

MARKET WATCH

Upcoming market catalysts in Q1 2013

Important market catalysts in the first quarter of 2013 include an approval decision on ponatinib for the treatment of chronic myeloid leukaemia (CML) and Philadelphia-chromosome positive acute lymphoblastic leukaemia (Ph⁺ ALL), as well as top-line Phase III data that are expected for ThermoDox (for the treatment of liver cancer) and for Gammagard (a potential disease-modifying therapy for Alzheimer's disease (AD)).

The US Food and Drug Administration (FDA) granted priority review of ponatinib for patients with CML or Ph⁺ ALL who are resistant or intolerant to other therapies, and a decision on potential accelerated approval is expected by 27 March 2013. Ponatinib (developed by Ariad) is an oral, multitargeted tyrosine kinase inhibitor (TKI) that not only acts on native forms of BCR-ABL, a kinase that is always active owing to a chromosomal abnormality, but also inhibits isoforms with a T315I mutation that confers resistance to all existing TKI therapies. The decision will be based on the single-arm Phase II PACE study, which was designed to assess efficacy in patients who are resistant or intolerant to the approved BCR-ABL inhibitors dasatinib or nilotinib, or patients who have a T315I mutation. In this study, 54% of patients with chronic-phase CML (70% with the T315I mutation) achieved a major cytogenetic response. Additionally, 60% of blast-phase (50% with the T315I mutation) and 35% (33%

with the T315I mutation) of advanced-phase CML or Ph⁺ ALL patients achieved a major haematological response. A positive approval decision seems likely given the lack of treatment options for such patients, especially those with the T315I mutation. A Phase III trial involving newly diagnosed chronic-phase CML patients is underway to test ponatinib head-to-head with the currently approved frontline treatment imatinib.

The top-line results of a Phase III trial known as HEAT that is evaluating ThermoDox (developed by Celsion) for non-resectable liver cancer are expected this month. ThermoDox, a heat-sensitive liposomal encapsulation of the cytotoxic cancer drug doxorubicin, may allow the deposition of much higher doses of doxorubicin than could be given systemically. The delivery is targeted with local mild hyperthermia induced by radiofrequency ablation (RFA), improving on current treatment using RFA alone. Positive Phase III results would probably support regulatory filing of the therapy — which has orphan drug status — in 2013, given the limited treatment options for liver cancer.

Baxter is expected to release data from the Phase III GAP study of Gammagard (IVIG) for the treatment of mild to moderate AD early in 2013. The drug is a preparation of broad-spectrum antibodies derived from large pools of donated human plasma. IVIG is currently approved for antibody replacement in rare

immunodeficiencies, and a rationale for its potential activity in AD remains unclear but might be related to broad anti-inflammatory effects or modulation of amyloid- β . A 24-patient Phase II study showed no benefit of IVIG at 6 months, but an extension study showed a positive signal at 18 months and no decline in AD measures in four patients who had received the 0.4 mg per kg dose for 36 months. Given that the Phase II results were from a very small number of patients, as well as the recent failures of amyloid- β -targeted antibody approaches, it seems unlikely that a strong effect will be observed with 18 months of IVIG in the 390-patient GAP study. In addition, only ~10,000 patients are currently treated with IVIG, and scaling up production to meet the treatment needs of millions of patients with AD could be very challenging.

*Edny Inui is a scientific analyst at Sagient Research Systems, 3655 Nobel Drive, San Diego, California 92122, USA.
e-mail: einui@sagientresearch.com*

The author declares no competing financial interests.

Artville/Russell Thurston

