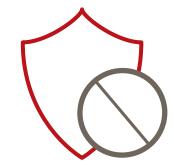
Pirtobrutinib in Relapsed/Refractory Mantle Cell Lymphoma Patients With Prior cBTKi: Updated Safety and Efficacy, Including High-Risk Subgroup Analyses From the Phase 1/2 BRUIN Study

JB Cohen; NN Shah, W Jurczak, PL Zinzani, CY Cheah, TA Eyre, CS Ujjani, Y Koh, WS Kim, SD Nasta, I Flinn, B Tessoulin, S Ma, AJ Alencar, DJ Lewis, JA Woyach, KJ Maddocks, K Patel, Y Wang, J Rhodes, CS Tam, JF Seymour, H Nagai, JM Vose, B Fakhri, MS Hoffmann, F Hernandez-Ilizaliturri, AD Zelenetz, A Kumar, T Munir, D Tsai, M Balbas, B Liu, AS Ruppert, B Nguyen, LE Roeker, ML Wang

Background

Although **cBTKi**'s are effective against **MCL**, resistance (which is poorly understood) often develops, resulting in an **unmet need post cBTKi**



Pirtobrutinib is a highly selective, noncovalent (reversible) BTKi with accelerated approval in the United States to treat R/R MCL following at least 2 lines of prior therapy, including **prior cBTKi**



An **updated analysis** of the phase 1/2 BRUIN study examined the efficacy and safety of pirtobrutinib in patients with R/R MCL with a median survival follow-up time of 2 years

Study design

The phase 1/2 BRUIN study examined the efficacy and safety of pirtobrutinib in patients with MCL, with or without previous cBTKi treatment

Efficacy-evaluable patients



Prior cBTKi (n=152)

cBTKi naïve (n=14)



Safety was assessed in patients with MCL (n=166)

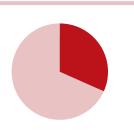
Prior cBTKi patient characteristics (n=152)

- Median age 70 years
- 53% with bone marrow involvement
- Majority classified as intermediate or high-risk sMIPI
- Heavily pretreated (median # prior systemic lines=3)
- 84% discontinued any prior BTKi due to progressive disease

Efficacy results: prior cBTKi (n=152)

Prior cBTKi (n=152)

Median PFS: 5.6 months 18-month PFS rate: 31.8%



ORR was 49.3% Median DOR was 21.6 months Median OS was 23.5 months

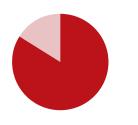
Clinically meaningful ORRs were observed in high-risk subgroups, including Ki-67 ≥30% and *TP53*-mutated

Efficacy results: cBTKi-naïve (n=14)

cBTKi-naïve (n=14)

ORR was 85.7%

18-month PFS rate: 83.9% (median NE)



Safety results in patients with MCL (n=166)



Median time on treatment for the MCL population was 5.5 months

Discontinuations due to TRAEs occurred in 3% (n=5) of MCL patients



Treatment-emergent **adverse events** (any grade; ≥15%):

Fatigue 31.9%

Diarrhea 22.3%

Dyspnea 17.5%

Anemia 16.9%

Platelet count decreased 15.1%

Adverse events of interest (grade ≥3; all cause)

Infections^a

Hemorrhage^b

Hypertension

19.9%

2.4%

0.6% Rashd

Atrial fibrillation/flutter^c 1.8%

1.2%

Arthralgia

0.6%

Summary

With a median survival follow-up of 2 years, pirtobrutinib continues to show promising efficacy in heavily pretreated patients with R/R MCL after a prior cBTKi



Consistent response rates were seen in patients with high-risk disease features, including elevated Ki-67 index and TP53 mutations



Pirtobrutinib showed low rates of discontinuation due to drug-related toxicity