

ORIGINAL RESEARCH ARTICLE

Nomogram model for mortality risk of hemangiosarcoma: A Surveillance, Epidemiology, and End Results population-based study

Supplementary file
Table S1. Baseline characteristics of hemangiosarcoma patients (%)

Variable	Total population (n = 4,703)	Validation set (n = 1,410)	Training set (n = 3,293)	p-value
Age				0.834
<60y	1,325 (28.2%)	386 (27.4%)	939 (28.5%)	
60–69y	971 (20.6%)	290 (20.6%)	681 (20.7%)	
≥70y	2,398 (51.0%)	731 (51.8%)	1,667 (50.6%)	
Unknown	9 (0.19%)	3 (0.21%)	6 (0.18%)	
Gender				0.924
Female	2,535 (53.9%)	762 (54.0%)	1,773 (53.8%)	
Male	2,168 (46.1%)	648 (46.0%)	1,520 (46.2%)	
Race				0.635
White	3,900 (82.9%)	1,183 (83.9%)	2,717 (82.5%)	
Black	380 (8.08%)	111 (7.87%)	269 (8.17%)	
American Indian	365 (7.76%)	98 (6.95%)	267 (8.11%)	
Asian	22 (0.47%)	8 (0.57%)	14 (0.43%)	
Unknown	36 (0.77%)	10 (0.71%)	26 (0.79%)	
Diagnosis year				0.221
2000–2005	1,128 (24.0%)	337 (23.9%)	791 (24.0%)	
2006–2011	1,468 (31.2%)	464 (32.9%)	1,004 (30.5%)	
2012–2018	2,107 (44.8%)	609 (43.2%)	1,498 (45.5%)	
Diagnostic method				0.236
Microscopic	4,645 (98.8%)	1,392 (98.7%)	3,253 (98.8%)	
Non-microscopic	32 (0.68%)	7 (0.50%)	25 (0.76%)	
Unknown	26 (0.55%)	11 (0.78%)	15 (0.46%)	
Primary site				0.351
Cutaneous or subcutaneous	3,383 (71.9%)	1,025 (72.7%)	2,358 (71.6%)	
Digestive system	517 (11.0%)	164 (11.6%)	353 (10.7%)	
Vasculature	224 (4.76%)	63 (4.47%)	161 (4.89%)	
Others	579 (12.3%)	158 (11.2%)	421 (12.8%)	
Laterality				0.931
Bilateral	23 (0.49%)	7 (0.50%)	16 (0.49%)	
Left	1,204 (25.6%)	365 (25.9%)	839 (25.5%)	
Right	1,139 (24.2%)	350 (24.8%)	789 (24.0%)	
Unpaired	2,278 (48.4%)	672 (47.7%)	1,606 (48.8%)	
Unknown	59 (1.25%)	16 (1.13%)	43 (1.31%)	

(cont'd...)

Table S1. (Continued)

Variable	Total population (n = 4,703)	Validation set (n = 1,410)	Training set (n = 3,293)	p-value
Tumor size				0.538
<50 mm	1,235 (26.3%)	357 (25.3%)	878 (26.7%)	
≥50 mm	1,246 (26.5%)	371 (26.3%)	875 (26.6%)	
Unknown	2,222 (47.2%)	682 (48.4%)	1,540 (46.8%)	
Grade				0.318
1 (well differentiated)	235 (5.00%)	67 (4.75%)	168 (5.10%)	
2 (moderately differentiated)	351 (7.46%)	111 (7.87%)	240 (7.29%)	
3 (poorly differentiated)	854 (18.2%)	235 (16.7%)	619 (18.8%)	
4 (undifferentiated)	913 (19.4%)	267 (18.9%)	646 (19.6%)	
Unknown	2,350 (50.0%)	730 (51.8%)	1,620 (49.2%)	
Stage				0.910
I	422 (8.97%)	127 (9.01%)	295 (8.96%)	
II	284 (6.04%)	80 (5.67%)	204 (6.19%)	
III	221 (4.70%)	63 (4.47%)	158 (4.80%)	
IV	526 (11.2%)	154 (10.9%)	372 (11.3%)	
Unknown	3,250 (69.1%)	986 (69.9%)	2,264 (68.8%)	
FMPI				0.697
No	1,803 (38.3%)	547 (38.8%)	1,256 (38.1%)	
Yes	2,900 (61.7%)	863 (61.2%)	2,037 (61.9%)	
PSS				0.728
No	1,562 (33.2%)	480 (34.0%)	1,082 (32.9%)	
Yes	3,120 (66.3%)	924 (65.5%)	2,196 (66.7%)	
Unknown	21 (0.45%)	6 (0.43%)	15 (0.46%)	
RRLN				0.312
No	3,489 (74.2%)	1,067 (75.7%)	2,422 (73.5%)	
Yes	366 (7.78%)	103 (7.30%)	263 (7.99%)	
Unknown	848 (18.0%)	240 (17.0%)	608 (18.5%)	
NPSS				0.404
No	4,471 (95.1%)	1,349 (95.7%)	3,122 (94.8%)	
Yes	197 (4.19%)	53 (3.76%)	144 (4.37%)	
Unknown	35 (0.74%)	8 (0.57%)	27 (0.82%)	
RT				0.776
No or unknown	3,444 (73.2%)	1,037 (73.5%)	2,407 (73.1%)	
Yes	1,259 (26.8%)	373 (26.5%)	886 (26.9%)	
RT sequence with PSS				0.897
After	799 (17.0%)	230 (16.3%)	569 (17.3%)	
Before	73 (1.55%)	22 (1.56%)	51 (1.55%)	
Not applicable	3,824 (81.3%)	1,156 (82.0%)	2,668 (81.0%)	
Unknown	7 (0.15%)	2 (0.14%)	5 (0.15%)	
CT				0.722
No or unknown	3,241 (68.9%)	966 (68.5%)	2,275 (69.1%)	
Yes	1,462 (31.1%)	444 (31.5%)	1,018 (30.9%)	
CT sequence with PSS				0.304
After	479 (10.2%)	142 (10.1%)	337 (10.2%)	
Before	107 (2.28%)	41 (2.91%)	66 (2.00%)	
Not applicable	2,905 (61.8%)	866 (61.4%)	2,039 (61.9%)	
Unknown	1,212 (25.8%)	361 (25.6%)	851 (25.8%)	

Abbreviations: CT: Chemotherapy; FMPI: First malignant primary indicator; NPSS: Non-primary site surgery; PSS: Primary site surgery; RRLN: Removal of regional lymph nodes; RT: Radiotherapy.

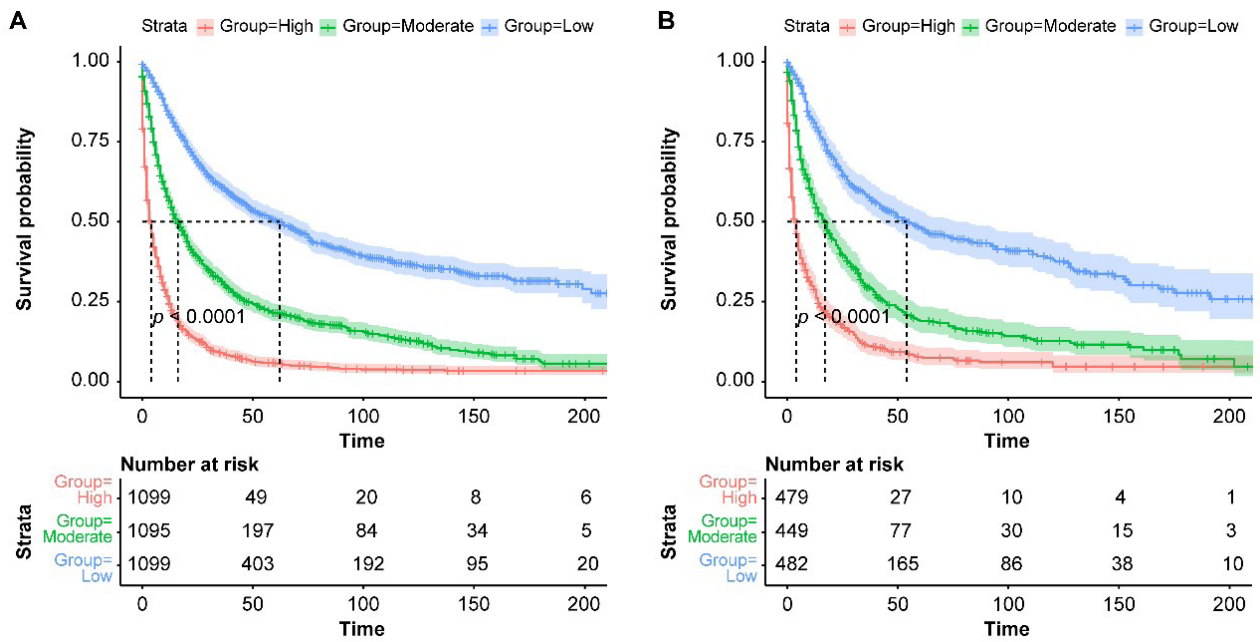


Figure S1. Risk stratified survival curves with 95% confidence intervals based on the ACD prognostic model for (A) the training set and (B) the validation set.

Abbreviation: ACD: All-cause death.