Cost-Effectiveness Analysis of Recombinant Zoster Vaccine for the Prevention of Herpes Zoster in Immunocompromised Adults Diagnosed with Select Cancers in the United States

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positive FOBT, and again edema in the right facial region. EBV reac-
tivation was suspected, for which a viral load was requested with a
report of 1 353.25 copies/ml. We administrated a second dose of
rituximab, however, the patient persisted with gastrointestinal bleeding,
which led to hypovolemic shock and death. Conclusion(s): PTLD have
an OS of 40-60% (5years), due to the fact that patients die because of
disease progression and infectious complications. This case reflects the
complexity of following a treatment schedule, especially when infec-
tious complications overlap with the application of rituximab, which
allowed EBV replication, with consequent disease progression.

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PO-31 | Cost-Effectiveness Analysis of Recombinant Zoster
Vaccine for the Prevention of Herpes Zoster in
Immunocompromised Adults Diagnosed with Select Cancers in the
United States

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Introduction / Background / Significance: Immunocompromised
(IC) populations diagnosed with cancer are at increased risk for herpes
zoster (HZ) due to their underlying disease and/or therapy. This risk is
highest among individuals receiving hematopoietic stem cell trans-
plant (HSCT) to treat multiple myeloma, lymphomas, or other diseases.
HZ is characterized by a painful vesicular rash. IC populations with HZ
are also at increased risk of developing HZ-related complications such
as postherpetic neuralgia, a persistent pain that can last for months or
years. This study evaluates the cost-effectiveness of recombinant zos-
ter vaccine (RZV) versus no vaccine for the prevention of HZ in IC
adult HSCT recipients, patients with Hodgkin lymphoma, and patients
with breast cancer in the United States (US).

Materials and Methods / Case Presentation / Objective: A Markov
model was developed to simulate a hypothetical cohort of 1 million IC
adults over a 30-year period. The model uses a one-year cycle length and
estimates avoided HZ cases and complications, discounted quality-
adjusted life-years (QALYs) gained, and discounted costs, comparing
scenarios where individuals are vaccinated with RZV versus no HZ vac-
cine. The base-case analysis modeled HSCT recipients, with scenario an-
alyses included for patients with either Hodgkin lymphoma or breast
cancer. To represent younger populations, the model followed 35-year-
old HSCT recipients who were assumed to remain IC for five years.
Patients with Hodgkin lymphoma or breast cancer were aged 25 and 45
years, respectively, and remained IC for two years. The model assumed 100% compliance with the two-dose RZV series. RZV efficacy
and waning inputs were derived from phase 3 clinical trial data. Other
input values for epidemiological, cost, utility, and mortality parameters
were obtained from the published literature, national survey data, Red
Book, and US life tables. A number of input values, including HZ inci-
dence, varied depending on whether individuals were IC or had returned
to healthy status. Robustness of the results was assessed by sensitivity
and scenario analyses.

Results / Description / Main Outcome Measure(s): For the base-case
1 million hypothetical HSCT recipients, RZV vaccination resulted in
116,790 avoided HZ cases, 5,545 QALYs gained, and a societal cost-
savings of $5.4 million compared with no vaccine. In scenario ana-
lyses, RZV vaccination resulted in 100,104 avoided HZ cases and
2,098 QALYs gained for patients with Hodgkin lymphoma and
136,399 avoided HZ cases and 1,813 QALYs gained for patients with
breast cancer. From the societal perspective, incremental cost-
effectiveness ratios (ICERs) for RZV vaccination were $95,972/QALY
gained for Hodgkin lymphoma and $67,682 for breast cancer. For the
HSCT population, ~97% of simulations from the probabilistic sensitiv-
ity analysis demonstrated ICERS less than $100,000/QALY gained.

Conclusion(s): Although the risk and burden of HZ are increased in
individuals diagnosed with cancer over a relatively short period,
results from this study highlight the value of RZV in preventing HZ
cases and improving the quality of life in the studied IC populations.
Results further indicate that vaccination with RZV is a cost-effective
option for the prevention of HZ and its associated complications in
these IC populations in the US. Funding: GSK (study: HO-19-19750/
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PO-32 | Depletion of Large Granular Lymphocytes in A First-in-
Human Clinical Trial of ABC008

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Background: Large granular lymphocytes (LGLs), comprising highly
differentiated CD8+ cytotoxic T (Tc) cells, are expanded and patho-
genetic in T cell large granular lymphocytic leukemia (T-LGLL). Killer cell
lectin-like receptor G1 (KLRG1) is a surface receptor that marks these
highly differentiated Tc cells. ABC008, a humanized afucosylated anti-
KLRG1 monoclonal antibody, potently depletes KLRG1+ T cells
in vitro and in cynomolgus monkeys. ABC008 is under developmen...