

related to nursing accounted for 0.54 percent of all requests. Almost 30 percent of these requests were related to recruitment and qualification. The second major topic, with 15 percent, was financing of the nursing sector. Of all 146 formal requests in the history of the Bundestag, 55 percent ( $n = 81$ ) were issued in the last 10 years.

**Conclusions.** Nursing is an emerging topic in the German parliament, highlighting the demographic shift in Germany and the growing pressure in the nursing care sector. Health Technology Assessment bodies should be informed and work together with the scientific services of parliamentary bodies. This would support a more transparent and evidence based healthcare system, aside from lobbyism.

### OP513 Disparities In Cancer Premature Mortality In Brazil: Predictions Up To 2030 And Sustainable Development Goals

Marianna De Camargo Cancela ([marianna.cancela@inca.gov.br](mailto:marianna.cancela@inca.gov.br)), Arthur Correa Schilithz, Leonardo Borges de Souza, Luis Felipe Martins, Dyego Bezerra de Souza, Paul Hanly, Anton Barchuk, Isabelle Soerjomataram, Linda Sharp and Alison Pearce

**Introduction.** Premature mortality affects the economy directly due to the loss of productivity of individuals who die, thus ceasing to contribute economically to the country. The one-third reduction in premature mortality (30–69 years) from chronic noncommunicable diseases is goal 3.4 of the United Nations Sustainable Development Goals (UN SDG). Although cancer is a chronic disease, it comprises more than 100 different conditions, with different risk factors and prognosis. This study aimed to calculate current and predicted premature mortality by 2030 for Brazil and regions, compared with the SDG 3.4 target and identify regional progress and future needs.

**Methods.** Mortality data were extracted from the National Mortality Information System of Brazil (SIM) and subsequently corrected for ill-defined causes. Crude and age-standardized mortality rates per 100,000 inhabitants were calculated. NordPred package by software R was used to calculate predictions up to 2030 and compared with the goal of one-third reduction of premature deaths.

**Results.** Comparison of observed (2011–2015) and predicted (2026–2030) mortality rates show a 12.0% reduction in the likelihood of death among men and 4.6 percent among women nationally. Although predicted rates for 2026–2030 are lower than those observed in 2011–2015, the predicted number of deaths increases by 75,341 for men and 90,513 for women. Lung cancer mortality rates are predicted to decrease more among men than women, while colorectal cancer mortality will increase for both sexes.

**Conclusions.** The profile of cancer premature mortality is diverse in Brazil. Nationally, only male lung cancer will be close to reaching the SDG 3.4 target, endorsing the government's long-term

efforts to reduce tobacco consumption. Colorectal cancer mortality increases in most regions, reflecting the epidemiological transition. Despite progress in cervical cancer control, it will continue to be a major challenge, especially in the North and Northeast. Our results provide a baseline for public policies for both prevention and access to treatment to reduce premature mortality in Brazil. Differences in cancer patterns show the need to plan and to adapt regionally for each reality.

### OP520 Evaluating Long-Term Survival From Clinical Trials: Does Real-World Evidence Change the Paradigm?

Xiaoliang Wang ([wendy.wang@flatiron.com](mailto:wendy.wang@flatiron.com)), Blythe J. Adamson, Katherine Tan, Shrujal Baxi, Andrew Briggs and Scott D. Ramsay

**Introduction.** Both patient composition and medical care received in clinical trials may not be representative of clinical practice, yet health technology assessments (HTAs) commonly use extrapolation results from trials to estimate incremental benefit. Due to data limitations, external validation of trial extrapolations are uncommon. With the goal of better estimating the benefit of new therapies in practice, we compared long-term survival estimated from real-world patients who received therapy similar to the comparator arm of the OAK trial, a phase III study of patients with advanced non-small cell lung cancer (aNSCLC) who progressed following initial chemotherapy, to standard estimation approaches.

**Methods.** We estimated long-term survival from: (i) direct extrapolation of trial survival curves; and (ii) aNSCLC patients from the United States Flatiron Health Electronic Health Record (-) derived de-identified database diagnosed between January 2011 and August 2019 who received docetaxel monotherapy after platinum-doublet and had adequate organ function as well as functional status. Patients with unknown organ function and functional status were also included. Standard parametric extrapolations were applied and selected based on visual inspection and goodness-of-fit tests for each cohort.

**Results.** Using a log-logistic model to extrapolate the trial comparator arm ( $N = 425$ ), estimated lifetime mean overall survival was 19.2 months (95% confidence interval [95% CI]: 16.5–22.6), and 14.4 months (95% CI: 12.4–17.0) for the real-world cohort ( $N = 415$ ). Estimated 5-year overall survival rates were 5.4 percent (95% CI: 3.9–7.3) for the trial patients, compared to 3.7 percent (95% CI: 2.6–5.0) among real-world cohort patients.

**Conclusions.** Our results suggest that directly extrapolating observed survival for trial patients may overestimate the long-term survival compared to the experience of patients treated in routine practice. Our findings have implications for those wishing to estimate the incremental benefit for novel versus established treatments. We plan to compare our results to a generic patient cohort from national cancer registry. Further EHR-based studies utilizing real world data are needed to confirm our findings and to extend beyond this use case for other cancer types and anti-neoplastic therapies.