

Table S1

(A)

	C_{imatinib} [μM] Ba/F3-BCR-ABL	C_{imatinib} [μM] K562	C_{dasatinib} [μM] K562
Lysate (diluted)	0.52 (±0.09)	0.81 (±0.23)	0.000583 (±0.00004)
Intracellular concentration (calculated)	10994	6513	4.688

(B)

	Diameter [μM]	Calculated volume/cell [L]
Ba/F3-BCR-ABL	12.18 (±1.63)	0.946 x 10⁻¹²
K562	16.81 (±1.93)	2.487 x 10⁻¹²

Table S1: TKI concentrations measured by HPLC / LC-MS/MS in cellular lysates

(A) TKI concentrations \pm SEM measured by HPLC / LC-MS/MS in cellular lysates treated with 25 μ M imatinib or 100nM dasatinib for 2h as indicated followed by drug wash-out. Intracellular TKI concentrations were calculated based on the mean cellular volume.

(B) Mean size in μ m \pm SD of Ba/F3-BCR-ABL cells and K562 cells. In total, 100 cells of each cell line were measured. Intracellular imatinib concentration was calculated based on the assumption that cells are spherical ($V = 4/3 \times \pi \times r^3$). Thus, the total cellular volume for 0.2×10^6 cells is 0.19 μ l for Ba/F3-BCR-ABL cells and 0.5 μ l for K562 cells.