

# Correction regarding data on blinatumomab-associated seizures

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With regard to the Review article by Stone and DeAngelis, published in the February 2016 issue of this journal (Cancer-treatment-induced neurotoxicity — focus on newer treatments. *Nat. Rev. Clin. Oncol.* **13**, 92–105 (2016))<sup>1</sup>, we wish to address an erroneous statement made by the authors that blinatumomab treatment “causes seizures in 15–20% of treated patients” (REF. 1). According to the reference cited to support this statement within the Review<sup>2</sup>, and the published clinical-trial literature on blinatumomab<sup>3–5</sup>, this range refers to the total frequencies of all grade  $\geq 3$  neurological adverse events combined, including not only seizures, but also encephalopathy, confusion, and cerebellar symptoms. Across several studies involving adults with relapsed and/or refractory B-cell acute lymphoblastic leukaemia (B-ALL) who received blinatumomab, seizures of any grade were reported in 2.1–8.3% of 246 patients in total: one of 21 patients with persistence or relapse of minimal residual disease (4.8%) had a grade 3 seizure in an early phase II trial<sup>3</sup>; three of 36 patients (8.3%) had epileptic seizures or convulsions leading to treatment interruption in the dose-finding

phase II study<sup>4</sup>; and four of 189 patients (2.1%) had convulsions in the confirmatory multicentre phase II trial<sup>5</sup>.

Among the patients treated with blinatumomab in clinical trials, most of the neurological adverse events observed have been low-grade tremors and dizziness<sup>3–5</sup>. More-serious neurological events, such as seizures and encephalopathy, have been the most-common reasons for treatment interruptions (frequency of 15–17%) and discontinuations (frequency of 4.8%)<sup>3–5</sup>, but patients have generally responded well to interventional therapy for these toxicities. Indeed, these adverse events have predominantly been limited in duration and primarily resolved with treatment interruption and/or standard anticonvulsive therapies, and most of the patients were subsequently able to resume blinatumomab therapy<sup>3–5</sup>.

Given the few treatment options currently available for relapsed and/or refractory B-ALL, we feel that accurately reporting the blinatumomab-related seizure rate is pertinent, in order to better inform appropriate treatment decisions.

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