

**Supplemental Table 1. Cox proportional hazards regression analysis for all-cause mortality in patients with ALCA.**

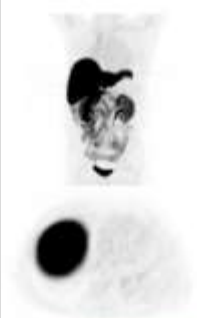


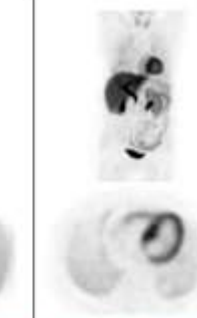
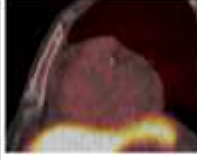
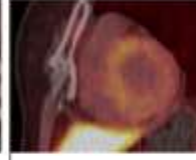
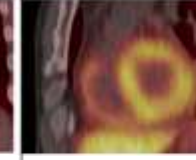
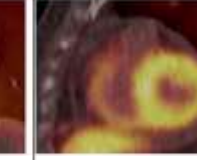
Variables	Univariate			Multivariate		
	HR	95% CI	<i>P</i>	HR	95% CI	<i>P</i>
Positive myocardial <sup>11</sup> C-PiB PET uptake	4.441	1.505–13.110	0.007	3.382	1.011–11.316	0.048
Age, years	1.066	1.013–1.122	0.014	1.033	0.968–1.102	0.323
Male	3.183	1.372–7.383	0.007	3.020	1.266–7.206	0.013
Systolic blood pressure, mmHg	0.989	0.963–1.017	0.441			
LV ejection fraction, %	0.969	0.940–0.999	0.041	0.958	0.919–0.999	0.046
E/e' ratio	1.032	0.995–1.071	0.093			
Autologous PBSCT	0.114	0.015–0.845	0.034	0.224	0.024–2.112	0.191

<sup>11</sup>C-PiB PET, <sup>11</sup>C-Pittsburgh compound B positron emission tomography; CI, confidence interval; E/e', early diastolic transmitral inflow velocity to early diastolic septal mitral annular tissue velocity ratio; HR, hazard ratio; LV, left ventricular; PBSCT, peripheral blood stem cell transplantation.

**Supplemental Table 2. Net reclassification improvement and integrated discrimination improvement for prediction of all-cause mortality.**

<b>Model</b>	<b>NRI</b>	<b>95% CI</b>	<b><i>P</i></b>	<b>IDI</b>	<b>95% CI</b>	<b><i>P</i></b>
Troponin I $\geq 0.1$ ng/mL plus $^{11}\text{C}$ -PiB PET/CT	0.861	0.299–1.420	0.003	0.200	0.066–0.334	0.004
NT-proBNP $\geq 1800$ pg/mL plus $^{11}\text{C}$ -PiB PET/CT	0.914	0.383–1.445	<0.001	0.156	0.056–0.256	0.002
dFLC $\geq 180$ mg/mL plus $^{11}\text{C}$ -PiB PET/CT	0.987	0.202–1.173	0.006	0.108	0.021–0.196	0.015

$^{11}\text{C}$ -PiB PET/CT,  $^{11}\text{C}$ -Pittsburgh compound B positron emission tomography/computed tomography; CI, confidence interval; dFLC, an absolute difference between the involved and uninvolved free light chain; IDI, integrated discrimination improvement; NRI, net reclassification improvement; NT-proBNP, N-terminal pro-B-type natriuretic peptide.

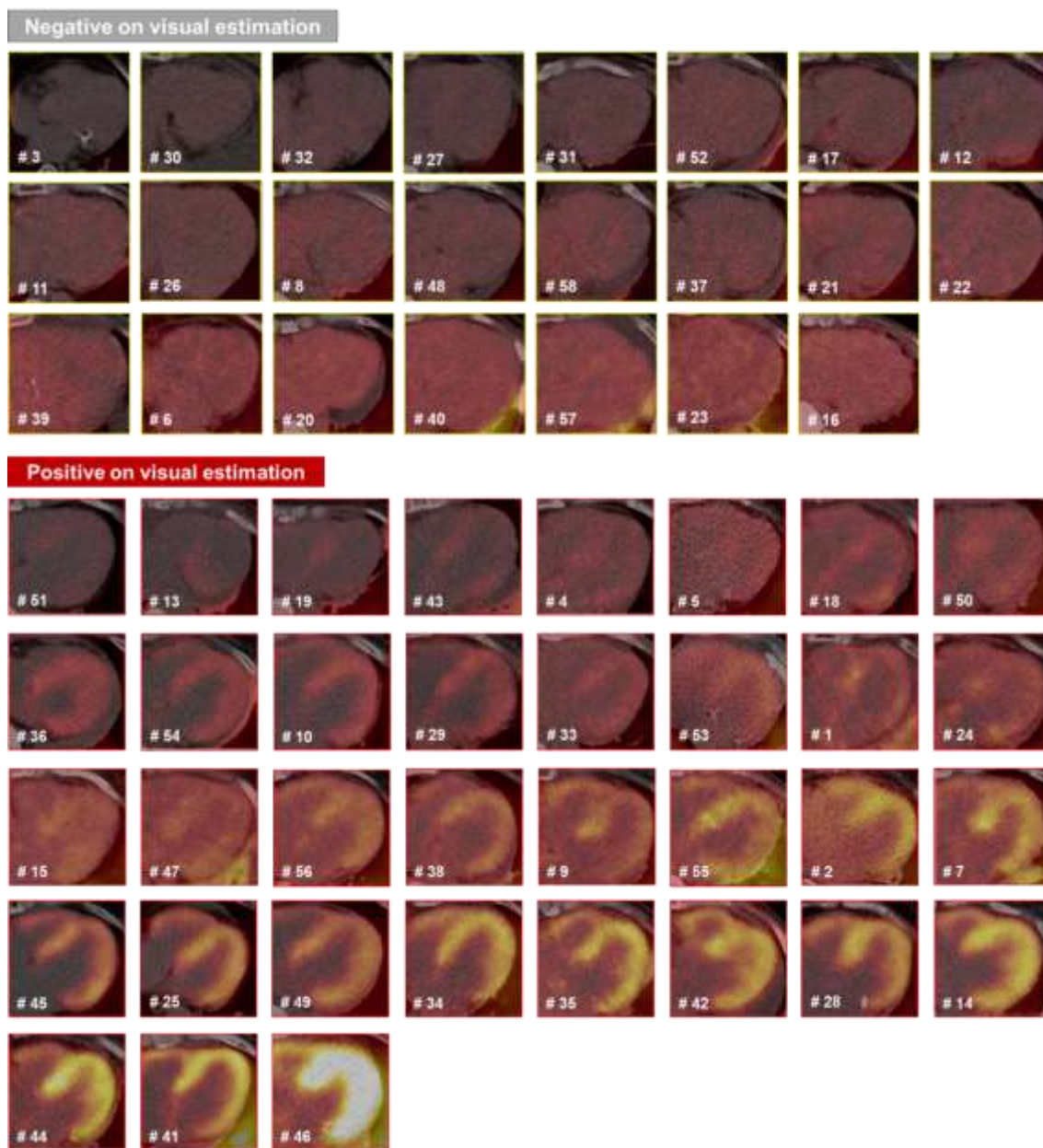
<sup>11</sup> C-PiB PET/CT				
				
<b>Grade</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>
<b>Visual estimation</b>	<b>Negative</b>	<b>Positive</b>	<b>Positive</b>	<b>Positive</b>
<b>Description</b>	Myocardial uptake not discernible from blood pool	Myocardial uptake much lower than liver	Myocardial uptake Mildly lower than liver	Myocardial uptake similar to or higher than liver
<b>Myocardial SUV<sub>peak</sub></b>	1.77±0.41 [0.97–2.61]	2.40±0.65 [1.53–3.68]	5.19±2.11 [3.21–10.87]	8.66±2.38 [5.48–12.02]
<b>Myocardial SUV<sub>peak</sub>-to-mean LV blood pool ratio</b>	1.57±0.14 [1.43–1.81]	2.81±0.71 [1.58–4.23]	4.99±1.32 [3.06–7.13]	6.57±1.57 [4.03–8.83]

**Supplemental Figure 1. Interpretations of <sup>11</sup>C-PiB PET/CT by visual estimation.**

A myocardial uptake of <sup>11</sup>C-PiB that was discernible from the blood pool (i.e., LV cavity) was considered positive. Specifically, a myocardial uptake of grade 1 or higher was considered a positive myocardial <sup>11</sup>C-PiB uptake on the visual estimation.

<sup>11</sup>C-PiB PET/CT, <sup>11</sup>C-Pittsburgh compound B positron emission tomography/computed tomography; LV, left ventricular; SUV, standardized uptake value.

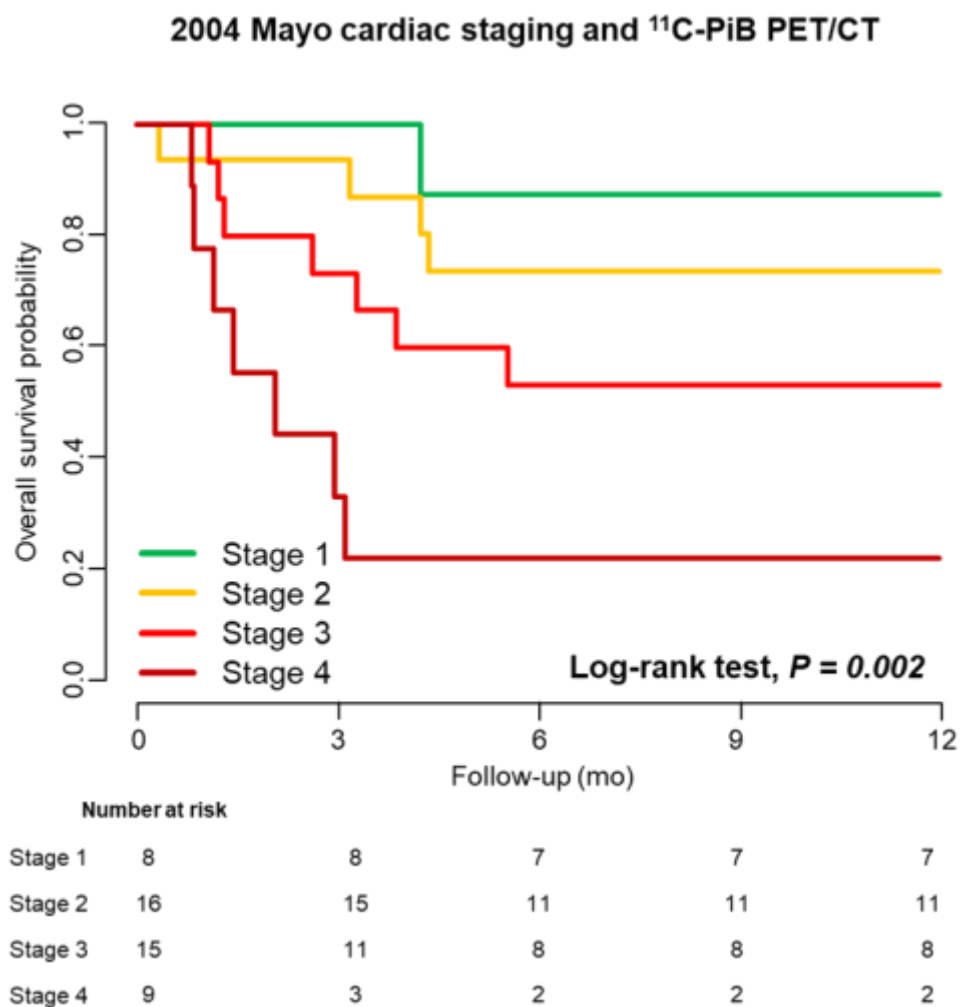




**Supplemental Figure 2. Images of  $^{11}\text{C}$ -PiB PET/CT for all patients with ALCA in this study.**

The upper panels contain the  $^{11}\text{C}$ -PiB PET/CT images interpreted as negative, whereas the lower panels contain those interpreted as positive. The number in the image indicates the subject number of each patient.

<sup>11</sup>C-PiB PET/CT, <sup>11</sup>C-Pittsburgh compound B positron emission tomography/computed tomography; ALCA, light chain type cardiac amyloidosis.



**Supplemental Figure 3. Kaplan-Meier curves for 1-year overall survival in patients with ALCA stratified by 2004 Mayo cardiac staging system combined with <sup>11</sup>C-PiB PET/CT.**

Kaplan-Meier survival curves of patients with ALCA, stratified by a 4-stage system incorporating <sup>11</sup>C-PiB PET/CT findings with the 2004 Mayo cardiac staging system. The 4-stage system allocated 1 point for each abnormal variable, such as elevated troponin I, NT-proBNP or a positive myocardial <sup>11</sup>C-PiB uptake.

<sup>11</sup>C-PiB PET/CT, <sup>11</sup>C-Pittsburgh compound B positron emission tomography/computed tomography; ALCA, light-chain type cardiac amyloidosis; NT-proBNP, N-terminal pro B-type natriuretic peptide.