convenient for them than other IV alternatives by being orally administered. Such
immunotherapies. Finally, erdafitinib (40,0% - 5,5 - BRL 50,882), pem-
12–14 years (QALY) were included into the model as the effectiveness criteria.
ity monitoring, palliative care. The life-years gained (LYG) and quality adjusted life-
and an increasing incidence in recent years. Although MM accounts for only a relatively small percentage of all cancer types, costs associated with its management are considerable, but economic data at a country level are limited with available studies mainly focused on healthcare costs. Methods: Burden of disease was measured using DALYs, MM-related hospital mortality was assessed considering European Cancer Information System data. The cost of MM was estimated using a prevalence-based model that estimated all direct costs under National Healthcare Service perspective. Results: It were identified 1.941 patients with Multiple Myeloma, in all NHS hospitals. Hospital-related mortality for Portugal in 2018 was 6,9/100.000, with a median age of death of 75 years. Burden of disease attributable to MM was estimated at 8.931 DALYs; 8.570 resulting from premature deaths and 361 from disability. Average yearly direct costs per MM patient, at 2018 prices, amounted to €31.449. Total direct costs are estimated at ~€61 million per year.

PCN138
STUDY OF THE BURDEN OF BLOOD TRANSFUSIONS IN PATIENTS WITH LOWER-RISK MYELODYSPLASTIC SYNDROMES WHO RECEIVE REGULAR TRANSFUSIONS
Jeanblanc G, Roset O, Schmidt A, Jouaneton B, Jolivet R
1Cegene SAS, 2 Bristol-Myers Squibb Company, Paris, France, 3HEVA, Lyon, France

Objectives: Myelodysplastic syndromes (MDS) are a group of myeloid neoplasms characterized by cytopenias and increased risk of leukemic evolution. Patients are categorized as having higher-risk or lower-risk (LR) MDS. Management of LR-MDS is essentially aimed at treating anemia through repeated transfusions. The objective of this study was to assess transfusion burden and possible related complications.

Methods: Using data from the French PMSI-MCO nationwide hospital discharge database, patients with an MDS code who were hospitalized as an inpatient or outpatient were included in the analysis between 2012 and 2017. The study included the first year of inclusion, or those presenting with high-risk criteria (chemotherapy, acute myeloblastic leukemia, azacitidine administration) were excluded. Resource utilization was considered from a National Health Insurance (NHI) perspective. Survival time was assessed using a Kaplan–Meier model.

Results: The analysis included 5,081 patients, with a median age of 81 years, followed for a median of 10.9 months; 87.6% of hospital stays included a transfusion. The in-hospital mortality rate was 64.9%. A median of 15 transfusions, representing a cost of EUR 19,789 was described per patient per year of follow-up. 1,628 (32.0%) patients had ≥1 hospital-stay related to transfusion complications (representing 2.8% of all stays) with a median total cost of EUR 6,645 per patient. Conclusions: This study illustrates the major burden of transfusions in patients with LR-MDS, both in terms of public health and the economic impact for health insurance in France. The analysis was performed using an exhaustive database to ensure highly representative results. Resource utilization from an NHI perspective illustrates precisely how the burden is caused by transfusions and their complications. Nevertheless, the causality between transfusion and hospitalization related to transfusion complications cannot be established fully with PMSI-MCO data.

PCN139
COST PER CONSEQUENCE ANALYSIS OF ERDAFINITIB AND ANA-PD1/PDL1 THERAPIES FOR METASTATIC UROTHELIAL CARCINOMA FGFR+ FROM THE PERSPECTIVE OF BRAZILIAN PRIVATE HEALTH SYSTEM Souza P, Lancheros J, Souza L, Piedadade A
1Janssen Pharmaceuticals, São Paulo, SP, Brazil, 2Janssen Center of Excellence Latin America, Bogota, Colombia, 3Janssen Brazil, São Paulo, Brazil, 4Janssen Pharmaceuticals, São Paulo, Brazil

Objectives: Erdafitinib is the first, and, so far, only targeted therapy approved for the treatment of metastatic urothelial carcinoma (mUC) FGFR+. Before the treatment pattern of mUC for FGFR+ patients consisted of non-specific drugs, such as chemo-therapy and anti-PD1/PDL1. Comparative effectiveness and cost data for these therapies are important to inform decision-making processes for healthcare budget allocation. The objective of this study was aimed to estimate the cost per consequence of erdafitinib and anti-PD1/PDL1 therapies from the perspective of Brazilian private healthcare system. Methods: Efficacy was assessed with data from erdafitinib (BLC2001), pembrolizumab (Keynote 045), atezolizumab (IMVIGOR 211), nivolumab (CheckMate 275) and durvalumab (MEDI4736) trials. Treatment costs until disease progression were assumed to include drug label dosages, administration costs and fees. The Brazilian official lists of drugs prices (CMED) and medical materials (SIMPRO) were used as sources. Results: Objective response rate (ORR), median PFS (months) and monthly costs per patient were: erdafitinib (40.0% - 5.5 - BRL 30,882), pem- brolizumab (21.2% - 2.1 - BRL 46,666), atezolizumab (13.4% - 2.2 - 39,742), nivolumab (19.06% - 2.0 - BRL 47,612) and durvalumab (17.6% - 1.5 - BRL 42,967). On average, erdafitinib increased ORR by 2-fold (1.9 to 3.0-fold) compared to immunotherapies. Likewise, erdafitinib has the longest PFS, being 3-times higher (2.6 – 3.7 times) than immunotherapies. Finally, erdafitinib costs on average 13% (8% to 225) more than its comparators. Conclusions: With the introduction of erdafitinib, ORR in mUC for FGFR+ patients has doubled and PFS has tripled versus anti-PD1/PDL1. In addition to that, erdafitinib is the only targeted therapy for mUC FGFR+ patients and it is more convenient for them than other IV alternatives being centrally administrated. Such incremental value is delivered with only 13% incremental treatment costs compared to nonspecific therapies such as anti-PD1/PDL1.

PCN142
1Faculdade de Medicina, Faculdade de Ciências e Tecnologia (FC&T), Universidade Nova de Lisboa, Portugal, 2Instituto de Saúde Global, Universidade Nova de Lisboa, Portugal, 3Centro Hospitalar Universitário de Coimbra, Coimbra, Portugal

Objectives: This study assesses the burden and cost of multiple Myeloma (MM) in Portugal, to support the definition of health policies, resource allocation and patient care. The results will raise awareness of the disease and drive new scientific research and better clinical and economical decisions. Multiple myeloma is the second most common hematological cancer worldwide, with significant morbidity and mortality and an increasing incidence in recent years. Although MM accounts for only a relatively small percentage of all cancer types, costs associated with its management are considerable, but economic data at a country level are limited with available studies mainly focused on healthcare costs. Methods: Burden of disease was measured using DALYs, MM-related hospital mortality was assessed considering European Cancer Information System data. The cost of MM was estimated using a prevalence-based model that estimated all direct costs under National Healthcare Service perspective. Results: It were identified 1.941 patients with Multiple Myeloma, in all NHS hospitals. Hospital-related mortality for Portugal in 2018 was 6,9/100.000, with a median age of death of 75 years. Burden of disease attributable to MM was estimated at 8.931 DALYs; 8.570 resulting from premature deaths and 361 from disability. Average yearly direct costs per MM patient, at 2018 prices, amounted to €31.449. Total direct costs are estimated at ~€61 million per year.

Conclusions: Years of Life Lost in MM are due to disease high Mortality rate in Portugal. We estimated the total direct costs under National Healthcare System. The model consisted of three health states: pre-progression, post-progression and death. Outcomes were calculated at each 2-weekly cycle up to a time horizon of 30 years. To measure costs of mRCC treatment with different types of second-line therapy for the state budget were used "cost-effectiveness" and "cost-utility" analysis. Direct medical costs included drugs, therapy monitoring, palliative care. The life-years gained (LYG) and quality adjusted life-years (QALY) were included into the model as the effectiveness criteria.

Results: Efficacy analysis showed the highest rates of LYG (3.18) and QALY (1.87) for cabozantinib compared with nivolumab (2.53 LYG and 1.6 QALY), axitinib and everolimus (2.21 LYG and 1.31 QALY). Total costs for mRCC treated patients with cabozantinib were €60273, which is 5 % lower than when using nivolumab (€63077). Conclusions: Outcomes were for axitinib and everolimus was lower compared with the cabozantinib one. Cost per LYG for cabozantinib was €19624, which is 25 % less compared to those for nivolumab. Cost per QALY for cabozantinib amounted €32239, which is 19 % less than those for nivolumab (rate for July 2020).

Conclusions: Using cabozantinib as second-line therapy in mRCC in adult patients was effective and economically justified treatment option in Russia.
ipilimumab for a time horizon of 6 weeks. Results: The preliminary results demonstrate that the pembrolizumab QW scheme could generate a cost savings of € 1.2, € 2.2 and 3.0 million for 1,000 patients if compared with pembrolizumab Q3W, nivolumab and ipilimumab respectively. On average, 40% of these cost reductions were associated with adjuvant treatment patients. Conclusions: The ability to reduce the admissions for drug administration in hospital due to a new therapeutic scheme of pembrolizumab, could generate an efficient management of the oncological ambulatory reducing the number of patients that have to come in hospital.

PCN146 ADJUSTMENT OF EXTRAPOLATION OF SURVIVAL CURVES USING EXTERNAL INFORMATION: GUYOT'S METHOD AND BAYESIAN MODEL AVERAGING IN PATIENTS WITH UNRESECTABLE HEPATOCELLULAR CARCINOMA (HCC)
Gaugain L, Mazaleyrat B, Gilberg M, Laurendeau C, Genestier V
1Amaris, Levallois Perret, France, 2Boche, Bouguen-Billancourt, France,
2CEMA, Boug Le Rain, France
Objectives: Survival extrapolation is key when conducting cost-effectiveness analyses (CEA) in oncology, which rely on overall survival (OS), partially observed in trials. Although clear methodological frameworks for extrapolations are available, the need to choose a specific distribution through internal and external validation using long-term data remains arbitrary. The aim was to evaluate the impact of the Guyot method to include external data in the extrapolation model and to investigate the use of a Bayesian Model Averaging (BMA) to remove the risk of choosing a single distribution, using the example of the IMbrave 150 data in HCC.
Methods: Two studies with patients treated with sorafenib as a first line treatment for HCC were considered: the ATENOR study (conducted on the French real-life database EORTC OS) and GIDEON study (prospective, observational, international study). Six parametric distributions were considered to model OS. Guyot’s method was implemented to combine IMbrave 150 data with external information. The use of the BMA was then explored. Survival curves were weighted to obtain one single extrapolation, based on an uninformative prior distribution of providing the best fit.
Results: The GIDEON had a more complete set of patients characteristics compared with the ATENOR study. Median survival observed in GIDEON (13.6 months) was also close to the sorafenib arm in IMbrave 150 (13 months). Both studies were explored to evaluate impact on OS extrapolations. Conclusions: Guyot's method is a useful tool for extrapolations, as it adjusts predictions rather than relying on visual inspection. As results are sensitive to the external data, their source and transposability to the trial setting shall be justified. BMA is also a useful method and can be an additional tool to the currently recognized methodological guidance. The confidence intervals provided by the BMA approach may be more informative than extreme scenario testing in CEA.

PCN147 ECONOMIC ANALYSES OF TRASTUZUMAB BIOSIMILAR FOR TREATMENT OF PATIENTS WITH HER2-POSITIVE BREAST CANCER FROM A BRAZILIAN PRIVATE HEALTHCARE PERSPECTIVE
Tanaka S, Suri G, Despiegel N, Nascimento C, Aratangy G
1Amergin, São Paulo, Brazil, 2Amergin, London, UK, 3Amergin inc., Thousand Oaks, CA, USA
Objectives: To evaluate value of KANJINTI (an IV trastuzumab biosimilar) in patients with early (EBC) and metastatic breast cancer (mBC) by estimating the cost-effectiveness of KANJINTI vs. chemotherapy, budget impact (BI) of switching patients from chemotherapy to KANJINTI for patients whose insurance didn't cover trastuzumab and impact of switching patients from Herceptin to KANJINTI and overall savings gained from patients treated with atezolizumab + nab paclitaxel shows an increase of PFS and OS in according with a concordance study compared using Dako 22C3 assay. Conclusions: The choice of a correct diagnostic strategy is crucial in order to optimize cancer therapies in the mTNBC patients that could save cost of immunomarketing. As an addition to the diagnostic pathway of the Ventana PD-L1 SP142 would identify a correct number of cases PD-L1 expression (>1 cut off), supporting the prescription of a more effective oncological therapy.

PCN150 WATCH AND WAIT POLICY VERSUS ROBOTIC SURGERY FOR RECTAL CANCER: A COST-UTILITY (RECCOST)
Nunez Alfonso J, Rodriguez-Pascual J, Ilebo B, Quijano Y
1Vicente E, Cubillo A, Martín Sabordido C
1Fundacion de Investigacion HM Hospitales, madrid, M, Spain, 2HM Hospitales, Madrid, Spain, 3HM Hospitales, Madrid, Spain, 4Health Sciences University Centre San Rafael Universidad Nebrija, Madrid, M, Spain
Objectives: Chemoradiotherapy (CR) followed by standard Surgical Resection (SR) is the standard treatment for distal locally-advanced rectal cancer (LARC) patients after a clinical compete response (cCR). Some novel approach suggested better functional results using robotic rectal resection (RRe) or avoiding surgical procedure, called Watch and Wait (WW) strategy. The aim of this study is to compare the clinical outcomes and cost-effective outcomes of WW versus RRe in the treatment of LARC. Methods: A Markov model-based, cost-utility analysis estimating mean costs and QALYS per patient was performed to compare SR, RRe and WW strategies for patients achieving a cCR to CR. Rates of local regrowth, recurrence and distant metastasis were derived from series comparing WW to SR and from our Model Comparative study of RRe versus SR. Lifetime incremental cost-utility ratio was calculated between strategies, and sensitivity analysis were performed to study model uncertainty. A willingness-to-pay of 30,000 per Quality Adjusted-Life Year (QALY) was used as a threshold to determine the most cost-effective treatment. Results: The base case 15-years cancer-specific survival was 93.5% (95% confidence interval [CI] 91.5-94.9) on a WW program, compared to 95.9% (95%CI 93.6-97.7) after RRe. WW was dominant relative to RRe with cost savings of $48,566.58 (95%CI $47,635.77 - $49,497.39 ) and incremental QALY of 7.47 (95%CI 7.46 – 7.48). WW was also dominant relative to LRR, with cost savings of $48,764.49 (95%CI $47,768.49 - $49,760.48 ) and incremental QALY of 7.44 (95%CI 7.43 – 7.45). WW remained dominant in sensitivity analysis unless the rate of SR fell to 73.03%. Conclusions: This study provides data of cost-effectiveness differences between SR, RRe, WW approaches in LARC after cCR, showing a benefit for WW.

PCN151 MAJOR ADVERSE CARDIOVASCULAR EVENT HOSPITALIZATION BURDEN IN PATIENTS WITH PROSTATE CANCER (PC) RECEIVING ANDROGEN DEPRIVATION THERAPY (ADT) IN THE UNITED STATES
Brady B, Pruitt J, Winer L, van Veenuyzen D, Hunsche E, Dufour R
1IIBM Watson Health, Laurel, MD, USA, 2Myovant Sciences, Brisbane, CA, USA,
3Myovant Sciences GmbH, Basel, BS, Switzerland, 4Myovant Sciences, Carmel, IN, USA
Objectives: Advanced prostate cancer (PC) standard of care utilizes androgen deprivation therapy (ADT) with gonadotropin-releasing hormone (GnRH) receptor agonists to induce castration and PC cell death. In 2010, the Federal Drug Administration required the addition of new safety information to the labels of GnRH agonists warning of increased risk of cardiovascular (CV) events in men receiving these medications. This study assessed CV-related events in