

# Results of Treatment in Children with B-Cell Lymphoma: Report on the Polish Leukemia/Lymphoma Study Group\*

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## A. Introduction

It is well established that B-cell lymphoma in children initially responds well to chemotherapy, and that prognosis depends upon the extent of the disease at diagnosis. However, the outcome of advanced B-cell lymphoma, particularly with initial bone marrow or central nervous system involvement remains far less favorable than that of localized disease [2–4]. Between 1983 and 1988 the Polish Children's Leukemia/Lymphoma Study Group used two protocols for disseminated B-cell lymphoma therapy, that of Murphy and Bowmann [2] and that of COAMP [1]. In this report the results of therapy with these regimens are described and are compared to those achieved with the LSA<sub>2</sub>L<sub>2</sub> protocol [5].

## B. Patients and Methods

A total of 152 children aged 1–15 years entered the study. Histologic classification was based on the Kiel system [3]. Clinical staging was done according to the criteria of Murphy et al. [2]. Initial characteristics of patients are presented

in Table 1. Therapy protocols are outlined in Figs. 1 and 2.

## C. Results

The overall results are summarized in Table 2. In patients treated according to the Murphy-Bowmann protocol and who achieved complete remission (CR), seven relapses were observed among the 18 cases of stage III (duration of CR, 2–10 months) and seven among the 10 cases of stage IV (duration of CR, 2–18 months). The life-table estimations for event-free survival after 62 months are 51% for stage III and 17% for stage IV (Fig. 3). In the patients with stage III and treated according to the COAMP regimen, all postremission relapses occurred between the 3th and 7th months after CR and in those with stage IV between the 2nd and 19th months after CR. The event-free survival after 61 months is 59% for those in stage III and 40% for those in stage IV (Fig. 4).

## D. Concluding Remarks

Comparison of the efficacy of the three different therapy modalities for stage III of B-cell lymphoma indicates the superiority of the COAMP regimen. The results obtained in stage III are comparable with the best reported up to date [3, 4]. No particular toxicity of the COAMP protocol was observed; one patient died in CR due to septicemia. With the protocols used, no comparative advantage was achieved in treatment of stage IV B-cell lymphoma.

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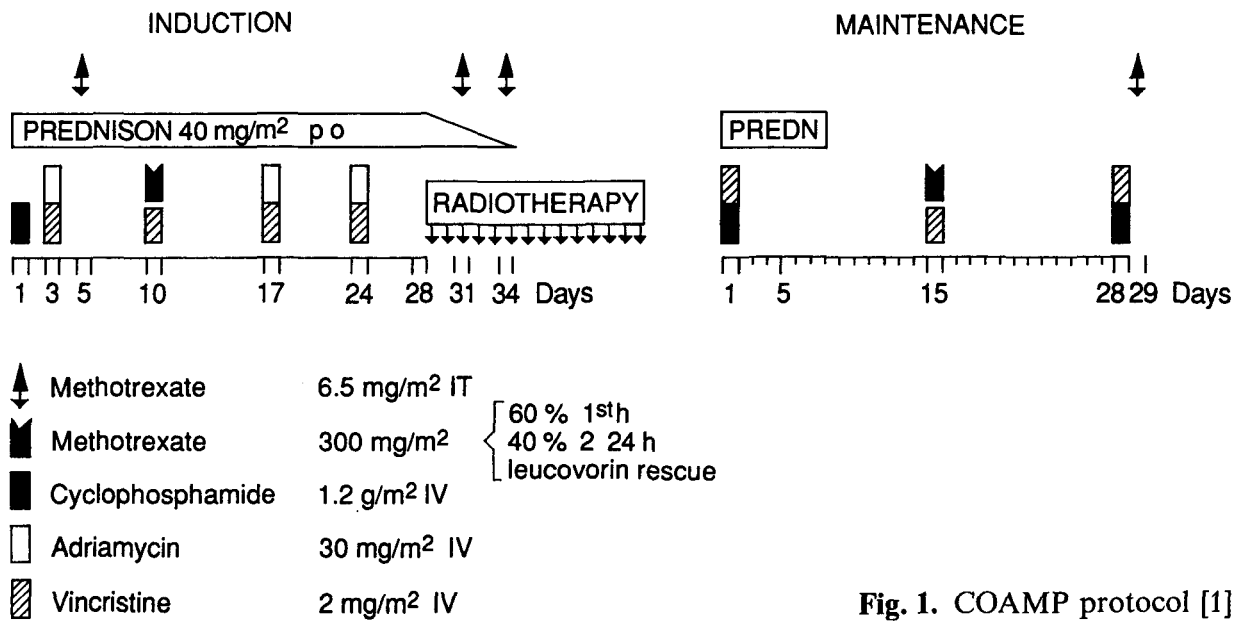


Fig. 1. COAMP protocol [1]

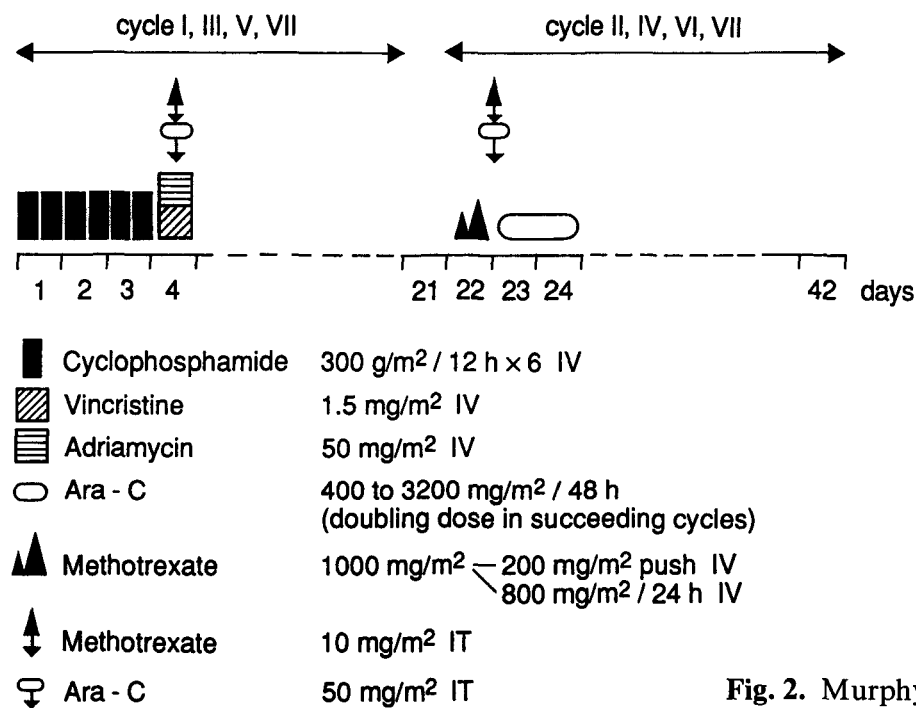
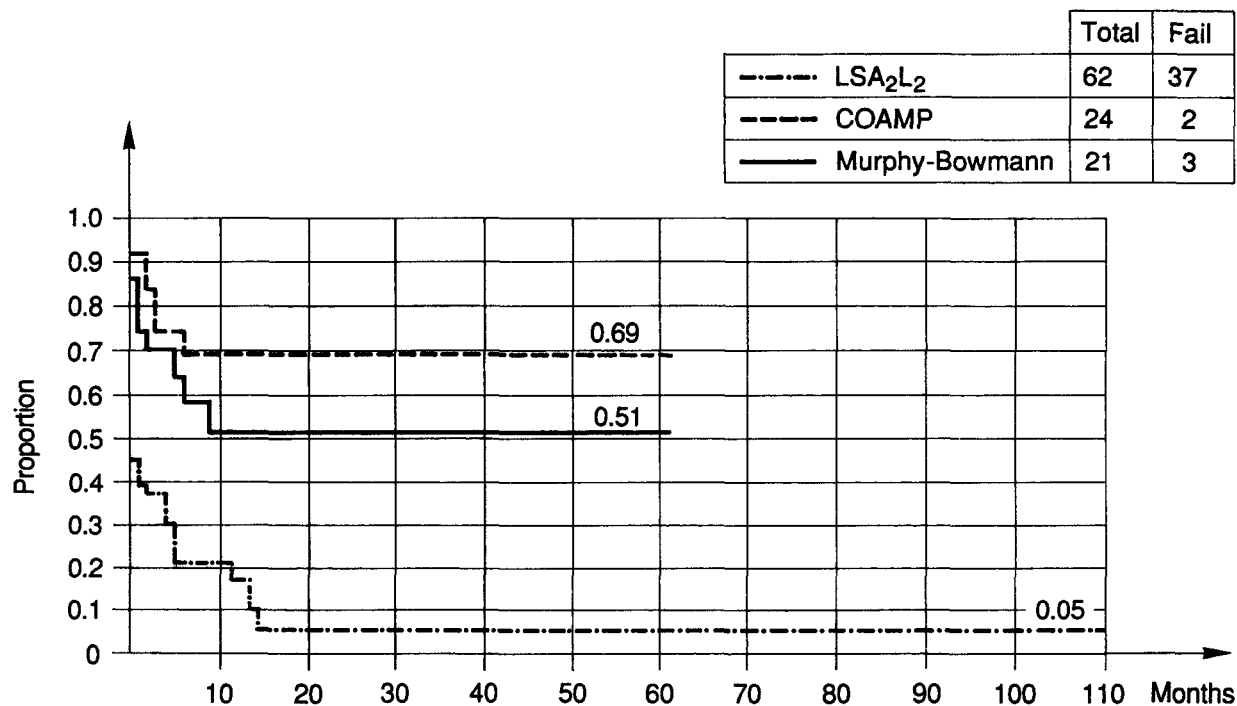


Fig. 2. Murphy-Bowmann protocol [2]

## References

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**Fig. 3.** Probability of event-free survival of children with B-cell lymphoma stage III with three different treatment protocols

**Table 1.** Initial characteristics of patients with B-cell lymphoma stages III and IV, treated according to three different protocols

	Protocol		
	LSA <sub>2</sub> L <sub>2</sub>	Murphy-Bowmann	COAMP
Total number admitted to the study	87	31	34
Sex			
Male	74	24	25
Female	13	7	9
Median age in years (range)	6 (1-15)	5 (1-12)	6 (1-14)
Clinical stage			
III	62	21	24
IV	25	10	10
BM	22	10	8
CNS	2	0	2
CNS + BM	1	—	—
Primary location:			
Intrathoracic	7	1	2
Abdomen	62	28	22
Head, neck	10	—	4
Peripheral nodes	8	2	6

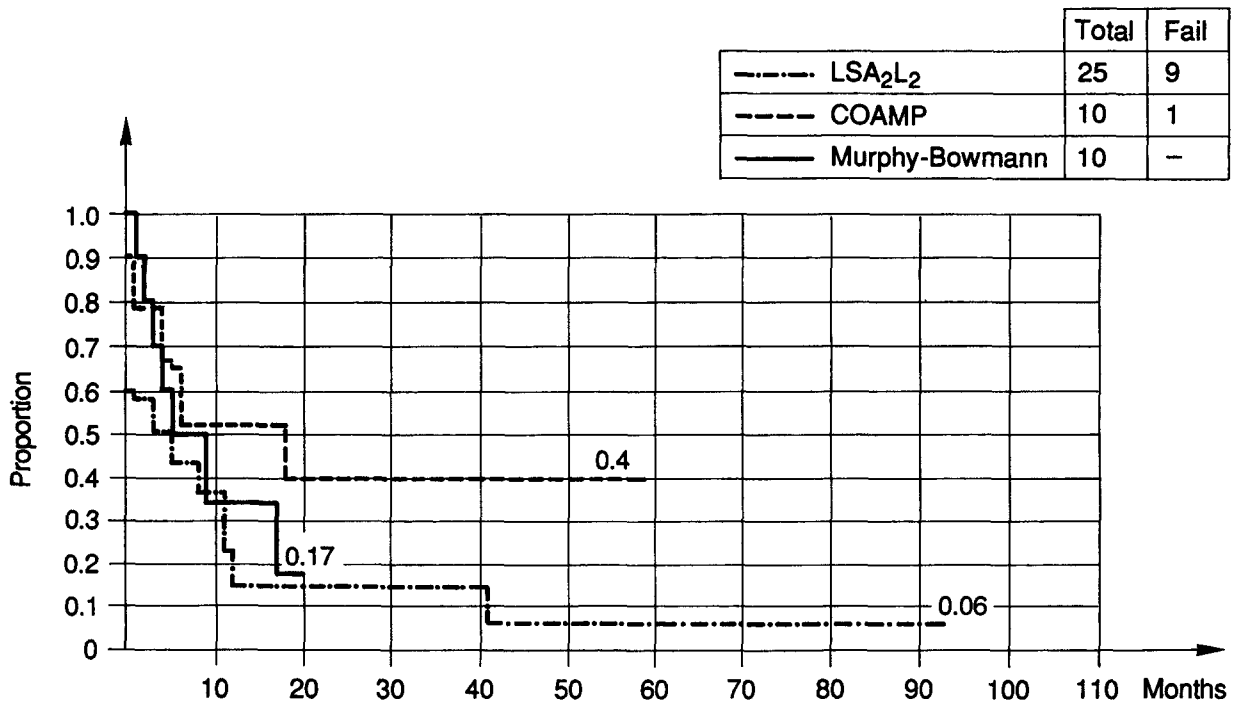


Fig. 4. Probability of event-free survival of children with B-cell lymphoma stage IV with three different treatment protocols

Table 2. Overall results achieved in children with B-cell lymphoma stages III and IV, treated according to three different protocols

	Protocol					
	LSA <sub>2</sub> L <sub>2</sub>		Murphy-Bowmann		COAMP	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Total number admitted to the study	87	100	31	100	34	100
Achieved CR	51	58.6	28	90.3	31	91.2
No CR	36	31.4	3	9.7	3	8.8
Died in CR due to infection	6	11.8	1	3.6	1	3.2
Relapsed	25	49.0	13	46.4	11	35.5
Still in first CR	20	39.2	14	50.0	19	61.3
Median time of follow-up (months)	18		12		24	
Off therapy	20	39.2	12	42.9	15	48.4