

Figure S1: Overview mutational signatures High-TMB

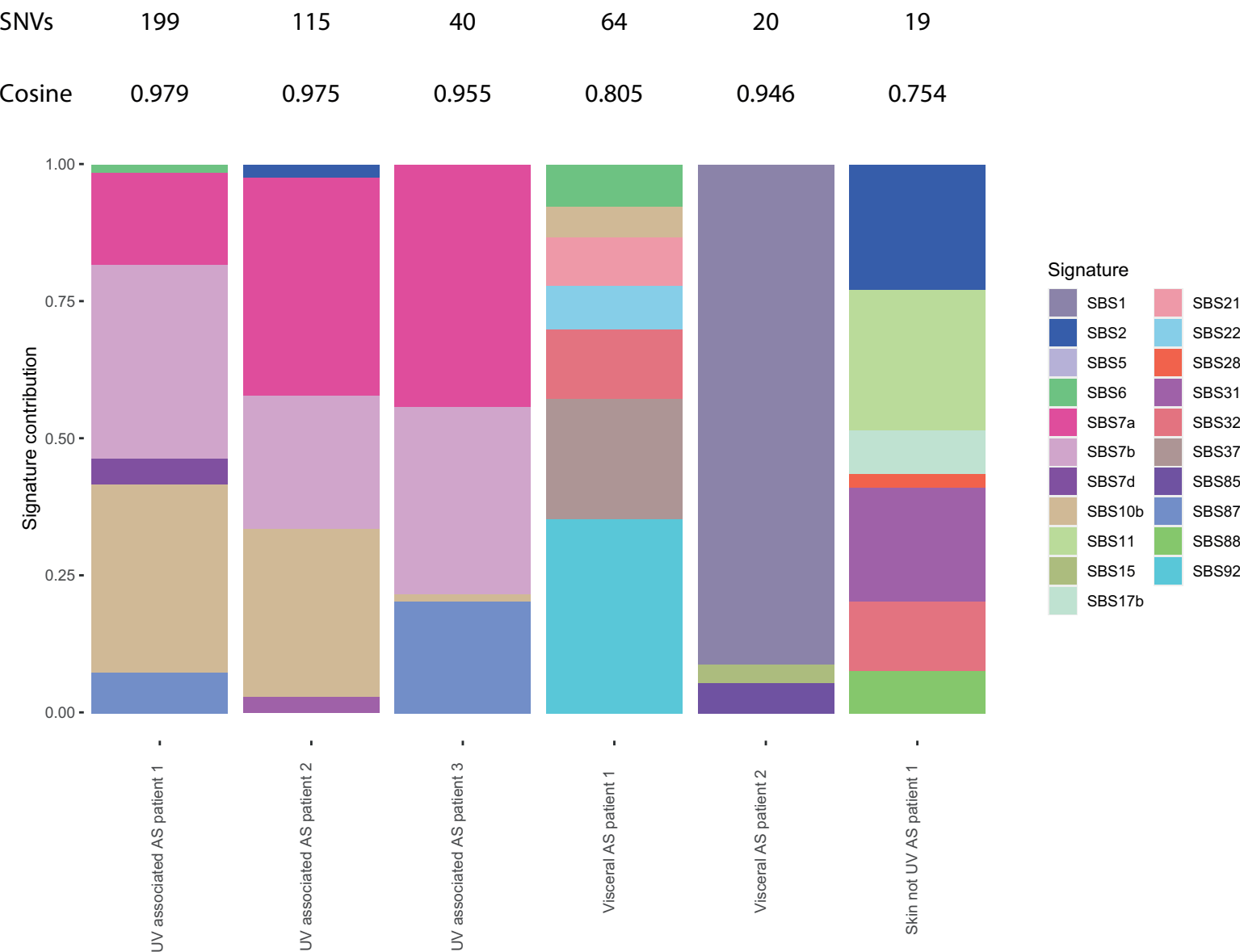


Figure S1: Mutational signatures in patients classified as high TMB ( $\geq 10$  mut/Mb). Signature recognition was measured using cosine similarity. SNV; Single Nucleotide Variation.

Figure S2: Overview of all (likely) pathogenic alterations

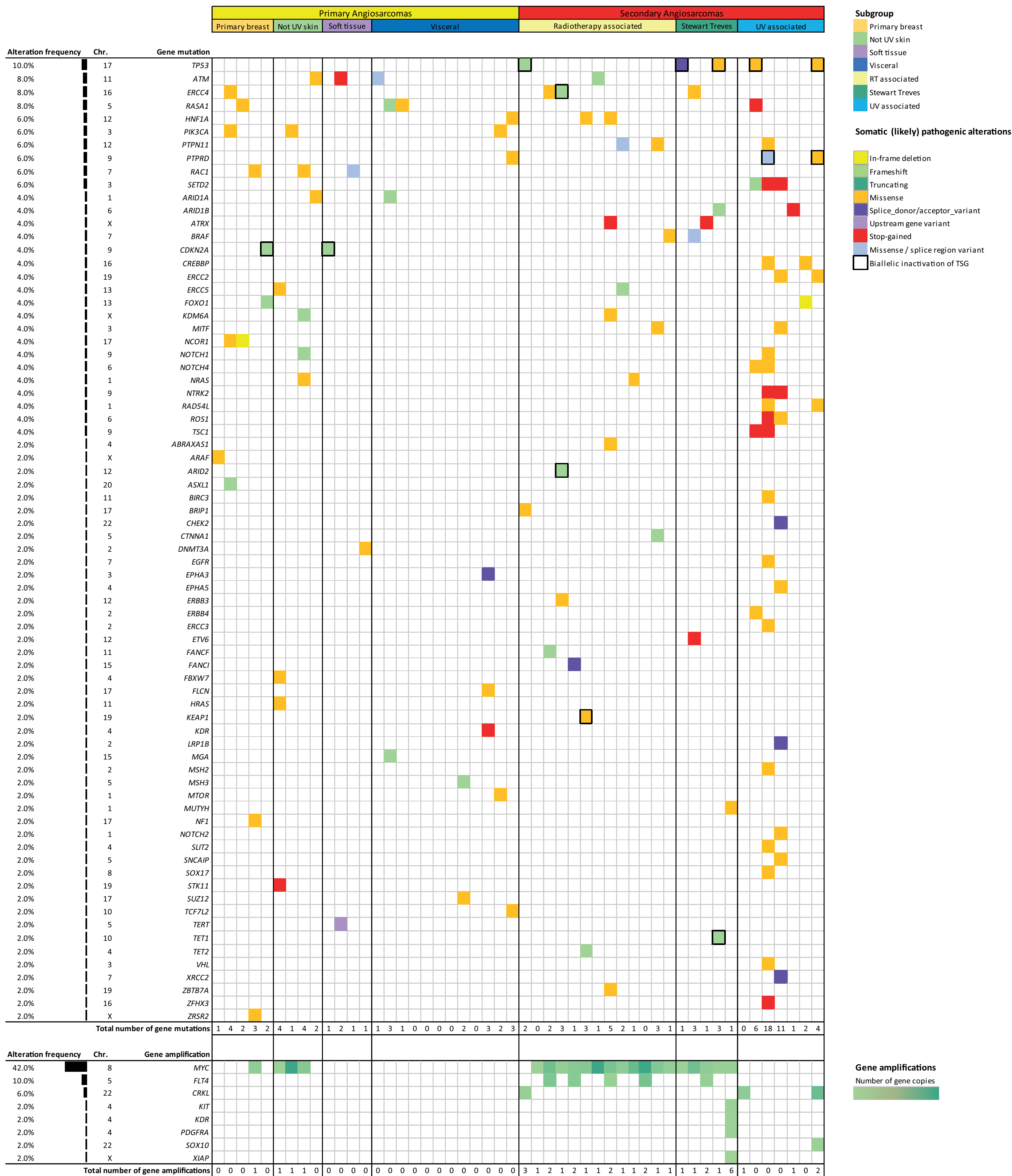


Figure S3: Overview of all class 3 mutations (variants of unknown significance)

Table S1: Immune cell densities for AS subgroups. Cell densities are reflected in cells/mm<sup>2</sup> with the IQR for all individual immune cell subclasses. This table reflects the combined data of the visceral and hearts AS subgroup taken together in one subgroup (visceral).

Angiosarcoma Subgroup	Primary AS (n=79)				Secondary AS (n=178)		
	Soft tissue n=11	Breast n=20	Skin not UV n=15	Visceral n=33	RT associated n=126	UV associated n=38	Stewart Treves n=14
Median cells/mm <sup>2</sup> (IQR)							
CD3+ T-cells	245 (549)	234 (246)	232 (280)	336 (450)	355 (605)	817 (862)	588 (734)
CD8+ T-cells	99 (406)	78 (94)	74 (60)	109 (203)	101 (186)	184 (230)	87 (209)
FoxP3+ T-cells	28 (63)	14 (35)	32 (50)	12 (25)	32 (60)	92 (161)	23 (35)
CD4+ T-cells	94 (137)	127 (118)	145 (143)	129(237)	190 (355)	461 (460)	457 (608)
CD20+ B-cells	26 (82)	22 (38)	15 (11)	38 (122)	21 (98)	44 (145)	88 (130)