Statins Don’t Alter Cancer Risk, Metaanalysis Finds

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S
statins neither raise nor lower the risk of cancer or cancer mortality, ac-
cording to a metaanalysis of 26 ran-
domized clinical trials.

Several retrospective studies have sug-
gested that statins reduce the risk of de-
veloping cancer by as much as 50%. However, three metaanalyses have failed to con-
firm that statins exert a protective effect against cancer.

To shed light on the issue, Krista M.
Dale, Pharm.D., of the University of Con-
necticut School of Pharmacy, Hartford, and her associates conducted a much larg-
er metaanalysis of 26 randomized clinical
trials involving 86,936 subjects. The par-
ticipants were followed up for 2-10 years for the development of cancer.

The trials included only placebo-con-
trolled or standard treatment–controlled
studies enrolling a minimum of 100 sub-
jects each. Most of these trials assessed the
ability of statins to prevent coronary
artery disease, but all examined cancer di-
agnosis or cancer death as a primary or
secondary end point.

Statins did not reduce the risk of cancer or of cancer death, Dr. Dale and her as-
sociates said (JAMA 2006;295:74-80).

When six major subtypes of cancer—
breast, colon, gastrointestinal, prostate,
respiratory tract, and skin cancers—were
considered individually, statins did not re-
duce the risk of any of these types.

Similarly, when pravastatin, simvastatin,
atorvastatin, cerivastatin, fluvastatin, and
levastatin were considered individually,
none of the agents reduced the risk of can-
cer or cancer death.

And when the metaanalysis was nar-
rrowed to assess natural versus synthetic
statins and low-lipophilic versus high-
lipophilic statins, the results did not change.

“We thought hydrophilic statins, with
their impaired ability to penetrate bio-
logical membranes, might provide different
effects than lipophilic statins, which readi-
ly enter cells, but this was not evident in our
study. Similarly, naturally derived statins
have a markedly different structure than
synthetic statins, but neither type affected
the results,” the investigators noted.

—Bruce Jancin

Intensive Statin Therapy Augments Stroke Prevention

DALLAS — Intensive statin therapy ap-
ppears to further decrease the risk of cere-
brovascular events beyond the already sig-
ificant reduction achieved with standard-
dose statins, Dr. Jessica L. Mega reported
at the annual scientific sessions of the
American Heart Association.

She presented a metaanalysis of three
major randomized trials of intensive-ver-
sus moderate-dose statins featuring rates
of stroke and transient ischemic attacks as
a predefined end point. In these three
studies totaling nearly 19,000 randomized
patients, the cerebrovascular event (CVE)
rate was 3.7% with standard-dose statin
therapy and 2.9% with high-dose statins.
That works out to a 17% relative reduction
in the risk of CVEs overall and a 21% de-
crease in the relative risk of stroke with in-
tensive compared with moderate-dose
statin therapy.

At least six other studies have shown
that standard-dose statins reduce the in-
cidence of CVEs compared with placebo,
added Dr. Mega of Massachusetts Gener-
eral Hospital, Boston.

The observed stroke prevention bene-
fit with intensive statin therapy did not ap-
pear to result from the greater degree of
LDL lowering achieved with these drugs.
Indeed, patients who experienced a CVE
had LDL levels similar to those who did not.

A clue as to the mechanism of benefit
comes from the Pravastatin or Atorvast-
tatin Evaluation and Infection Therapy
(PROVE-IT) trial, in which 4,162 patients
were randomized to 40 mg/day of pravas-
tatin or 80 mg/day of atorvastatin. In that
study, patients who experienced a CVE
had significantly higher C-reactive pro-
tein levels 30 days into treatment than did
those who did not experience a CVE, by a
margin of 2.7 mg/L vs. 1.9 mg/L. It seems
likely that the anti-inflammatory and
vascular-stabilizing properties of the
statins account for the reduction in
strokes, Dr. Mega said.

—Bruce Jancin