interventions. Three out of the 172 letters were associated with a change in the cost-effectiveness conclusion. ***Conclusions:*** Between 2018 and 2019, stakeholders have leveraged ICER evaluations as an opportunity to promote dialogue about the evidence of the value of technologies. Although stakeholders' inputs had little influence on ICER assessment's cost-effectiveness analysis conclusions, actionable, evidence-based recommendations were often accepted.

HT2
EVALUATION OF TUCATINIB FOR HER2-POSITIVE BREAST CANCER PATIENTS WITH BRAIN METASTASES: A UNITED STATES-BASED COST-EFFECTIVENESS ANALYSIS

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Objectives: To evaluate the cost-effectiveness of tucatinib in human epidermal growth factor receptor 2 (HER2)-positive breast cancer (BC) patients with brain metastases (BMs) and the subgroup of active BMs from the United States (US) payer perspective. ***Methods:*** A three-state Markov model was developed to compare the cost-effectiveness of tucatinib, trastuzumab and capecitabine (TTC) with placebo, trastuzumab and capecitabine (PTC) in HER2-positive BC patients with BMs;subgroup analysis of active BMs was also performed.Pseudo-individual patient data were generated from digitized Kaplan-Meier curves.Costs were derived from official databases and the literature.Health state utility values were consistent with published literature and adjusted by adverse events.Lifetime costs,quality-adjusted life years (QALYs),incremental cost-effectiveness ratio (ICER) and incremental net health benefit (INHB) were estimated.The willingness-to-pay (WTP) threshold was $200,000/QALY.The robustness of the model was tested by sensitivity analysis and scenario analyses were also performed. ***Results:*** In patients with BMs,the PTC and TTC strategies cost $87,905.23 and $503,637.21,yielding 0.68 and 1.68 QALYs,respectively.While in the subgroup of active BMs,the two strategies cost $81,968.50 and $451,699.62 and the QALYs were 0.61 and 1.75,respectively.The ICERs yielded by TTC were $418,007.01/QALY and $324,465.03/QALY, and INHBs were -1.08 QALYs and -0.71 QALY, compared with PTC in these two groups,respectively.The results were most sensitive to the cost of tucatinib.Probabilistic sensitivity analysis suggested that the probability of TTC being cost-effective was low at the current WTP threshold in the patients with BMs and the subgroup of active BMs. ***Conclusions:*** The additional using tucatinib (TTC) is unlikely to be cost-effective in HER2-positive BC patients with BMs from the US payer perspective,-but shows a better economics in patients with active BMs.Therefore, selecting favorable population would be a good way to optimize the cost-effectiveness of tucatinib.To meet the economical demands of public health,it may be a preferable option to reduce the price of tucatinib or offer appropriate drug assistance policies.

HT3
WHAT IS VALUE? A SYSTEMATIC REVIEW OF VALUE ASSESSMENT FRAMEWORKS

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Objectives: To investigate how value is defined and measured in existing value assessment frameworks (VAFs) in health care. ***Methods:*** We searched PubMed, Embase, the Cochrane Library and Centre for Review and Dissemination from 2008 to 2019. We also performed backward citation chaining of included studies and previously published systematic reviews. Studies reporting the development of a VAF in health care were included. For each included framework, we extracted and compared the context, target users, intended use, methods used to identify value attributes (e.g., patient/public engagement), description of the attributes, and attribute scoring approaches. ***Results:*** Out of 8151 articles screened, 53 VAFs described in 56 articles were included. The value attributes included in 52 VAFs were grouped into nine categories, namely, health benefits (50/52, 96%), affordability (42/52, 81%), societal impact (39/52, 75%), the burden of disease (35/52, 67%), quality of evidence (31/52, 60%), cost-effectiveness (30/52, 58%), ethics and equity (25/52, 48%), unmet needs (22/52, 42%), and innovation (15/52, 29%). The remaining VAF uses three broad attributes for diagnostics: medical value, planning value and psychic value. Literature review has been used to identify value attributes in 34 VAFs. Patient/public was engaged in the development of only 11 VAFs. Weighting has been used to score 29 VAFs, among which 19 used the methods of multicriteria decision analysis (MCDA). ***Conclusions:*** Substantial efforts have been made to facilitate value assessment in health care. There are substantial variations in defining and measuring value. A particular concerning finding is that patient/public engagement was poor in this process.

HT4
PATIENT-RELEVANCE OF ENDPOINTS OTHER THAN OVERALL SURVIVAL (NON-OS ENDPOINTS) IN ONCOLOGY HEALTH TECHNOLOGY ASSESSMENTS BY THE FEDERAL JOINT COMMITTEE (G-BA) IN GERMANY

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Objectives: To investigate the G-BA's decisions regarding patient-relevance of non-OS endpoints across breast cancer (BC), chronic lymphocytic leukaemia, melanoma, non-small cell lung cancer, ovarian cancer, and prostate cancer (PC). ***Methods:*** All published G-BA appraisal reports (January 2011–October 2020) in the 6 selected indications were reviewed and relevant data were extracted for analysis. ***Results:*** Reviewed G-BA appraisals (n=101) yielded 307 individual decisions regarding patient-relevance of non-OS endpoints, employing 56 different outcome measures. Although in 74% of decisions (n=226/307) non-OS endpoints were deemed patient-relevant in general, in 79% (179/226) of these cases, no additional medical benefit was granted either due to lack of compliance with G-BA's methodological requirements, inadequate/missing data, or statistically insignificant results. The G-BA did not accept progression-free survival, metastasis-free survival, complete remission, and objective response rate measured per imaging or laboratory tests. Patient-relevance decisions for health status (n=59), quality of life (n=103), and pain (n=10) related endpoints were positive across all indications. Decisions regarding the patient-relevance of other non-OS endpoints were indication-specific and variable, e.g. relapses as proxy for the failure of therapy with curative intent were judged patient-relevant in both BC (neo-adjuvant and adjuvant settings) and melanoma (adjuvant setting), and symptomatic progression in the palliative setting in PC was judged patient-relevant. In comparison, time-to-first-subsequent-therapy and time-to-onset-of-cytotoxic-therapy were judged patient-relevant in principle, but not accepted due to methodological deficiencies, and/or lack of correlation with patient-relevant side-effects of subsequent treatment. ***Conclusions:*** Strict compliance with methodological requirements and specific relevance to disease context and treatment setting were key drivers of G-BA's acceptance of patient-relevance for non-OS endpoints. The impact of G-BA's stringent methodological requirements on establishing the holistic patient-relevance of non-OS endpoints requires further debate.

Impact of COVID-19 on Health Systems, Treatment, and Value

IN1
TREATMENT JOURNEY OF COVID-19 PATIENTS IN HOSPITAL SETTINGS

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Objectives: Severe cases of COVID-19 have overwhelmed hospital systems across the nation. To better understand patient's journey within hospital setting, this study described the treatment journey of COVID-19 patients from hospital admission to 30 days after discharge for inpatients and hospital-based outpatients. ***Methods:*** A retrospective cohort study was conducted using a large geographically diverse all-payer hospital administrative database (Premier Healthcare Database). Patients were identified by their first discharges between April 1 and July 31, 2020, with a principal or secondary discharge diagnosis of COVID-19 (ICD-10 diagnosis code, U07.1). ***Results:*** Of 369,894 patients, 39% were inpatients and 61% were outpatients. Inpatients were older (median age 64 vs. 44 years) and more likely to be male (52% vs. 44%) and have baseline comorbidity (60% vs. 19%) compared to outpatients. (All $p<0.05$). Among inpatients, 80% originated from home, 9% from another acute care facility, and 94% were admitted through emergency department (ED). Of these patients, 23% were admitted to intensive care unit, 16% (n=22,665) died during initial hospitalization, 48% were discharged home, 14% to skilled nursing facility, 11% to home health, 6% were transferred to another hospital, and 3% to hospice. Within 30 days, an additional 0.7% (n=1,009) died, 4% were readmitted to same hospital, and 2% visited ED due to COVID-19. Among outpatients, 66% were ED outpatient visits. During initial visit, 91% were sent home, 2% were transferred to an acute care hospital, and 0.3% (n=712) died. An additional 0.4% (n=802) died, 7% visited ED, and 4% were hospitalized due to COVID-19 during follow-up visits within 30 days. ***Conclusions:*** This study shows that COVID-19 is associated with high-level of ED utilization, ICU admission, and in-