

# Patients-Like-Me module for patients with metastatic non-small cell lung cancer

## Additional information

### What is the Patients-Like-Me (PLM) module?

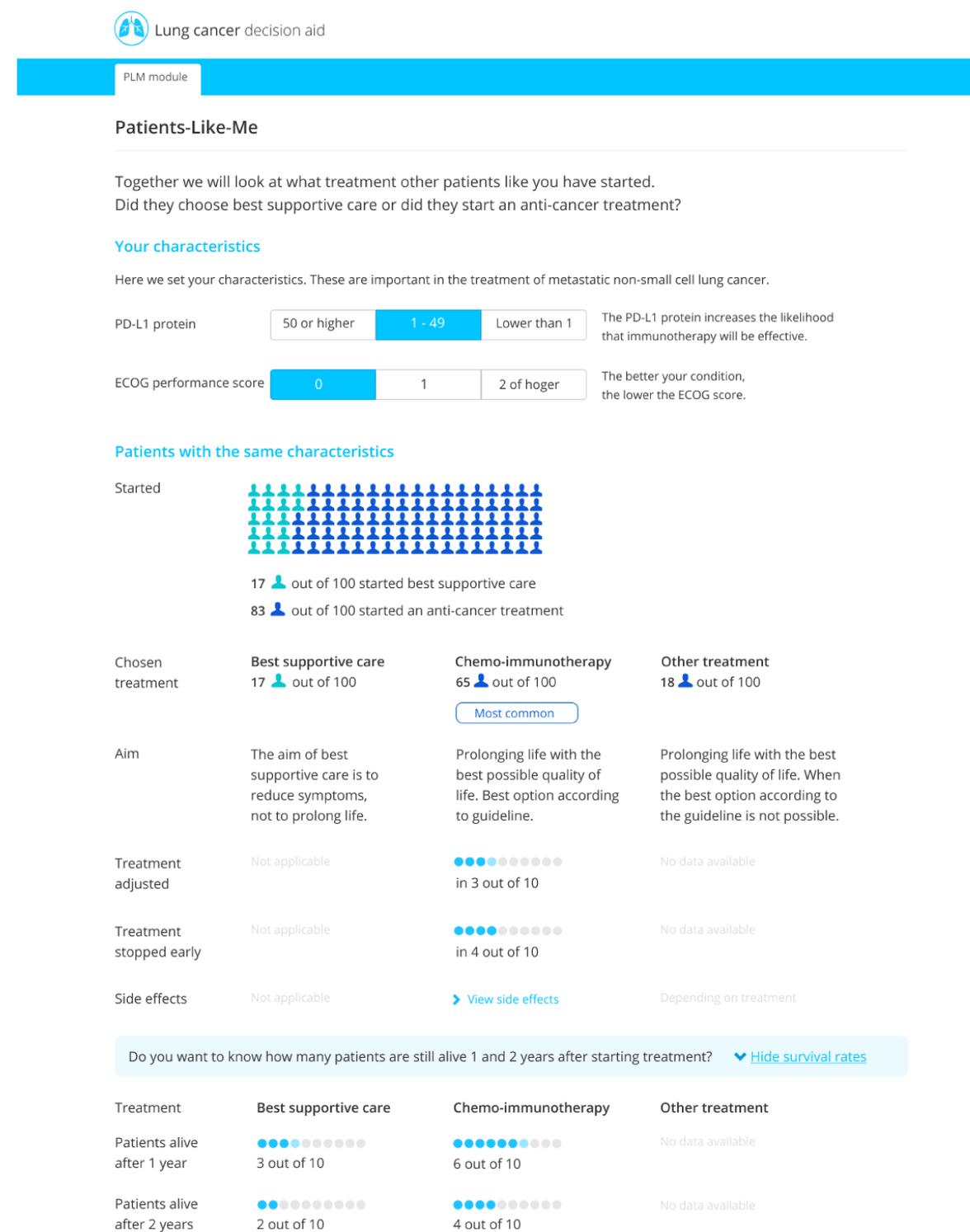
The PLM module is a decision-support tool for patients with stage IV non-small-cell lung cancer (NSCLC). It is used during consultations to support shared decision-making. It shows outcomes of patients with similar ECOG performance status and PD-L1 expression. And it provides insight into first-line treatments chosen by patients; the course of the treatment (e.g. treatment adjustments) and one- and two-year survival outcomes.

### On which data is the PLM module based?

The current PLM module is based on data from 13,522 patients with stage IV non-small-cell lung cancer (NSCLC) diagnosed between 2019 and 2022 in all Dutch hospitals, excluding those with targetable driver mutations. Treatment choices and survival were derived from the Netherlands Cancer Registry (NKR), while information on the course of treatment was obtained from a subset of 1,845 patients diagnosed in the seven Santeon hospitals, where registry data were enriched with electronic health record data. Compared with the earlier version (2019–2020, Santeon only), the new dataset is larger, nationwide in scope, and provides more precise estimates of treatment patterns and outcomes.

### Who developed the PLM module?

The PLM module was initiated by Santeon, a network of seven Dutch teaching hospitals, and developed in collaboration with Utrecht University, Amsterdam UMC, and ZorgKeuzeLab. It complements the Dutch Lung Cancer Decision Aid, which was developed with relevant national medical societies, the patient organization Longkanker Nederland, and ZorgKeuzeLab. The further development and nationwide rollout of the module were funded by the Dutch Cancer Society (KWF Kankerbestrijding).



Example screenshot Patients-Like-Me module

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Data per patient selection group – treatment characteristics

## Treatment characteristics per patient selection group (N, %)

	ECOG 0 & PD-L1 < 1 % (N = 1448)	ECOG 0 & PD-L1 1-49 % (N = 934)	ECOG 0 & PD-L1 ≥ 50 % (N = 1400)	ECOG 1 & PD-L1 < 1 % (N = 2322)	ECOG 1 & PD-L1 1-49 % (N = 1326)	ECOG 1 & PD-L1 ≥ 50 % (N = 2030)	ECOG ≥ 2 & PD-L1 < 1 % (N = 1648)	ECOG ≥ 2 & PD-L1 1-49 % (N = 898)	ECOG ≥ 2 & PD-L1 ≥ 50 % (N = 1310)
<b>Chemotherapy</b>	285 (18%)	141 (15%)	107 (8%)	358 (16%)	165 (12%)	129 (7%)	147 (8%)	59 (6%)	47 (4%)
<b>Immunotherapy</b>	5 (0%)	17 (2%)	730 (56%)	8 (0%)	18 (1%)	1030 (53%)	2 (0%)	2 (0%)	330 (25%)
<b>Chemo-immunotherapy</b>	967 (62%)	611 (65%)	279 (21%)	1155 (51%)	803 (59%)	347 (18%)	224 (12%)	158 (16%)	77 (6%)
<b>Second-opinion/referral</b>	14 (1%)	13 (1%)	13 (1%)	22 (1%)	4 (0%)	12 (1%)	3 (0%)	5 (1%)	3 (0%)
<b>Best supportive care</b>	289 (19%)	160 (17%)	187 (14%)	721 (32%)	379 (28%)	437 (22%)	1438 (79%)	777 (78%)	844 (65%)

*Notes.* Data are presented as n (%); ECOG PS: Eastern Cooperative Oncology Group performance status; Second-opinion/referral: Patients diagnosed in one of the seven Santeon hospitals for whom treatment was delivered in a non-Santeon hospital. Treatment data from outside the Santeon network were unavailable due to privacy restrictions; therefore, these patients were classified under this additional category; Percentages may not add up to 100 % due to rounding.

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## Data per patient selection group – survival per treatment modality

### One- and two-year survival per treatment modality per patient selection group (N, %)

	<b>ECOG 0 &amp; PD-L1 &lt; 1 % (N = 1448)</b>	<b>ECOG 0 &amp; PD-L1 1-49 % (N = 934)</b>	<b>ECOG 0 &amp; PD-L1 ≥ 50 % (N = 1400)</b>	<b>ECOG 1 &amp; PD-L1 &lt; 1 % (N = 2322)</b>	<b>ECOG 1 &amp; PD-L1 1-49 % (N = 1326)</b>	<b>ECOG 1 &amp; PD-L1 ≥ 50 % (N = 2030)</b>	<b>ECOG ≥ 2 &amp; PD-L1 &lt; 1 % (N = 1648)</b>	<b>ECOG ≥ 2 &amp; PD-L1 1-49 % (N = 898)</b>	<b>ECOG ≥ 2 &amp; PD-L1 ≥ 50 % (N = 1310)</b>
<b>Chemotherapy</b>	<b>N = 285</b>	<b>N = 141</b>	<b>N = 107</b>	<b>N = 358</b>	<b>N = 165</b>	<b>N = 129</b>	<b>N = 147</b>	<b>N = 59</b>	<b>N = 47</b>
One-year survival	144 (51%)	80 (57%)	79 (74%)	119 (33%)	63 (38%)	64 (50%)	27 (18%)	13 (22%)	8 (17%)
Two-year survival	83 (29%)	56 (40%)	58 (54%)	60 (17%)	35 (9%)	46 (36%)	12 (8%)	6 (10%)	4 (9%)
<b>Immunotherapy</b>	<b>N = 5</b>	<b>N = 17</b>	<b>N = 730</b>	<b>N = 8</b>	<b>N = 18</b>	<b>N = 1030</b>	<b>N = 2</b>	<b>N = 2</b>	<b>N = 330</b>
One-year survival	3 (60%)	11 (65%)	513 (70%)	4 (50%)	7 (39%)	591 (57%)	0 (0%)	1 (50%)	132 (40%)
Two-year survival	2 (40%)	8 (47%)	398 (55%)	1 (13%)	4 (22%)	437 (42%)	0 (0%)	1 (50%)	94 (29%)
<b>Chemo-immunotherapy</b>	<b>N = 967</b>	<b>N = 611</b>	<b>N = 279</b>	<b>N = 1155</b>	<b>N = 803</b>	<b>N = 347</b>	<b>N = 224</b>	<b>N = 158</b>	<b>N = 77</b>
One-year survival	554 (57%)	389 (64%)	188 (67%)	444 (38%)	422 (53%)	218 (63%)	60 (27%)	67 (42%)	32 (42%)
Two-year survival	330 (34%)	249 (41%)	139 (50%)	217 (19%)	264 (33%)	158 (46%)	25 (11%)	36 (23%)	25 (33%)
<b>Second-opinion/referral</b>	<b>N = 14</b>	<b>N = 13</b>	<b>N = 13</b>	<b>N = 22</b>	<b>N = 4</b>	<b>N = 12</b>	<b>N = 3</b>	<b>N = 5</b>	<b>N = 3</b>
One-year survival	7 (50%)	9 (69%)	8 (62%)	14 (64%)	3 (75%)	6 (50%)	0 (0%)	3 (60%)	1 (33%)
Two-year survival	3 (21%)	7 (54%)	8 (62%)	11 (50%)	2 (50%)	4 (33%)	0 (0%)	0 (0%)	1 (33%)
<b>Best supportive care</b>	<b>N = 289</b>	<b>N = 160</b>	<b>N = 187</b>	<b>N = 721</b>	<b>N = 379</b>	<b>N = 437</b>	<b>N = 1438</b>	<b>N = 777</b>	<b>N = 844</b>
One-year survival	79 (27%)	48 (30%)	48 (26%)	94 (13%)	59 (16%)	59 (14%)	43 (3%)	31 (4%)	24 (3%)
Two-year survival	48 (17%)	27 (17%)	37 (20%)	43 (6%)	35 (9%)	39 (9%)	13 (1%)	12 (2%)	15 (2%)

Notes. Data are presented as n (%); ECOG PS: Eastern Cooperative Oncology Group performance status; Second-opinion/referral: Patients diagnosed in one of the seven Santeon hospitals for whom treatment was delivered in a non-Santeon hospital. Treatment data from outside the Santeon network were unavailable due to privacy restrictions; therefore, these patients were classified under this additional category; Percentages may not add up to 100 % due to rounding.

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## Data per patient selection group – Intermediary treatment outcomes

ECOG 0 & PD-L1 < 1 %		
	Treatment stopped early	Treatment adjusted
<b>Chemotherapy (N = 21)</b>	9 (43%)	5 (24%)
<b>Immunotherapy (N = 0)</b>	n/a	n/a
<b>Chemo-immunotherapy (N = 169)</b>	53 (31%)	43 (25%)

ECOG 0 & PD-L1 1-49 %		
	Treatment stopped early	Treatment adjusted
<b>Chemotherapy (N = 17)</b>	10 (59%)	4 (24%)
<b>Immunotherapy (N = 3)</b>	n/a	0 (0%)
<b>Chemo-immunotherapy (N = 78)</b>	29 (37%)	23 (30%)

ECOG 0 & PD-L1 ≥ 50 %		
	Treatment stopped early	Treatment adjusted
<b>Chemotherapy (N = 9)</b>	2 (22%)	1 (11%)
<b>Immunotherapy (N = 117)</b>	n/a	16 (14%)
<b>Chemo-immunotherapy (N = 38)</b>	10 (26%)	8 (21%)

ECOG 1 & PD-L1 < 1 %		
	Treatment stopped early	Treatment adjusted
<b>Chemotherapy (N = 38)</b>	25 (66%)	8 (21%)
<b>Immunotherapy (N = 0)</b>	n/a	n/a
<b>Chemo-immunotherapy (N = 150)</b>	63 (42%)	32 (21%)

ECOG 1 & PD-L1 1-49 %		
	Treatment stopped early	Treatment adjusted
<b>Chemotherapy (N = 27)</b>	17 (63%)	10 (37%)
<b>Immunotherapy (N = 11)</b>	n/a	2 (18%)
<b>Chemo-immunotherapy (N = 87)</b>	33 (38%)	22 (25%)

ECOG 1 & PD-L1 ≥ 50 %		
	Treatment stopped early	Treatment adjusted
<b>Chemotherapy (N = 7)</b>	4 (57%)	0 (0%)
<b>Immunotherapy (N = 133)</b>	n/a	15 (11%)
<b>Chemo-immunotherapy (N = 33)</b>	13 (39%)	11 (33%)

ECOG 2 & PD-L1 < 1 %		
	Treatment stopped early	Treatment adjusted
<b>Chemotherapy (N = 16)</b>	9 (56%)	2 (13)
<b>Immunotherapy (N = 1)</b>	n/a	0 (0%)
<b>Chemo-immunotherapy (N = 39)</b>	22 (56%)	6 (15)

ECOG 2 & PD-L1 1-49 %		
	Treatment stopped early	Treatment adjusted
<b>Chemotherapy (N = 2)</b>	1 (50%)	1 (50%)
<b>Immunotherapy (N = 2)</b>	n/a	1 (50%)
<b>Chemo-immunotherapy (N = 29)</b>	17 (59%)	7 (24%)

ECOG 2 & PD-L1 ≥ 50 %		
	Treatment stopped early	Treatment adjusted
<b>Chemotherapy (N = 9)</b>	4 (44%)	2 (22%)
<b>Immunotherapy (N = 53)</b>	n/a	2 (4%)
<b>Chemo-immunotherapy (N = 13)</b>	2 (15%)	4 (31%)

*Notes.* Data are presented as n (%); ECOG PS: Eastern Cooperative Oncology Group performance status; *Treatment stopped early* was defined as discontinuation of chemotherapy before completion of four planned cycles, including discontinuation due to disease progression or death. Data on early discontinuation of immunotherapy were not available; *Treatment adjusted* was defined as dose reduction or switch of chemotherapy regimen; interruption of immunotherapy for ≥8 consecutive weeks within the first treatment year; or either of these for chemo-immunotherapy.