



**Universiteit
Leiden**
The Netherlands

Age-related differences of oncological outcomes in primary extremity soft tissue sarcoma: a multistate model including 6260 patients (vol 141, pg 128, 2020)

Acem, I.; Verhoef, C.; Rueten-Budde, A.J.; Grunhagen, D.J.; Houdt, W.J. van; Sande, M.A.J. van de; PERSARC Study Grp

Citation

Acem, I., Verhoef, C., Rueten-Budde, A. J., Grunhagen, D. J., Houdt, W. J. van, & Sande, M. A. J. van de. (2022). Age-related differences of oncological outcomes in primary extremity soft tissue sarcoma: a multistate model including 6260 patients (vol 141, pg 128, 2020). *European Journal Of Cancer*, 162, 247-249. doi:10.1016/j.ejca.2021.12.002

Version: Publisher's Version

License: [Creative Commons CC BY 4.0 license](#)

Downloaded from: <https://hdl.handle.net/1887/3455705>

Note: To cite this publication please use the final published version (if applicable).



Available online at www.sciencedirect.com

ScienceDirect

journal homepage: www.ejcancer.com



Corrigendum

Corrigendum to ‘Age-related differences of oncological outcomes in primary extremity soft tissue sarcoma: a multistate model including 6260 patients’ [Eur J Cancer 141 (2020) 128-136]



Ibtissam Acem ^{a,b,*}, Cornelis Verhoef ^a, Anja J. Rueten-Budde ^c,
Dirk J. Grünhagen ^a, Winan J. van Houdt ^d, Michiel A.J. van de Sande ^b,
PERSARC study group¹

^a Department of Surgical Oncology and Gastrointestinal Surgery, Erasmus MC Cancer Institute, Dr. Molewaterplein 40, 3015 GD, Rotterdam, the Netherlands

^b The Netherlands Department of Orthopedic Surgery, Leiden University Medical Centre, Albinusdreef 2, 2333 ZA, Leiden, the Netherlands

^c Mathematical Institute, Leiden University, Niels Bohrweg 1, 2333 CA, Leiden, the Netherlands

^d Department of Surgical Oncology, The Netherlands Cancer Institute, Plesmanlaan 121, 1066 CX, Amsterdam, the Netherlands

The authors regret the publication of table 1, table 3 and figure 5 owing to a coding error in the covariate ‘depth’. The revised tables are attached in the following. All conclusions remained unchanged.

DOI of original article: <https://doi.org/10.1016/j.ejca.2020.09.021>.

* Corresponding author: Department of Surgical Oncology and Gastrointestinal Surgery, Erasmus MC Cancer Institute, Dr. Molewaterplein 40, 3015 GD, Rotterdam, the Netherlands.

E-mail address: i.acem@erasmusmc.nl (I. Acem).

¹ Will Aston, Han Bonenkamp, Ingrid M.E. Desai, Peter C. Ferguson, Marta Fiocco, Hans Gelderblom, Robert J van Ginkel, Winette van der Graaf, Anthony M. Griffin, Rick L. Haas, Jos A. van der Hage, Andrew J. Hayes, Lee M. Jeys, Johnny Keller, Minna K. Laitinen, Andreas Leithner, Katja Maretty-Kongstad, Toshifumi Ozaki, Rob Pollock, Veroniek M. van Praag, Myles J. Smith, Maria A. Smolle, Emelie Styring, Joanna Szkandera, Kazuhiro Tanaka, Per-Ulf Tunn, Madeleine Willegger, Reinard Windhager, Jay S. Wunder, Olga Zaikova.

<https://doi.org/10.1016/j.ejca.2021.12.002>

0959-8049/© 2021 The Author(s). Published by Elsevier Ltd. All rights reserved.

Table 1
Tumour and treatment characteristics.

		All patients (n = 6260)	YA (n = 841)	Middle-aged (n = 3217)	Elderly (n = 2202)	P ^a
Gender	Male	3466 (55.4)	464 (55.2)	1815 (56.4)	1187 (53.9)	0.182
	Female	2793 (44.6)	377 (44.8)	1401 (43.6)	1015 (46.1)	
	Missing	1		1		
Histology	LMS	657 (10.5)	50 (5.95)	336 (10.5)	271 (12.3)	<0.001
	LPS	1002 (16.0)	191 (22.7)	569 (17.7)	242 (11.0)	
	MF	1095 (17.5)	42 (4.99)	599 (18.6)	454 (20.6)	
	UPS and NOS	1948 (31.1)	96 (11.4)	959 (29.8)	893 (40.6)	
	MPNST	353 (5.64)	98 (11.7)	186 (5.79)	69 (3.14)	
	SS	570 (9.11)	267 (31.7)	254 (7.90)	49 (2.22)	
	Other	631 (10.1)	97 (11.5)	312 (9.70)	222 (10.1)	
	Missing	4		2	2	
Grade	2	1008 (24.6)	169 (29.2)	585 (27.3)	254 (18.4)	<0.001
	3	3096 (75.4)	410 (70.8)	1560 (72.7)	1126 (81.6)	
	high grade (not further specified)	2156	262	1072	822	
Size	<5 cm	1510 (24.9)	239 (29.7)	802 (25.8)	469 (21.9)	<0.001
	5–10 cm	2383 (39.3)	323 (40.2)	1199 (38.5)	861 (40.2)	
	≥10 cm	2165 (35.7)	242 (30.1)	1112 (35.7)	811 (37.9)	
	Missing	202	37	104	61	
Depth	Deep	4095 (70.1)	601 (76.3)	2126 (71.0)	1368 (66.6)	<0.001
	Superficial	1744 (29.9)	187 (23.7)	870 (29.0)	687 (33.4)	
	Missing	421	53	221	147	
Site	Lower extremity	4750 (75.9)	647 (76.9)	2501 (77.8)	1602 (72.8)	<0.001
	Upper extremity	1509 (24.1)	194 (23.1)	715 (22.2)	600 (27.2)	
	Missing	1		1		
Presentation	Primary	3814 (78.8)	489 (73.2)	1928 (78.1)	1397 (82.0)	<0.001
	Whoops/residue	1028 (21.2)	179 (26.8)	542 (21.9)	307 (18.0)	
	Missing	1418	173	747	498	
Type of surgery	Limb sparing	5059 (93.9)	674 (95.1)	2590 (93.9)	1795 (93.4)	0.306
	Amputation	330 (6.12)	35 (4.94)	169 (6.13)	126 (6.56)	
	Missing	871	132	458	281	
Resection margin	R0	5338 (87.9)	737 (89.8)	2769 (89.2)	1832 (85.4)	<0.001
	R1-R2	732 (12.1)	84 (10.2)	336 (10.8)	312 (14.6)	
	Missing	190	20	112	58	
Radiotherapy	No	3016 (48.2)	379 (45.1)	1460 (45.4)	1177 (53.5)	<0.001
	Yes	3239 (51.8)	461 (54.9)	1753 (54.6)	1025 (46.5)	
	Missing	5	1	4		
Chemotherapy	No	5240 (83.7)	593 (70.5)	2526 (78.5)	2121 (96.3)	<0.001
	Yes	1019 (16.3)	248 (29.5)	690 (21.5)	81 (3.68)	
	Missing	1		1		
Radiotherapy (detailed)	No RT	3017 (48.6)	379 (45.4)	1459 (45.8)	1179 (53.8)	<0.001
	Adjuvant	2033 (32.7)	262 (31.4)	1062 (33.4)	709 (32.4)	
	Neoadjuvant	1135 (18.3)	190 (22.8)	647 (20.3)	298 (13.6)	
	Neoadjuvant and adjuvant	24 (0.387)	4 (0.479)	16 (0.503)	4 (0.183)	
	Missing	51	6	33	12	
Chemotherapy (detailed)	No CT	5241 (84.1)	593 (70.8)	2529 (79.1)	2119 (96.4)	<0.001
	Adjuvant	560 (8.98)	109 (13.0)	394 (12.3)	57 (2.59)	
	Neoadjuvant	190 (3.05)	64 (7.65)	119 (3.72)	7 (0.318)	
	Neoadjuvant and adjuvant	243 (3.90)	71 (8.48)	156 (4.88)	16 (0.728)	
	Missing	26	4	19	3	

YA, young adults; LMS, leiomyosarcoma; LPS, liposarcoma; MF, myxofibrosarcoma; UPS, undifferentiated pleomorphic sarcoma; NOS, (pleomorphic) soft tissue sarcomas not-otherwise-specified; MPNST, malignant peripheral nerve sheet tumour; SS, synovial sarcoma; RT, radiotherapy; CT, chemotherapy.

^a Global P value for differences in distribution across the age groups.

Table 3
HRs of age for overall survival and all transitions in the multistate model.

Age	OS	TRANS 1 ANED → LR	TRANS 2 ANED → DM	TRANS 3 ANED → Death	TRANS 4 LR → DM	TRANS 5 LR → Death	TRANS 6 DM → Death
	HR (95% CI)	HR (95% CI)	HR (95% CI)	HR (95% CI)	HR (95% CI)	HR (95% CI)	HR (95% CI)
- YA	1	1	1	1 ^a	1	1	1
- Middle-aged	1.46 (1.22–1.74)	1.38 (0.978–1.95)	1.26 (1.07–1.49)		1.26 (0.703–2.25)	1.40 (0.506–3.89)	1.26 (1.03–1.54)
- Elderly	3.06 (2.53–3.69)	2.20 (1.53–3.16)	1.23 (1.02–1.48)	5.93 (4.85–7.25)	0.792 (0.419–1.49)	4.54 (1.66–12.4)	2.20 (1.76–2.74)

OS, overall survival; ANED, alive, no evidence of disease; LR, local recurrence; DM, distant metastasis; HR, hazard ratio, YAs, young adults; CI, confidence interval.

Adjusted for histology, grade, size, depth and tumour site, surgical margin, (neo)adjuvant radiotherapy and (neo)adjuvant chemotherapy. For transition 3 (ANED → Death), we grouped the YA and middle-aged population owing to the relatively small number of patients in this transition for these age groups. For transition 5 (LR → Death), we only adjusted for tumour characteristics owing to the relatively small number of patients in this transition. Appendix B includes the full multistate model including het HRs of the adjusted variables.

^a For transition 3, the YA and middle-aged group were combined in one group.

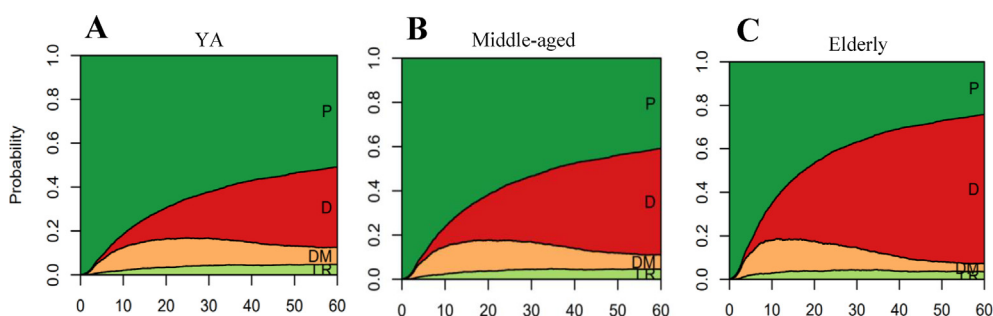


Fig. 5. State occupation probabilities for three patients with the same profile in each age group. Panel A: patient in the YA group with a grade III, deep-seated, malignant peripheral nerve sheet tumour of 10 cm of the lower limb treated with radiotherapy and R0-resection. Panel B: patient in the middle-aged group with the same patient profile as A. Panel C: patient in the elderly group with the same patient profile as A. The distance between two curves denotes the probability of being in a specific state at a specific time after surgery. YA, Young adult; P, alive no evidence of disease; D, death; DM, distant metastasis; LR, local recurrence.

The authors would like to apologise for any inconvenience caused.