

## JOURNAL WATCH

# Statins in the Last Six Months of Life: A Recognizable, Life-Limiting Condition Does Not Decrease their Use

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### ABSTRACT

**Background:** Some have advocated discontinuing statins in patients with life-limiting conditions. However, the extent of statin use at the end of life has yet to be described and whether statin prescribing may already be influenced by the presence of a recognizable, life-limiting condition is unknown.

**Objective:** To measure the prevalence of statin use during the last 6 months of life and determine if statin prescribing varies according to the presence of a recognizable, life-limiting condition.

**Design:** Matched, case-control trial nested within a retrospective, cohort study.

**Setting/subjects:** From 3031 VISN 11 patients who died in FY2004, we identified 1584 (52%) receiving statins at least 6 months before death. Of those, we identified 337 cases with a recognizable, life-limiting condition and 1247 controls matched on number of comorbidities, age, and socioeconomic status.

**Analyses:** We used survival analysis to test the relationship between days without statins and the presence of a life limiting condition, while controlling for pills supplied and comorbidity score.

**Results:** There was no significant difference in the time off statins between cases and controls even though the study was sufficiently powered to detect one.

**Conclusions:** These findings underscore a missed opportunity to reduce the therapeutic burden upon dying patients and limit health care spending.

### Strengths:

- Matched case control design, with moderate sample size (~1500).
- This study examined the influence of certain diagnoses rather than patients' prognoses (doctors are better at diagnosing).
- Had 90% power to detect a difference in proportions as small as 10% between the groups.

### Weaknesses:

- "recognizable, life-limiting conditions" is still somewhat subjective.
- This study depended on the use of the VHA's PCI (Palliative Care Index) which is not a validated, prognosticator of death.
- Assumes that if statins were stopped prior to death, was because physicians recognized that the patient has an incurable, progressive condition (data did not include reasons for discontinuation).
- Generalizability of the study (conducted using VHA data, for which some copy of medication list exists).

**Applicability to Palliative Care:**

Statins are used for both primary and secondary prevention of MI and stroke. However, it takes 3-6 years of use for risk reduction to occur. The harm of using statins is likely to outweigh the benefits in those approaching the end of life. Side effects are more likely to occur in this population because they are often older, have low albumin, renal or hepatic insufficiency, and polypharmacy to name a few reasons. Physicians find discontinuation of preventive therapies like statins difficult to discuss or patients may not be receptive to the notion that preventive therapies are no longer warranted. However, in stopping unnecessary medications, it may reduce the burden of disease associated with their use (swallowing, side effects), as well as align with their goals of care, making therapy more consistent. In addition, there is the advantage of not paying for medications that are no longer useful.