Supplementary data for:

89Zr-ImmunoPET shows therapeutic efficacy of anti-CD20 interferon-α fusion protein in a murine B-cell lymphoma model

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Running title: 89Zr-anti-CD20-IFNα immunoPET in B-cell lymphoma

Table S1. Radiolabeling results

|	^{89}Zr-DFO-Rit-mIFNα		^{89}Zr-DFO-Rit	
	Mean ± SD	N	Mean ± SD	N
Labeling Efficiency [%]	98.0 ±1.3	2	98.0 ± 0.9	3
Specific Activity [MBq/µg]	0.21 ± 0.01	2	0.19 ± 0.03	3
Radiochemical Purity [%]	99.1 ± 0.06	2	98.7 ± 1.1	3
Immunoreactivity (38C13-hCD20)	64.2 ± 6.3	2	64.6 ± 15.0	3
Immunoreactivity (38C13)	44.6 ± 3.3	2	8.1 ± 5.2	2

Table S2. Ex vivo biodistribution. Site-specifically radiolabeled (mal-DFO) species-specific fusion proteins and parental antibodies. C3H mice bearing 38C13-hCD20 subcutaneous tumors. 20 h p.i. of 10 µg protein. N=4 per group, %ID/g values are depicted as mean ± SEM.

	^{89}Zr-anti-CD20 hIgG1-hIFNα14		^{89}Zr-anti-CD20 hIgG1 (Rit)		^{89}Zr-anti-CD20 mIgG2a-mIFNα1		^{89}Zr-anti-CD20 mIgG2a	
	Mean	SEM	Mean	SEM	Mean	SEM	Mean	SEM
Blood	7.7	1.0	8.5	1.9	3.2	0.6	4.6	1.1
38C13-hCD20	14.0	3.1	40.7	7.5	10.6	2.5	16.9	3.3
Heart	3.2	0.5	3.3	0.6	1.6	0.2	1.7	0.4
Lung	3.8	0.5	4.2	0.8	2.2	0.3	2.5	0.7
Liver	20.6	2.2	4.5	0.8	23.9	2.7	4.1	0.7
Kidney	33.8	3.4	6.4	0.3	6.9	0.8	2.8	0.5
Spleen	36.1	3.4	4.9	0.6	19.1	2.0	6.0	1.0
Stomach	1.1	0.1	1.0	0.1	1.0	0.1	0.6	0.1
Intestine	2.1	0.4	1.6	0.1	2.0	0.1	0.9	0.1
Muscle	0.5	0.1	0.7	0.1	0.3	0.0	0.3	0.1
Carcass	1.4	0.2	1.7	0.1	0.9	0.1	0.8	0.1

A) ^{89}Zr-anti-CD20 mIgG2a-mIFNα
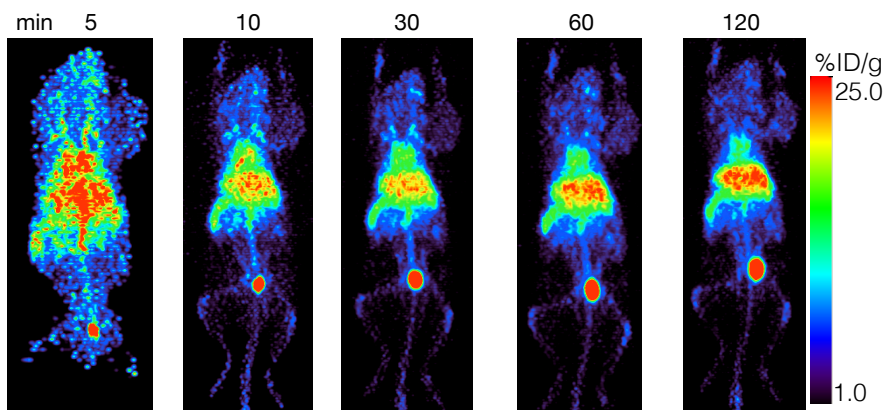
B) ^{89}Zr-anti-CD20 mIgG2a
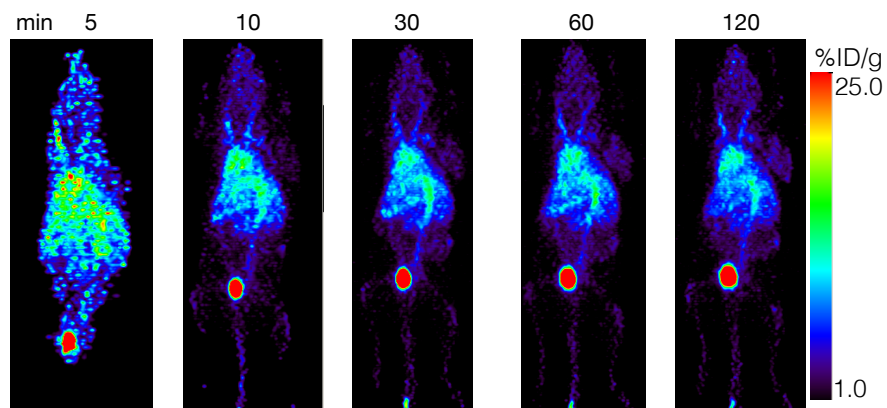
C) ^{89}Zr-anti-CD20 hIgG1-hIFNα14
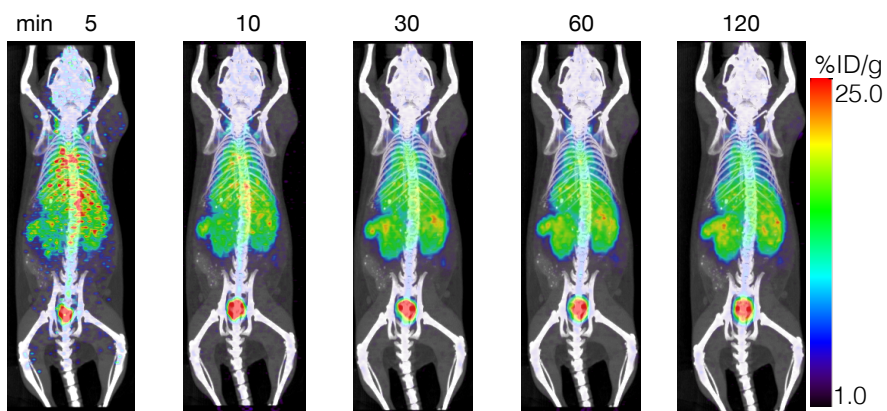
Supplementary Figure S1. In vivo biodistribution of low dose ^{89}Zr-anti-CD20 immunocytokines and ^{89}Zr-anti-CD20 mAbs.
Dynamic (0-120 min) PET scans obtained post-injection of 10 µg (1.85 MBq) of **A)** ^{89}Zr-anti-CD20 mIgG2a-mIFNα; **B)** ^{89}Zr-anti-CD20 mIgG2a; **C)** ^{89}Zr-anti-CD20 hIgG1-hIFNα14.