

**Supplementary Table 1: *In vivo* study design**

SKOV-3, microsurgery CAR treatment IV, Day 21-22 post-tumor	Survival analysis	Intermediate sacrifice Day 62-65 post tumor	OVCAR-4, IP CAR treatment IP, Day 13 post-tumor	Survival analysis	Intermediate sacrifice Day 76 post- tumor
<b>MBBz</b> (n=11)	n= 8	n=3	<b>M28z</b> (n=7)	n= 7	
<b>M28z</b> (n=11)	n= 8**	n=3	<b>M1xx</b> (n=15)	n= 13	n=2
<b>M1xx</b> (n=11)	n= 8**	n=3	<b>Control</b> (n=10)	<b>CD19</b>	n= 5
<b>Control CD19</b> (n=9)	n= 7	n=2 +1*		<b>Untreated</b>	n= 5

\* One mouse was sacrificed due to tumor burden at the same time as two other mice sacrificed to perform analysis at intermediate timepoint. This mouse was therefore included in survival analysis. \*\* One mouse in M28z group and three mice in M1xx group were excluded from survival analysis because died/sacrificed for reasons unrelated to high tumor burden or its complications.