#### **Supplementary Figure** 1

## Α

Β

	Introduction period					boost period				maintenace period			
Γ	(1 r	1 <sup>st</sup> nonth)	2 <sup>nd</sup> (1 month)			3 <sup>rd</sup> (1 month)		4 <sup>th</sup> (1 month)		5 <sup>th</sup> (1 month)		6 <sup>th</sup> (1 month)	
Ì	1	11	1	1	1		ĺ	1			Ì		_,
							^	r	r r		<u>م</u>		
Weekly administration					Biweekly administration			ration	Monthly administration				
	Peptides (mg				g / injectio	n)	Adjuvants (		mg / injection)		Patient		
	_	Dose Level	I I	HSP70			GPC3		Hiltonol		IMP821		
	Level 1		1.0		1.0		1.4		0.25		3		
		Level 2	2.0		2.0		1.4		0.25		3		
	_		2.0		2.0		1.4		1.0		11		

🕇 Death Progressive disease

△ Stable disease

+ Study drop out

Vaccination therapy

Post vaccination therapies

HCC CRC

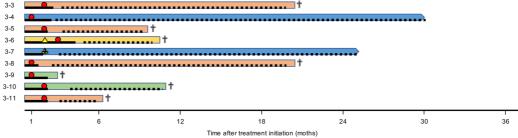
ESCC

GC

PDAC

1

Type of desease Patient 1-1 + 1-2 1 1-3 + 2-1 + 2-2 1 2-3 3-1 . ................. 3-2 **. ...** † + 3-3 3-4 3-5 3-6 



# 2

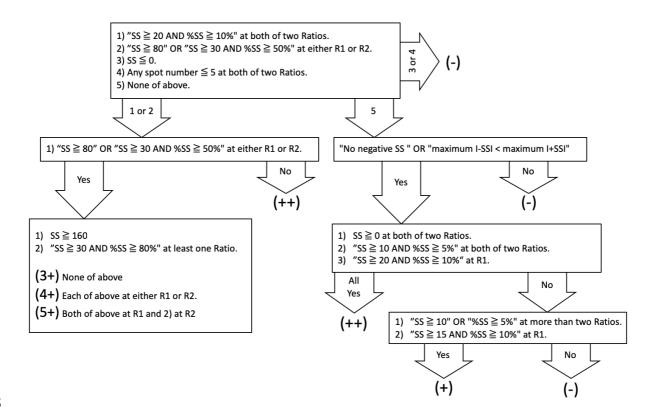
### 3 Fig. S1. Study design and clinical outcomes of enrolled patients.

A, Treatment schedule, dose escalation and cohort assignment of this study. B, Swimmer plot 4

for enrolled patients (n = 17). 5

6

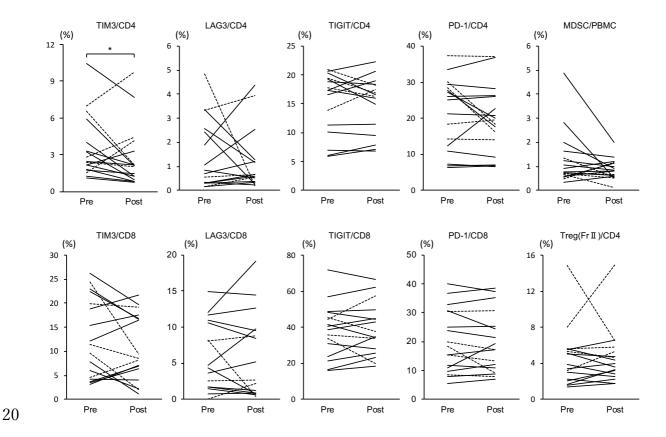
7





### 9 Fig. S2. ELISPOT assay protocol used in this study.

10 Positivity of antigen-specific T cell response was quantitatively defined according a tree 11 algorithm. In brief, the peptide-specific spots (SS) were the averages of triplicates and were 12 determined by subtracting the value of the HIV peptide-pulsed stimulator well from that of 13 the immunized peptide-pulsed stimulator well. %SS is the percentage of SS among the 14 average number of spots in the immunized peptide pulsed stimulator well. Positivity of 15 antigen-specific T cell response was classified as -, +, 2+, 3+, 4+, or 5+ depending on the 16 numbers of peptide-specific spots and the invariability of the peptide-specific spots at 17 different responder/stimulator ratios. SS, peptide-specific spots; R1, responder/stimulator 18 ratio = 1; R2, responder/stimulator ratio = 0.5.



### 21 Fig. S3. Flow cytometlic analysis of surface marker expression on PBMCs before and

## 22 after treatment

- 23 Comparison of the exhaustion marker expression levels in CD4 and CD8 T and
- 24 immunosuppressive (Treg and MDSC) cells in the PBMCs before and after one course of

<sup>25</sup> treatment. (\*, *P* < 0.05)