2010 to 2020 was estimated by applying published age-specific NHL incidence to
prednisone) on the annual number of patients experiencing recurrence and deaths
from 2772 cases in 2000 to 3194 in 2004. Aggressive NHL accounts for approxi-
mately 60% of all cases and cure can be achieved in more than 70% of cases with
rates ranging 50% to 90% when under immunotherapy depending on the clini-
cal stage and international prognostic index (IPI). Currently, only CHOP therapy
is available for patients presenting with aggressive NHL; however, considerable uncertainty
in NHL in Brazilian Public Healthcare System. OBJECTIVES: To evaluate the epidemiological impact of adding rituximab (R) to CHOP first-line therapy (cyclophosphamide, doxorubicin, vincristine, and
prednisone) on the annual number of patients experiencing recurrence and deaths
between 2010 and 2020. Brazil. METHODS: Annual aggressive NHL incidence for
2010 to 2020 was estimated by applying published age-specific NHL incidence to
Brazilian population projections for the mentioned period. Projections were made for
aggressive NHL and population above 20-year-olds only. Therapy effect for R-CHOP
and CHOP was derived from Gao (2009) and 2-year overall survival and disease
control data were adjusted for a 1-year rate. Considering the subgroups analysis, annual
overall survival rate was 54.5% and 45.7% and disease control rate were
43.7% and 31.1% for R-CHOP and CHOP, respectively. RESULTS: Between 2010 and
2020, it is estimated that 8868 more patients would be saved if R-CHOP was
given (54,917 vs. 46,031 for CHOP). Regarding disease progression, R-CHOP has
the potential to control the disease in 12,703 more patients than CHOP (44,048 vs.
31,345). CONCLUSIONS: Findings suggest that R-CHOP has the potential to save
about 16% more lives annually when compared to CHOP in the management of
aggressive NHL, particularly in Brazilian patients who have late diagnosis which
implies a worse prognosis.

**PCN27**

ESTIMATION OF THE EPIDEMIOLOGICAL EFFECT OF TRASTUZUMAB
OVER THE 200–2015 PERIOD IN PORTUGAL

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OBJECTIVES: Trastuzumab was approved for the treatment of HER2-positive
ear breast cancer (EBC) in 2006 in several European countries, Portugal included.
The model assesses the impact of trastuzumab treatment in EBC on the annual number of patients
cancer registries, where overall breast cancer survival is comparable to that seen in
Portugal. Age-specific rates were applied to UN population projections for 2000 to
2025. The annual number of patients with HER2-positive metastatic breast cancer
(MBC) includes de novo and recurrent MBC patients. The baseline 10-year recurrence rate
rate was estimated as 27%, based on 4-year follow-up in the control arm of a com-
binated trial analysis in patients with HER2-positive breast cancer and the long-term
time of recurrence in all patients with breast cancer. To model recurrence in trastu-
atumab-treated EBC patients, the hazard ratio (HR) from the HERA trial (0.49; 95% CI:
0.39–0.61; 0.0001) was applied. RESULTS: In 2004, a final assessment was done for approval of trastuzumab in
EBC, the pool of de novo and relapsed MBC patients was estimated to be 650. Between 2005 and 2015, the model predicts that the use of trastuzumab will result in an annual average decline in recurrence of MBC of 5.2% (95% CI: 3.0, 6.7). Cumula-
tive recurrence prevented by trastuzumab treatment between 2005 and 2014 (pro-
jected through full 10-year window for recurrence) is projected to be 884 (95% CI:
537; 1075).

CONCLUSIONS: Trastuzumab treatment of HER2-positive EBC over a
10-year period is expected to prevent nearly 900 women from developing metastases
in Portugal, which may result in a similar number of breast cancer deaths being avoided.

**PCN28**

UTILIZATION OF ANTIEMETIC PROPHYLAXIS ALONGSIDE
CHEMOTHERAPY IN FOUR EUROPEAN COUNTRIES

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OBJECTIVES: To investigate prescription patterns for serotonin antagonists used along-
side chemotherapy in France, Germany, Italy, and the UK. METHODS: Prescription
data from June 2008 to July 2009 were extracted from the Synovate Oncology
Monitor, an ongoing database tracking prescriptions of antinecancer therapies and
corresponding patients. Patterns receiving serotonin prophylaxis (dolasetron, granise-
tron, ondansetron, palonosetron, or tropisetron) with Moderately emetogenic chem-
otherapy (MEC) or highly emetic chemotherapy (HEC) were selected. RESULTS: The
sample included 1715, 1683, 1830, and 1651 patients with MEC regimens in France,
Germany, Italy, and UK, respectively, and 577, 761, 993, and 627 patients with HEC
regimens. Ondansetron was used in 85.1%, 45.8%, 52.1%, and 83.3% of patients
with MEC regimens in France, Germany, Italy, and UK respectively, and 92.5%,
46.0%, 43.8%, and 62.2% of patients with HEC regimens. The shares of different
serotonin were relatively similar between MEC and HEC regimens in Germany; a stronger
association between serotonin regimen category was found in other countries, with
different trends according to country. Doses of serotonins were slightly higher for HEC
regimens than for MEC regimens in Italy, but substantially higher in other countries.
The average daily dose was found to increase with treatment duration in all countries.
Neurokinin 1 antagonists (NK1) were used alongside serotonins on up to 44% of
overall prescriptions. Such international comparisons may provide useful insight for improving
disease in different countries.

**PCN29**

EPIDEMIOLOGY AND HEALTH-CARE UTILIZATION FOR RESECTED
SQUAMOUS CELL CARCINOMA OF THE HEAD AND NECK (SCCHN)
IN SOUTH KOREA

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OBJECTIVES: In South Korea, 2017 new cases of head and neck cancer (HNC)
were diagnosed and 1473 deaths were reported in 2005. In Western countries, SCCHN
represents more than 90% of HNCs and surgery is the primary treatment modality
for SCCHN. Chemotherapy is often an important treatment component combined
with radiotherapy for patients diagnosed with locally advanced disease. This study
aimed to estimate the number of resected SCCHN patients and describe their treatment
and health-care utilization in South Korea. METHODS: The study included the fol-
lowing cancer sites: oral cavity, pharynx, and larynx. The main source of data for the
probabilities of having different types of SCCHN treatments was results from retro-
spective analyses found through literature review using MEDLINE, EMBASE,
Cochrane, and the Korean Medical Database. Cancer incidence was based on data
from the National Cancer Registry. In addition, expert opinion of a HNC surgeon in
South Korea complemented the literature review. RESULTS: We estimated that
SCCHN constituted 91% of HNC cases; 69% of the SCCHN cases were surgically
resected. The number of new cases of resected SCCHN in South Korea was 1642 (oral
cavity, 501; pharynx, 397; and larynx, 744). Fifty-two percent of resected SCCHN
patients had neck dissections (45% of them were radical neck dissections) and 6% of
resected SCCHN patients had total laryngectomy. Ten percent of patients had second-
ary surgery and 75% had reconstructive surgery. Sixty-four percent of patients
received radiotherapy, whereas 33% received chemotherapy combined with surgery
or as concomitant therapy with radiotherapy. CONCLUSIONS: In South Korea,
resected SCCHN is estimated to constitute 1% of all cancers. However, 25% of
patients with resected SCCHN had major surgeries (radical neck dissection or total
laryngectomy), causing a significant negative impact on the quality of life of patients
and contributing to a high economic burden to the patients and society.

**PCN31**

THE PREDICTIVE AND PROGNOSTIC ROLE OF ERCC1 IN ADVANCED
NON-SMALL CELL LUNG CANCER: A SYSTEMATIC REVIEW AND
META-ANALYSIS

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OBJECTIVES: ERCC1 mRNA expression has the potential to be a useful tool in the
clinical treatment of advanced NSCLC patients with platinum-based
chemotherapy using a systematic review and meta-analytic techniques. METHODS:
A systematic search of the literature was conducted using MEDLINE and EMBASE
databases from June 1995 to May 2010. Additionally, a search of ASCO Annual
Meeting abstracts was conducted. Eligible studies were evaluated for clinical, meth-
odological, and statistical heterogeneity. Pooled RESULTS: The pooled analysis dem-
strated a statistically significant higher probability of response (according to the
RECIST criteria) to platinum-based chemotherapy for patients with low ERCC1
mRNA expression levels relative to patients with high ERCC1 mRNA expression
levels (OR: 0.64, 95% CI: 0.42–0.95). Low ERCC1 mRNA expression level was also
associated with significantly improved overall survival relative to high mRNA expres-
sion levels (HR: 0.44, 95% CI: 0.31–0.62). CONCLUSIONS: In conclusion, ERCC1
mRNA expression level may provide useful clinical information in terms of the likeli-
hood of platinum-based chemotherapy response and overall survival prognosis. Ongoing
analyses are focused on evaluating the predictive role of ERCC1 in overall
survival. The findings of this analysis also reveal a need for standardization in char-
acterizing “high” and “low” ERCC1 mRNA expression, as the studies evaluated herein differed considerably in their methods.