Vascepa® (icosapent ethyl) – New indication

- On December 13, 2019, the FDA announced the approval of Amarin Pharma's Vascepa (icosapent ethyl), as an adjunct to maximally tolerated statin therapy to reduce the risk of myocardial infarction (MI), stroke, coronary revascularization, and unstable angina requiring hospitalization in adult patients with elevated triglyceride (TG) levels (≥ 150 mg/dL) and: established cardiovascular (CV) disease or diabetes mellitus and 2 or more additional risk factors for CV disease.
    - The effect of Vascepa on the risk for pancreatitis in patients with severe hypertriglyceridemia has not been determined.
- Vascepa is also approved as an adjunct to diet to reduce TG levels in adult patients with severe (≥ 500 mg/dL) hypertriglyceridemia.
- High levels of triglycerides can play a role in the hardening of arteries or thickening of the artery wall, which can increase the risk of a MI or stroke; however, the mechanisms of action that contribute to reduced CV events among patients taking Vascepa are not completely understood.
    - Vascepa is the first FDA approved drug to reduce CV risk among patients with elevated triglyceride levels as an add-on to maximally tolerated statin therapy. Statins are drugs used to treat elevated cholesterol levels and reduce the risk of CV events.
- The approval of Vascepa for the new indication was based on REDUCE-IT, a double-blind, randomized, placebo-controlled, event-driven study in 8,179 statin-treated adult patients with low-density lipoprotein-cholesterol (LDL-C) > 40 mg/dL and ≤ 100 mg/dL and elevated TG levels and either established CV disease or diabetes and other risk factors for CV disease. The median follow-up duration was 4.9 years. The primary composite endpoint was the time to first occurrence of CV death, MI, stroke, coronary revascularization, or hospitalization for unstable angina (5-point major adverse cardiovascular event [MACE]). The key secondary endpoint was time to first occurrence of CV death, MI, or stroke (3-point MACE).
    - Vascepa significantly reduced the risk for the primary composite endpoint and the key secondary endpoint ($p < 0.0001$ for both).

	Vascepa		**Placebo**		**Vascepa vs. placebo**
	N = 4,089 n (%)	**Incidence rate (per 100 patient years)**	**N = 4,090 n (%)**	**Incidence rate (per 100 patient years)**	**Hazard Ratio (95% CI)**
Primary composite endpoint (5-point MACE)	705 (17.2)	4.3	901 (22.0)	5.7	0.75 (0.68, 0.83)

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Key secondary composite endpoint (3-point MACE)	459 (11.2)	2.7	606 (14.8)	3.7	0.74 (0.65, 0.83)
Other secondary endpoints					
Fatal or non-fatal MI	250 (6.1)	1.5	355 (8.7)	2.1	0.69 (0.58, 0.81)
Emergent or urgent coronary revascularization	216 (5.3)	1.3	321 (7.8)	1.9	0.65 (0.55, 0.78)
CV death	174 (4.3)	1.0	213 (5.2)	1.2	0.80 (0.66, 0.98)
Hospitalization for unstable angina	108 (2.6)	0.6	157 (3.8)	0.9	0.68 (0.53, 0.87)

- The most common adverse reactions (≥ 3% and ≥ 1% more frequent than placebo) with Vascepa use in the CV outcomes study were musculoskeletal pain, peripheral edema, constipation, gout, and atrial fibrillation.

- The recommended dose of Vascepa for all patients is 4 grams orally per day taken as either: four 0.5 gram capsules twice daily with food or as two 1 gram capsules twice daily with food.

Lipid levels should be assessed before initiating therapy. Other causes (eg, diabetes mellitus, hypothyroidism, or medications) of high triglyceride levels should be identified and managed as appropriate.