

# Editorial

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## Niacin for Patients with Diabetes?

In this month's editorial, I'd like to return to one of my favorite topics—the underuse of niacin as a lipid lowering agent. Specifically, I want to focus on the use of niacin in diabetes, since I often hear that this key drug should be avoided in our many diabetic patients. In reality, diabetes is a condition that is practically crying out for niacin to be used, because of the pattern of lipid abnormalities that typically goes along with it.

First, let's review the lipid benefits of niacin. It's important to remember that niacin is the absolute champion when it comes to raising levels of high-density lipoprotein cholesterol (HDL-C), the so-called “good cholesterol.” No other drug out there can hold a candle to niacin's HDL-C raising potency, which can approach 35%. Niacin also is very effective at reducing triglyceride levels, which have been shown in many settings to be an independent risk factor for coronary artery disease. And niacin is no slouch at lowering low-density lipoprotein cholesterol (LDL-C) levels, although it is admittedly less effective in this capacity than the higher doses of statins.

These lipid effects are exactly what the typical patient with diabetes needs. Most of these patients have suboptimal levels of HDL-C, which increases their vulnerability to cardiovascular events. Most also have an excess of triglycerides, usually in proportion to the relative degree of hypoglycemia. Triglycerides appear to contribute to the lipotoxicity that has been recognized increasingly as a cause of progressive beta-cell failure. This failure, in turn, is part and parcel of the vicious cycle of worsening diabetes. Finally, many diabetic patients have elevated LDL-C levels, especially when

the LDL-C goal of less than 70 mg/dL is used in this high risk population. While there may be room for some debate over the optimal LDL-C goal in the setting of diabetes, the need for aggressive LDL-C treatment in these patients is acknowledged widely.

Given the match between niacin's lipid lowering benefits and diabetic patients' needs, the use of niacin in this population seems like a no-brainer. But, as we all know, only a tiny percentage of patients with diabetes and dyslipidemia actually receive niacin. The main reason why providers are reluctant to prescribe niacin—for diabetic and nondiabetic patients alike—is concern over flushing, a very predictable adverse effect experienced by virtually all patients.

in not one, but two, well designed and executed clinical trials. Both the Arterial Disease Multiple Intervention Trial (ADMIT),<sup>1</sup> which used standard crystalline nicotinic acid, and the Assessment of Diabetes Control and Evaluation of the Efficacy of Niaspan Trial (ADVENT),<sup>2</sup> which used extended-release niacin (Niaspan, Kos Pharmaceuticals, Miami, FL), have demonstrated the effects of niacin therapy on glycemic control to be very small. While some participants in these trials did require a modest intensification of their antidiabetic regimen, this was seldom a major problem for the patients or the investigators.<sup>1,2</sup>

The Heart Protection Study (HPS)<sup>3</sup> and the Collaborative Atorvastatin Diabetes Study (CARDS)<sup>4</sup> have estab-

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As I've written before, however, this issue is way overblown given that all but the most fair-skinned of patients develop tolerance after a week or two (and often within a few days).

In the setting of diabetes, there is yet another obstacle to niacin use: the misguided perception that niacin will markedly exacerbate the diabetic state and make glycemic control much harder to achieve. My justification for calling this concern misguided is that it has been addressed head-on

lished the importance of giving statins to all patients with diabetes in whom such drugs are not contraindicated, regardless of their baseline lipid levels. But for those patients who do have a contraindication to statins or who have lipid abnormalities that persist despite optimal statin therapy, niacin is an ideal alternative or add-on therapy. For most of these patients, whose cardiovascular risks are high, the potentially significant benefits of niacin clearly outweigh the drawbacks. ●

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### Author disclosures

*The author reports no actual or potential conflicts of interest with regard to this editorial.*

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