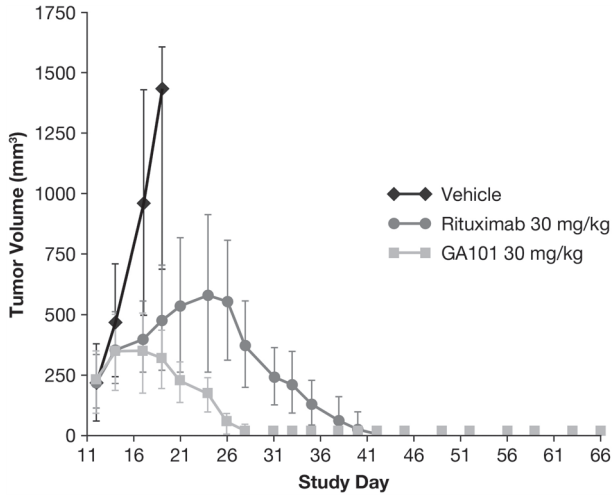
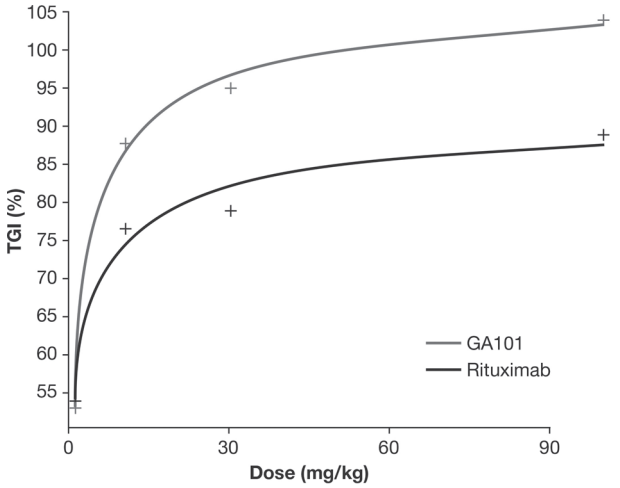
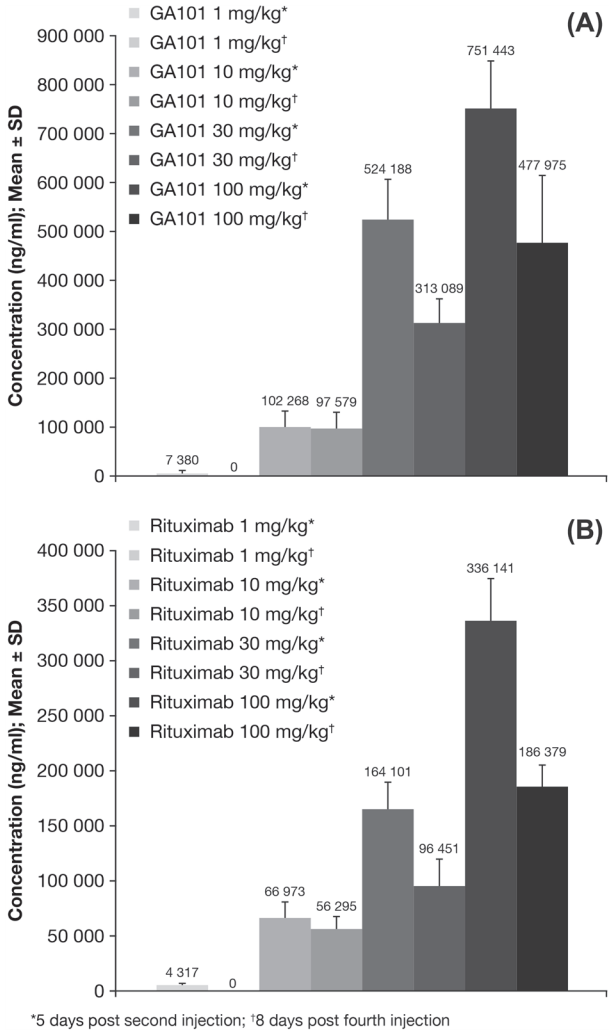
Supplementary material for Herting F, et al. Enhanced anti-tumor activity of the glycoengineered type II CD20 antibody obinutuzumab (GA101) in combination with chemotherapy in xenograft models of human lymphoma. Leuk Lymphoma 2014; 55:2151–2160.



Supplementary Figure 1. Tumor size during treatment with rituximab or obinutuzumab (GA101) (30 mg/kg i.p. x3) in single-agent Z138 when tumor load reached a volume of 220 mm^3.



Supplementary Figure 3. Tumour growth inhibition (%) at Day 31 following treatment with obinutuzumab (GA101) and rituximab at various dose concentrations. TGI, tumor growth inhibition.



Supplementary Figure 2. Serum levels of (A) anti-CD20 antibody obinutuzumab (GA101) and (B) rituximab at various dose concentrations. SD, standard deviation.

Supplementary Table I. Treatment schedules by chemotherapy combination partner.

	n	Treatment schedule	Median tumor volume at staging (mm^3)
Single-agent studies in Z138 xenograft			
Single-agent obinutuzumab (GA101) or rituximab			
Z138 (mantle cell lymphoma) tumor xenograft	10	Vehicle	214
Treatment initiation 14 days post cell transplantation			
Study termination Day 35–78	10	Rituximab 10 mg/kg i.v. q7d × 4	207
	10	Obinutuzumab (GA101) 10 mg/kg i.v. q7d × 4	211
Single-agent obinutuzumab (GA101) or rituximab			
Z138 (mantle cell lymphoma) tumor xenograft	10	Vehicle	–
Treatment initiation 12 days post cell transplantation			
Study termination Day 21–66	10	Rituximab 30 mg/kg i.p. × 3	–
	10	Obinutuzumab (GA101) 30 mg/kg i.p. × 3	–
Single-agent obinutuzumab (GA101) or rituximab			
Z138 (mantle cell lymphoma) tumor xenograft	10	Vehicle	397
Treatment initiation 20 days post cell transplantation			
Study termination Day 49	10	Rituximab 1 mg/kg i.v. q7d × 4	396
	10	Rituximab 10 mg/kg i.v. q7d × 4	396
	10	Rituximab 30 mg/kg i.v. q7d × 4	401
	10	Rituximab 100 mg/kg i.v. q7d × 4	406
	10	Obinutuzumab (GA101) 1 mg/kg i.vi q7d × 4	402
	10	Obinutuzumab (GA101) 10 mg/kg i.v. q7d × 4	394
	10	Obinutuzumab (GA101) 30 mg/kg i.v. q7d × 4	410
	10	Obinutuzumab (GA101) 100 mg/kg i.v. q7d × 4	393
Single-agent obinutuzumab (GA101)			
Z138 (mantle cell lymphoma) tumor xenograft	10	Vehicle	201
Treatment initiation 14 days post cell transplantation			
Study termination Day 40	10	Obinutuzumab (GA101) 10 mg/kg i.v. q7d × 4	203
	10	Obinutuzumab (GA101) WT 10 mg/kg i.v. q7d × 4	202
Combination studies in Z138 xenograft			
Bendamustine combination			
Z138 (mantle cell lymphoma) tumor xenograft	10	Vehicle	442
Treatment initiation 19 days post cell transplantation	10	Obinutuzumab (GA101) 1 mg/kg i.p., Days 19, 26	433
Study termination Day 33			
	10	Rituximab 1 mg/kg i.p., Days 19, 26	455
	10	Bendamustine 3 mg/kg i.p., Days 19, 20, 21, 22	443
	10	Obinutuzumab (GA101) 1 mg/kg i.p. Days 19, 26 + bendamustine 3 mg/kg i.p., Days 19, 20, 21, 22	446
	10	Rituximab 1 mg/kg i.p., Days 19, 26 + bendamustine 3 mg/kg i.p., Days 19, 20, 21, 22	431
Fludarabine combination			
Z138 (mantle cell lymphoma) tumor xenograft	10	Vehicle	399
Treatment initiation 22 days post cell transplantation	10	Obinutuzumab (GA101) 1 mg/kg i.v., Days 22, 29	411
Study termination Day 43			
	10	Rituximab 1 mg/kg i.v., Days 22, 29	406
	10	Fludarabine 40 mg/kg i.p., Days 22, 23, 24	408
	10	Obinutuzumab (GA101) 1 mg/kg i.v., Days 22, 29 + fludarabine 40 mg/kg i.p., Days 22, 23, 24	403
	10	Rituximab 1 mg/kg i.v., Days 22, 29 + fludarabine 40 mg/kg i.p., Days 22, 23, 24	416
Chlorambucil combination			
Z138 (mantle cell lymphoma) tumor xenograft	10	Vehicle	272
Treatment initiation 27 days post cell transplantation			
Study termination Day 41			

(*Continued*)

Supplementary Table I. (*Continued*)

	n	Treatment schedule	Median tumor volume at staging (mm^3)
	10	Obinutuzumab (GA101) 1 mg/kg i.v., Days 27, 34	269
	10	Rituximab 1 mg/kg i.v., Days 27, 34	281
	10	Chlorambucil 4 mg/kg i.p., Days 27, 28, 29	273
	10	Obinutuzumab (GA101) 1 mg/kg i.v., Days 27, 34 + chlorambucil 4 mg/kg i.p., Days 27, 28, 29	274
	10	Rituximab 1 mg/kg i.v., Days 27, 34 + chlorambucil 4 mg/kg i.p., Days 27, 28, 29	274
Single-agent studies in WSU-DLCL2 xenograft			
Single-agent obinutuzumab (GA101) or cyclophosphamide/vincristine/doxorubicin			
WSU-DLCL2 lymphoma xenograft	10	Vehicle	143
Treatment initiation 9 days post cell transplantation			
Study termination Day 30			
	10	Cyclophosphamide 25 mg/kg plus vincristine 0.25 mg/kg i.v. q7d × 3	140
	10	Doxorubicin 3 mg/kg i.v. q7d × 3	143
	10	Cyclophosphamide 25 mg/kg plus vincristine 0.25 mg/kg i.v. q7d plus doxorubicin 3 mg/kg i.v. q7d × 3	140
	10	Obinutuzumab (GA101) 30 mg/kg i.v. q7d × 3	143
	10	Obinutuzumab (GA101) 100 mg/kg i.v. q7d × 3	144
Combination studies in WSU-DLCL2 xenograft			
Cyclophosphamide/vincristine combination			
WSU-DLCL2 lymphoma xenograft	10	Vehicle	115
Treatment initiation 9 days post cell transplantation			
Study termination Day 35–64			
	10	Rituximab 30 mg/kg i.v., Days 9, 15, 23, 30, 37, 44, 51, 58	114
	10	Obinutuzumab (GA101) 30 mg/kg i.v., Days 9, 15, 23, 30, 37, 44, 51, 58	114
	10	CYC/VINC 25/0.25 mg/kg i.v., Days 9, 15, 23, 30, 37, 44, 51, 58	115
	10	Obinutuzumab (GA101) 30 mg/kg i.v., + CYC/VINC 25/0.25 mg/kg i.v., Days 9, 15, 23, 30, 37, 44, 51, 58	112
	10	Rituximab 30 mg/kg i.v., + CYC/VINC 25/0.25 mg/kg i.v., Days 9, 15, 23, 30, 37, 44, 51, 58	112
	10	CYC/VINC 25/0.25 mg/kg i.v., Days 9, 15, 23 then obinutuzumab (GA101) 30 mg/kg i.v, Days 30, 37, 44, 51, 58	115
	10	CYC/VINC 25/0.25 mg/kg i.v., Days 9, 15, 23 then rituximab 30 mg/kg i.v., Days 30, 37, 44, 51, 58	113
	10	CYC/VINC 25/0.25 mg/kg i.v., Days 9, 15, 23 then CYC/VINC 25/0.25 mg/kg i.v., + obinutuzumab (GA101) 30 mg/kg i.v., Days 30, 37, 44, 51, 58	113
	10	CYC/VINC 25/0.25 mg/kg i.v., Days 9, 15, 23 then CYC/VINC 25/0.25 mg/kg i.v., + rituximab 30 mg/kg i.v., Days 30, 37, 44, 51, 58	113

CYC, cyclophosphamide; i.p., intraperitoneal; i.v., intravenous; q7d, every 7 days; VINC, vincristine.