



**SUPPLEMENTAL TABLE S1:** Flowchart of patient disposition.

	Dose level				Total
	9 Gy in	15 Gy in	18 Gy in	24 Gy in	
	fraction of 3	fraction of 5	fraction of 6	fraction of 8	
	Gy	Gy	Gy	Gy	
<b>Treated patients (ROW)</b>	(% 13 (63%)	6 (37%)	0 (0%)	0 (0%)	19 (100%)
<b>LDH level</b>					
Normal	7	2	0	0	9
Elevated	6	4	0	0	10
<b>Metastasis staging</b>					
M1a	4	0	0	0	4
M1b	1	1	0	0	2
M1c	8	5	0	0	13
<b>Site of irradiated lesions</b>					
Lymph nodes	5	4	0	0	9
Axillary	3	1	0	0	4
Inguinal	1	3	0	0	4
Supraclavicular	1	0	0	0	1
Subcutaneous nodules	8	2	0	0	10
Breast	1	1	0	0	2
Thoracic	1	0	0	0	1
Upper limb	1	0	0	0	1
Axillary	1	0	0	0	1
Lower limb	4	1	0	0	5
<b>Treatment discontinuation</b>					
Toxicity-related	9	4	0	0	13
Progression-related	4	2	0	0	6
<b>Global response*</b>					
SD	6	1	0	0	7
PR	2	1	0	0	3
CR	2	0	0	0	2
PD	2	2	0	0	4

**SUPPLEMENTAL TABLE S2:** This table synthesizes the initial extent of the melanoma (LDH level and metastases staging), as well as the sites of irradiated lesions, the reasons of permanent treatment discontinuation and the global response according to the dose level of radiotherapy. \* The initial melanoma staging of the patients: i) in CR was M1a for one patient and M1c for the other one, ii) in PR was M1a for one patient and M1c for 2 patients, iii) in SD was M1a for 2 patients, M1b for one patient and M1c for 4 patients, iv) in PD was M1b for one patient and M1c for 3 patients.

	<b>Level dose 1 N = 13</b>	<b>Level dose 2 N = 6</b>	<b>Total N = 19</b>
<b>Diarrhea</b>	3 (23%)	1 (17%)	4 (21%)
<b>Anemia</b>	2 (15%)	1 (17%)	3 (16%)
<b>Pleural effusion</b>	1 (8%)	1 (17%)	2 (11%)
<b>Colitis</b>	1 (8%)	1 (17%)	2 (11%)
<b>Asthenia</b>	2 (15%)	0 (0%)	2 (11%)
<b>Dyspnea</b>	1 (8%)	1 (17%)	2 (11%)
<b>Alanine/Aspartate aminotransferase increased</b>	1 (8%)	1 (17%)	2 (11%)
<b>DRESS syndrome</b>	1 (8%)	0 (0%)	1 (5%)
<b>Dysthyroidism</b>	1 (8%)	0 (0%)	1 (5%)
<b>Dehydration</b>	1 (8%)	0 (0%)	1 (5%)
<b>Disease-related pain</b>	1 (8%)	0 (0%)	1 (5%)
<b>Nausea/vomiting</b>	1 (8%)	0 (0%)	1 (5%)
<b>Anorexia</b>	1 (8%)	0 (0%)	1 (5%)
<b>Acute kidney injury</b>	1 (8%)	0 (0%)	1 (5%)
<b>Hypokalemia</b>	1 (8%)	0 (0%)	1 (5%)
<b>Hyperkalemia</b>	1 (8%)	0 (0%)	1 (5%)
<b>Hyponatremia</b>	0 (0%)	1 (17%)	1 (5%)
<b>Fracture</b>	0 (0%)	1 (17%)	1 (5%)
<b>Alkaline phosphatase increased</b>	1 (8%)	0 (0%)	1 (5%)
<b>Seizure</b>	1 (8%)	0 (0%)	1 (5%)
<b>Suicide attempt</b>	0 (0%)	1 (17%)	1 (5%)
<b>Autoimmune hepatitis</b>	0 (0%)	1 (17%)	1 (5%)

**SUPPLEMENTAL TABLE S3:** Grade 3 and 4 adverse events: for each dose level of radiotherapy. Multiple AEs of grade 3 occurred in some patients.