**Additional file 1** Tumour volume growth curves (calliper measurements) of CB17 SCID mice bearing subcutaneous DOHH2 human B cell lymphoma. Mice were SC injected with tumour cells at day 0. Mice were treated with vehicle or rituximab (10 mg/kg, *ip*) at day 22, 29 and 36. Red arrows represent treatment days. t<sub>0</sub> (day 21), t<sub>1</sub> (day 34) and t<sub>2</sub> (day 42) represent [<sup>18</sup>F]fludarabine PET/CT imaging days for treated animals at baseline (1 day before dosing) and follow-up scans, respectively. t<sub>0</sub>' (day 23), t<sub>1</sub>' (day 37) and t<sub>2</sub>' (day 44) represent [<sup>18</sup>F]fludarabine PET/CT imaging days for vehicle animals at baseline and follow-up scans, respectively. Error bars: ± SEM.

