Respiratory Viral Infections Continue to be a Growing Problem in the Care of Hematopoietic Cell Transplanted Patients

TCT 2021
Abstract
LBA14

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INTRODUCTION

- Respiratory viral infections (RVIs) are associated with significant morbidity and mortality in hematopoietic cell transplant (HCT) recipients with mortality rates up to 50% if infection progresses to the lower respiratory tract (LRT)
- Management of these patients remains challenging without an established standard of care

OBJECTIVES

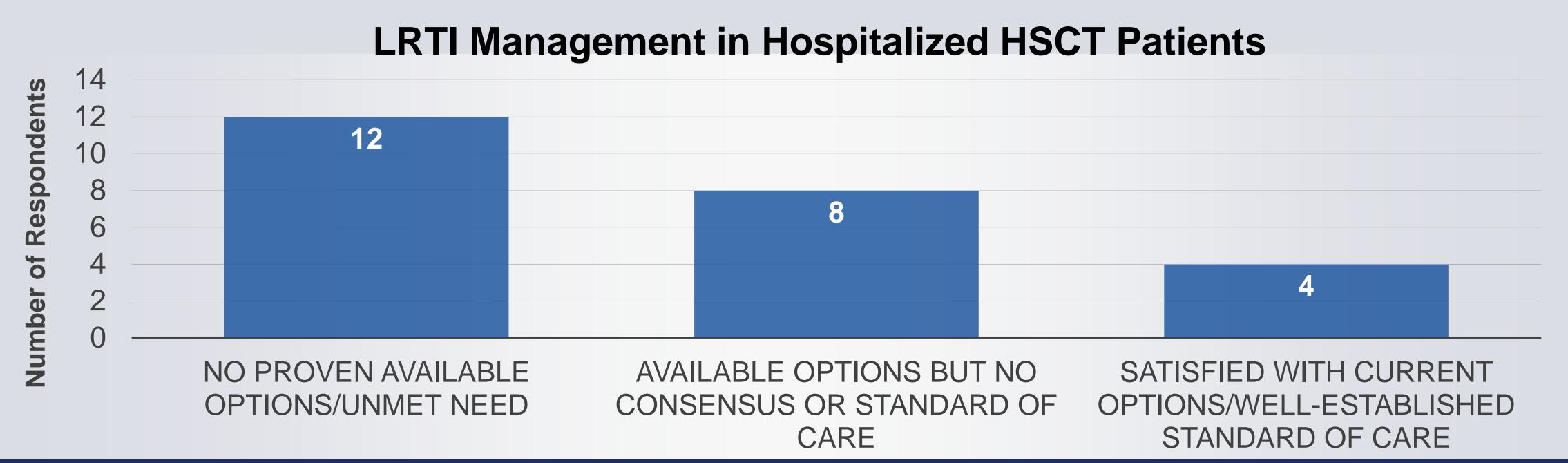
- Identify the most common RVI pathogens in HCT patients
- Evaluate the current management of LRT viral infections
- Explore the nature of the unmet need and the potential for future therapies
- Determine the current clinical state of LRT infections caused by viral pathogens in the face of the COVID-19 pandemic

METHODS

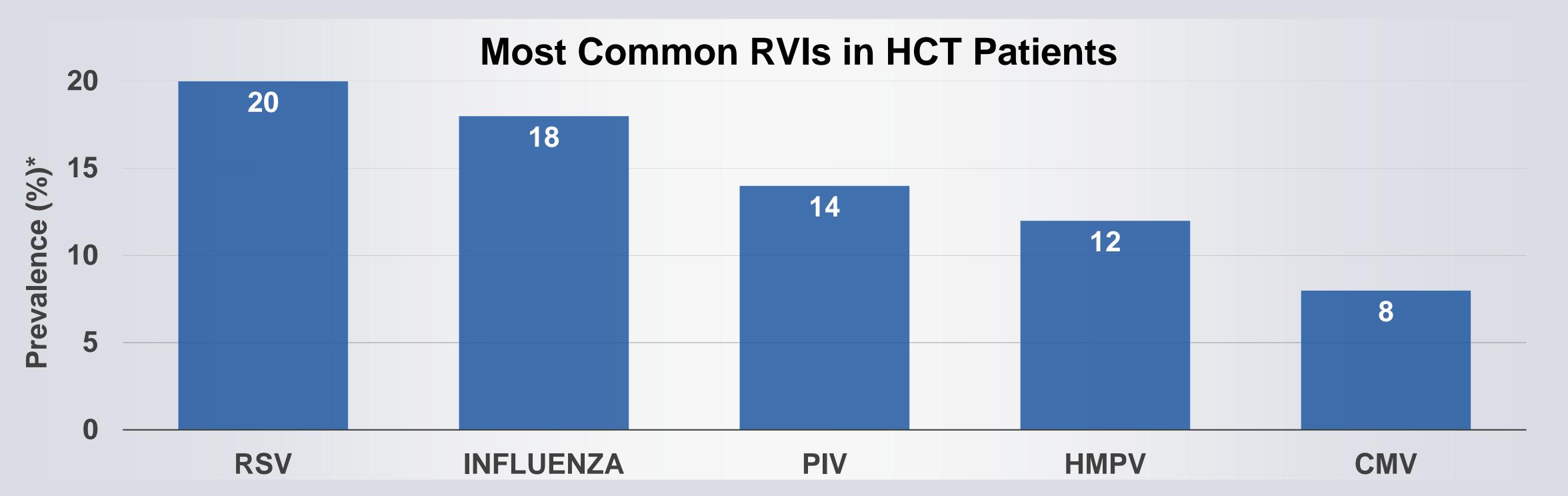
- This prospective medical questionnaire was distributed between mid-September and mid-October 2020 to twenty-four key opinion leaders (KOLs) at major HCT centers in the United States, both pediatric and adult
- The questionnaire was administered by a third party with individual results being blinded
- The online platform captured:
 - Demographics
 - Practice site information
 - Pathogen identification and frequency
 - Management strategies for RVIs including respiratory syncytial virus (RSV)
 - Provider satisfaction with currently available modalities

RESULTS

- Twenty-four KOLs from leading HCT centers completed the questionnaire
- Over 80% considered LRT viral infections to be problematic and a growing concern with no established standard of care



The most common RVIs in order of prevalence were: RSV, influenza, parainfluenza (PIV), human metapneumovirus (hMPV) and cytomegalovirus (CMV)



*Respondents indicated their top 5 respiratory viral pathogens.

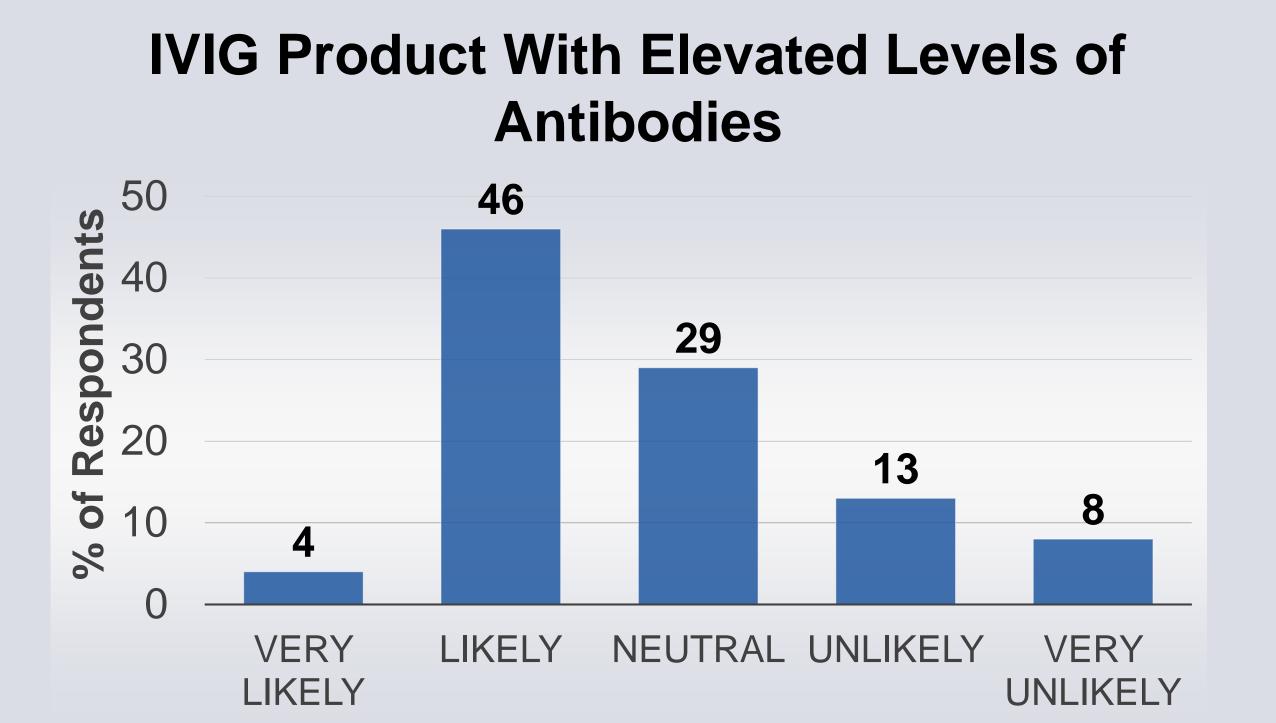
- There was a wide range of strategies with no consensus on the optimal management of RVIs caused by RSV or other respiratory viruses
- The most commonly administered regimen consisted of oral ribavirin +/- intravenous immunoglobulin (IVIG)

Administered Regimen	% of Respondents
Based on risk, alone or in combination with IVIG*	_
Ribavirin (Inhaled or Oral)	50%
IVIG	27%
Steroids	8%
Supportive care	15%

*Oral ribavirin +/- IVIG for adults; Inhaled ribavirin +/- IVIG for pediatrics

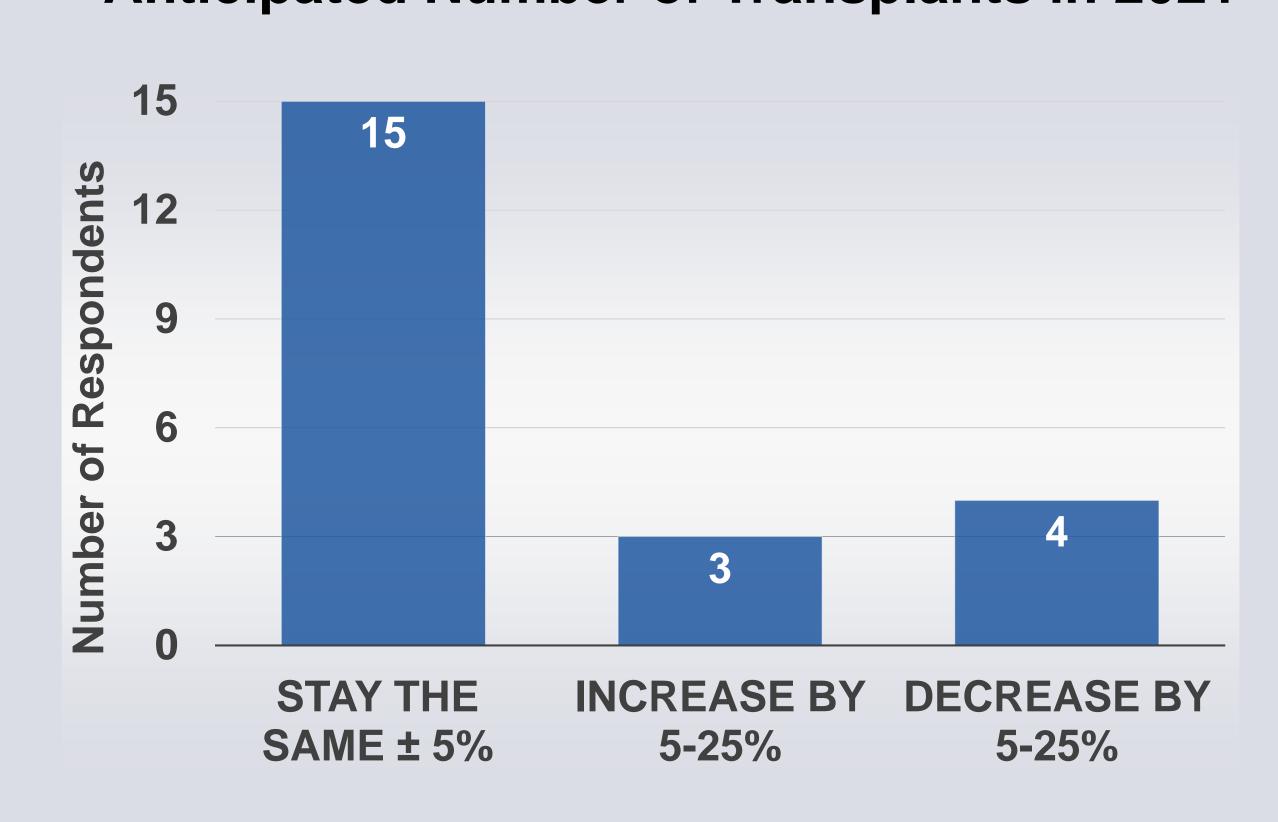
RESULTS

Fifty-percent of respondents would be likely or very likely to use an IVIG product that has elevated levels of antibody to RSV and other viral pathogens



Two-thirds of respondents anticipate the number of HCTs in 2021 to remain the same or increase in the face of the COVID-19 pandemic

Anticipated Number of Transplants in 2021



CONCLUSIONS

- RVIs are a growing concern facing transplanters in the care of immunocompromised transplant patients
- Management strategies vary substantially with no clear consensus and there is a need to develop more effective therapies
- Novel therapies are warranted to help combat RVIs in this highly susceptible population