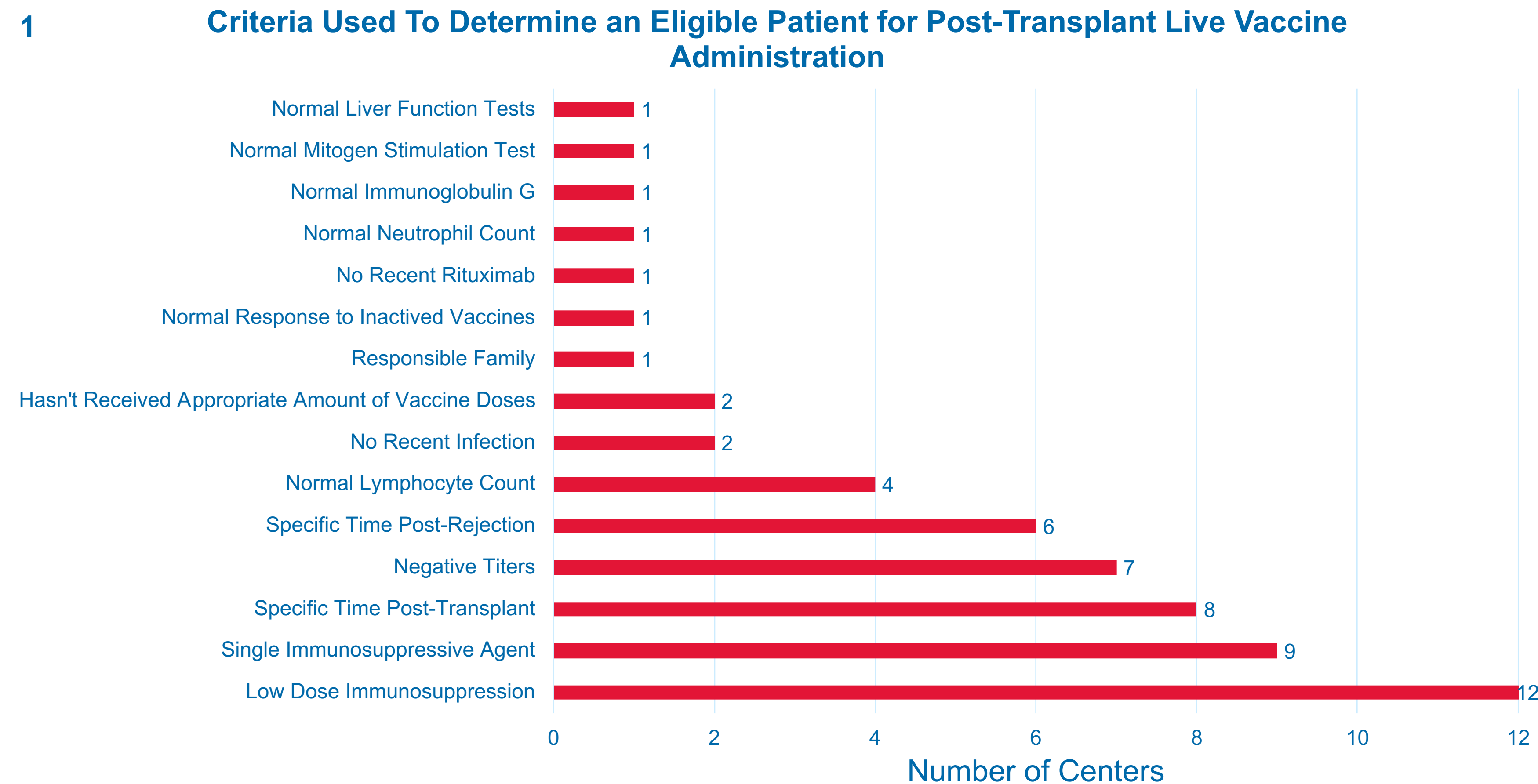
- The Infectious Diseases Society of America (IDSA) and American Society of Transplantation (AST) have historically recommended avoiding live vaccines after transplant^{1,2}
- This was based on concern for 1) inducing vaccine-strain disease and 2) inadequate immune response to vaccines when immunosuppressed
- International consensus and revised AST guidelines from April 2019 suggested live vaccines post-transplant can be considered for select transplant recipients³⁻⁴
- The goal of this survey study was to assess post-transplant live vaccine practices following the updated AST guidelines

METHODS

- We surveyed a representative from each center participating in the Society of Pediatric Liver Transplantation (SPLIT) consortium
- A 6-item e-mail survey detailing center-specific post-transplant live vaccine practices was sent
- This was followed by up to 3 response-specific questions
- Answers were collected between July 2019 and May 2020

RESULTS

- 93% (41/44) of SPLIT centers responded to the survey
- Only 29% (12/41) of these centers currently offer live vaccines after transplantation
- Of these centers, the criteria used to determine eligibility for vaccination varied widely (Figure 1)



- Of the 29 centers not currently offering live vaccines, reasons included: concerns about safety (26/29), inability to reach consensus (10/29), concerns about efficacy (8/29), no ability to administer vaccines (4/29), and history of adverse events with administration of live vaccines post-transplant (2/29)
- Of these 29, 8 don't anticipate offering live vaccines in the near future. Reasons included: needing more safety data (8/8), needing more efficacy data (6/8), and needing clearer guidelines (5/8)

CONCLUSIONS

Despite updated guidelines, a majority of pediatric liver transplant centers are still reluctant to offer live vaccines post-transplant.

IMPLICATIONS

- Prospective multicenter studies are needed to confirm safety and efficacy of vaccines post-transplant.
- This is of particular concern with diminishing herd immunity during the global pandemic and given the unique susceptibility of pediatric transplant recipients to vaccine preventable infections.⁵

REFERENCES

- ¹Rubin LG, Levin MJ, Ljungman P, et al. 2013 IDSA clinical practice guideline for vaccination of the immunocompromised host. *Clin Infect Dis*. 2014;58(3):e44-100.
- ²Danziger-Isakov L, Kumar D, Practice ASTIDCo. Vaccination in solid organ transplantation. *Am J Transplant*. 2013;13 Suppl 4:311-317.
- ³Suresh S, Upton J, Green M, et al. Live vaccines after pediatric solid organ transplant: Proceedings of a consensus meeting, 2018. *Pediatr Transplant*. 2019;23(7):e13571.
- ⁴Danziger-Isakov L, Kumar D, Practice AICo. Vaccination of solid organ transplant candidates and recipients: guidelines from the American society of transplantation infectious diseases community of practice. *Clin Transplant*. 2019;33(9):e13563.
- ⁵Feldman AG, Beaty BL, Curtis D, Juarez-Colunga E, Kempe A. Incidence of Hospitalization for Vaccine-Preventable Infections in Children Following Solid Organ Transplant and Associated Morbidity, Mortality, and Costs. *JAMA Pediatr*. 2019;173(3):260-8. Epub 2019/01/15. doi: 10.1001/jamapediatrics.2018.4954. PubMed PMID: 30640369; PMCID: PMC6439884.

DISCLOSURES

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