

Supplemental Figure 1. Progression-free survival according to BMI in the non-melanoma cohort (N=240). **(a)** Overall cohort ($P=0.04$); **(b)** weight-based dosing ($P=0.05$); **(c)** fixed dosing ($P=0.3$).

Supplemental Figure 2. Overall survival according to BMI in the non-melanoma cohort (N=240). **(a)** Overall cohort ($P=0.3$); **(b)** weight-based dosing ($P=0.05$); **(c)** fixed dosing ($P=0.95$).

Supplemental Figure 3. Clinical outcomes according to dosing strategy and BMI category. **(a)** PFS ($P=0.05$); **(b)** OS ($P=0.08$). For BMI <25, median PFS 199 days with fixed-dose vs 81 days with weight-based ICI ($P=0.16$); median OS 455 days with fixed-dose vs 158 days with weight-based ICI ($P=0.04$). For BMI ≥ 25 , median PFS 264 days with fixed-dose vs 406 days with weight-based ICI ($P=0.39$); median OS 502 days with fixed-dose vs 742 days with weight-based ICI ($P=0.47$).

Supplemental Figure 4. Clinical outcomes according to dosing strategy and BMI category with underweight (BMI <18.5) removed. **(a)** PFS with weight-based dosing ($P=0.05$); **(b)** PFS with fixed dosing ($P=0.26$); **(c)** OS with weight-based dosing ($P=0.04$); **(d)** OS with fixed dosing ($P=0.52$).

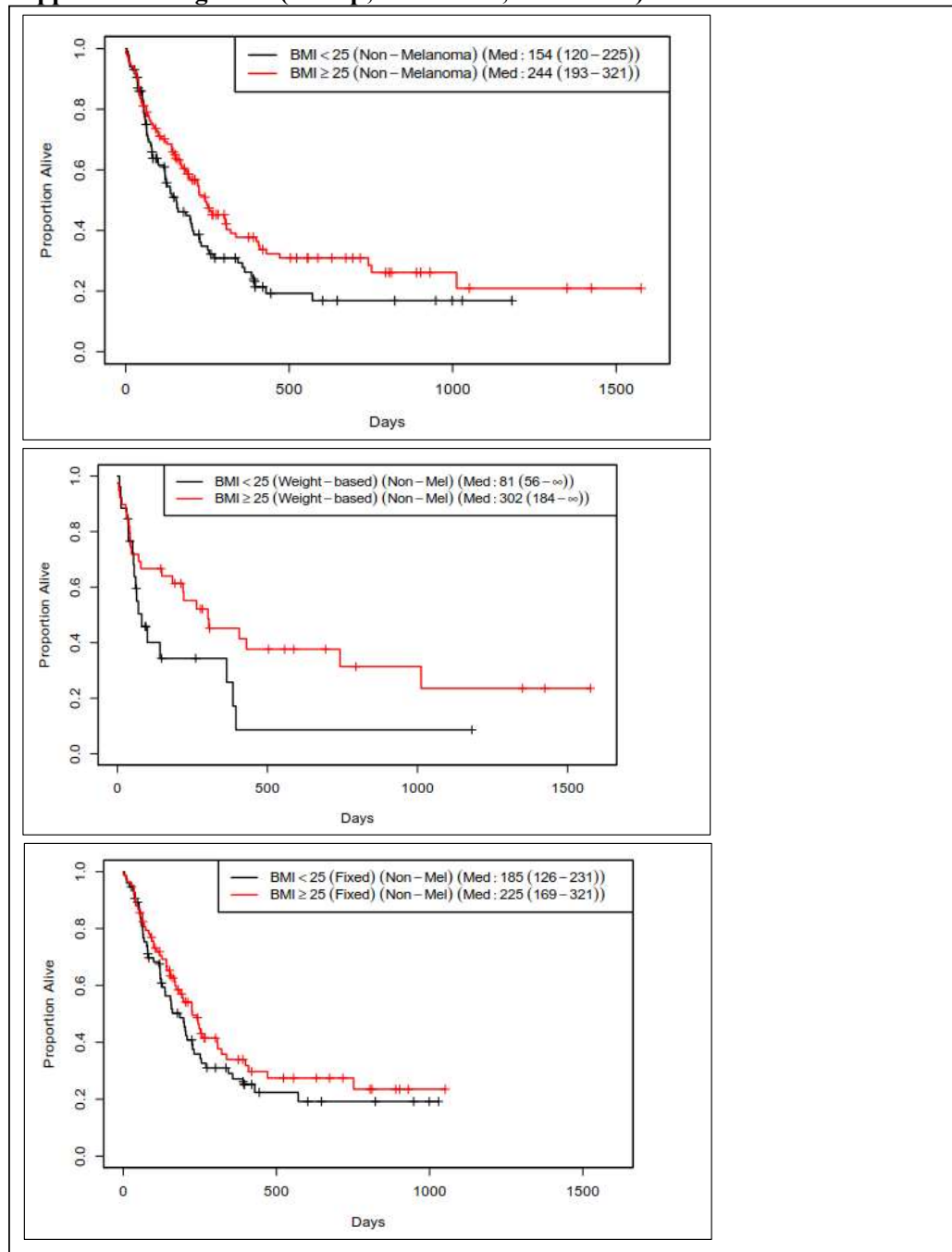
Supplemental Figure 5. Clinical outcomes according to BMI and patient sex. **(a)** PFS in male patients; **(b)** PFS in female patients; **(c)** OS in male patients; **(d)** OS in female patients.

Supplemental Figure 6. Clinical outcomes according to BMI and ICI dosing strategy in male patients. **(a)** PFS with fixed-dose ICI; **(b)** PFS with weight-based ICI; **(c)** OS with fixed-dose ICI; **(d)** OS with weight-based dose ICI.

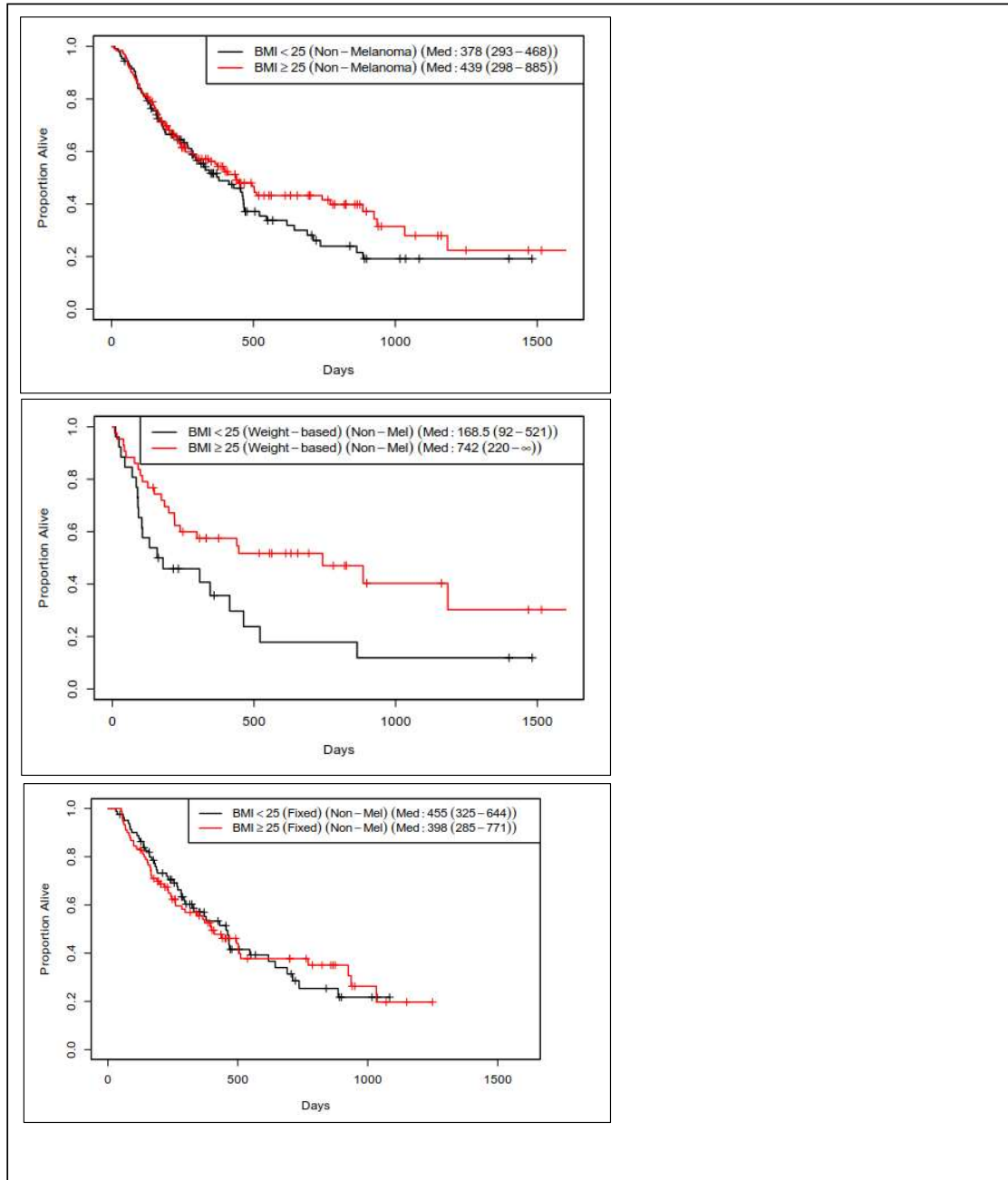
Supplemental Figure 7. Clinical outcomes according to BMI and ICI dosing strategy in female patients. *(a)* PFS with fixed-dose ICI; *(b)* PFS with weight-based ICI; *(c)* OS with fixed-dose ICI; *(d)* OS with weight-based dose ICI.

Supplemental Figure 8. Clinical outcomes in obese, overweight, normal, and underweight patients. *(a)* PFS; *(b)* OS.

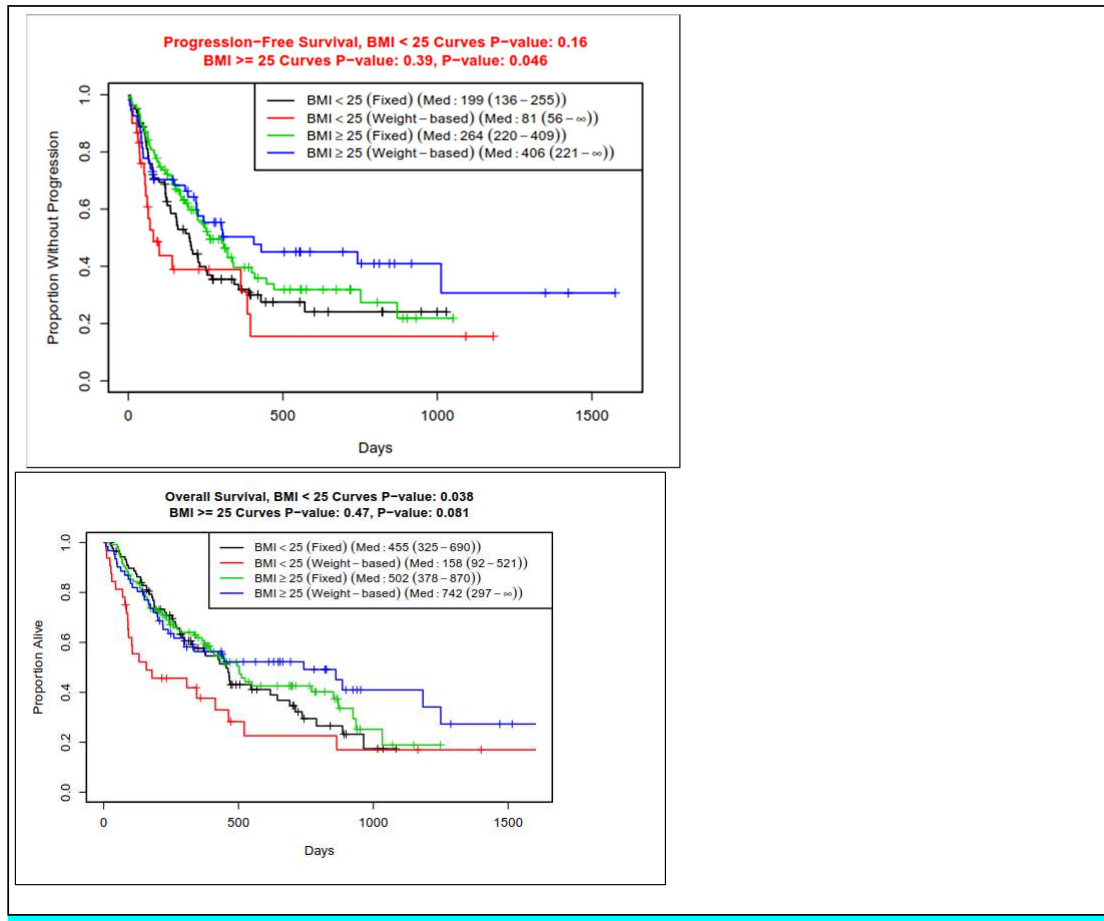
Supplemental Figure 1. (a—top; b—middle; c—bottom)



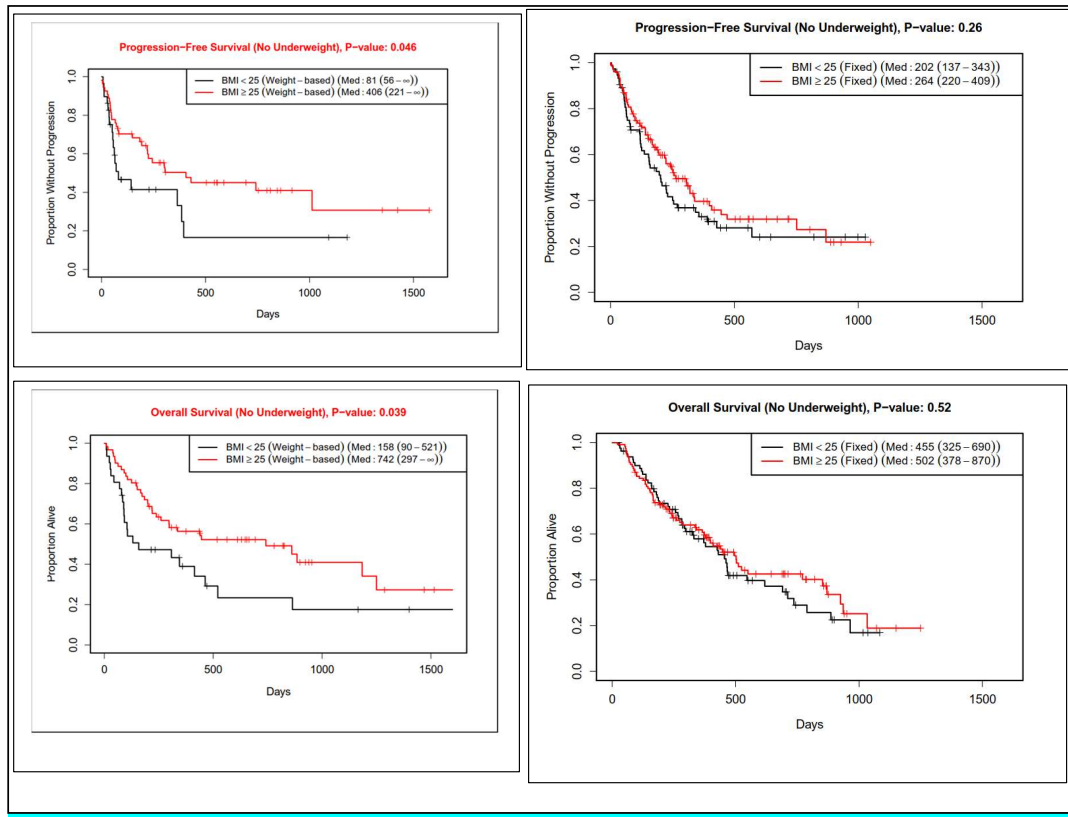
Supplemental Figure 2. (a—top; b—middle; c—bottom)

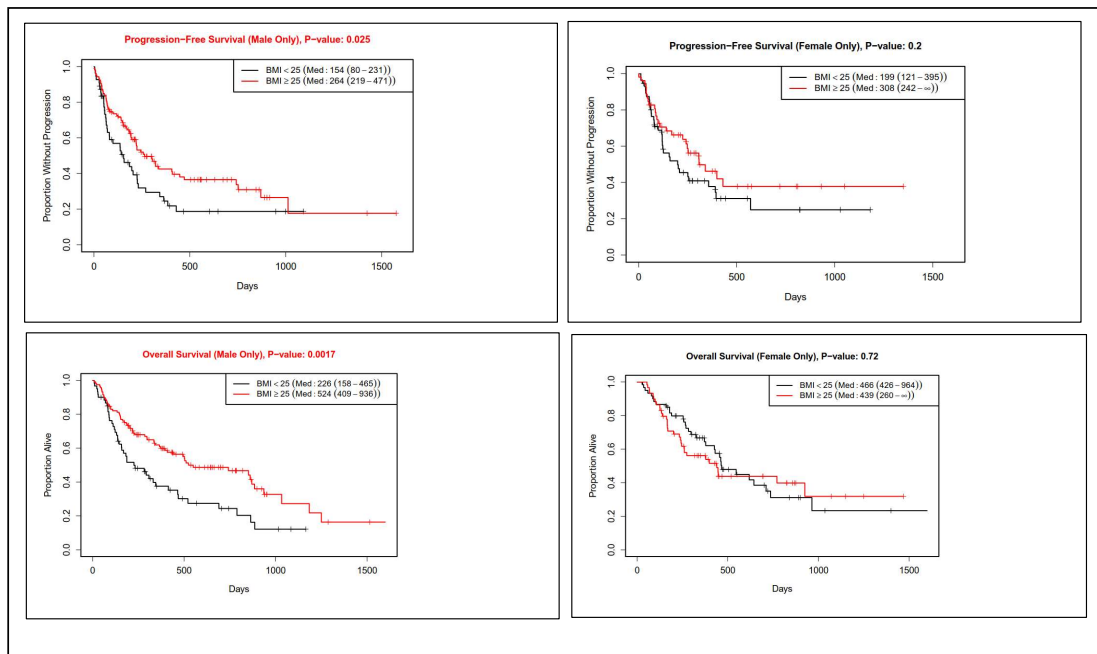


Supplemental Figure 3. (a—top; b—bottom)

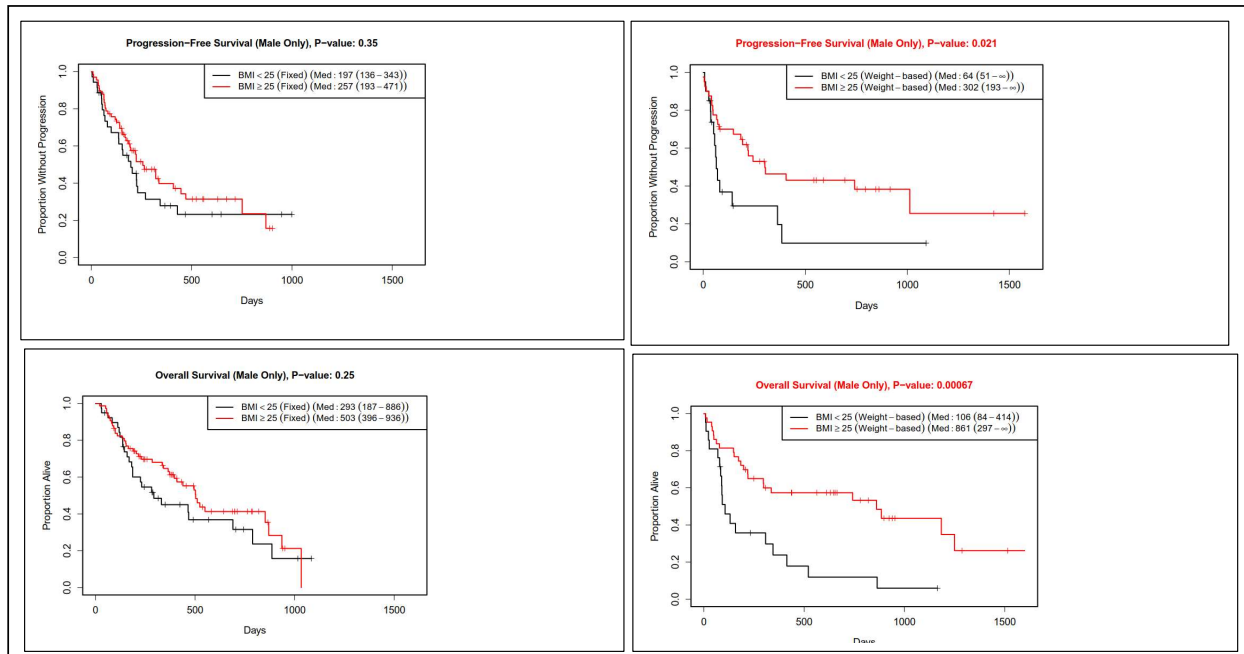


Supplemental Figure 4. (a—top left; b—top right; c—bottom left; d—bottom right)

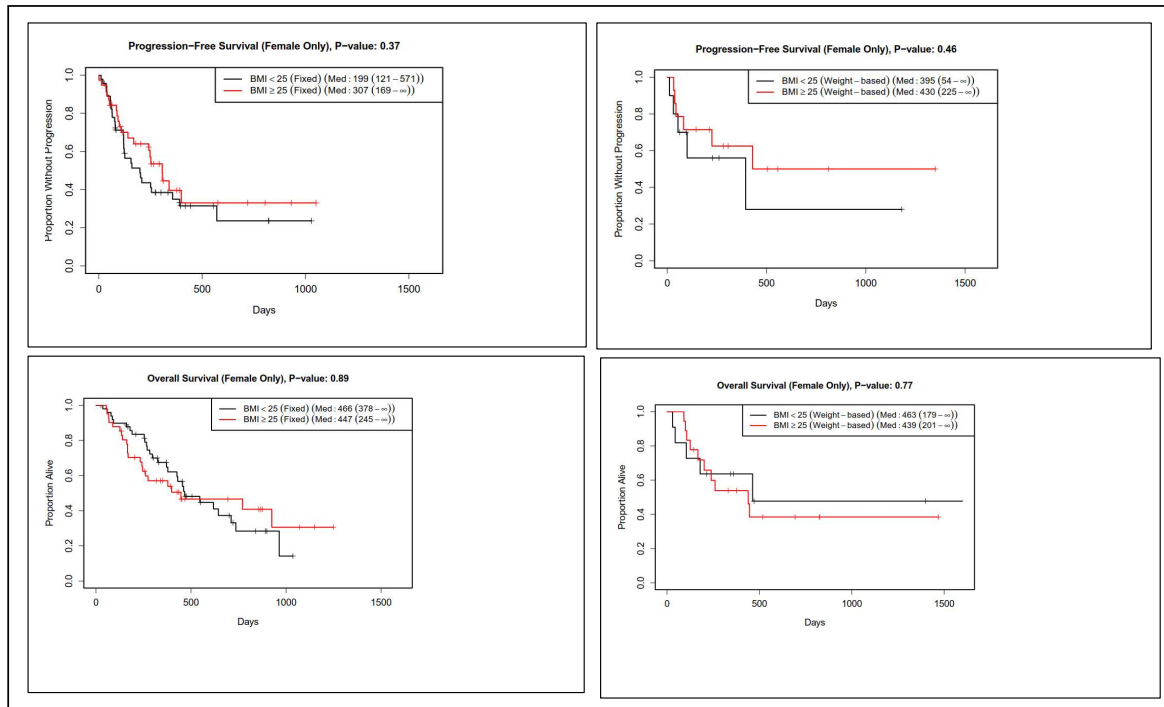


Supplemental Figure 5. (a—top left; b—top right; c—bottom left; d—bottom right)

Supplemental Figure 6. (a—top left; b—top right; c—bottom left; d—bottom right)



Supplemental Figure 7. (a—top left; b—top right; c—bottom left; d—bottom right)



Supplemental Figure 8. (a—left; b—right)

