SWITCHING FROM BRANDED ALENDRONATE OR RISEDRONATE TO GENERIC ALENDRONATE: EFFECT ON PERSISTENCE WITH BISPHOSPHONATE THERAPY IN GERMANY

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INTRODUCTION

After launch of generic alendronate, market share increased significantly over few months. However, since many osteoporotic patients are of higher age, some of them will be less willing to take a different drug. Switching might therefore cause non-compliance, which is in its turn an important factor of fracture risk.

OBJECTIVE

We, therefore, estimated the impact on persistence and medication possession ratio (MPR) when patients using branded alendronate or risedronate are switched to generic alendronate.

METHODS

Data were extracted from the DAPI data warehouse, a resource that contain prescription claims for about 60 million statutory health insurance recipients in Germany. Patients with a pretreatment period of at least 6 months with branded alendronate or branded risedronate and switching to treatment with generic alendronate between October 1, 2005 and March 31, 2006 were included. Patients who received a prescription other than weekly alendronate or weekly risedronate within 6 months prior and 12 months after index prescription were excluded. Claims data on selected patients were studied for 12 months from the date of their index prescription. Persistence was evaluated based on a gap in coverage of 30 days for weekly bisphosphonates.

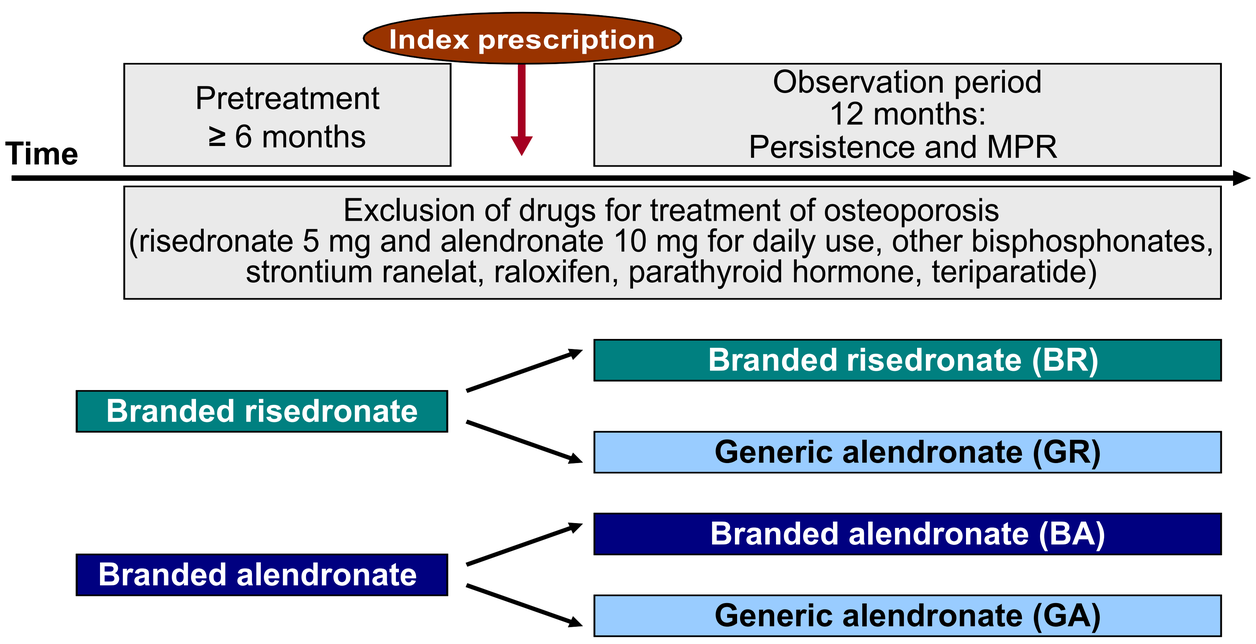

Figure 1: Study design

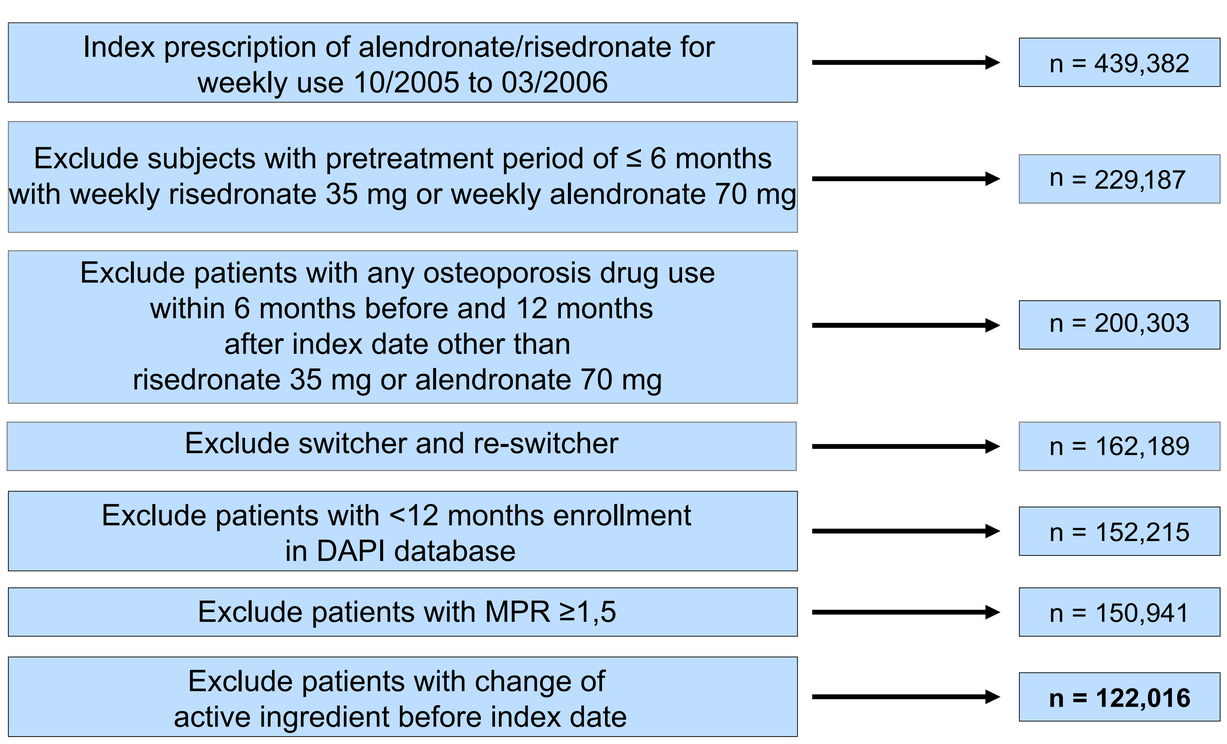

Figure 2: Identification of the study population

RESULTS

A total of 122,016 subjects were included in the study, the risedronate cohort included 48,491 subjects on once-a week dosing of 35 mg branded risedronate and 73,525 subjects on once-a week dosing of 35 mg branded alendronate (Figure 2). During the index date period 5,628 subjects switched from branded risedronate and 38,589 subjects switched from branded alendronate to generic alendronate. The median number of days until the occurrence of a first gap was larger ($p < 0.001$) for subjects who continued with branded risedronate (228 days) than for subjects who switched from branded risedronate to generic alendronate (200 days). At 12 months, more subjects receiving branded risedronate (33.2%) were persistent compared to subjects switching to generic alendronate (28.5%). MPR ≥ 80% that was most commonly used to define high compliance was observed in 58.2% and in 41.7% of subjects continuing with branded risedronate and branded alendronate, respectively. After switching to generic alendronate MPR ≥ 80% was almost 50% in switchers from the two branded bisphosphonates. Median MPR was 92.1% in subjects continuing with branded risedronate and was less than 80% in all other groups (Table 1 and Figure 3).

Table 1: Rate of persistence, median persistence, MPR and rate of MPR ≥ 0.80

Group	Persistence 365 days (%)	Median (days)	MPR Median	MPR ≥ 0.80 (%)
Branded risedronate	33.2	228	0.92	58.2
Branded risedronate→ Generic alendronate	28.5	200	0.77	49.8
Branded alendronate	23.0	180	0.69	41.7
Branded alendronate→ Generic alendronate	27.4	200	0.77	49.5

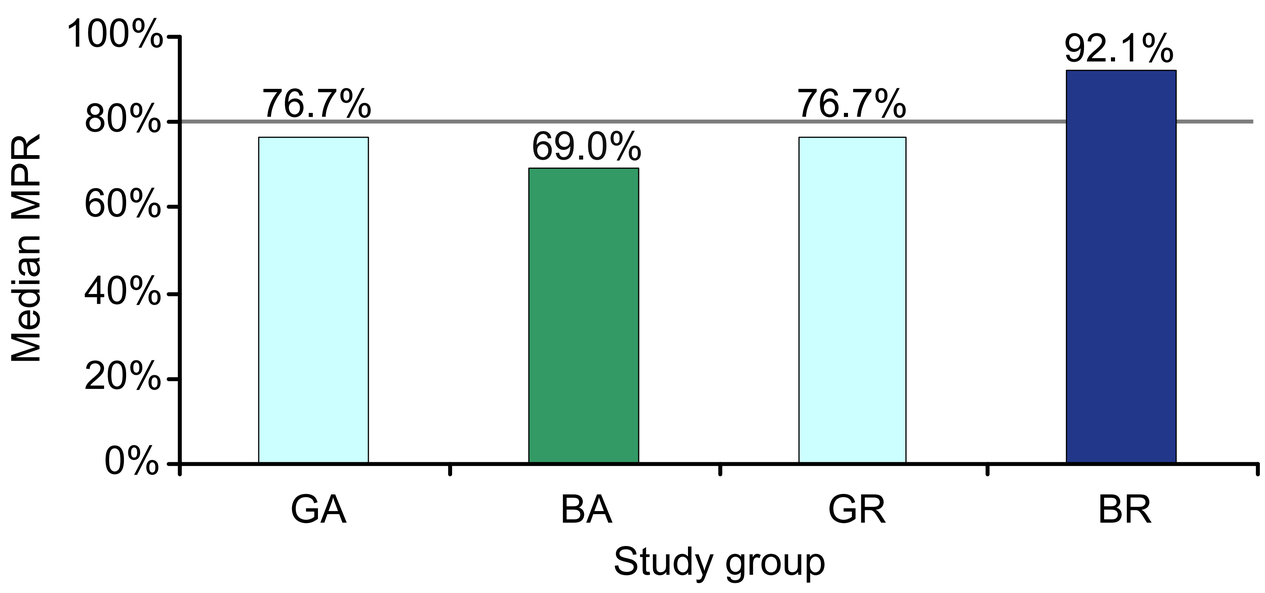

Figure 3: Median MPR of the study groups

CONCLUSIONS

Switching patients from branded risedronate to generic alendronate might negatively affect medication persistence and adherence.

ECTS 2009, Vienna, Austria, 23 – 27 May 2009, Poster P511