associated with a modest increased risk of HZ (pooled RR = 1.14; 95% CI: 1.11, 1.17). Recent physical trauma increased risk of HZ by almost two-fold (pooled RR = 2.56; 95% CI: 1.97, 3.33).

Conclusion. In addition to age and immunocompromised conditions, our review shows that female sex, race/ethnicity, family history, and comorbidities are risk factors for HZ. Efforts are needed to better understand risk factors and to increase the uptake of zoster vaccination.

Disclosures. **B. P. Yawn**, GSK: Consultant and Scientific Advisor, Consulting fee

1037. Herpes–Zoster Infection in a Tertiary Hospital in Brazil

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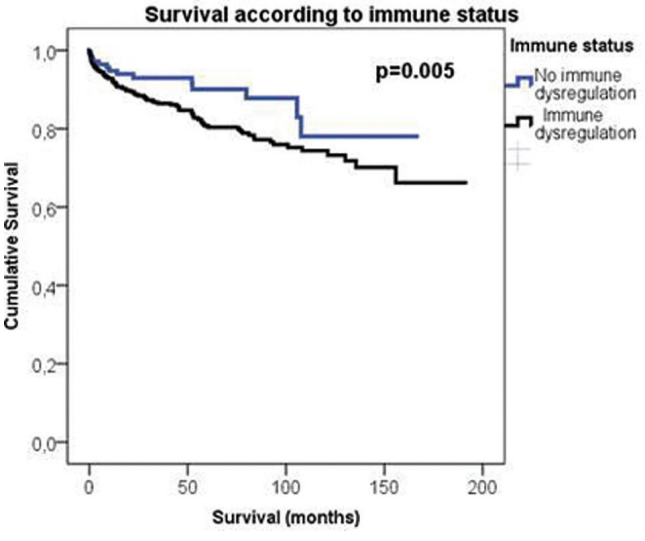
Background. herpes zoster (HZ) is a common infection with potential complications requiring hospital care, especially for patients with multiple comorbities. However, there is little information on HZ from hospital registries.

Methods. we searched for hospital-based records of B02 code (ICD-10) between March 2000 and January 2017 at Hospital de Clínicas de Porto Alegre, a tertiary, university hospital in south Brazil. To avoid misclassifications, we considered clinical evaluation for the diagnosis of cutaneous HZ and postherpetic neuralgia (PHN), ophthalmological evaluation for ophthalmic HZ and the combination of clinical, radiologic and cerebrospinal fluid analysis for HZ meningo-encephalitis (ME). We analyzed conditions associated with immune dysregulation, complications, length of hospital stay, and mortality. Chi-square test and Kaplan-Meier estimator were used for statistical analyses. $P < 0.05$ was considered statistically significant.

Results. there were 847 records for this period, of which 801 were confirmed according to our criteria and included in the analysis. Most patients were women (n = 448; 60%), with an average of 48.8 years, standard deviation of 22.2. There were more diagnoses in the inpatients group (74.4%), and fewer in the emergency room (22.4%) and outpatient (3.3%). The median length of hospital stay was 7 days (2-10, P25-P75) when HZ was the main reason for admission. Most patients presented cutaneous HZ (n = 743, 92.8%). There were fewer cases of PHN (6.1%), ophthalmic HZ (7.6%) and ME (4.1%). Seventy percent had some kind of immune dysregulation; more frequently AIDS (31%), use of immunosuppressive agents (18.7%) and malignant disease (16.2%). We followed the subjects for a median of 28.2 (2.8-77.5) months. During this period, there were 105 (13.1%) deaths. Five were related to HZ ME. The 30-day overall mortality rate was 1.5%. There was no statistical difference in cumulative survival (graph 1, P = 0.05) or incidence of complicated forms for patients with or without immune dysregulation.

Conclusion. our sample was characterized by a majority of inpatient diagnoses. The 30-day mortality rate was lower than reported in similar studies, but there was a relevant impact of complicated forms in mortality and sequelae.



Disclosures. **All authors:** No reported disclosures.

1038. Epidemiology of Influenza Viruses in Canada over the 2011–2012 to 2013–2014 Seasons: A Study from the Serious Outcomes Surveillance (SOS) Network of the Canadian Immunization Research Network (CIRN)

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Background. Influenza virus activity varies seasonally and within season. Epidemiology of serious influenza outcomes is contingent on the prevalent circulating strain/s and susceptible age group/s. Given the strain variability over the 2011–2012 through 2013–2014 seasons in Canada, this study examined the clinical and epidemiological profiles of different influenza strains causing adult hospitalizations.

Methods. During these three influenza seasons, the Serious Outcomes Surveillance (SOS) Network of the Canadian Immunization Research Network (CIRN) enrolled adults hospitalized with acute respiratory illness across Canada. Nasopharyngeal swabs (NPs) from influenza cases were tested for strain characterization using real-time reverse transcriptase polymerase chain reaction (rtRT-PCR). A primary assay differentiated A and B influenza viruses. Subsequently, influenza A viruses were subtyped as H1N1 or H3N2, and influenza B lineages were differentiated as Victoria or Yamagata. Laboratory results were compared with patient demographic data and clinical outcomes.

Results. Over three consecutive influenza seasons, 3394 cases of hospitalized acute respiratory illness were laboratory-confirmed as influenza. At 72.4%, influenza A was predominant across all seasons, while influenza B caused 27.6%. Most of the influenza A cases were due to H3N2 (58.7%), while H1N1 accounted for 41.3%. For influenza B, the Yamagata lineage was predominant at 88.4% whereas the Victoria lineage accounted for 11.6%. Outcome analyses are presented for each influenza A subtype and influenza B lineage, overall and per season. Considering serious outcomes in patients ≥65, higher proportions of patients hospitalized with the H1N1 strain experienced intensive care unit (ICU) admission and need for mechanical ventilation, while higher proportions of patients hospitalized with B/Yamagata and H3N2 died within 30 days of admission.

Conclusion. Comprehensive collection of surveillance data paired with NP specimens by the CIRN SOS Network was conducive to broader understanding of influenza strain activity and associated outcomes at the subtype and lineage level. This data is important to make informed recommendations for the use of multicomponent influenza vaccines.

Disclosures. **M. Elsherif**, Canadian Institutes of Health Research: Investigator, Research grant. Public Health Agency of Canada: Investigator, Research grant. GSK: Investigator, Research grant. **T. Hatchette**, GSK: Grant Investigator, Grant recipient; Pfizer: Grant Investigator, Grant recipient. Abbvie: Speaker for a talk on biologics and risk of TB reactivation, Speaker honorarium.**M. K. Andrew**, GSK: Grant Investigator, Research grant. Pfizer: Grant Investigator, Research grant. Sanofi-Pasteur: Grant Investigator, Research grant. **J. McElhaney**, GSK Vaccines: Scientific Advisor, Speaker honorarium. **A. Mcgeer**, Hoffman La Roche: Investigator, Research grant. GSK: Investigator, Research grant. sanofi pasteur: Investigator, Research grant. **J. Powis**, Merck: Grant Investigator, Research grant. GSK: Grant Investigator, Research grant. Roche: Grant Investigator, Research grant. Synthetic Biologicals: Investigator, Research grant. **M. Semret**, GSK: Investigator, Research grant. Pfizer: Investigator, Research grant. **S. Trottier**, Canadian Institutes of Health Research: Investigator, Research grant. **L. Valiquette**, GSK: Investigator, Research grant. **S. McNeil**, GSK: Contract Clinical Trials and Grant Investigator, Research grant. Merck: Contract Clinical Trials and Speaker's Bureau, Speaker honorarium. Novartis: Contract Clinical Trials, No personal renumeration. sanofi pasteur: Contract Clinical Trials, No personal renumeration

1039. Co-circulation of Influenza A and B During the 2016–2017 Influenza Season at Rush University Medical Center

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