

21. Need for Viral Vector Risk Assessment Support Among ABSA International Membership: Results of the Task Force Survey

Sharon Altmann¹, PhD, RBP, CBSP; Theresa Bell², PMP, MPH, RBP, CBSP; Lolly Gardiner^{*,1,4}, MBA, RBP, CBSP; Claudia Gentry-Weeks³, PhD, CBSP

¹MRIGlobal, Gaithersburg, MD; ²Leidos Biomedical Research, Inc., Frederick, MD; ³Colorado State University, Fort Collins, CO; ⁴Task Force Co-Chair

ABSTRACT

The use of genetically modified viruses to deliver “payloads” of genetic material into cells is an essential molecular biology technique in research and development. These viral vectors are derived from a variety of different virus families and species, each of which is associated with its own biosafety-related risks. Many investigators struggle to prepare and present an appropriate risk assessment for their proposed work, and Institutional Biosafety Committees frequently assess proposals involving viral vector systems with which their members are unfamiliar. This combination of factors can lead to delays in project approvals and a failure to implement appropriate risk mitigation measures.

METHODS

In 2019, ABSA International identified through the Expanding ABSA’s Influence Task Force an opportunity to evaluate and address the needs of the biosafety community in regards to viral vector risk assessment. The Task Force developed and circulated a survey among ABSA membership in late 2019 and received over 300 responses. Here, the Task Force presents a summary of the survey findings and outlines the next phase in activities designed to address the community’s needs.

CONTACT INFORMATION

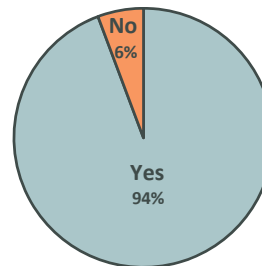
*Corresponding author:

Lolly Gardiner, lgardiner@mriglobal.org

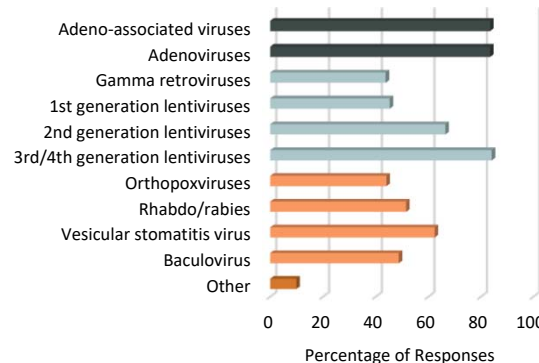
Please reach out if you are interested in volunteering as a beta tester, reader, or subject matter expert!

SURVEY RESULTS

Would respondents benefit from having tools available to assist with risk assessments related to viral vector usage?



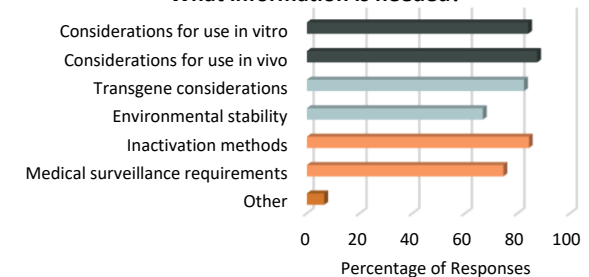
Which viral vectors are tools needed for?



Most desired tools, ranked

Score	Tool
5.86	Risk assessment template
5.61	Pre-completed fact sheets / safety data sheets
4.91	Best practices to share with users
3.89	Infographics for general viral vector classes
3.45	Glossary of common terminology
3.44	Resource webpage
2.61	Review articles in <i>Applied Biosafety</i>

What information is needed?



WHAT IS NEXT?

- The preliminary risk assessment template is under development.
 - Will need volunteers for beta testing.
- The Task Force is currently evaluating options for generating fact sheets and best practices resources.
- The Council has approved the development of a dedicated webpage for the viral vector resources to be posted.

The views presented here are the authors’ own, and do not represent the positions of their respective employers or ABSA International.



ABSA
INTERNATIONAL
The Association for Biosafety and Biosecurity