

Supplemental Table 1. Pairwise Comparisons for Gravidity, FSH, and Tubal Factor Infertility Diagnosis by BMI Category (Reference: Normal BMI 18.5–24.9 kg/m²)

Variable	Comparison	p-value
Gravidity	Normal vs. Overweight	0.003
	Normal vs. Obese	0.085
	Normal vs. Morbidly Obese	0.949
	Overweight vs. Obese	0.764
	Overweight vs. Morbidly Obese	0.084
	Obese vs. Morbidly Obese	0.275
FSH (mIU/mL)	Normal vs. Overweight	0.997
	Normal vs. Obese	0.002
	Normal vs. Morbidly Obese	0.706
	Overweight vs. Obese	0.008
	Overweight vs. Morbidly Obese	0.779
	Obese vs. Morbidly Obese	0.849
PCOS	Normal vs. Overweight	1.000
	Normal vs. Obese	0.007
	Normal vs. Morbidly Obese	1.000
	Overweight vs. Obese	0.074
	Overweight vs. Morbidly Obese	1.000
	Obese vs. Morbidly Obese	1.000
Tubal Factor Infertility	Normal vs. Overweight	0.089
	Normal vs. Obese	<0.001
	Normal vs. Morbidly Obese	1.000
	Overweight vs. Obese	1.000
	Overweight vs. Morbidly Obese	1.000
	Obese vs. Morbidly Obese	0.254

Supplemental Table 2. Holm-adjusted p-values for race/ethnicity-specific comparisons across BMI groups

Race / Ethnicity	P-Value
White	<0.001
Black or African American	0.008
Hispanic or Latino	0.004
Asian	0.414
Native American	0.623
Native Hawaiian or Other Pacific Islander	1.000
Unknown	0.623

Supplemental Table 3. Holm-adjusted p-values for year of treatment comparisons across BMI groups

Year of Treatment	P-Value
2017	0.984
2018	0.984
2019	0.329
2020	0.984
2021	0.436
2022	0.321
2023	0.321
2024	0.984

Supplemental Table 4. Pairwise Adjusted Odds Ratios for IVF-ET Outcomes by BMI Category
(Reference: Normal BMI 18.5–24.9 kg/m²)

Outcome	Comparison	aOR	95% CI	p-value
LBR	Normal vs. Overweight	0.91	0.63–1.30	0.895
	Normal vs. Obese	1.41	0.96–2.07	0.103
	Normal vs. Morbidly Obese	2.83	1.35–5.95	0.002
	Overweight vs. Obese	1.55	1.05–2.30	0.021
	Overweight vs. Morbidly Obese	3.13	1.47–6.66	<0.001
	Obese vs. Morbidly Obese	2.01	0.94–4.33	0.088
Implantation Rate	Normal vs. Overweight	0.81	0.54–1.21	0.528
	Normal vs. Obese	1.21	0.80–1.83	0.625
	Normal vs. Morbidly Obese	1.70	0.83–3.49	0.234
	Overweight vs. Obese	1.50	0.98–2.30	0.066
	Overweight vs. Morbidly Obese	2.10	1.01–4.41	0.048
	Obese vs. Morbidly Obese	1.40	0.67–2.93	0.649
BCR	Normal vs. Overweight	0.96	0.57–1.62	0.998
	Normal vs. Obese	0.83	0.48–1.44	0.825
	Normal vs. Morbidly Obese	0.56	0.23–1.37	0.346
	Overweight vs. Obese	0.87	0.50–1.51	0.910
	Overweight vs. Morbidly Obese	0.59	0.24–1.45	0.429
	Obese vs. Morbidly Obese	0.68	0.27–1.70	0.697
CIUPR	Normal vs. Overweight	0.86	0.60–1.24	0.716
	Normal vs. Obese	1.31	0.89–1.92	0.269
	Normal vs. Morbidly Obese	2.22	1.10–4.49	0.019
	Overweight vs. Obese	1.52	1.03–2.25	0.031
	Overweight vs. Morbidly Obese	2.58	1.26–5.30	0.004
	Obese vs. Morbidly Obese	1.70	0.82–3.51	0.242
MR	Normal vs. Overweight	0.79	0.35–1.77	0.474
	Normal vs. Obese	0.62	0.27–1.44	0.055

	Normal vs. Morbidly Obese	0.23	0.06–0.92	0.066
	Overweight vs. Obese	0.79	0.35–1.75	0.652
	Overweight vs. Morbidly Obese	0.29	0.07–1.16	0.354
	Obese vs. Morbidly Obese	0.37	0.09–1.52	0.759
CLBR	Normal vs. Overweight	1.06	0.64–1.75	0.993
	Normal vs. Obese	1.24	0.72–2.12	0.734
	Normal vs. Morbidly Obese	3.02	1.20–7.58	0.011
	Overweight vs. Obese	1.17	0.69–2.00	0.867
	Overweight vs. Morbidly Obese	2.86	1.12–7.28	0.020
	Obese vs. Morbidly Obese	2.44	0.94–6.31	0.077

Supplemental Table 5. Pairwise Adjusted Odds Ratios for IVF-ET Outcomes by BMI Category Across Single Elective Euploid Embryo Transfers (Reference: Normal BMI 18.5–24.9 kg/m²)

Outcome	Comparison	aOR	95% CI	p-value
LBR	Normal vs. Overweight	0.79	0.53–1.18	0.440
	Normal vs. Obese	1.31	0.85–2.01	0.387
	Normal vs. Morbidly Obese	2.79	1.27–6.15	0.005
	Overweight vs. Obese	1.66	1.05–2.60	0.022
	Overweight vs. Morbidly Obese	3.54	1.57–7.95	<0.001
	Obese vs. Morbidly Obese	2.14	0.94–4.86	0.081
Implantation Rate	Normal vs. Overweight	0.71	0.44–1.15	0.259
	Normal vs. Obese	1.30	0.81–2.08	0.471
	Normal vs. Morbidly Obese	1.63	0.74–3.57	0.385
	Overweight vs. Obese	1.83	1.10–3.03	0.012
	Overweight vs. Morbidly Obese	2.28	1.01–5.18	0.047
	Obese vs. Morbidly Obese	1.25	0.55–2.82	0.897
BCR	Normal vs. Overweight	0.99	0.56–1.75	1.000
	Normal vs. Obese	1.01	0.54–1.88	1.000
	Normal vs. Morbidly Obese	0.51	0.21–1.27	0.232

	Overweight vs. Obese	1.02	0.54–1.94	1.000
	Overweight vs. Morbidly Obese	0.52	0.20–1.32	0.268
	Obese vs. Morbidly Obese	0.51	0.19–1.33	0.269
CIUPR	Normal vs. Overweight	0.78	0.52–1.18	0.418
	Normal vs. Obese	1.27	0.82–1.96	0.485
	Normal vs. Morbidly Obese	2.29	1.07–4.87	0.025
	Overweight vs. Obese	1.63	1.03–2.56	0.031
	Overweight vs. Morbidly Obese	2.93	1.34–6.37	0.002
	Obese vs. Morbidly Obese	1.80	0.82–3.95	0.220
MR	Normal vs. Overweight	1.04	0.41–2.68	0.999
	Normal vs. Obese	0.74	0.28–1.95	0.859
	Normal vs. Morbidly Obese	0.27	0.06–1.22	0.115
	Overweight vs. Obese	0.71	0.27–1.91	0.816
	Overweight vs. Morbidly Obese	0.26	0.05–1.23	0.117
	Obese vs. Morbidly Obese	0.36	0.08–1.75	0.346