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# POSTER ABSTRACTS

## 623.MANTLE CELL, FOLLICULAR, AND OTHER INDOLENT B CELL LYMPHOMAS: CLINICAL AND EPIDEMIOLOGICAL

### The Efficacy of Obinutuzumab Combined with Pomalidomide and Covalent Btki for the Treatment of TP53 Mutated Mantle Cell Lymphoma (MCL): A Prospective, Open-Label, Single-Arm Study

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**Background**
TP53 mutated MCL lacks effective treatment options and has a poor prognosis, posing challenges in management. The guidelines recommend clinical trials as the first choice, pomalidomide as a new generation of immunomodulators (IMiDs), which have immunomodulatory effects and modulates the tumor microenvironment. Individual cases have been reported about pomalidomide be used for relapsed and refractory MCL. In this study, we investigated the application of Pomalidomide combined with Obinutuzumab and covalent BTKi (Ibrutinib and Zanubrutinib) for the treatment of TP53 mutated MCL to provide a new treatment evidence for clinical practice.

**Methods**
This was a prospective, single-center, clinical study. The key inclusion criteria include: confirmed diagnosis of MCL, age≥18 years, appropriate organ function, etc, both previously untreated and relapsed patients are eligible for inclusion. All patients receive Obinutuzumab (1000 mg d1) combined with Pomalidomide (4 mg d1-21) and covalent BTKi (Ibrutinib 560mg qd or Zanubrutinib 160mg bid)for 4 cycles, every 28 days as a cycle; If the treatment is effective, patients receive Obinutuzumab (1000 mg d1, every 3 months/time) combined with Pomalidomide (4 mg d1-14/28 days) and covalent BTKi triplet combination maintenance therapy until disease progression. The primary endpoint was overall response (Lugano 2004 criteria). Safety analysis included all patients who received the treatment, irrespective of eligibility or duration of treatment. Minimal residual disease was assessed by NGS in peripheral blood.

**Results**
The study included 14 patients with relapsed or refractory mantle-cell lymphoma (12 patients) or previously untreated mantle-cell lymphoma (2 patient). Patients median age 59(44 to 74) with a male-to-female ratio of 6:1, and the lines of previous treatments ranged from none to three. 85.7%(12/14)of patients had mutation of TP53, 28.6%(4/14) had mutation of CCND1, 21.4%(3/14)had mutation of SMARCA4/SAMHD1. 64.3% had a higher Ki-67≥30% and 50% had a high-risk prognostic score of MIPI-c. The complete response rate at 4 course was 64.3% and the overall response rate was 85.7%. 9 patients underwent MRD testing after 4 cycles of treatment, and MRD negative was confirmed in 100% of the patients by NGS. The most common grade 3-4 adverse events were neutropenia (in 5 [35.7%] of 14 patients), thrombocytopenia (in 3 [21.4%] of 14 patients), infections (in 2[14.3%] patients), severe Covid-19 infection was in 2[14.3%] patients.

**Conclusions**
Our results provide preliminary evidence that the triplet combination of Obinutuzumab, pomalidomide, and covalent BTKi is an active regimen in MCL patients with the mutation of TP53, and should be evaluated in a prospective randomized controlled trial.

**Disclosures** No relevant conflicts of interest to declare.

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