Estimating the Respiratory Syncytial Virus (RSV) Health Utility Values for Older Adults and their Caregivers in the Japanese population: a Time Trade-Off (TTO) study

This study aims to estimate the **humanistic burden of RSV in older adults** as perceived by the general population living in **Japan.** The results showed that the **general population in Japan would trade off several days to avoid an RSV episode.**

Digital poster
Supplemental data
SCAN ME
Narrated summary
Audio File

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Aims

To estimate health utility values associated with RSV for older adults and their caregivers within the Japanese adult population

Demographics

The final analytical sample consisted of **241 adults from Japan**, of which **45 were caregivers** of patients ≥60 years old who had recently experienced RSV or a similar condition.*

*More details and demographic information available via QR code

Mean age 51.9 years old, 45.2% female*

Study design

This is a cross-sectional study conducted through an online survey, gathering data from a sample of Japanese adults residing in Japan within the general population.[1]

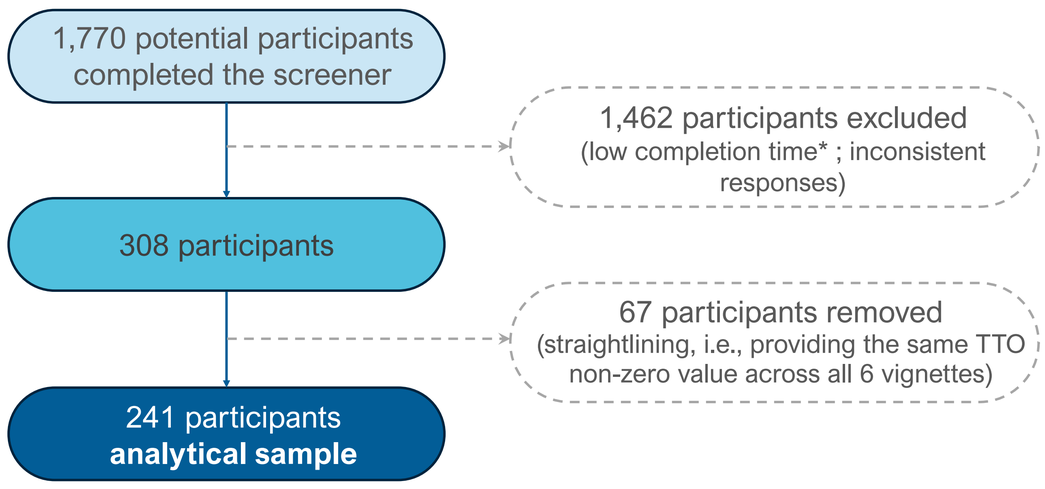
The survey was comprised of six vignettes describing three different types of RSV-related health states for patients and their caregivers.

Vignettes were developed and validated by clinicians, health outcomes researchers, patients, and caregivers.[2]

The three health states were: sLRTI, LRTI, and URTI.

TTO approach: Participants were asked to quantify the number of days they would be willing to trade off from their end of life to avoid the described health states or caregiving responsibilities for a family member in those states.[3,4]

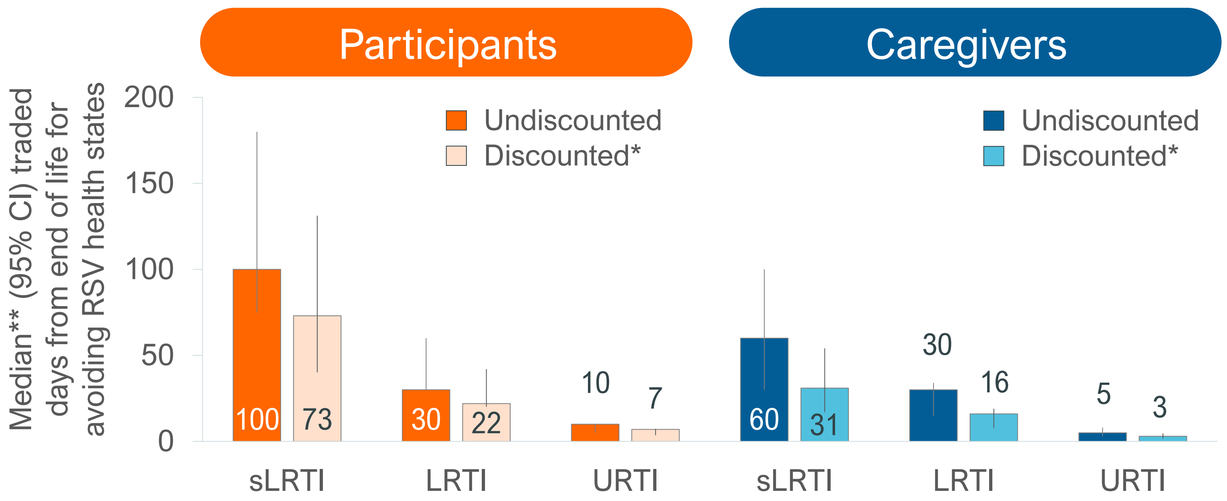
Participant flow



*<4 minutes to respond

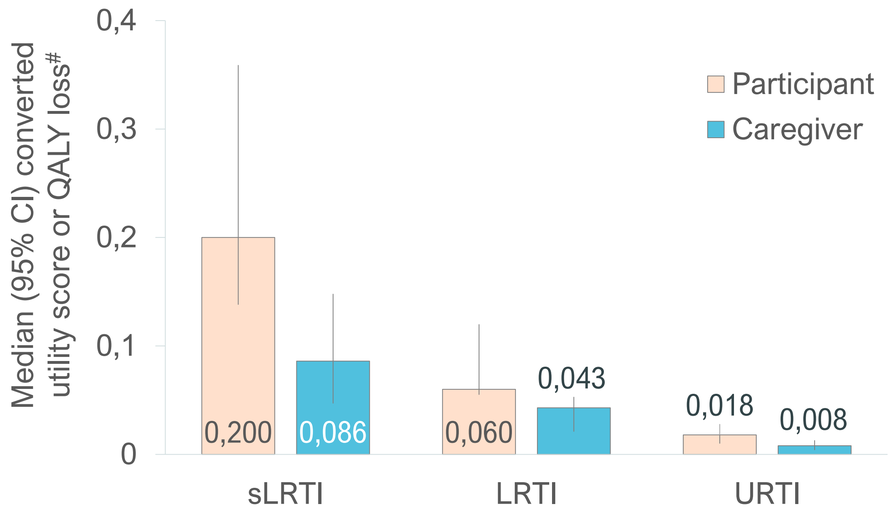
Results

Traded days from end of life for avoiding RSV health states and caregiving for RSV cases increased with the severity of the RSV condition



*Discounting was applied based on a discounting rate of 2% and based on the life expectancy of a Japanese 70-year-old
**Given the significant skewness in the distribution of TTO values, median values were reported and 5% trimming was applied to the mean (and associated CI)

QALY loss calculated from TTO values



#QALY losses were calculated by dividing the discounted TTO values by 365. QALY losses statistical analysis across 3 older and caregiver health states are available in the supplementary file accessible via QR code

Background

RSV is a common viral pathogen that affects the respiratory system, causing respiratory tract infections in individuals of all ages.

In older adults, adults with chronic illnesses, and immunocompromised adults, RSV infection can lead to more severe diseases, frequently leading to hospitalization.[5]

Two vaccines to prevent RSV-LRTI in older adults are approved in EU and US.[4] Only one is now approved for RSV prevention in older adults in Japan.[6]

Data on impact of RSV on quality of life in adults in Japan are scarce.

Conclusions

Our findings show that the Japanese population is willing to trade several days from end of life to avoid RSV infection and caregiving burdens for a relative patient with RSV.

Limitations: The authors acknowledge limitations in online data collection, with steps taken to ensure data quality and representativeness.

Abbreviations

CI, confidence interval; **EU**, European Union; **LRTI**, lower respiratory tract infection; **QALY**, quality-adjusted life-year; **RSV**, respiratory syncytial virus; **sLRTI**, severe lower respiratory tract infection; **TTO**, time trade-off; **URTI**, upper respiratory tract infection; **US**, United States.

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