

## **Assessing the role of tumour-associated macrophage subsets in breast cancer subtypes using digital image analysis**

Breast Cancer Research and Treatment

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## Supplementary data

**Supplementary Table 1. Univariate analysis of DFS and OS of the total study cohort**

	DFS			OS		
	HR	95% CI	<i>P</i>	HR	95% CI	<i>P</i>
<b>CD68</b>	0.999	0.997-1.001	0.162	0.998	0.996-1.000	0.067
<sup>CD163</sup> <b>M2-like</b>	0.999	0.998-1.001	0.304	0.999	0.998-1.000	0.160
<sup>CD163</sup> <b>M1-like</b>	0.997	0.989-1.004	0.360	0.995	0.986-1.004	0.288
<sup>CD163</sup> <b>ratio</b>	1.000	0.999-1.001	0.624	0.999	0.998-1.001	0.380
<sup>CSF-1R</sup> <b>M2-like</b>	1.000	0.999-1.001	0.774	1.000	0.999-1.001	0.649
<sup>CSF-1R</sup> <b>M1-like</b>	0.999	0.996-1.001	0.295	0.997	0.993-1.000	0.084
<sup>CSF-1R</sup> <b>ratio</b>	1.000	0.999-1.001	0.747	1.000	0.999-1.001	0.519
<sup>CD206</sup> <b>M2-like</b>	1.001	0.999-1.002	0.501	1.000	0.998-1.002	0.763
<sup>CD206</sup> <b>M1-like</b>	0.998	0.996-1.001	0.185	0.998	0.995-1.001	0.121
<sup>CD206</sup> <b>ratio</b>	1.001	0.999-1.002	0.334	1.001	0.999-1.002	0.335

HR, hazard ratio; 95% CI, 95% confidence interval; *P*, *P*-value.

**Supplementary Table 2. Univariate analysis of DFS and OS in Luminal-A breast cancer**

	DFS			OS		
	HR	95% CI	<i>P</i>	HR	95% CI	<i>P</i>
<b>CD68</b>	1.000	0.997-1.003	0.922	0.999	0.995-1.003	0.693
<sup>CD163</sup> <b>M2-like</b>	1.000	0.998-1.002	0.715	0.999	0.996-1.001	0.392
<sup>CD163</sup> <b>M1-like</b>	0.995	0.984-1.005	0.330	0.994	0.981-1.008	0.407
<sup>CD163</sup> <b>ratio</b>	1.000	0.998-1.002	0.830	0.999	0.997-1.002	0.555
<sup>CSF-1R</sup> <b>M2-like</b>	0.999	0.995-1.003	0.507	0.996	0.989-1.002	0.158
<sup>CSF-1R</sup> <b>M1-like</b>	1.000	0.996-1.004	0.966	1.000	0.996-1.005	0.860
<sup>CSF-1R</sup> <b>ratio</b>	0.998	0.994-1.003	0.482	0.996	0.989-1.003	0.241
<sup>CD206</sup> <b>M2-like</b>	1.000	0.998-1.003	0.767	1.000	0.997-1.002	0.756
<sup>CD206</sup> <b>M1-like</b>	1.000	0.995-1.005	0.945	0.999	0.993-1.005	0.761
<sup>CD206</sup> <b>ratio</b>	1.001	0.999-1.003	0.573	1.000	0.998-1.002	0.895

HR, hazard ratio; 95% CI, 95% confidence interval; *P*, *P*-value.

**Supplementary Table 3. Univariate analysis of DFS and OS in Luminal-B breast cancer**

	DFS			OS		
	HR	95% CI	<i>P</i>	HR	95% CI	<i>P</i>
<b>CD68</b>	0.999	0.995-1.003	0.709	0.998	0.994-1.004	0.744
<sup>CD163</sup> <b>M2-like</b>	0.998	0.995-1.001	0.294	0.999	0.995-1.002	0.437
<sup>CD163</sup> <b>M1-like</b>	1.003	0.991-1.015	0.623	1.000	0.984-1.017	0.980
<sup>CD163</sup> <b>ratio</b>	0.998	0.996-1.001	0.308	0.999	0.995-1.002	0.460
<sup>CSF-1R</sup> <b>M2-like</b>	0.999	0.997-1.002	0.676	1.000	0.997-1.003	0.955
<sup>CSF-1R</sup> <b>M1-like</b>	0.997	0.989-1.006	0.497	0.997	0.986-1.007	0.530
<sup>CSF-1R</sup> <b>ratio</b>	0.998	0.993-1.002	0.327	0.999	0.995-1.003	0.679
<sup>CD206</sup> <b>M2-like</b>	1.000	0.995-1.005	0.980	1.000	0.993-1.007	0.811
<sup>CD206</sup> <b>M1-like</b>	0.999	0.994-1.004	0.749	0.998	0.992-1.004	0.549
<sup>CD206</sup> <b>ratio</b>	0.998	0.992-1.005	0.642	0.998	0.990-1.007	0.700

HR, hazard ratio; 95% CI, 95% confidence interval; *P*, *P*-value.

**Supplementary Table 4. Univariate analysis of DFS and OS in HER2-positive breast cancer**

	DFS			OS		
	HR	95% CI	<i>P</i>	HR	95% CI	<i>P</i>
<b>CD68</b>	0.999	0.994-1.004	0.697	0.999	0.994-1.004	0.787
<sup>CD163</sup> <b>M2-like</b>	1.000	0.997-1.004	0.834	1.001	0.998-1.005	0.462
<sup>CD163</sup> <b>M1-like</b>	0.973	0.921-1.027	0.322	0.938	0.798-1.103	0.438
<sup>CD163</sup> <b>ratio</b>	1.001	0.998-1.004	0.483	1.002	0.999-1.005	0.261
<sup>CSF-1R</sup> <b>M2-like</b>	0.999	0.995-1.003	0.599	1.000	0.996-1.004	0.957
<sup>CSF-1R</sup> <b>M1-like</b>	0.999	0.992-1.006	0.816	0.995	0.985-1.005	0.367
<sup>CSF-1R</sup> <b>ratio</b>	0.998	0.994-1.003	0.477	0.999	0.995-1.003	0.738
<sup>CD206</sup> <b>M2-like</b>	0.996	0.986-1.007	0.494	0.996	0.985-1.008	0.550
<sup>CD206</sup> <b>M1-like</b>	1.001	0.995-1.006	0.792	1.001	0.995-1.007	0.723
<sup>CD206</sup> <b>ratio</b>	1.002	0.991-1.013	0.746	1.002	0.991-1.014	0.666

HR, hazard ratio; 95% CI, 95% confidence interval; *P*, *P*-value.

**Supplementary Table 5. Univariate analysis of DFS and OS in TNBC**

	DFS			OS		
	HR	95% CI	<i>P</i>	HR	95% CI	<i>P</i>
<b>CD68</b>	0.999	0.995-1.003	0.562	0.997	0.993-1.002	0.248
<sup>CD163</sup> <b>M2-like</b>	1.000	0.999-1.002	0.690	0.999	0.997-1.001	0.418
<sup>CD163</sup> <b>M1-like</b>	1.005	0.989-1.023	0.526	1.008	0.991-1.025	0.378
<sup>CD163</sup> <b>ratio</b>	1.001	0.999-1.002	0.523	0.999	0.997-1.001	0.499
<sup>CSF-1R</sup> <b>M2-like</b>	1.000	0.999-1.001	0.752	1.000	0.999-1.001	0.566
<sup>CSF-1R</sup> <b>M1-like</b>	0.999	0.994-1.003	0.575	0.994	0.985-1.004	0.247
<sup>CSF-1R</sup> <b>ratio</b>	1.000	0.999-1.001	0.688	1.000	0.999-1.001	0.496
<sup>CD206</sup> <b>M2-like</b>	1.001	0.998-1.003	0.540	1.001	0.998-1.003	0.516
<sup>CD206</sup> <b>M1-like</b>	0.998	0.993-1.003	0.393	0.995	0.988-1.003	0.218
<sup>CD206</sup> <b>ratio</b>	1.000	0.998-1.003	0.681	1.001	0.999-1.003	0.488

HR, hazard ratio; 95% CI, 95% confidence interval; *P*, *P*-value.