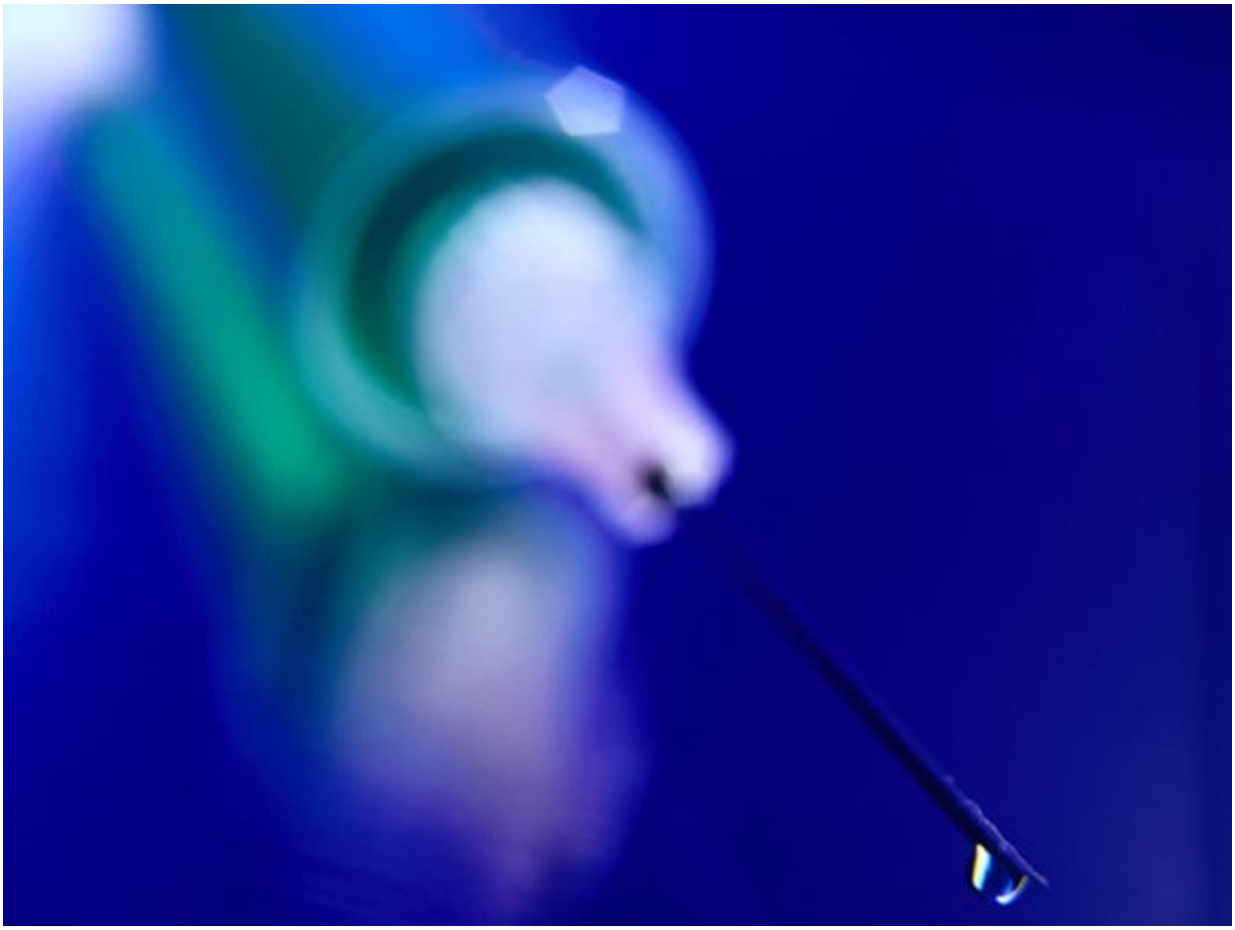
Patisiran, inotersen aid hereditary transthyretin amyloidosis

July 6 2018



(HealthDay)—For patients with hereditary transthyretin amyloidosis

with polyneuropathy, an investigational RNA interference therapeutic agent (patisiran) and a 2'-*O*-methoxyethyl-modified antisense oligonucleotide (inotersen), which inhibits hepatic production of transthyretin, improve clinical manifestations of disease, according to two studies published in the July 5 issue of the *New England Journal of Medicine*.

David Adams, M.D., Ph.D., from the Université Paris-Sud, and colleagues conducted a phase 3 trial involving patients with hereditary transthyretin amyloidosis with polyneuropathy receiving either patisiran (148 patients) or placebo (77 patients). The researchers found that the least-squares mean change from baseline in the modified Neuropathy Impairment Score+7 (mNIS+7) was −6.0 ± 1.7 versus 28.0 ± 2.6 in the patisiran versus the placebo group (difference, −34.0 points) at 18 months. The least-squares mean change from baseline in the Norfolk Quality of Life-Diabetic Neuropathy (QOL-DN) questionnaire was −6.7 ± 1.8 versus 14.4 ± 2.7 (difference, −21.1 points) at 18 months.

Merrill D. Benson, M.D., from the Indiana University School of Medicine in Indianapolis, and colleagues conducted a randomized trial involving adults with stage 1 or 2 hereditary transthyretin amyloidosis with polyneuropathy. Patients were randomized to inotersen (112 patients) or placebo (60 patients). The researchers found that the difference in the least-squares mean change from baseline to week 66 favored inotersen versus placebo (−19.7 points for the mNIS+7 and −11.7 points for the Norfolk QOL-DN score).

"Inotersen improved the course of neurologic disease and quality of life in patients with hereditary transthyretin amyloidosis," Bensen and colleagues write.

The Adams study was supported by Alnylam Pharmaceuticals; the Benson study was funded by Ionis Pharmaceuticals.

More information: Abstract/Full Text - Adams (subscription or payment may be required)
Abstract/Full Text - Benson (subscription or payment may be required)
Editorial (subscription or payment may be required)