

Table S1. Number of patients included in 12-month weight loss analysis by phase and country.

| | Phase 2 2002–2004 | Phase 3 2005–2008 | Phase 4 2009–2011 | Phase 5 2012–2014 | Phase 6 2015–2018 | Total |
|---------|----------------------|----------------------|----------------------|----------------------|----------------------|--------|
| ANZ | 310 | 406 | 315 | 0 | 0 | 1,031 |
| Belgium | 292 | 295 | 351 | 270 | 131 | 1,339 |
| Canada | 358 | 341 | 298 | 409 | 353 | 1,759 |
| China | 0 | 0 | 0 | 563 | 0 | 563 |
| France | 237 | 395 | 354 | 90 | 0 | 1,076 |
| GCC | 0 | 0 | 0 | 383 | 254 | 637 |
| Germany | 300 | 471 | 476 | 513 | 239 | 1,999 |
| Italy | 318 | 394 | 462 | 385 | 130 | 1,689 |
| Japan | 1,173 | 1,494 | 1,474 | 1,540 | 1,600 | 7,281 |
| Russia | 0 | 0 | 0 | 189 | 0 | 189 |
| Spain | 373 | 409 | 515 | 354 | 339 | 1,990 |
| Sweden | 322 | 380 | 305 | 299 | 289 | 1,595 |
| Turkey | 0 | 0 | 0 | 55 | 0 | 55 |
| UK | 235 | 207 | 254 | 269 | 203 | 1,168 |
| US | 969 | 925 | 2,482 | 8,469 | 7,103 | 19,948 |
| Total | 4,887 | 5,717 | 7,286 | 13,788 | 10,641 | 42,319 |

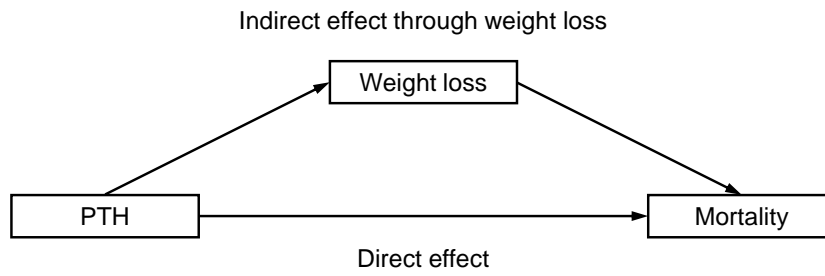
Abbreviations: ANZ, Australia and New Zealand; GCC, Gulf Cooperation Council; UK, United Kingdom; US, United States.

Table S2. Distribution of baseline PTH by region.

| | Europe (n = 10,856) | Japan (n = 7,281) | North America (n = 21,707) | Overall (n = 42,319) |
|--------------------------|------------------------|----------------------|-------------------------------|-------------------------|
| PTH, pg/ml, median (IQR) | 218 (109–390) | 130 (68–223) | 317 (192–522) | 251 (131–444) |
| PTH ≥600 pg/ml, % | 12.1 | 2.8 | 19.6 | 15.0 |

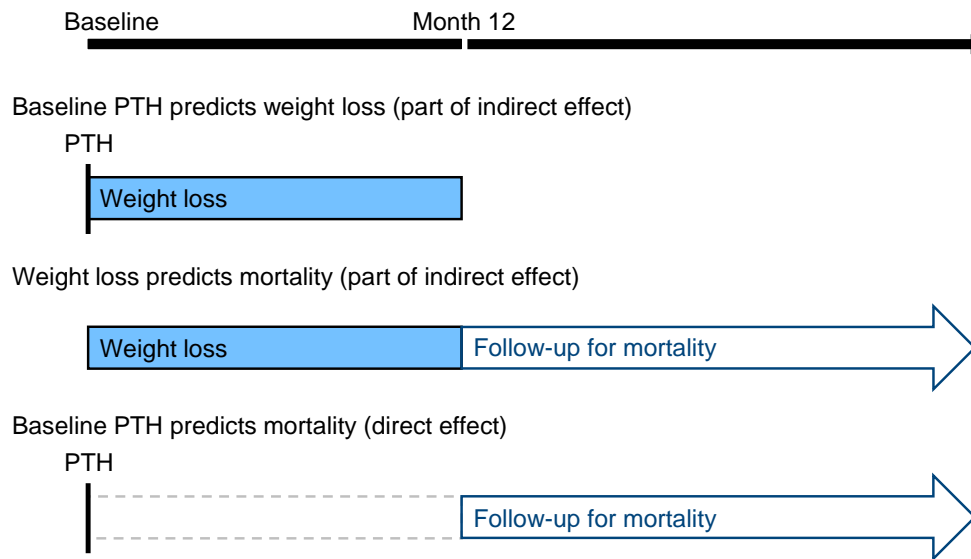
Abbreviations: IQR, interquartile range; PTH, parathyroid hormone.

Figure S1-A. Illustration of the mediation analysis pathways between baseline PTH, weight loss, and mortality.



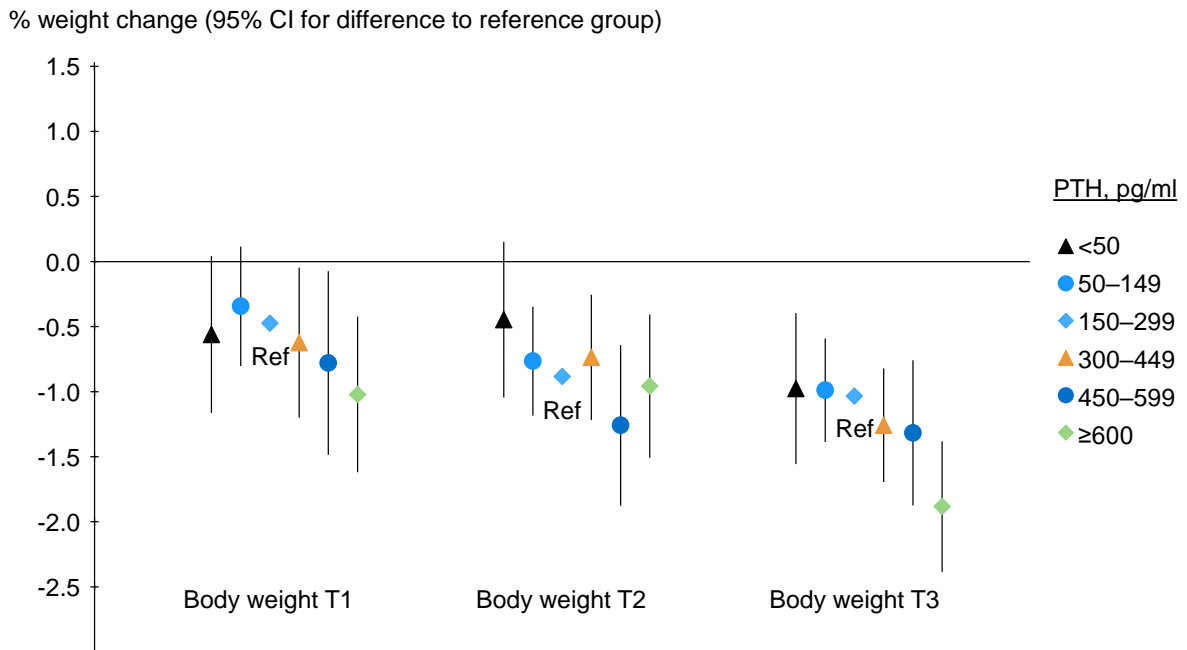
PTH, parathyroid hormone.

Figure S1-B. Illustration of the timing of the data used in the three major models for the mediation analysis.



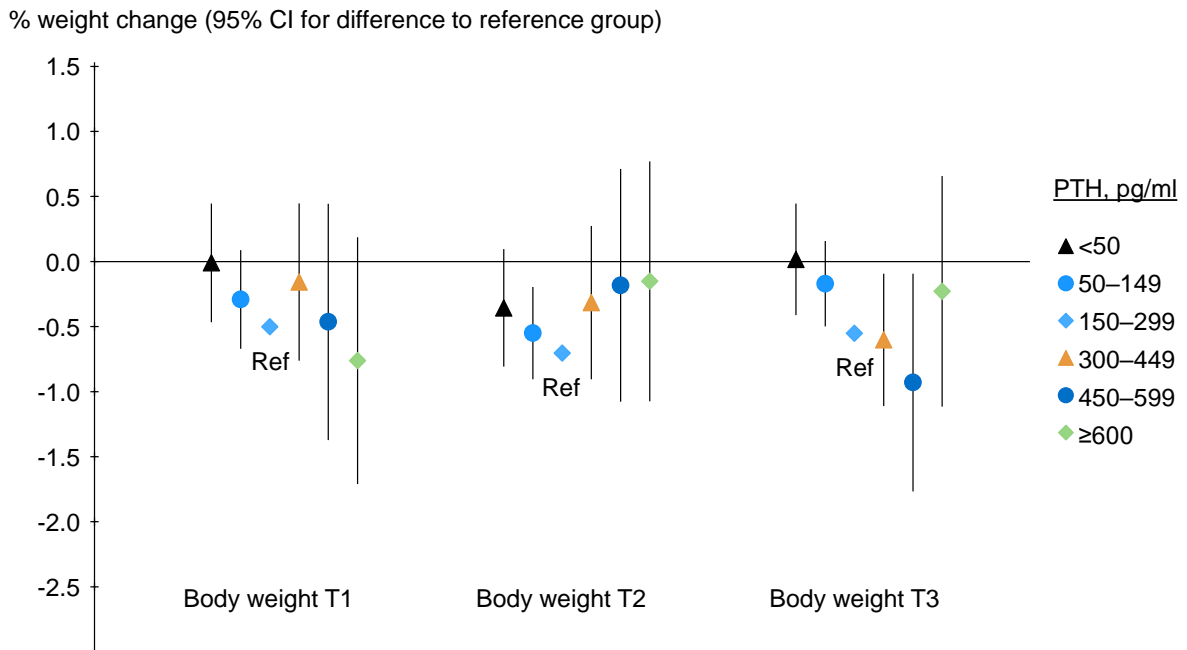
PTH, parathyroid hormone.

Figure S2-A. Association of baseline PTH with 12-month percent weight change, by body weight in Europe.



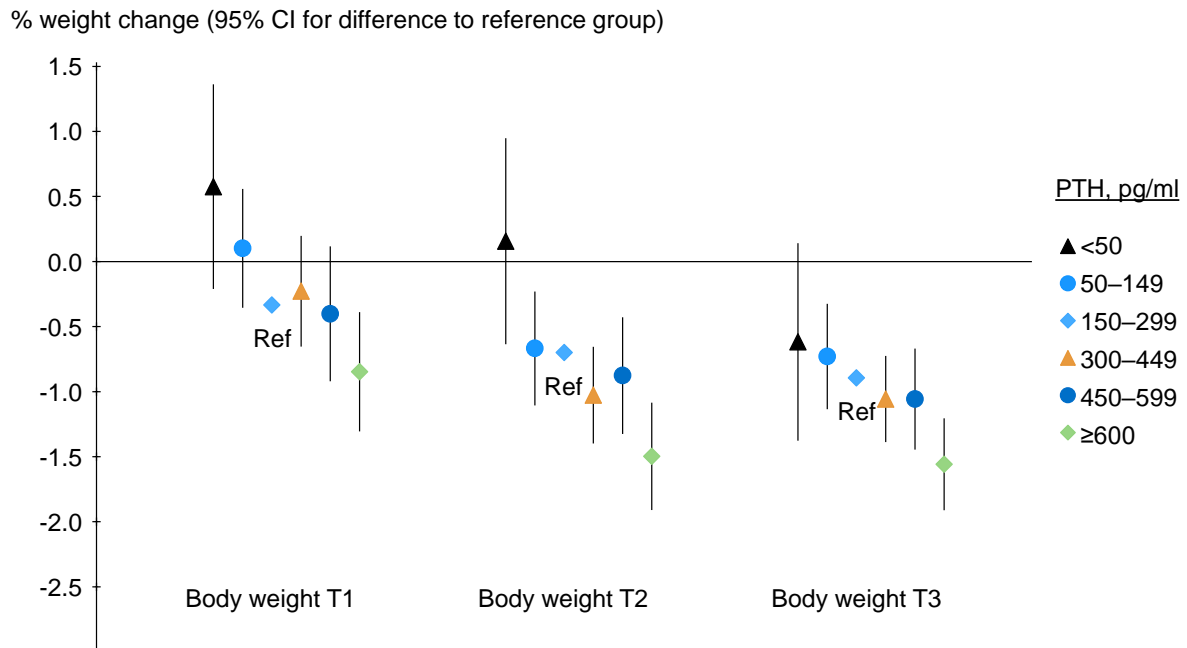
PTH, parathyroid hormone; Ref, reference. Model adjusted for country, study phase, electronic health record data source (US phases 4–6 only), age, sex, time on dialysis, 13 comorbid conditions, single-pool Kt/V , dry weight, albumin, hemoglobin, creatinine, calcium, and phosphorus, accounting for facility clustering. The P value for trend was 0.17 for tertile 1, 0.06 for tertile 2, and <0.001 for tertile 3. The mean actual weight change was shown for the reference group, and other groups were plotted relative to the reference group based on adjusted model results.

Figure S2-B. Association of baseline PTH with 12-month percent weight change, by body weight in Japan.



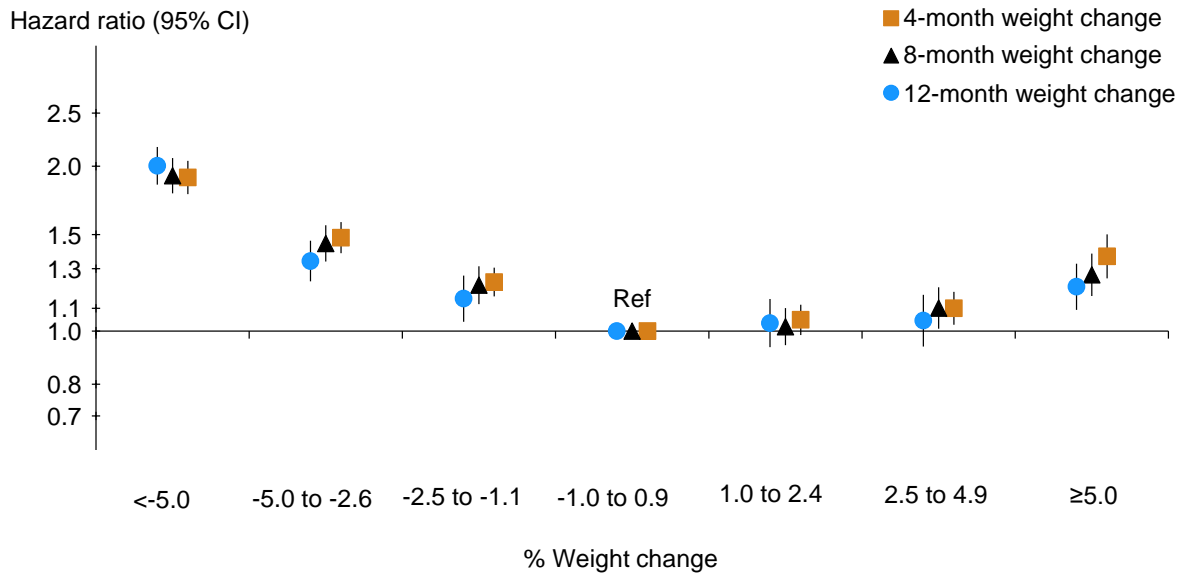
PTH, parathyroid hormone; Ref, reference. Model adjusted for country, study phase, electronic health record data source (US phases 4–6 only), age, sex, time on dialysis, 13 comorbid conditions, single-pool Kt/V , dry weight, albumin, hemoglobin, creatinine, calcium, and phosphorus, accounting for facility clustering. The P value for trend was 0.04 for tertile 1, 0.53 for tertile 2, and 0.009 for tertile 3. The mean actual weight change was shown for the reference group, and other groups were plotted relative to the reference group based on adjusted model results.

Figure S2-C. Association of baseline PTH with 12-month percent weight change, by body weight in North America.



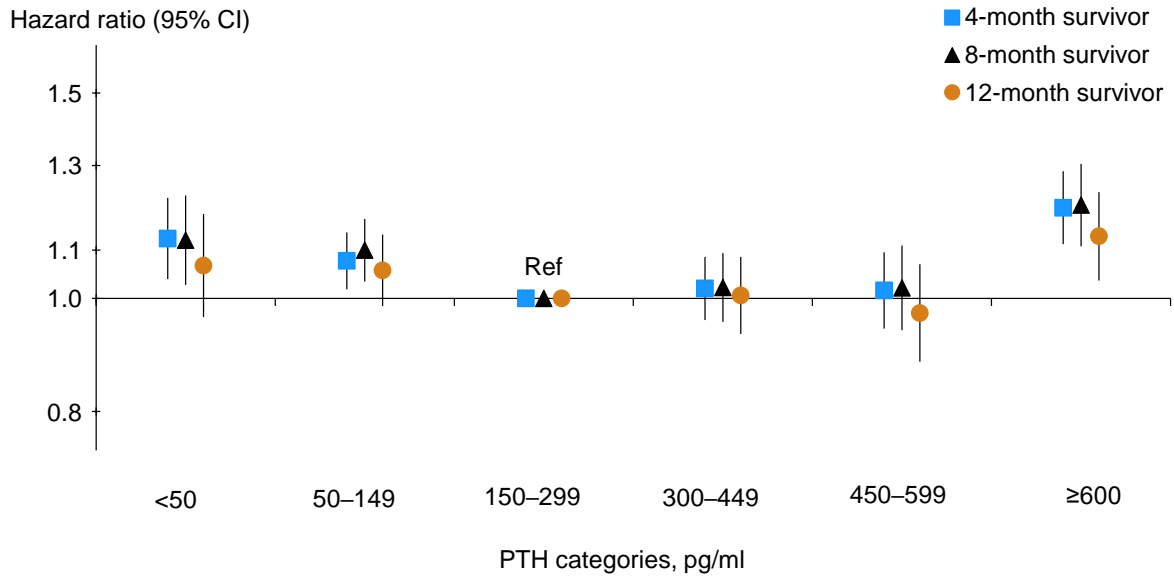
PTH, parathyroid hormone; Ref, reference. Model adjusted for country, study phase, electronic health record data source (US phases 4–6 only), age, sex, time on dialysis, 13 comorbid conditions, single-pool Kt/V , dry weight, albumin, hemoglobin, creatinine, calcium, and phosphorus, accounting for facility clustering. The P value for trend was <0.001 for each tertile. The mean actual weight change was shown for the reference group, and other groups were plotted relative to the reference group based on adjusted model results.

Figure S3. Association between percent weight change and mortality.



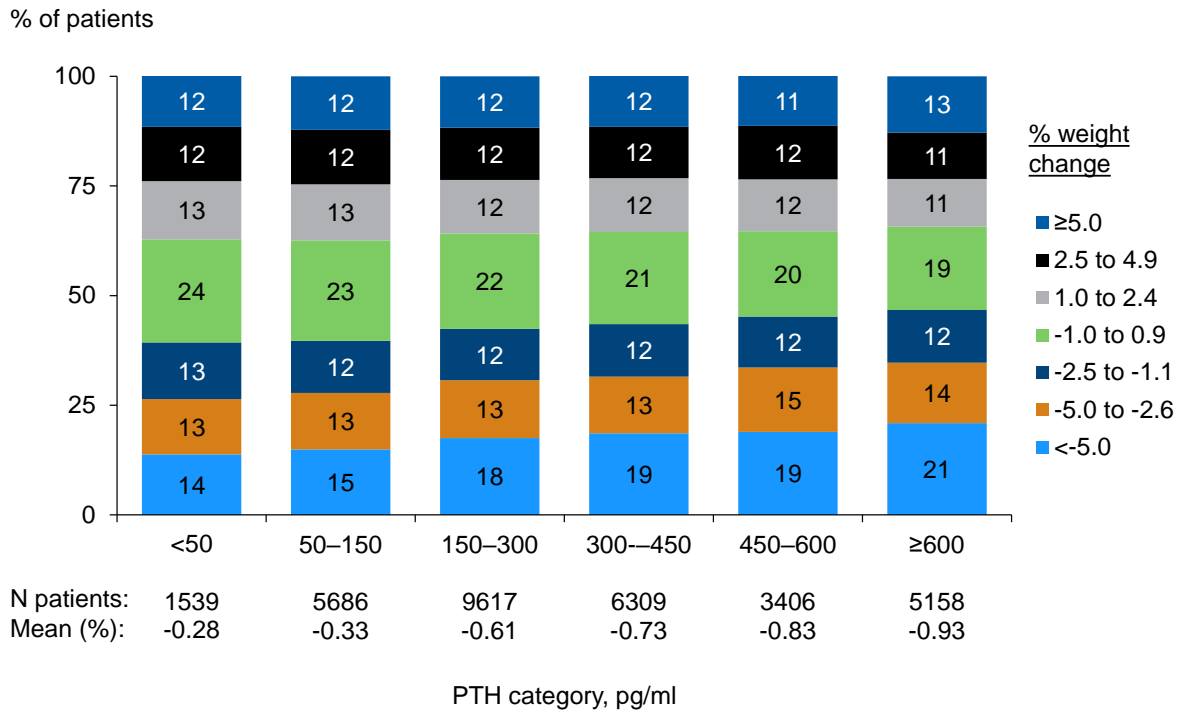
Model stratified by country, adjusted for study phase, electronic health record data source (US phases 4–6 only), age, sex, time on dialysis, 13 comorbid conditions, single-pool Kt/V , dry weight, albumin, hemoglobin, creatinine, calcium, and phosphorus, accounting for facility clustering.

Figure S4. Association between baseline PTH and mortality.



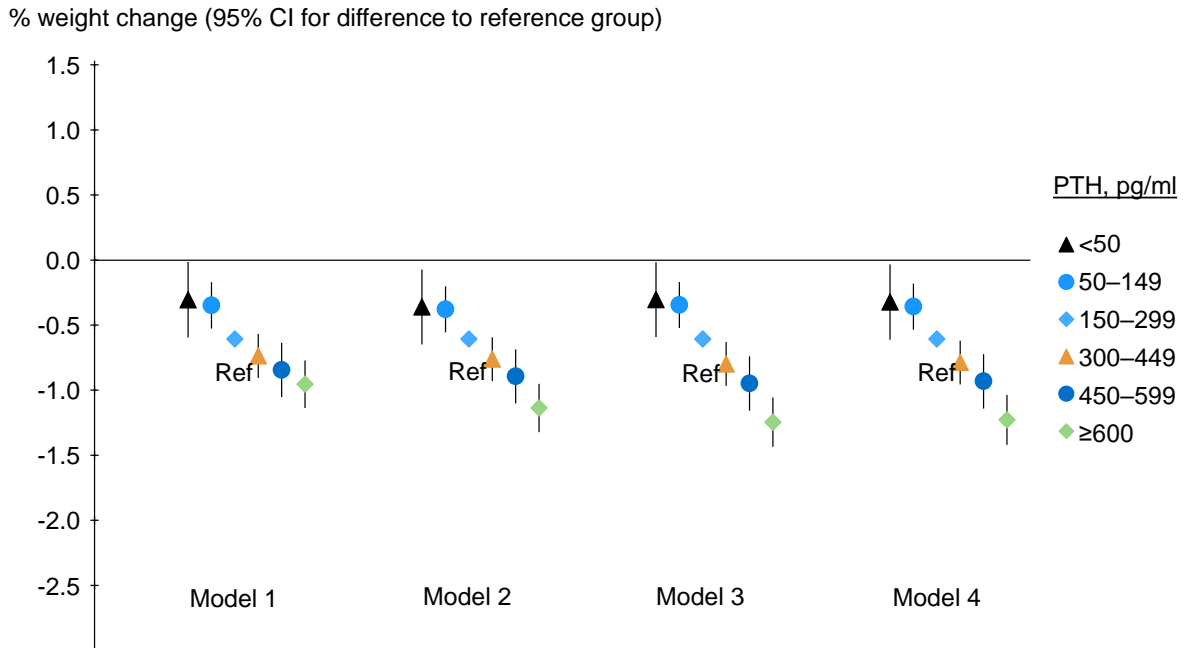
PTH, parathyroid hormone. Model stratified by country, adjusted for study phase, electronic health record data source (US phases 4-6 only), age, sex, time on dialysis, 13 comorbid conditions, single-pool Kt/V , dry weight, albumin, hemoglobin, creatinine, calcium, and phosphorus, accounting for facility clustering.

Figure S5. Distribution of 12-month percent weight change by baseline mean PTH level.



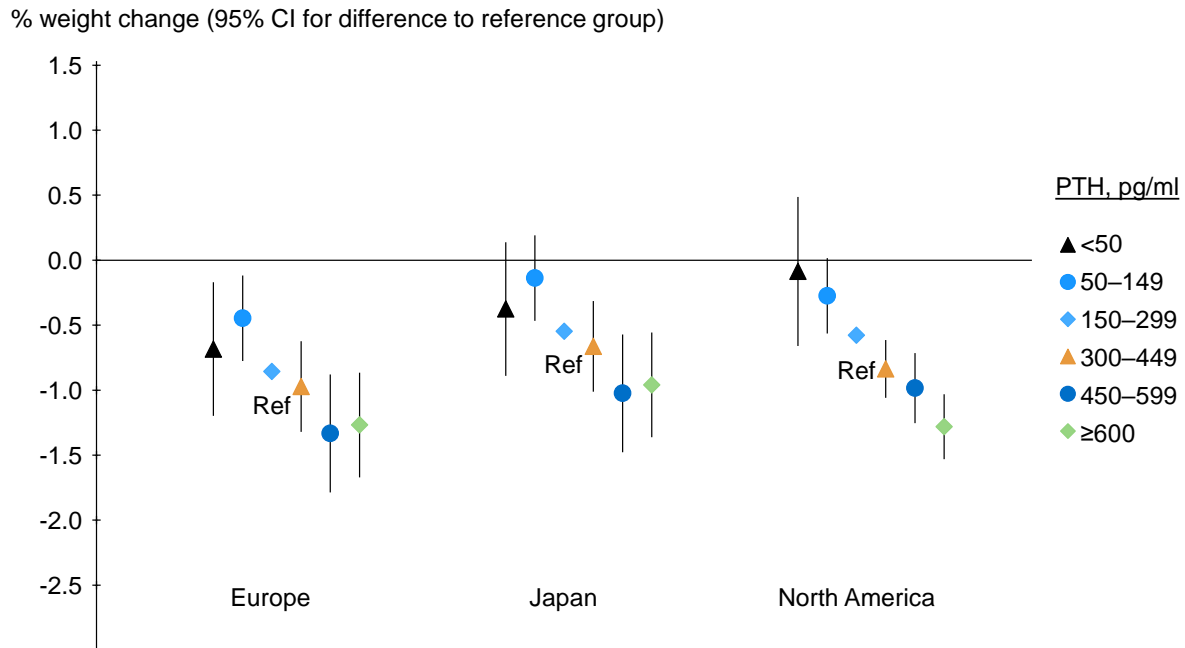
PTH, parathyroid hormone.

Figure S6. Association of baseline mean PTH with 12-month percent weight change.



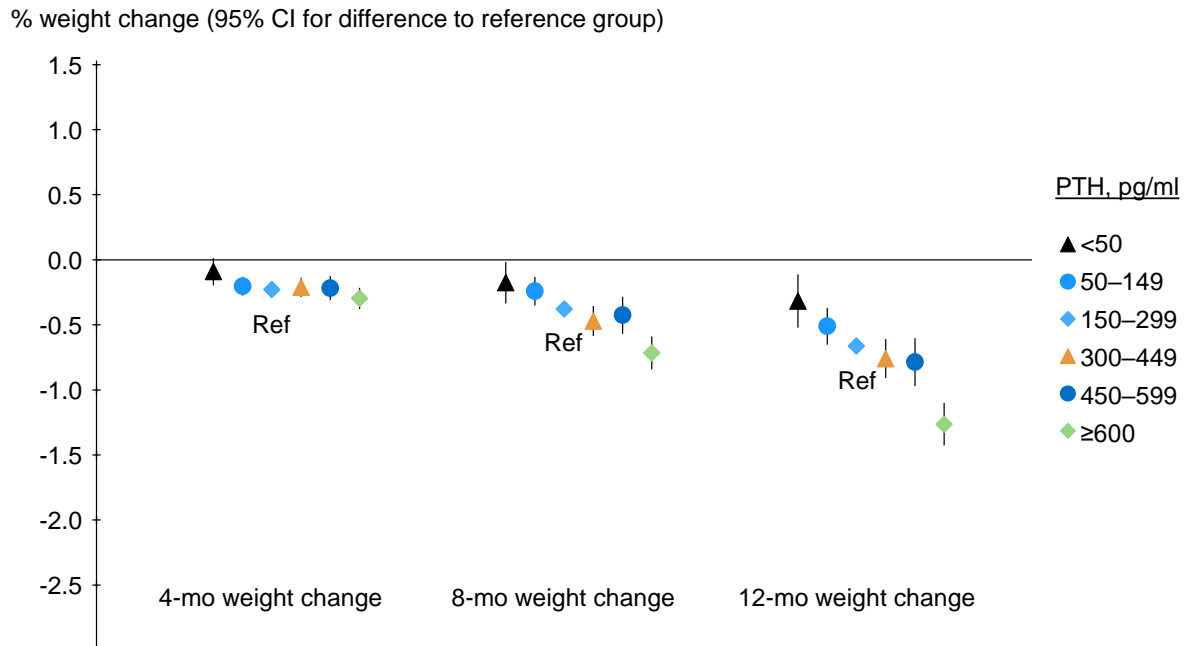
PTH, parathyroid hormone; Ref, reference. Model 1 adjusted for country, study phase, and electronic health record data source (US phases 4–6 only), accounting for facility clustering. Model 2 adjusted for covariates in Model 1 plus age, sex, time on dialysis, 13 comorbid conditions, single-pool Kt/V , and dry weight. Model 3 adjusted for covariates in Model 2 plus albumin, hemoglobin, creatinine, calcium, and phosphorus. Model 4 adjusted for covariates in Model 3 plus calcium-based binder, sevelamer, lanthanum, other phosphate binders, active vitamin D derivatives, and calcimimetics. The P value for trend was <0.001 for each model. The mean actual weight change was shown for the reference group, and other groups were plotted relative to the reference group based on adjusted model results.

Figure S7. Association of baseline mean PTH with 12-month percent weight change, by region.



PTH, parathyroid hormone; Ref, reference. Model adjusted for country, study phase, electronic health record data source (US phases 4–6 only), age, sex, time on dialysis, 13 comorbid conditions, single-pool Kt/V , dry weight, albumin, hemoglobin, creatinine, calcium, and phosphorus, accounting for facility clustering. The P value for trend was <0.001 for Europe and North American, and 0.06 for Japan. The mean actual weight change was shown for the reference group, and other groups were plotted relative to the reference group based on adjusted model results.

Figure S8. Association of baseline PTH with percent weight change in 4, 8, and 12 months.



PTH, parathyroid hormone; Ref, reference. Model adjusted for country, study phase, electronic health record data source (US phases 4–6 only), age, sex, time on dialysis, 13 comorbid conditions, single-pool Kt/V , dry weight, albumin, hemoglobin, creatinine, calcium, and phosphorus, accounting for facility clustering. The P value for trend was <0.001 for each analysis. The mean actual weight change was shown for the reference group, and other groups were plotted relative to the reference group based on adjusted model results.