

uximab. These patients (HBcAb +) are at high risk of HBV reactivations, due to long periods of immunosuppression.

Results: Nevertheless, even if our calculations underestimated the costs of prophylaxis, the "monitoring approach" resulted cost-effective. Moreover, even though in our series no serious events in terms of morbidity and/or mortality occurred, in other papers a monitoring approach did not guarantee patients survival. These detrimental results could be ascribed to the delayed start of lamivudine treatment if the monitoring is not adequately strict. Also, it has been reported that performing only the transaminase monitoring should not be acceptable to prevent severe reactivations.

Table 1.

	Unitary Cost	n. putients	Total per patient	Duration [days]	Total
Cost of prophylasis					
Lamivadine	€3,18	48	€132,64	360	€34.959,40
HBV DNA monitoring	€ 130,06	48	€6,240,00	6	€37.449,00
HBsAg menitoring	€17,00	48	€116,00	6	€43/96,00
AST/ALT monitoring	€5,74	48	€ 275,52	12	€3,336,24
Total	€ 155,92	48	£7,454,16		€100,592,64
Cost of HBV Reactivation					
HBV DNA monitoring	€130,00	48	€ 6.240,00	6	€37 449.90
AST/ALT monitoring	€5,74	48	€ 275,52	12	€3,306,24
Cost of DRG 285 [v24 Geouper]	€3.269,10	5			€ 18 845,50
Total	€3.994,84				€ 49,746,24

Summary/Conclusions: Our monitoring approach resulted efficacious probably because of the monthly ALT assay was strictly observed.

PB2109

AN HPLC AND 1H NMR STUDY OF THE CYTARABINE DEGRADATION IN CLINICAL CONDITIONS TO AVOID DRUG WASTE, DECREASE THERAPY COSTS AND IMPROVE PATIENT COMPLIANCE

COSTS AND IMPROVE PATIENT COMPLIANCE

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Background: Cytarabine, the 4-Amino-1-(β-D-arabinofuranosyl)-2(1H)-pyrimidinone, (ARA-C), is an antimetabolite cytidine analogue used worldwide as key drug in the management of leukaemia. As specified in the manufacturers' instructions, once the components-sterile water and ARA-C powder-are unpackaged and mixed, the solution begins to degrade after 6 hours at room temperature and 12 hours at $^{\circ}$ C.

Aims: To evaluate how to avoid wasting the drug in short-term low dose treatment regimens, the reconstituted samples, stored in the dark at 25° and 4° C, were analyzed every day of the test week by reversed phase high-performance liquid chromatography (RP-UHPLC) and high-field nuclear magnetic resonance spectroscopy (¹H NMR).

Methods: All the samples remained unchanged for the entire week, which corresponds to the time required to administer the entire commercial drug package during low-dose therapeutic regimens. The drug solution was stored in a glass container at 4 $^{\circ}$ C in an ordinary freezer and drawn with sterile plastic syringes; during this period, no bacterial or fungal contamination was observed. After one month, the samples presented evidence of a degradation product (0.8% of starting material), identified as 1-(β-D-arabinofuranosyl)-pyrimidine-2,4-(1H,3H)-dione (ARA-U).

Results: Our findings provide evidence of an optimal physico-chemical stability and microbiological sterility of ARA-C solution stored for one week in the dark, at 4°C. This encourages the use of the reconstituted drug for the time required for short-term multi-dose treatments, avoiding drug waste, patient stress and hospital crowding. Moreover, it seems possible to leave in the same container surplus of different ARA-C packages, improving the cost-effectiveness of the treatment without affecting its efficacy and safety. An additional advantage is the fact that patients are able to have the treatment administered at home.

Summary/Conclusions: Our results show that a solution of reconstituted ARA-C could be employed for a longer period that what suggested by the manufacturers. In fact, patients could receive a safe aliquot to be used at home for short-term treatments, thus optimizing the use of aliquot residues and avoiding vial manipulation and the production of special waste material.

PB2110

COST ANALYSIS OF THE END OF LIFE CARE IN HEMATOLOGICAL MALIGNANCY PATIENTS

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Background: Most hematological malignancies remain chemo-sensitiveness even in the end stage, unlike solid tumors. Sometimes it is difficult to determine

the timing to switch to palliative care. Therefore, aggressive treatments often apply to patients in the end of life (EOL). On the other hand, aggressive EOL care causes deterioration of patients' quality of life, depression among family members, and increase of medical expenses.

Aims: We analyzed the contents of medical treatment and the costs to clarify the issues of aggressive EOL care for patients with hematological malignancies. Methods: Hematological malignancy patients who died in the hemato-oncology unit of a general acute hospital from September 2010 to August 2015, and as the control group, all patients who discharged alive in the same period were studied. The duration of hospital stay, medical cost, contents of treatment, treatment policy, intervention by palliative care team, disease, and disease status were analyzed. T-test and univariate analysis of variance were used to test the factors associated with the cost using SPSS version 23.

Results: We analyzed 2984 patients who were discharged alive and 164 patients who died in our hospital. In patients who died, the mean age was 65.3 years old, 116 (70.7%) were men. Diseases were 54 (32.9%) with multiple myeloma, 38 with (56.1%) malignant lymphoma, 27 (16.5%) with leukemia, 41 (25.0%) with myelodysplastic syndrome. Twelve (7.3%) were in complete response, 6 (3.7%) in partial response, 19 (11.6%) in stable disease, 105 (60.4%) in progression of disease, and 22 (13.4%) were with newly diagnosed disease. Treatment policies were 95 (57.9%) in aggressive anti-tumor and/or support therapy, 69 (42.1%) in palliative care. In patients who died in the hospital, mean medical cost of last hospitalization was 60,200 euro, and the duration of stay was 63.4 days. Those were significantly higher than the mean cost (14,550 euro, p<0.001) and the duration of hospital stay (23.3 days, p<0.001) of patients who were discharged alive. Though the number of patients who died was only 5% of total number of inpatients, the medical expense accounted for 18.5% of total medical cost in the hematology department. Although, the treatment policy was shifted from aggressive therapy to palliative care in most patients (68% in the last 2 weeks, and 71% in the last week), the medical cost per week increased (p=0.020). The half of the cost in the last 2 weeks was the fee for blood transfusion and antibiotics. In the last 2 weeks, 11 days of blood sugar monitoring, 9 times of blood examination, and 5 times of roentgenological examination was performed per patient. In the last week, intravenous hyperalimentation was given in 50.6% of patients, vasopressors was used in 31.7%, hemodialysis was performed in 8.5%, and 6.9% was admitted to ICU. Analysis using univariate analysis of variance revealed that the significant factors which contributed to saving medical cost were palliative care policy on admission (p=0.020), older age (p<0.001), and patients who have care giver(s) (p=0.048). The intervention by palliative care team did not affect the cost.

Summary/Conclusions: In this study, we clarified that aggressive EOL care was given in the most hematological malignancy patients. Blood transfusion and antibiotics were continued until death. Furthermore, prospective study on the aggressiveness of EOL care and quality of life is needed.

PB2111

AMBULATORY MANAGEMENT OF ANEMIA: A RETROSPECTIVE VIEW FROM AN ITALIAN MULTIDISCIPLINARY TEAM

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Background: Anemia is one of the most prevalent clinic condition leading to a specialist medical consult. In 2014 our Internal Medicine unit started a Multidisciplinary Anemia Ambulatory (Internist, Immune-Hematologist, Hematologist) with the purpose to rapidly manage, diagnosis and treatment of anemic pts, giving a direct connection between general practitioners and hospital services.

Aims: Evaluate if Multidisciplinary Anemia Ambulatory and its diagnostic-therapeutic path, with the involvement of different Specialists, resulte in an improvement of the coordination and continuity of care, reducing sanitary cost in terms of hospitalization, drugs rationalization and quality of life for patients.

Methods: Retrospective analysis of 212 patients came to our attention for internist consult due to anemia from January 1st 2014 to January 2015.

Results: A total of 212 patients came to our attention for internist consult due to anemia: 165 female and 47 male, medium age 63,23 years (range 19-100). A precise classification of anemia was determined for 187 pts: 130 had iron deficiency anemia (IDA, 61,32%), 17 multifactorial anemia (inflammatory disorders, chronic kidney disease and combined deficiency, 8,02%), 16 combined deficiency anemia (iron and vitamins, 7,55%), 9 chronic kidney disease related anemia (4,25%), 7 anemia secondary to inflammatory chronic disorder (3,30%), 5 B12 deficiency (2,36%), 2 both folate and B12 deficiency (0,94%), 1 folate deficiency (0,47%). Twenty-five pts were not classified due to lack of data. Severity of anemia was defined according to WHO criteria: 53 pts (25%) presented mild anemia, 123 (58%) moderate anemia, 33 (15,6%) severe anemia. We considered comorbidities of internistic relevance, which could be worsened by anemia: cardiovascular (coronary heart disease, arrhythmias, heart failure), 30 pts; neurologic (ischemic and degenerative diseases), 19 pts; respiratory disease (COPD and asthma), 11 pts.Pts were treated according to clinical practice in relation to