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## Fixed Combination Verapamil SR/Trandolapril

## A Viewpoint by Vincent DeQuattro

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Combination therapy for the management of hypertension is a featured recommendation of the JNC-VI guidelines; by inference, the combination of a low dose diuretic with a β-receptor blocker. However, the JNC-VI lists approximately 30 combinations including those of angiotensin converting enzyme (ACE) inhibitors with calcium channel blockers: the dihydropyridines felodipine and amlodipine are combined with enalapril and benazepril, respectively, and the heart rate limiting calcium channel blocker diltiazem (a benzothiazepine) is in fixed combination with enalapril. The most recent FDA approved combination, which is also included in the JNC-VI, is the heart rate limiting calcium channel blocker verapamil (sustained-release; SR) [a phenylalkylamine] with the long-acting nonsulfhydryl ACE inhibitor trandolapril.

As we reported earlier<sup>[1,2]</sup> and as reviewed here, the efficacy of the verapamil SR/trandolapril combination is superior to monotherapy with its individual components and equivalent to the diuretic/ $\beta$ -blocker combinations. Most importantly, the combination is being studied in postmyocardial infarction patients with congestive heart failure, where preliminary findings suggest it is likely to be effective. In the TRACE trial, trandolapril with diuretics reduced mortality by  $20\%^{[3]}$  and in DA-VIT II verapamil with and without diuretic therapy

either improved or did not worsen cardiovascular outcome in patients after myocardial infarction.<sup>[4]</sup>

This review and our own experience in a double-blind trial<sup>[5]</sup> suggest an important clinical advantage of this combination agent in patients with type 2 diabetes both with and without proteinuria. The combination was more effective than monotherapy with either agent in the control of blood pressure and the reduction of proteinuria, [5] and it did so without adversely affecting blood glucose or lipid levels. The verapamil SR/trandolapril combination is a practical and effective way to control blood pressure in patients with mild, moderate or severe hypertension and its efficacy can be improved further by the addition of low dose diuretics. The incidence and type of adverse events seen with this combination are similar to those of the individual components and primarily include cough, constipation and first degree AV block.

## References

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