8501 **Oral Abstract Session, Sat, 1:15 PM-4:15 PM**

Preliminary results of PI3Kδ inhibitor idelalisib (GS-1101) treatment in combination with everolimus, bortezomib, or bendamustine/rituximab in patients with previously treated mantle cell lymphoma (MCL).

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Background: PI3K-delta is critical for activation, proliferation and survival of B cells and plays a role in homing and retention in lymphoid tissues. PI3Kδ signaling is hyperactive in many B-cell malignancies. Idelalisib is a first-in-class, selective, oral inhibitor of PI3Kδ that has shown monotherapy activity in recurrent MCL (Kahl, ICML 2011). **Methods:** This phase 1 study is evaluating the activity of continuous idelalisib (Id), 150 mg BID, in combination with everolimus (E) (10 mg PO qD) (Id+E regimen), with bortezomib (V) (1.3 mg/m^2 SC day 1, 8, 15 per 28 day cycle) (Id+V regimen), or with rituximab (R) (375 mg/m^2, on Day 1) and bendamustine (B) (90 mg/m^{2}x 2), for 6 cycles (Id+BR regimen). Investigators assessed response according to standard criteria (Cheson 2007). **Results:** Study enrolled 22 patients with relapsed/refractory MCL. Results are from 14 Jan 2013 data cutoff. The 3 cohorts included Id+E (N=12), Id+V (N=6), and Id+BR (N=4). Patients were 73% male, median age [range] of 68 [47E79] years, 32% with refractory disease and 73% stage III/IV. The median [range] number of prior therapies was 3 [1E7]. The median [range] duration of treatment was 2.5 [0.5-8.3+] months. Overall response rate (ORR) was 10/22 (46%), with 2 CR (9%). The ORR/CR for Id+E, was 25%/0%, Id+V was 50%/0%, and Id+BR was 100%/50%. The median duration of response (mDOR) and median PFS (mPFS) were not reached. Most common adverse events included (total%/≥G3%) diarrhea (41/9), fatigue (41/0), rash (27/14), cough (27/0), decreased appetite (23/0), and epistaxis (23/0). Lab abnormalities included (total%/≥G3%) thrombocytopenia (82/27), neutropenia (32/14), and ALT/AST elevations (50/5). **Conclusions:** Preliminary data indicates idelalisib-based combination therapy is active in patients with relapsed/refractory MCL. All combinations were tolerable. These data support further clinical development in larger trials to further characterize safety and response duration. Clinical trial information: NCT01088048.