Supplementary Figure 1
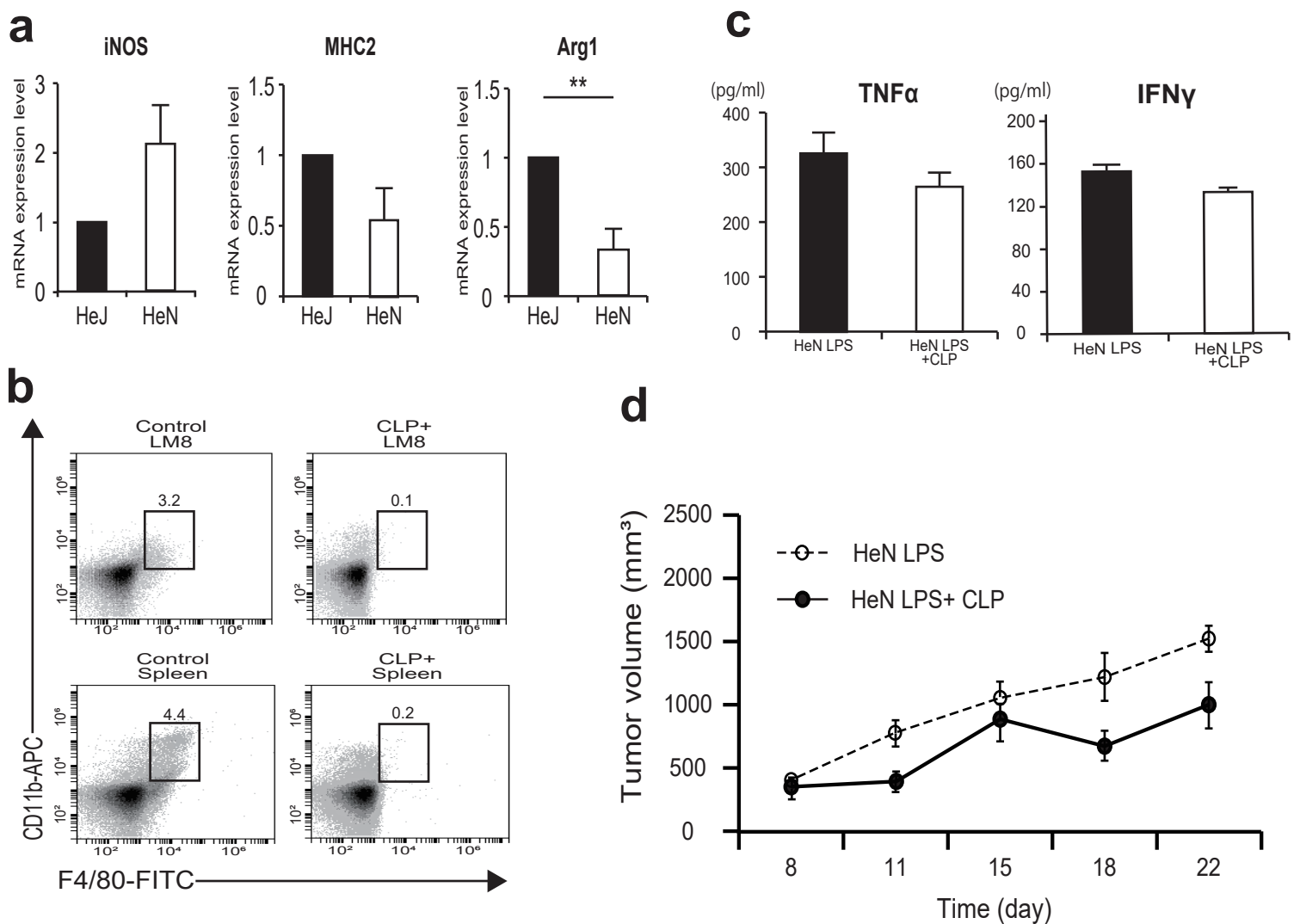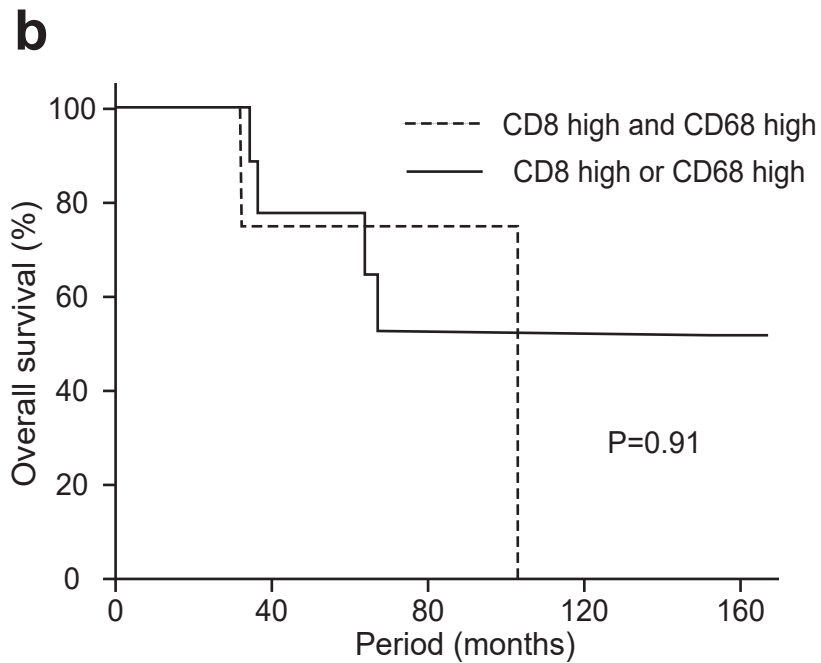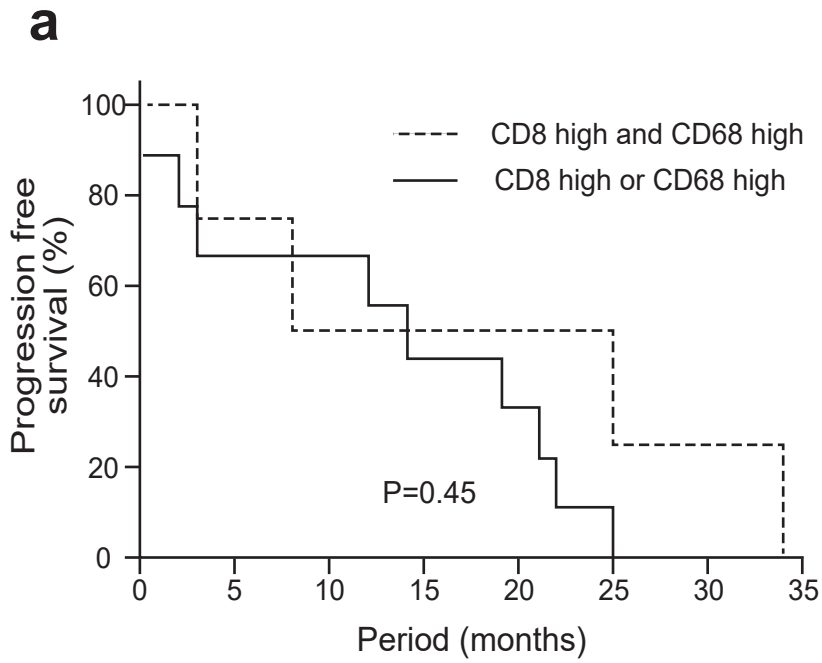
(a) LM8 tumor volume curve in CD8+-depleted C3H/HeN (red), C3H/HeN (green), LPS-treated C3H/HeN (orange), LPS-treated C3H/HeJ (blue) and C3H/HeJ (black) mice (n=5). LPS was administered weekly. Values represent means ± S.D. * indicates $P < 0.05$ by Mann–Whitney U-test. **(b)** Kaplan–Meier curves for overall survival probability of C3H/HeN (green), C3H/HeJ (black) and CD8+-depleted C3H/HeN (red) mice with LM8 tumors (n = 5). The generalized Wilcoxon test was used for statistical analysis between C3H/HeN and CD8+-depleted C3H/HeN mice. **(c)** Kaplan–Meier curves for overall survival probability of C3H/HeN (green), C3H/HeJ (black) and C3H/HeN LPS (orange) mice with LM8 tumors (n = 5). The generalized Wilcoxon test was used for statistical analysis between C3H/HeN and C3H/HeN LPS mice.

Supplementary Figure 2

(a) qRT-PCR analysis of mRNA expression levels of M1 (iNOS and MHC 2) and M2 (Arg1) macrophage differentiation markers in tumor-associated macrophages in LM8 tumor. (n = 4) Values represent means ± S.D. ** indicates P < 0.01 by Mann–Whitney U-test. (b) Flow cytometry analysis of LM8 tumor and mouse spleen to confirm that macrophages were removed from the tumor and spleen after CLP administration. Data represent representative of three independent experiments. (c) Serum TNFα and IFNγ concentrations in control C3H/HeN mice and macrophage-depleted C3H/HeN mice 6 hours after LPS administration (n=3). Values represent means ± S.D. * indicates P < 0.05 by Mann–Whitney U-test. (d) LM8 tumor volume after depletion of macrophages by CLP (n=5). The dotted line represents HeN LPS mice and the solid line represents the CLP-administered HeN LPS.

Supplementary Figure 3

(a,b) Kaplan-Meier curves for progression-free survival probability and overall survival probability of OS patients. The dotted line represents the CD8 and CD68 double high group (n=4) and the solid line represents CD8 or CD68 either high group (n=9). A generalized Wilcoxon test was used for statistical analysis.

Supplementary Table1

Subject	Age(years)	Sex[1]	Primary site	Adjuvant Chemothrapy[2]	Metastasis at diagnosis	Outcome[3]
1	4	M	Humerus	ICE	M0	DOD
2	19	M	Tibia	IFO	M0	DOD
3	20	M	Humerus	ICE	M1	DOD
4	17	F	Femur	ICE	M0	DOD
5	17	M	Femur	ICE	M0	DOD
6	53	M	Iliac	AP	M0	NED
7	62	F	Rib	IFO	M0	DOD
8	15	M	Fibula	CDDP	M0	DOD
9	9	M	Femer	IFO	M0	NED
10	9	F	Radius	ICE	M0	NED
11	16	M	Femur	MAP+IFO	M1	DOD
12	13	M	Femur	MAP	M0	NED
13	22	M	Femur	IFO	M0	NED

[1] Sex, F -Femal, M -Male

[2] Chemotherapy, MAP -methotrexate + doxorubicin+ cisplatin, IE -ifosfamide+ etoposide, IFO -ifosfamide, AP -doxorubicin + cisplatin

[3] Outcome, DOD -dead of disease, NED -no evidence of diseas