

Excess Treatment Costs/Service Support Costs for AML17 Trial

The method of viewing excess treatment costs was to take the trial schema of MRC-AML15 as standard treatment, and to compare the AML17 schema. Service support costs have not been separately included because they usually have to be agreed at individual Trust level.

The differences for AML17 are described below:-

1. 12% of patients will enter the APL randomisation. In AML15 the Ida + ATRA was compared with intensive chemotherapy + ATRA. In AML17 the equivalent of Ida + ATRA will be compared with the chemo-free option of ATRA + Arsenic. So the difference in resource use between 15 and 17 is effectively the difference for the 50% of patients who enter ATRA + ARSENIC compared with intensive chemotherapy plus ATRA.

The differences are:

- (i) saving on all drugs including antibiotics associated with intensive chemotherapy.
 - (ii) probably saving of most (80%) of the average of 90 days inpatients of inpatient treatment.
 - (iii) Arsenic although licensed will be free.
 - (iv) Molecular monitoring of disease will be mandatory in this subset and will cost up to £3k per patient. [this is an excess cost which is offset by the reduced chemotherapy and inpatient days] [Cost per travel entrant = $15/100 \times 3k = £450$].
2. In non-APL patients:-
 - (i) 80% of patients will receive Mylotarg. This will be provided at 60% discount and at a flat rate irrespective of dose given. When site have a patient allocated to Mylotarg they will be sent the appropriate does and will then be invoiced for £2740. .
 - (ii) The FLAG-Ida schedule in AML15 has been dropped, so the drug acquisition costs (£3900) will be saved. This amounts to £1300 per entrant to AML15 compared to AML17.
 - (iii) A small subset (Core Binding Factor Leukaemia) will have molecular monitoring which was done in AML15 on research funds. Sites can still have this service – it is not mandatory in the protocol – but they have to pay for it if they want it.
 - (iv) AML15 compared 4 vs 5 treatment courses. AML17 compared 3 vs 4. So patients in AML17 will receive 1 course of treatment less. This saves the chemotherapy/supportive care/hospitalisation (around 20 days).
 - (v) All experimental drugs (CEP-701, Everolimus, Clofarabine) are free of charge.

- vi) All other molecular or immunophenotypic monitoring and molecular screening is provided free

So overall there are substantial resources being saved in the overall treatment plan of AML17 compared with AML15. The only potential new expense is payment for Mylotarg. However removal of FLAG-Ida removes an average £1300 per patient. No transplant (estimated cost £50k) are recommended for standard risk disease (315 performed so far in AML15) representing a saving of £15.75m (50k x 315) which will be an average £7.8k per entrant. Monitoring for APL is chargeable, but for each patient entering the study overall the cost will be £450. Excluding the transplant benefit the estimated **nett** reduction in NHS costs per patient is around £9k

Summary:

1. There is no requirement for excess service costs for AML17.
2. Trusts/commissioners will save significant costs due to the aim of AML17 to test de-escalation of treatment in several respects.
3. All experimental drugs under test are supplied free of charge.

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