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A Review of the Clinical Experience with the Angiotensin II Receptor Antagonist Irbesartan

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ABSTRACT

Irbesartan, a member of the AIIRA class of antihypertensive agents, demonstrates potent, selective, and insurmountable AII receptor antagonism. It has a favorable clinical pharmacokinetic profile in that it does not require biotransformation for antihypertensive efficacy, has a high oral bioavailability, exerts linear pharmacokinetics over the therapeutic dose range, and has a rapid onset of action. Its long half-life allows for once-daily dosing. Clinical studies of irbesartan coadministered with frequently prescribed drugs that are metabolized through similar pathways have shown no clinically significant drug interactions. Once-daily irbesartan effectively lowers BP in a dose-dependent manner, and reductions last for the entire 24-h dosing interval. In randomized, double-blind clinical trials, the antihypertensive effectiveness of irbesartan was comparable to or superior to that of other antihypertensive agents, including losartan, enalapril, atenolol, amlodipine, and HCTZ.

Irbesartan has a placebo-like safety profile at all doses and is similarly or better tolerated than comparative antihypertensive agents. No significant differences in pharmacokinetic parameters or antihypertensive effects are evident between elderly and nonelderly patients, men and women) or between patients with renal or hepatic impairment and healthy individuals.

The inhibition of AII by ACE inhibitors has led to improvements in outcomes in hypertension, heart failure, diabetes, and associated target organ damage. Preliminary studies with irbesartan have shown similar efficacy in these areas. The renal and cardiovascular protective effects of irbesartan, which have been demonstrated in preclinical and preliminary clinical studies, are being further investigated in PRIME in a high-risk hypertensive population.