Updated results from a phase II study of infigratinib (BGJ398), a selective pan-FGFR kinase inhibitor, in patients with previously treated advanced cholangiocarcinoma containing FGFR2 fusions


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Background: Fibroblast growth factor receptor 2 (FGFR2) fusions occur in 13–17% of intrabiliary cholangiocarcinomas (IHC). A multicenter, open-label, phase II study (NCT02150967) evaluated the antitumor activity of infigratinib, an ATP-competitive FGFR1–3-selective oral tyrosine kinase inhibitor, in patients (pts) with previously-treated advanced IHC containing FGFR2 fusions.

Methods: Pts received infigratinib 125 mg orally daily for 21 days of 28-day cycles until unacceptable toxicity, disease progression, investigator discretion, or withdrawal of consent. Primary endpoint: investigator-assessed confirmed overall response rate (cORR, RECIST 1.1). Secondary endpoints: progression-free survival (PFS), disease control rate (DCR), best overall response, overall survival (OS), safety, pharmacokinetics.

Results: 71 pts (62% women; median age 53 years; median 2 prior lines of therapy) with FGFR2 fusions/translocations were included. At the prespecified data cutoff (8-Aug 2018), median duration of treatment was 5.5 months, median duration of follow-up was 8.4 months, and 62 pts had discontinued treatment. The ORR (confirmed and unconfirmed) was 31.0% (95% CI 20.5–43.1%) and the cORR (in pts with potential for confirmation) was 26.9% (95% CI 16.8–39.1%). Other efficacy findings: cORR in pts receiving ≤1 prior lines of treatment was 39.3% (n = 28), and ≥2 17.9% (n = 39); DCR 83.6% (95% CI 72.5–91.5%); median duration of response 5.4 (95% CI 3–7.4) months; median PFS 6.8 (95% CI 5.3–7.6) months; median OS 12.5 (95% CI 9.9–16.6) months. Most common any grade treatment-emergent adverse events (TEAEs): hyperphosphatemia (73.2%), fatigue (49.3%), stomatitis (45.1%), alopecia (38.0%), constipation (35.2%). Grade 3/4 TEAEs occurred in 47 pts (66.2%), including hyperphosphatemia (14.1%), hyperphosphatemia (12.7%), and hyponatremia (11.3%).

Conclusions: Infigratinib-associated toxicity is manageable, and our efficacy findings suggest clinically meaningful activity after chemotherapy in pts with IHC containing FGFR2 fusions. The efficacy of infigratinib in this study supports FGFR2 as a therapeutic target in FGFR2-fusion IHC.

Clinical trial identification: NCT02150967.

Editorial acknowledgement: Editorial assistance was provided by Lee Miller from Miller Medical Communications Ltd.

Legal entity responsible for the study: QED Therapeutics Inc.

Funding: QED Therapeutics Inc.