

**SUPPLEMENTAL TABLE 1.** Acquisition parameters of the head and neck magnetic resonance imaging sequences.

	<b>Slice mm</b>	<b>Gap mm</b>	<b>TR ms</b>	<b>TE ms</b>	<b>Scan type</b>	<b>TI ms</b>	<b>B-value</b>
<b>STIR</b>	5	0,5	5909	70	2D/IR	165	
<b>T1w</b>	4	0,4	586	15	2D/TSE		
<b>T2w</b>	4	0,4	3742	80	2D/TSE		
<b>DWI</b>	4	0	11711	104	2D/GRA		0+800
<b>T1w gd Trans</b>	4	0,4	586	15	2D/TSE		
<b>T1w gd Cor</b>	4	0,4	558	14	2D/TSE		

STIR=Short-TI Inversion Recovery, T1w=T1 weighted image, T2w=T2 weighted image DWI=Diffusion weighted imaging, TR ms= Repetition time in milliseconds, TE ms=Echo time in milliseconds, TI ms=Inversion time in milliseconds, 2D/IR= Two-Dimensional Inversion-Recovery, 2D/TSE= Two-Dimensional Turbo Spin-Echo, 2D/GRA= Two-Dimensional Gradient-Echo.

**SUPPLEMENTAL TABLE 2.** The net reclassification improvement (NRI) for staging of recurrent head and neck squamous cell carcinoma staging based.

CXR/MRI	PET/CT stage					
	Number of patients			Reclassified (%)		
	Localized	Locally advanced	Metastatic	Up-staged	Down-staged	Net correctly classified
<b>Patients alive (n=47)</b>						
Localized	15	9	0	10 (21.3%)	5 (10.6%)	-10.7%
Locally advanced	5	17	1			
Metastatic	0	0	0			
<b>Patients died (n=63)</b>						
Localized	3	10	7	40 (63.5%)	1 (1.6%)	61.9%
Locally advanced	0	13	23			
Metastatic	0	1	6			
<b>NRI (95% CI)</b>						<b>51.2% (29.9% to 72.5%)</b>
<b>p-value</b>						<b>&lt;0.001</b>

CI =confidence interval, CXR=chest X-ray, MRI=magnetic resonance imaging of the head and neck, PET/CT=<sup>18</sup>F-FDG-PET/CT.

**SUPPLEMENTAL TABLE 3.** The net reclassification improvement (NRI) for staging of recurrent head and neck squamous cell carcinoma staging based.

CCT/MRI	PET/CT stage					
	Number of patients			Reclassified (%)		
	Localized	Locally advanced	Metastatic	Up-staged	Down-staged	Net correctly classified
<b>Patients alive (n=47)</b>						
Localized	10	4	0	5 (10.6%)	20 (42.6%)	32.0%
Locally advanced	4	12	1			
Metastatic	6	10	0			
<b>Patients died (n=63)</b>						
Localized	3	9	1	27 (42.9%)	1 (1.6%)	41.3%
Locally advanced	0	14	17			
Metastatic	0	1	18			
<b>NRI (95% CI) p-value</b>						<b>73.3% (54.3% to 92.3%) &lt;0.001</b>

CCT=chest Computed tomography, CI =confidence interval, PET/CT=<sup>18</sup>F-FDG-PET/CT.