homosexual IVDU], ranging in age from 27 to 44 years. In BCBL cases, the patients exhibited exclusive or predominant lymphoma involvement of the body cavities. Their clinical outcome was poor, with a median survival of 4 months after the diagnosis, despite the administration of systemic chemotherapy. No patient had a history of KS. In all cases, the smears and cell blocks prepared from pleural fluid samples showed a tumour cell population greater than 95% as evaluated by morphological and immunophenotypic analysis. Neoplastic cells from BCBL cases showed anaplastic (three of four) or immunoblastic (one of four) features, expressed CD30 (four of four) and tended to display indeterminate phenotypes (three of four), whereas all lymphomatous effusions secondary to tissue-based lymphomas consistently expressed B-cell phenotype. By an *in situ* hybridisation (ISH) technique, monotypic κ mRNA or λ mRNA were detected in all BCBL and other cases, establishing their B-cell clonality. The presence of Epstein–Barr virus (EBV) was detected in two of three KSHV-positive BCBL by EBV-encoded small RNAs (EBER) ISH. In both EBV-positive cases, a fraction of tumour cells expressed latent membrane protein-1 (LMP-1).

Overall, our results indicate that AIDS-related BCBL preferentially associates with peculiar clinical, immunophenotypic and molecular features among lymphomatous effusions and, therefore, should be singled out as a specific clinicopathological entity. Intriguingly, BCBL morphological and immunophenotypic characteristics, as well as EBV phenotype (LMP-1+), are similar to those of AIDS-related immunoblastic or CD30+ anaplastic large cell lymphomas (ALCL) [5]. However, the clinical manifestations of BCBL and its association with KSHV DNA sequences are highly specific for this type of lymphoma among AIDS-related NHL, since KSHV DNA sequences were not detected in a series of 28 systemic AIDS-related NHL, including CD30+ ALCL (our unpublished observation).

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Magnesium Supplements with Cisplatin Chemotherapy

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We recently reported on the use of routine intravenous magnesium supplements in patients receiving cisplatin chemotherapy with continuous infusional 5-fluorouracil and epirubicin (ECF) [1]. Cisplatin is known to cause renal tubular magnesium wasting which can result in symptomatic hypomagnesaemia [2]. In our report, all 14 evaluable patients who did *not* receive routine supplements had at least one episode of hypomagnesaemia (Mg <0.7 mmol/l) and subsequent supplements had to be given with 50% of the cisplatin chemotherapy cycles. In contrast, only 6/14 patients who received routine magnesium supplements were found to have a reduced serum magnesium on admission, and on only one occasion was this <0.6 mmol/l.

Although these data show that cisplatin associated hypomagnesaemia can be avoided by the routine addition of magnesium sulphate to the hydration fluids, this adds considerably to the cost of treatment. The estimated additional cost of 28 mmol magnesium sulphate per chemotherapy cycle was £34.30. In the group of patients who only received supplements when required, the cost per patient per cycle was £17.51.

Table 1. *Mean magnesium concentration* (± *S.E.*) *on day* 1 *of each chemotherapy cycle*

	Average (Mg) mmol/l	
	25 mmol/cycle	12.5 mmol/cycle
Cycle 1	0.85 ± 0.017 (0.81–0.90)	0.89 ± 0.02 (0.84–0.94)
Cycle 2	0.81 ± 0.016 (0.77–0.85)	0.86 ± 0.026 (0.79–0.92)
Cycle 3	0.83 ± 0.018 (0.79–0.88)	0.78 ± 0.043) (0.67–0.89)
Cycle 4	0.78 ± 0.027 (0.71–0.85)	0.79 ± 0.024 (0.73–0.85)
Cycle 5	0.78 ± 0.043 (0.67–0.89)	0.78 ± 0.028 (0.71–0.85)
Cycle 6	0.78 ± 0.030 (0.70–0.85)	0.80 ± 0.035 (0.71–0.88)

95% confidence intervals are given in parentheses. Mean Mg mmol/l.

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We have now investigated whether a lower dose of magnesium sulphate supplements would be sufficient to avoid hypomagnesaemia without increasing the cost above that expected if patients only received replacement as required.

24 consecutive patients who were to receive ECF chemotherapy for upper GI or breast adenocarcinoma (and had normal renal function {GFR >60 ml/min}) were randomly allocated to hydration with 10 and 15 mmol/l magnesium sulphate, or to half that amount (5 and 7.5 mmol/l), in pre- and posthydration fluids, respectively. 22 patients received more than one course of chemotherapy and were evaluable (2 patients died after their first course of ECF), 11 in each group. Serum magnesium was measured on day 1 of each cycle and when clinically indicated. The total number of chemotherapy courses received by each group was 60 (25 mmol/cycle) and 66 (12.5 mmol/cycle).

No patient was thought to have symptomatic hypomagnesaemia at any point and no additional interim magnesium infusions were given. Serum magnesium concentrations on day 1 of each ECF cycle did not fall below 0.7 mmol/l for any of the patients receiving 25 mmol magnesium sulphate per cycle. 4/11 patients allocated to the lower dose (12.5 mmol) had documented serum magnesium <0.7 mmol/l on only one occasion per patient (2 patients at cycle 3, 1 at cycle 5 and 1 at cycle 6). There was no significant difference between the mean serum magnesium concentration on day 1 of each cycle between the groups (Mann–Whitney test). These results are summarised in Table 1. Thus, no subject experienced persistent or recurrent hypomagnesaemia requiring additional or increased magnesium supplements. Only one estimate of serum magnesium was made per cycle of chemotherapy. In the original study, an interim level was measured between courses. This may explain the lower incidence of mild hypomagnesaemia (serum Mg >0.6 <0.7 mmol/l) detected in the present study.

We conclude that 5 and 7.5 mmol magnesium sulphate added routinely to pre- and posthydration for cisplatin administration in ECF chemotherapy is sufficient to avoid problematic hypomagnesaemia. The cost of a 4 mmol ampoule of magnesium sulphate is £4.90. We calculate that the saving per cycle of chemotherapy is £14.70 for the 5 and 7.5 mmol (12.5 mmol) regime. Over a course of six cycles of chemotherapy this would be a total saving of £88.80.

We therefore recommend this dose of magnesium sulphate in the routine administration of ECF chemotherapy.

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