

1.2 Remission Duration from a Clinical Trial for Acute Leukemia

Freireich et al. (1963) report the results of a clinical trial of a drug 6-mercaptopurine (6-MP) versus a placebo in 42 children with acute leukemia. The trial was conducted at 11 American hospitals. Patients were selected who had a complete or partial remission of their leukemia induced by treatment with the drug prednisone. (A complete or partial remission means that either most or all signs of disease had disappeared from the bone marrow.) The trial was conducted by matching pairs of patients at a given hospital by remission status (complete or partial) and randomizing within the pair to either a 6-MP or placebo maintenance therapy. Patients were followed until their leukemia returned (relapse) or until the end of the study (in months). The data is reported in Table 1.1.

TABLE 1.1

Remission duration of 6-MP versus placebo in children with acute leukemia

<i>Pair</i>	<i>Remission Status at Randomization</i>	<i>Time to Relapse for Placebo Patients</i>	<i>Time to Relapse for 6-MP Patients</i>
1	Partial Remission	1	10
2	Complete Remission	22	7
3	Complete Remission	3	32 ⁺
4	Complete Remission	12	23
5	Complete Remission	8	22
6	Partial Remission	17	6
7	Complete Remission	2	16
8	Complete Remission	11	34 ⁺
9	Complete Remission	8	32 ⁺
10	Complete Remission	12	25 ⁺
11	Complete Remission	2	11 ⁺
12	Partial Remission	5	20 ⁺
13	Complete Remission	4	19 ⁺
14	Complete Remission	15	6
15	Complete Remission	8	17 ⁺
16	Partial Remission	23	35 ⁺
17	Partial Remission	5	6
18	Complete Remission	11	13
19	Complete Remission	4	9 ⁺
20	Complete Remission	1	6 ⁺
21	Complete Remission	8	10 ⁺

⁺ Censored observation