8500 **Oral Abstract Session, Sat, 1:15 PM-4:15 PM**

Tolerability and activity of combinations of the PI3Kδ inhibitor idelalisib (GS-1101) with rituximab and/or bendamustine in patients with previously treated, indolent non-Hodgkin lymphoma (iNHL): Updated results from a phase I study.

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Background: PI3K-delta signaling is critical for activation, proliferation and survival of B cells, and is hyperactive in many B-cell malignancies. Idelalisib is a first-in-class, selective, oral inhibitor of PI3Kδ that has shown considerable monotherapy activity in recurrent iNHL (Kahl, ICML 2011), as well as combination therapy (Fowler, ASCO 2012). **Methods:** This phase I study evaluated the activity of continuous (48 weeks) idelalisib (Id), 100/150 mg BID, in combination with rituximab (R) (375 mg/m^2 weekly x 8 doses) (Id+R), with bendamustine (B) (90 mg/m^2 x 2, for 6 cycles) (Id+B), or in combination with R (375 mg/m^2 monthly x 6) and B (90 mg/m^2 x 2), for 6 cycles (Id+BR). Investigators assessed response according to standard criteria (Cheson 2007). Patients who continued to benefit were able to enroll on an extension study. **Results:** Study enrolled 78 pts with relapsed/refractory iNHL, with 34 (44%) pts continuing on treatment in the ongoing extension protocol. The 3 cohorts included Id+R (N=30), Id+B (N=34), and Id+BR (N=14). Pts were 67% male, median age [range] of 62 [37E84] years, 41% with refractory disease, 88% stage III/IV, and 36% of FL with high FLIPI scores. The median [range] number of prior therapies was 3 [1E10]. The median [range] duration of treatment was 10.6 [0.5-29.2] months. Overall response rate (ORR) was 63/78 (81%), with 22/78 (28%) CR. The ORR/CR for Id+R was 77%/20%, Id+B was 85%/29%, and Id+BR was 79%/43%. At 20 months, the PFS was 66%. For responders, 73% were progression-free at 20 months. Most common adverse events included (total%/≥G3%) pyrexia (56/4), fatigue (45/4), nausea (41/0), rash (40/8), cough (37/0), diarrhea (36/8), chills (18/0), URI (18/1), and pneumonia (17/15). Lab abnormalities included (total%/≥G3%) ALT/AST elevations (56/17). **Conclusions:** Idelalisib-based combination therapy is highly active and well tolerated in patients with relapsed/refractory iNHL. These data support further clinical development. Phase III trials evaluating the efficacy of idelalisib in combination with R, or BR in iNHL are ongoing (NCT01732913, NCT01732926). Clinical trial information: NCT01732913, NCT01732929.