

TRAJECTORIES OF CKD-MBD BIOCHEMICAL PARAMETERS IN THE 2 YEARS FOLLOWING DIAGNOSIS OF SEVERE SECONDARY HYPERPARATHYROIDISM

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INTRODUCTION

- Most studies about severe secondary hyperparathyroidism (SHPT) assess the bone turnover on only one isolated biological measure.

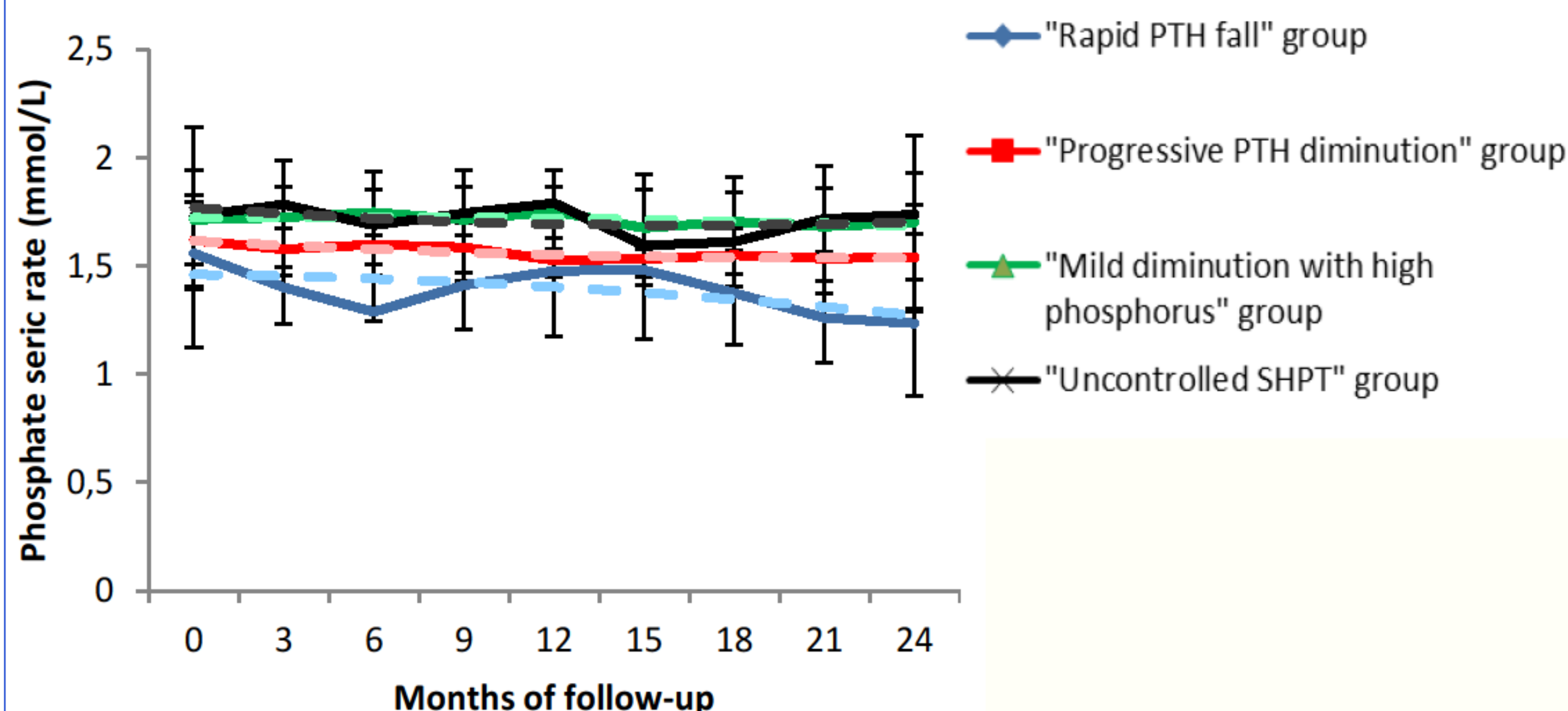
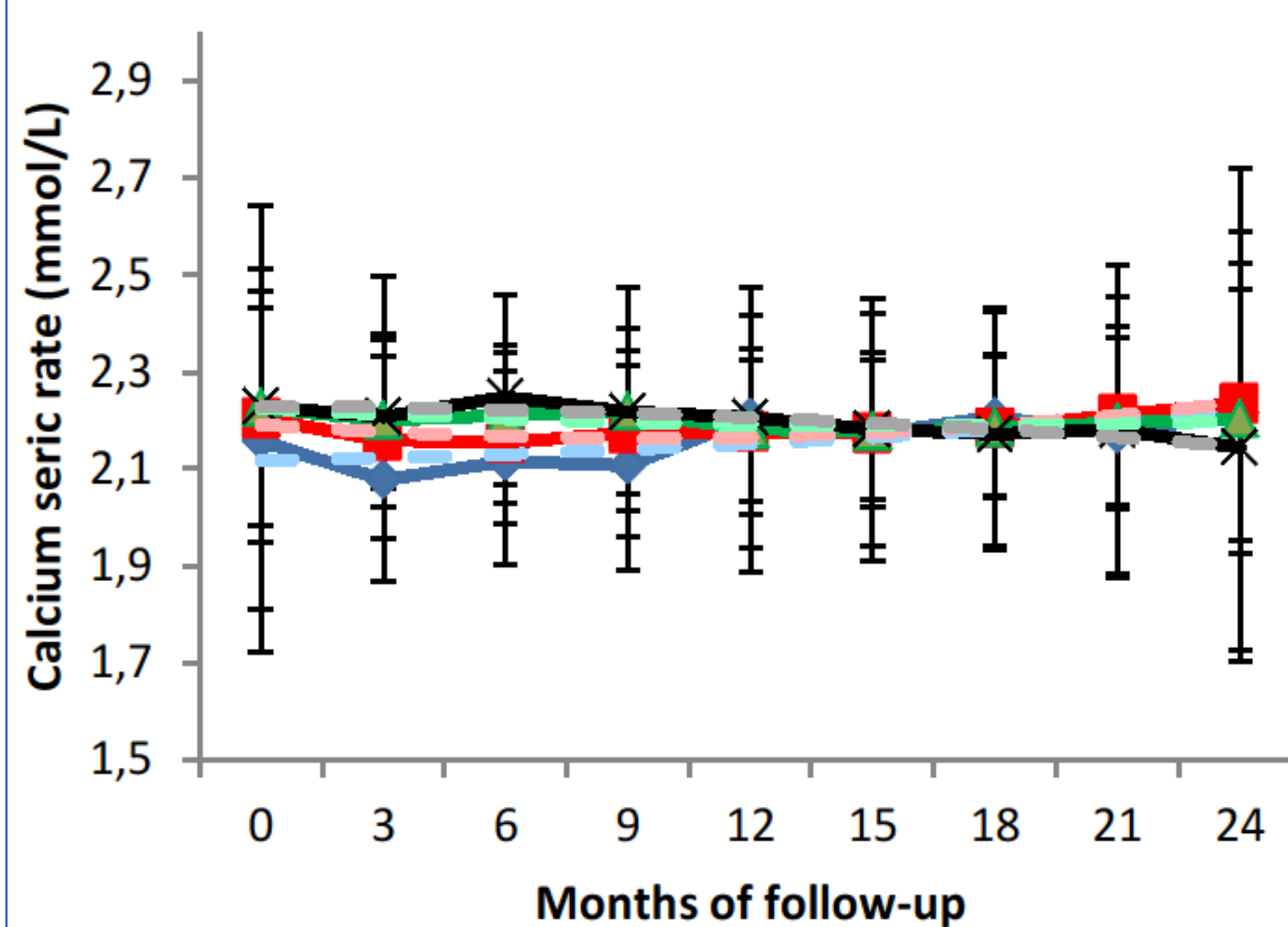
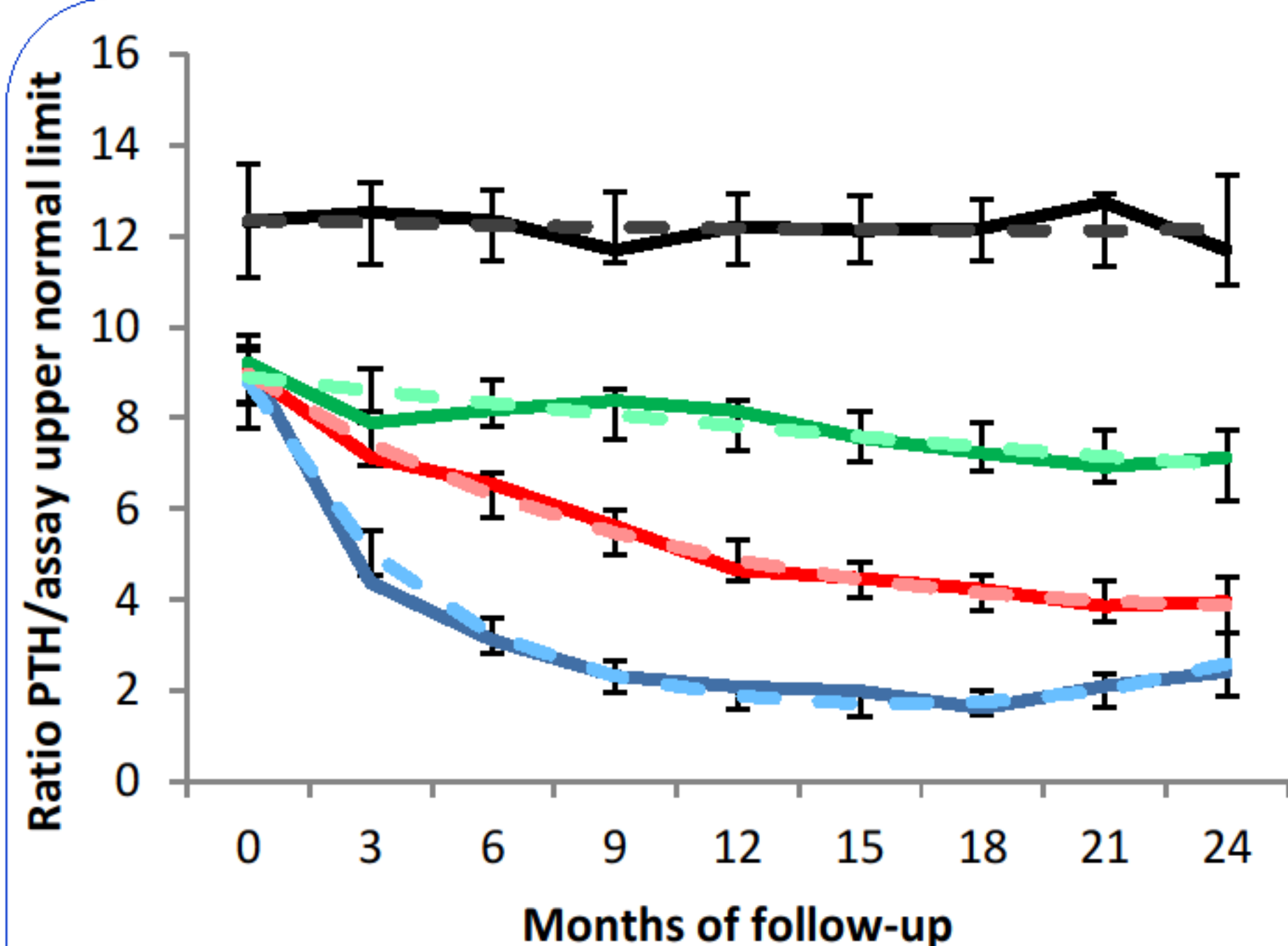
OBJECTIVES

- To assess the feasibility of new statistical approach to describe longitudinal trajectories of calcium, phosphorus and parathyroid hormone (PTH) with their clinical characteristics, treatments and outcomes.

METHODS

- From December 2009 to May 2012, we included prospectively all patients in dialysis with a newly diagnosed SHPT in one french administrative region. Each patient was followed for 2 years. All the biological parameters for SHPT measured in clinical practice, treatments and medical events potentially associated to SHPT were collected.
- We defined several groups and their trajectories for the calcium, the phosphorus and the PTH seric rate by group-based trajectory modeling (GBTM). The characteristics and given treatments were compared between these groups.

RESULTS



- We included 269 patients and identified 4 distinct trajectories (Figure 1.): “rapid PTH fall” (n=34; 12.6%), “progressive PTH diminution” (n=98; 36.4%), “mild diminution with high phosphorus” (n=105; 39.0%) and “uncontrolled SHPT” (n=32; 11.9%).
- Mean probabilities of group assignation ranged from 0.84 to 0.99 according to the group.
- Patients in the “uncontrolled SHPT” group were significantly younger than patients in the other groups (54.1±19.4 years versus 68.8±14.6 years, 68.5±13.6 years and 67.2±14.9 years in the other groups; p<0.00001).
- KDIGO targets were reached for 14.89% of patients at baseline versus 16.67% at the end of the study. No difference in total lengths of prescription was observed according to the group.
- The patients in the “rapid PTH fall” group received cinacalcet more frequently at 3 and 6 months of follow-up. The patients in the “uncontrolled SHPT” group received cinacalcet more frequently at 24 months of follow-up (figure 2.).

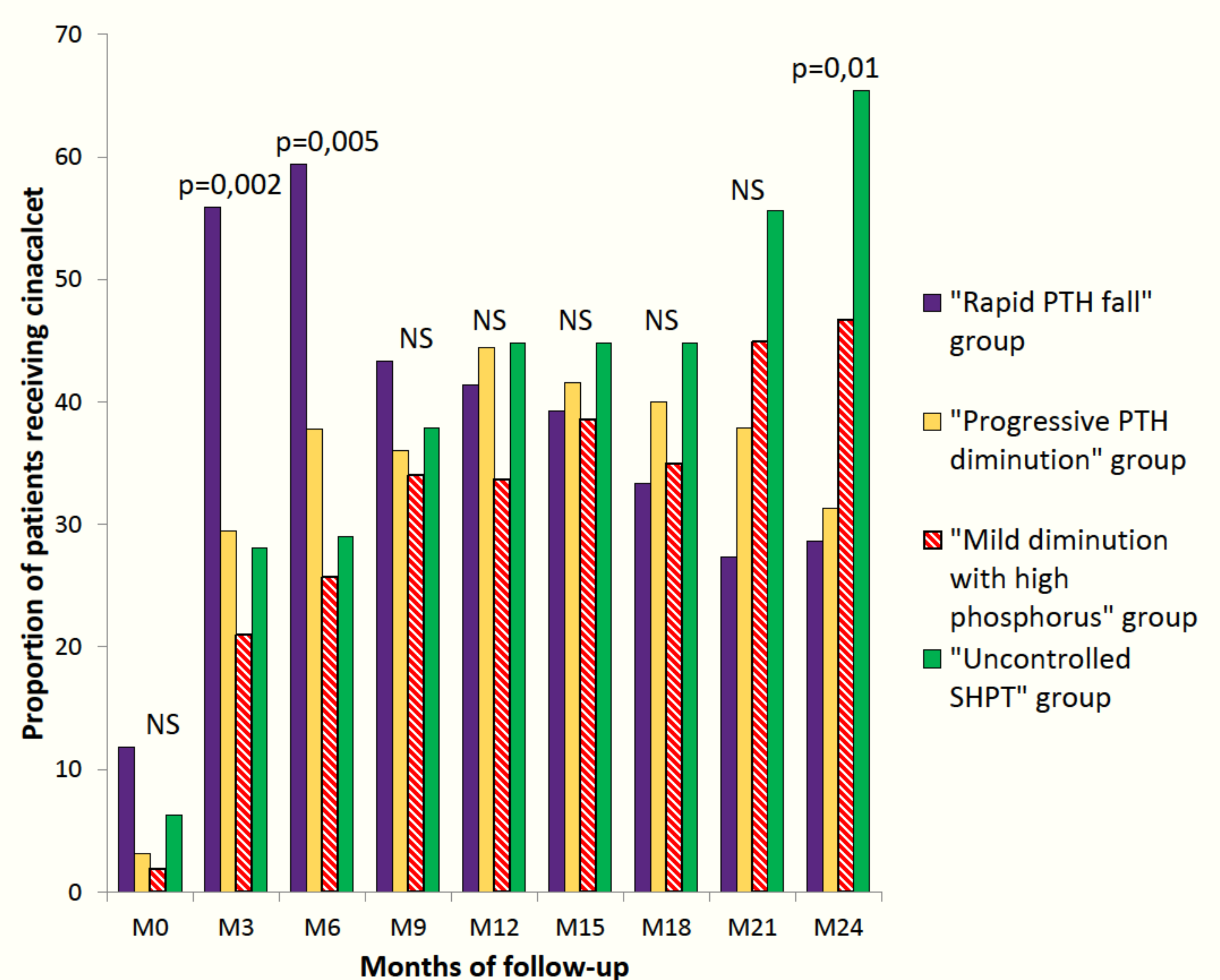


Figure 1. Trajectories for PTH, calcium, phosphate seric rates in the 2 years following the diagnosis of a SHPT

The solid lines indicate the observed trajectories and the dashed lines indicate the predicted trajectories with their 95% confidence intervals.

Figure 2. Cinacalcet prescription according to the group of follow-up

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