THE EFFECT OF ORGANIZED MAMMOGRAPHY SCREENING ON THE NUMBER OF BREAST SURGERIES

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OBJECTIVES: Nationwide organized breast cancer program was introduced in 2002 in Hungary. The purpose of this study is to analyze the effect of breast cancer screening program on the number and ration of breast surgeries. METHODS: The data derived from the financial database of the National Health Insurance Fund Administration. We identified the patients with ICD codes and Diagnosis Related Groups (DRG). The study covers the five-year period between 2000–2004. We defined total mastectomy as the removal of preferably all breast tissue. Subtotal mastectomy (e.g. quadrantectomy) is defined as breast conserving surgery. We carried out the detailed analysis for the years 2000–2001, without nationwide organized screening program, and for the years 2002–2003 (first screening round) after the implementation of nationwide organized breast cancer screening program. RESULTS: The total number of breast surgeries was 7306 in 2000 and 7549 in 2001. After the introduction of the nationwide organized breast cancer screening program the total number of breast surgeries increased to 8531 in 2002 and 9140 in 2003. Compared to the values of 2000 as 100%, the number of total mastectomies increased 107.8% in 2002 and 109.6%, while the number of subtotal mastectomies increased much more: 120.3% in 2002 and 127.4% in 2003. The ratio of total and subtotal mastectomies in 2000 was 46.2% versus 33.8%. By 2004 the proportion of total mastectomies decreased to 40.0% and the proportion of subtotal mastectomies increased to 60%. The number of surgeries because of benign cases has also increased. CONCLUSIONS: The introduction of organized nationwide breast cancer screening program increased the total number of breast surgeries. Within the total number of breast surgeries decreased the proportion of total and increased the proportion of subtotal or breast conserving mastectomies.

REAL WORLD DOSING OF ERYTHROPOIETIC AGENTS IN A NATIONWIDE SAMPLE OF PATIENTS WITH CANCER RECEIVING CHEMOTHERAPY: RESULTS FROM A LARGE RETROSPECTIVE OBSERVATIONAL STUDY

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OBJECTIVES: To better understand the real-world dosing patterns of epoetin alfa (EPO) and darbepoetin alfa (DARB) in patients with cancer receiving chemotherapy, a large retrospective, observational study was undertaken to analyze dosing patterns and associated costs of patients treated with EPO and DARB in the outpatient setting. METHODS: Adult patients who had cancer and were receiving chemotherapy, had ≥2 EPO or DARB claims, and were newly initiated on erythropoiesis stimulating therapy (EST) between April 2003 and February 2005 were identified from a nationwide sample of outpatient medical claims from hospital clinics and office practices. EPO and DARB use was identified via HCPCS codes in medical claims with dose calculated using billed units. Average treatment duration, dosing frequency, mean cumulative dose, and total EST costs (using 2005 wholesale acquisition prices) were studied. RESULTS: A total of 1405 EPO and 1087 DARB patients met the inclusion criteria. Mean age (years; EPO 63 ± 13; DARB 62 ± 12) was similar between groups, with more women in the DARB group (EPO 62%; DARB 71%; p < 0.05). Weekly and extended dosing (≥Q2W) frequencies were utilized in patients receiving EPO (QW: 65%, Q2W: 29%, ≥Q3W: 6%) and DARB (QW: 11%, Q2W: 61%, ≥Q3W: 28%). Mean treatment duration was 54 ± 51 days for EPO and 52 ± 46 days for DARB. Mean cumulative dose for EPO and DARB was 296,070 IU and 1022 mcg corresponding to a dose only ratio of 290:1 (units EPO: mcg DARB) and total EST costs of $3603 and $4456, respectively. CONCLUSION: In this large observational study, DARB treatment costs were substantially higher (24%) than EPO treatment costs. In addition, extended EPO and DARB dosing was common among patients with cancer receiving chemotherapy.

DEFINING GUIDELINES ON BRCA MUTATION TESTING AT A MEDICAL ONCOLOGY UNIT—AT AN UNIVERSITY HOSPITAL IN SOUTH-EASTERN BRAZIL

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OBJECTIVE: The risk cut off to recommend BRCA 1 and 2 gene testing varies from 10% for the American Society of Clinical Oncology to 20% in European countries. Considering pts with a previous diagnosis of breast cancer, we aimed to establish a risk cut off policy for genetic testing at our service, in terms of direct costs. A total of 130 pts with a previous breast cancer, in routine follow-up, received invitation to schedule consultation in the hereditary breast cancer unit. METHODS: Of these, 77 patients, were recontacted by a multidisciplined team and had their risk assessed based on family pedigree and confirmed pathological information (Frank Ts et al, JCO 20;1480–1490, 2002). Direct costs of genetic testing were considered as the sum of costs of reagents, permanent equipment and personnel excluded. Prices in reais were converted to dollar (2.3 reais per dollar). RESULTS: Our survey have shown that 3 women in 117 surveyed were to be tested with a risk cut off established in 20% as compared to 16 with a risk assessment of >10%. Considering the offspring, screening those women would benefit 162 and 21 other women, respectively, at 10% and 20% cut off. The total direct costs of gene testing would be $31,023.86 at 10% and $584,979 at 20%. In case we consider all first degree women relatives as beneficiaries, independent of the result being positive or negative for BRCA mutation, cost effectiveness (CE) ratio of $191.50 per individual benefited at 10% and $276.99/beneficiary at 20%. CONCLUSION: A 20% cut off for genetic testing in this population with breast cancer seems very strict, since the number of women indicated for genetic testing was far bellow the 5% expected in breast cancer population. Considering the other family members, the higher cost associated with 10% cut off could benefit more women.

INTER-RATER AGREEMENT OF HUI3 UTILITY SCORES FOR PATIENTS AT FOUR PHASES OF THERAPY FOR ACUTE LYMPHOBLASTIC LEUKEMIA IN CHILDHOOD: PARENT VERSUS CLINICIAN ASSESSMENT

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OBJECTIVES: To assess inter-rater agreement for Health Utilities Index (HUI) Mark 3 (HUI3) measurements of patients
were 375 patients who were surveyed (55.2% males). The
RESULTS: agreement; 0.00–0.19 negligible agreement.
agreement; 0.35–0.50 moderate agreement; 0.20–0.34 weak
RESULTS: There were 375 patients who were surveyed (55.2% males). The
agreement for HRQL measures was observed. Parent and clinician reports should
are associated with lower mortality rates than are high-grade
are significant predictors for HG patients. The latter is evidence that patient- and physician-reported measures provide
important complementary types of information.

METHODS: Patients were aged five years or older at
time of study and enrolled in Dana Farber Cancer Institute 95-
001 clinical trial. Parents-of-patients and clinicians, blinded to
each other, completed self-administered HUI questionnaires at
four assessment points during treatment: Induction of remission,
CNS prophylaxis, intensification, and maintenance. Agreement
between parents and clinicians, for HUI3 single-attribute and
overall health-related quality of life (HRQL) utility scores, was
assessed using a single-measure two-way mixed model intra-class
correlation coefficient (ICC) and paired t-test. Mean differences
in single-attribute and HRQL scores >0.05 and >0.03,
respectively, are clinically important. Statistical significance was set at
p < 0.05. ICC results were interpreted as follows: >0.50 strong
agreement; 0.35–0.50 moderate agreement; 0.20–0.34 weak
agreement; 0.00–0.19 negligible agreement. RESULTS: There were
375 patients who were surveyed (55.2% males). The
number of pairs of parent and clinician assessments varied by
assessment point (minimum = 104, maximum = 180). There was
moderate or better agreement between raters (p < 0.05) at all
assessment points for ambulation (ICC = 0.51–0.84) and pain
(ICC = 0.39–0.84). Weak or better agreement (p < 0.05) was
observed at all assessment points for vision (ICC = 0.23–0.79),
and emotion (ICC = 0.22–0.69). Inter-rater agreement for HRQL
ranged from weak to moderate (ICC = 0.31–0.50, p < 0.05).
There was no significant agreement (p > 0.05) for dexterity at
any assessment point (ICC = 0.05–0.16) and for cognition at
Induction (ICC < 0.01). The mean difference (clinician minus
parent) was clinically important for HRQL (difference = 0.07, p
= 0.01) at Maintenance. CONCLUSIONS: Inter-rater agreement
varies, from none to strong, by both type of utility score and
assessment point. A clinically important mean difference in
HRQL scores was observed. Parent and clinician reports should
not be considered interchangeable. The results are consistent
with studies of all patients assessed after completion of
therapy.

PCN27

HEALTH STATUS MEASURES AS PREDICTORS OF MORTALITY
AMONG ADULTS WITH BRAIN TUMORS
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OBJECTIVES: The five-year mortality rate for a population of
adult brain tumor patients is typically high (≥50%). Tumor grade
is a well-known predictor for mortality: low-grade (LG) tumors
are associated with lower mortality rates than are high-grade
(HG) tumors. METHODS: Prospective study of consecutive
patients newly diagnosed with primary brain tumors attending
a single regional centre. A cross-sectional survey collected baseline
health status assessments for each patient after diagnosis,
and in most cases surgery, but before radiotherapy or chemotherapy.
Each participating patient completed a Health Utilities Index (HUI) Mark 2 (HUI2) and Mark 3 (HUI3) 15-item self-complete
questionnaire, prior to encounter with assessing physician.
The assessing physician, blind to patient’s assessment,
recorded a Karnofsky Performance Score (KPS) and a Mini-
Mental Status Examination (MMSE) score. The life status for
each patient was determined for the five-year period after assessment.
Proportional hazards models estimated the IHOD for differences
of: 0.10 in HUI utility scores; ten units in KPS; and five
units in MMSE. Statistical significance was set at the 5% level.

RESULTS: HUI2 self-care was the only health status measure
associated with a significant IHOD for LG tumors (n = 25): a decrease of 0.10 in HUI2 self-care score being associated with a
30% IHOD (p = 0.023). Among patients with HG tumors (n = 56), 3 measures were independently significant: KPS (20% IHOD, p = 0.022); MMSE (26% IHOD, p = 0.015) and HUI3
dexterity (18% IHOD, p = 0.035). Two measures, together, were
significant among HG patients: MMSE (29% IHOD, p = 0.007) and HUI3 dexterity (20% IHOD, p = 0.020). CONCLUSION:
Only HUI measures were significant predictors of IHOD for both
LG and HG patients. MMSE and HUI3 dexterity, in combination,
were significant predictors for HG patients. The latter is evidence that patient- and physician-reported measures provide
important complementary types of information.

PCN28

REVIEWS OF ECONOMIC APPRAISALS OF CHEMOTHERAPY
FOR METASTATIC COLORECTAL CANCER
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OBJECTIVES: To assess economic appraisals of chemotherapy
regimens for metastatic colorectal cancer (mCRC) published in
peer-reviewed journals. METHODS: A PubMed search of
English-language documents published up to October 2004 was
conducted using the search terms: “chemotherapy”, “metasta-
colic cancer”, and “economic”, “cost-effectiveness”,
or “cost-benefit”. Additional publications were identified from
references, reviews, and meta-analyses. Publications were
reviewed for information on the type of cost analyses, year of
publication, journal, country, perspective, type of chemotherapy
assessed, data collection methods, sponsor, and types of sen-
sitivity analyses conducted. RESULTS: Economic analyses were
published on eight regimens. Seven of the 14 published studies
were published from a UK perspective, and 2 each from a French
and a Dutch perspective; no study has been published from the
US perspective. Ten studies were cost-consequences and four
were cost-effectiveness analyses. Limited documentation was
provided on sources of costs for medical resource use. Adjust-
ments for quality of life were considered in sensitivity analyses
in two studies designed to inform guidance by the UK’s National
Institute of Clinical Excellence. Overall, drug costs accounted for
1%–37% of total expenditures for 5-flourouracil + leucovorin
(5FU/LV) regimens, in contrast to 47%–83% of total expendi-
tures for newer combination regimens (e.g., irinotecan + 5FU/LV,
oxaliplatin +5FU/LV, capectabine). No formal analyses were
published on Avastin (bevacizumab) or Erbitux (cetuximab).
Discounting for future costs and benefits was not done in any
analysis. CONCLUSIONS: Some prominent novel regimens for
mCRC have no publicly available economic appraisal. Among
the few published studies on older regimens, most omit compo-
nents such as quality-of-life adjustments, discounting, and
transparent statements on data sources for prices that are rec-
nommended in ISPOR’s statement on “Good Research Practices—
Modeling Studies.”

PCN29

GAPS IN THE ECONOMIC EVALUATION OF
PROSTATE CANCER
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OBJECTIVE: This study seeks to synthesize and identify gaps in
the economic literature of prostate cancer (PCA). METHODS:
English-language abstracts and articles published between 1990