Figure S1: PIM1 and PIM2 expression in NHL cell lines. A Protein expression of PIM kinases was assessed in different BCL cell lines by western blot after nuclear-cytoplasmic fractionation. The data are representative of three independent experiments. B mRNA expression of PIM1 and PIM2 was measured by RT-qPCR and is shown relative to TBP expression. Means and sd of two to five independent experiments are plotted.
Figure S2: Smi4a represses proliferation of NHL cell lines. (A) Raji, (B) Ramos, (C) OCI-Ly10 and (D) OCI-Ly3 were treated with 40 µM Smi4a starting from day 0. Cell number was assessed by MTT assay. Left: One experiment is shown for each cell line. Right: The means and SD of at least two independent experiments conducted in duplicate wells of a 6-well plate are plotted. For \( n \geq 3 \) Student’s t test was performed: * \( p < 0.05 \), ** \( p < 0.01 \).
**Figure S3:** Anti-proliferative potential of various PIM kinase inhibitors on NHL cell lines. Burkitt lymphoma Raji and Ramos (**A**), ABC-DLBCL OCI-Ly3 and OCI-Ly10 (**B**) and GCB-DLBCL SUDHL6 and OCI-Ly19 cells (**C**) were treated with 40 µM Quercetagentin or PIM1/2 inhibitor VI or SMI4a (SUDHL6, OCI-Ly19) for indicated times. Treatment started on day 0 and cells were counted daily using Trypan blue staining and a haemocytometer. The averages of one experiment conducted in duplicate wells are shown. For DMSO averages and standard deviations of two independent experiments are plotted.
Figure S4: Identification of c-MYC/PIM1-bound cis-regulatory elements by ChIP in BL-derived cell lines. ChIP for PIM1, c-MYC and Pol II was done in Raji and Ramos cells and primers for different possible c-MYC binding sites were used for qPCR. For Raji cells, means and standard deviations of two technical replicates are shown, values for Ramos cells are from one experiment. PIM1 and c-MYC binding was observed at the GNL3 promoter (+0.1kb, +0.4kb from the TSS) and the NPM1 enhancer (+1kb from the TSS) in both cell lines. The ID2, SEPX1 and FOSL1 sites were negative for PIM1 and c-MYC in Raji cells, but binding at the ID2 -1.4kb region and the FOSL1 gene was observed in Ramos cells. POL II was enriched at the GNL3 promoter and NPM1 enhancer, but also at the SEPX1 promoter in both cell lines. The other tested regions were showed only very low Pol II binding.