Treatment of Higher-Risk Myelodysplastic Syndrome With Induction Chemotherapy Followed by Azacitidine and Lenalidomide: Results of a Phase 2 Study

Maher Salamoon MD **Al Bairouni University Cancer Center, Daffodil 88 comprehensive cancer center, Damascus, Syrian Arab Republic**

Introduction

: Higher-risk myelodysplastic syndromes (MDS) are defined by patients who fall into high-risk categories in the original or revised International Prognostic Scoring System (IPSS). Survival rates for these patients are dismal, and treatment should be initiated without delay. Standard therapies include the hypomethylating agents azacitidine and decitabine. Patients with relapsed disease are referred to clinical trials.

Aim

Evaluate a new protocol combining an induction chemotherapy followed by azacitidine and lenalidomide.

Objectives

Treatment with new protocol evaluating the response and survival in higher risk myelodysplastic syndrome

Methods

We prospectively studied 26 newly diagnosed patients with CLL, all of whom were fit for treatment. They had non-mutated TP53 and mutated IGHV. LPL was weakly expressed in seven patients, ZAP 70 was weakly expressed in 10 patients and COBBLL1 was highly expressed in 10 patients. Five patients had 13q14.3 deletion.

Results

We enrolled 20 patients diagnosed with very high-risk MDS according to the IPSS. Most exhibited a blast percentage between 12% and 20%, chromosomal abnormalities, and generalized cytopenia, with histology oscillating between refractory anemia with excess blasts (RAEB)-1 and RAEB-2. Induction chemotherapy included cytarabine 3 g/wk for 8 consecutive weeks, followed by azacitidine 75 mg/m2/day for 5 consecutive days of a 28-day cycle, given concomitantly with lenalidomide 10 mg/day continuously. Treatment was continued in patients who responded and if toxicity was acceptable. Bone marrow aspiration was performed at the end of induction and every 3 months thereafter.

Summary

The sequence of induction chemotherapy followed by hypomethylating agents plus immunomodulators seems to be a good

Discussion

Complete response was documented for five of 20 patients (25%) at the end of induction, 15 patients (75%) were partial responders. Three months after the start of the second block, another three patients joined the complete responders (40%). At 2 years, progression-free survival was 60% (95% CI, 56–66) and overall survival was 85% (95% CI, 77–92).

References

Maher.salamoon@gmail.com / phone: +963933771086 DMC 88 cancer center