The treatment of children and young adults with early stage Non-Hodgkin's lymphoma (NHL) has seen remarkable advances over the past several decades. These advances have resulted in significantly improved survival with less treatment related morbidity and mortality. In fact, the majority of children and young adults who present with early stage NHL will be cured utilizing modern treatment regimens. Unfortunately, the morbidity of such treatment, although less than the past, remains significant. For this reason, the Pediatric Oncology Group conducted a studies to determine if the intensity of treatment can be reduced without compromising cure rates. The first trial found that radiotherapy can be safely eliminated from the treatment regimen. The second trial was designed to determine if the amount and duration of chemotherapy can be safely reduced.

These two trials began in 1983 and enrolled 340 patients with NHL who were 21 years old or less. In the first trial, patients received nine weeks of intense chemotherapy followed by 24 weeks of maintenance (less intense) chemotherapy. Half of the patients received radiation in addition to the chemotherapy. The second trial eliminated the radiation treatments altogether and randomized patients to nine weeks of chemotherapy alone versus nine weeks plus 24 week maintenance chemotherapy. In total the two trials had 113 patients receive nine weeks of chemotherapy alone, 131 patients receive eight months of chemotherapy alone and 67 patients received 8 months of chemotherapy with radiation. At five years there was no difference among patients in these three groups in rates of complete remissions (89, 86 and 88 percent respectively). Subgroup analysis found that patients with lymphoblastic type NHL did worse than other types of NHL and benefited from 8 months of chemotherapy. The authors conclude that 9 weeks of chemotherapy is sufficient treatment for children and young adults who present with early stage non-lymphoblastic lymphoma.