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Review Article

Indapamide: the diuretic of choice for managing blood pressure in Indian populations

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ABSTRACT

Hypertension is a leading global risk factor for morbidity and mortality, with considerable burden in India, where salt sensitivity and poor blood pressure (BP) control raises the challenges for its management. Diuretics, particularly thiazide agents have key role in hypertension therapy. However, their use is associated with clinically significant metabolic and electrolyte abnormalities. Among the available thiazide diuretics, Indapamide stands out because of to its favourable pharmacological profile, superior efficacy and safety. In contrast to thiazides, Indapamide structures have a lipophilic methylindoline moiety, enhancing vascular penetration. Moreover, its moderate carbonic anhydrase inhibition contributes to potent natriuretic and vasodilatory effects. Its pharmacokinetic properties provide 24-hour control of BP with minimal metabolic and electrolyte imbalance and is effective clinically in moderate renal impairment up to GFR <30-40 ml/min. Clinical evidence and real-world data supports Indapamide's efficacy as monotherapy and in combinations HTN management, achieving recognition in recent guidelines- ESC 2024, ADA 2025 and Indian guidelines. This review emphasizes Indapamide's role as an optimal antihypertensive, especially in Indian hypertensive, where BP control is challenge

Keywords: Blood pressure, Diuretics, Hypertension, Indapamide, Thiazides

INTRODUCTION

Hypertension remains one of the top global contributors to death and disease. Since 1990 to 2019, the number of people living with hypertension globally raised from 650 million to 1.3 billion, effectively doubling over this period.[1] where Southeast Asia region experienced an optimal rise in the prevalence of hypertension and India is ranking among the top three countries with the highest burden.[2] The latest Indian projections indicate 28.3% of the population with diagnosed hypertension. Of the diagnosed, only 36.9% are on antihypertensive treatment and of those on therapy, only 52.5% are controlled. This indicates a high treatment-control gap for hypertension.[3] Sodium retention hypertension is prevalent in India, since salt sensitivity affects most of the population. Thus,

augmentation of sodium excretion in the urine is an integral component of effective therapy.[4] So for management of hypertension, diuretics are a heterogeneous group of drugs that enhance urine flow by altering nephron ion transport, enhancing renal sodium, chloride and water excretion.

Current status of diuretics use in India

Thiazide-type and thiazide-like diuretics are fundamental to evidence-based hypertension management, with robust evidence demonstrating their efficacy in reducing BP and cardiovascular risk (CV), comparable to other antihypertensive classes. Consequently, current hypertension guidelines recommend these diuretics as first-line treatment as monotherapy and combination therapy with calcium channel blockers (CCB) and Renin-Angiotensin System (RAS) blockers.[5-7]

Recent Indian study indicates that diuretics are utilized in over 40% of clinical practice, either as monotherapy or in combination with other antihypertensive agents. Among diuretic users, 46% are on thiazide diuretics. Furthermore, more than 70% of diuretic users demonstrate electrolyte abnormalities.[8] In Indian hypertensive populations, diuretic use raises concerns about electrolyte imbalances and metabolic disturbances which coupled with rising temperatures, further complicates diuretic effectiveness as heat-induced dehydration and electrolyte loss often require reduced or suboptimal diuretic dosing, limiting their effectiveness.[9]

Although the frequency and severity of side effects are significantly reduced with low-dose therapy (12.5 mg of HCTZ or 12.5, 6.5 mg of CTD), it is unlikely that the full therapeutic benefits observed with high-dose thiazides would be maintained at the lower doses commonly used for primary hypertension management.[10] This highlights Indapamide's role in effectively reducing blood pressure at a minimal dose (1.5 mg/2.5 mg), while minimizing the risk of metabolic and electrolyte disturbances.

STRUCTURE–ACTIVITY RELATIONSHIP OF INDAPAMIDE

Indapamide is an indoline derivative of chloro-sulfonamide without any thiazide ring and its molecular name is 4-chloro-N-(2-methyl-2, 3-dihydroindol-1-yl)-3-sulfamoyl-benzamide. Indapamide is a two-part molecule composed of a sulfonamide diuretic variant and a methyl Indoline moiety. As shown in the Figure 1, the Sulfonamide structure of Indapamide exert their action in the cortical segment of the ascending part of the nephron and indapamide differs from thiazide diuretics due to the substitution of the thiazide ring with a lipid soluble methylindoline ring. As a result, indapamide possesses more lipophilic properties than other thiazide diuretics, enabling improved tissue penetration.[11]

Indapamide modulates vascular ion channels and calcium influx which thereby reducing vascular hyperreactivity and peripheral resistance that contributing to its antihypertensive efficacy. It's indoline ring is unique feature which is not present in any other diuretics.[11] Furthermore, Indapamide inhibits carbonic anhydrase (CA) isoforms in the kidney and blood vessels which includes CA VII, IX, XII and XIII. While other thiazides and loop diuretics also showed the CA inhibition profile, but this mechanism coupled with predictable natriuresis and vascular effects, may support blood pressure reduction and organ protection. Clinically, CA inhibition enhances natriuresis, impact on vascular tone and also may partly justify the favorable renal and metabolic effects observed with thiazide-like diuretics.[12] Indapamide's lipophilic indole ring further supports vascular penetration and then, together with its CA inhibition profile, promotes natriuresis and vasodilation, enhancing antihypertensive efficacy, although the associated clinical importance of CA inhibition remains uncertain

PHARMACODYNAMIC PROPERTIES OF INDAPAMIDE

Indapamide has unique methyl indoline ring structure which enhances its pharmacological effects through lipophilic properties and making it an effective antihypertensive agent. Although its dual mechanism of blood pressure reduction- diuretic and vasoactive properties is well established but the precise mechanism of action remains unknown.

Diuretic activity

Indapamide known for its a well-defined diuretic effect in humans. It is primarily targets on cortical segment of the distal convoluted tubule where it blocks the Sodium-Chloride co-transporter which leads to sodium and water excretion.[11]

Vasoactive activity

Indapamide's lipid solubility 5 to 80 times greater than the other thiazide-type diuretics which enables it to accumulate within vascular smooth muscle. Its lipophilic nature provides vasodilation through reduced calcium entry by voltage-dependent calcium channels, as with calcium channel blockers. Decreasing intracellular calcium inhibits contraction of vascular smooth muscle. Indapamide also blocks release of calcium from sarcoplasmic reticular stores and affects ion currents, decreasing cellular excitability further and promoting greater vasodilation, leading to decreased blood pressure.[13]

Evidence showed that indapamide has significant pleiotropic benefits that protect the target organs, extending beyond its diuretic and non- diuretic blood pressure-lowering effects. Comparative studies extensively mentioned pleiotropic actions of thiazide diuretic which is complementing its diuretic effect.[14]

PHARMACOKINETIC PROPERTIES OF INDAPAMIDE

Indapamide possesses the favourable pharmacokinetic characteristics. It has fast gastrointestinal absorption (within 60 minutes), well distributed throughout the body and shows 76% plasma protein binding along with 98% carbonic anhydrase binding.[15] It's lipophilic nature which permits tissue penetration and both Immediate Release (IR dose 2.5 mg) and sustained release (SR dose of 1.5 mg) have approximately 100% bioavailability. Moreover, its vascular wall absorption contributing to its pharmacological efficacy.[16] It undergoes extensive metabolism, producing 19 metabolites, including active forms like 5-hydroxy and dehydroindapamide, which enhance antihypertensive effects.[15]

Indapamide's pharmacokinetic profile offers major clinical benefits, with a half-life of approx. 18 hours and duration of action of nearly 24 hours that provides sustained BP reduction during daytime and night-time. Mainly it gets metabolized in the liver, with only 5-7% being excreted through urine and nearly 22% through feces. Hepatic clearance is the predominant mechanism of elimination, minimizing renal dependence. This ensures no significant drug accumulation with chronic administration occurs despite renal impairment.[17] Furthermore, the SR formulation have the hydrophilic matrix that provides a smoother pharmacokinetic profile and avoids unnecessary plasma peak concentration that may be associated with adverse effects.[18] These pharmacokinetic properties highlighted that indapamide may offer sustained and effective BP management and its reliable use in renal impaired patients.

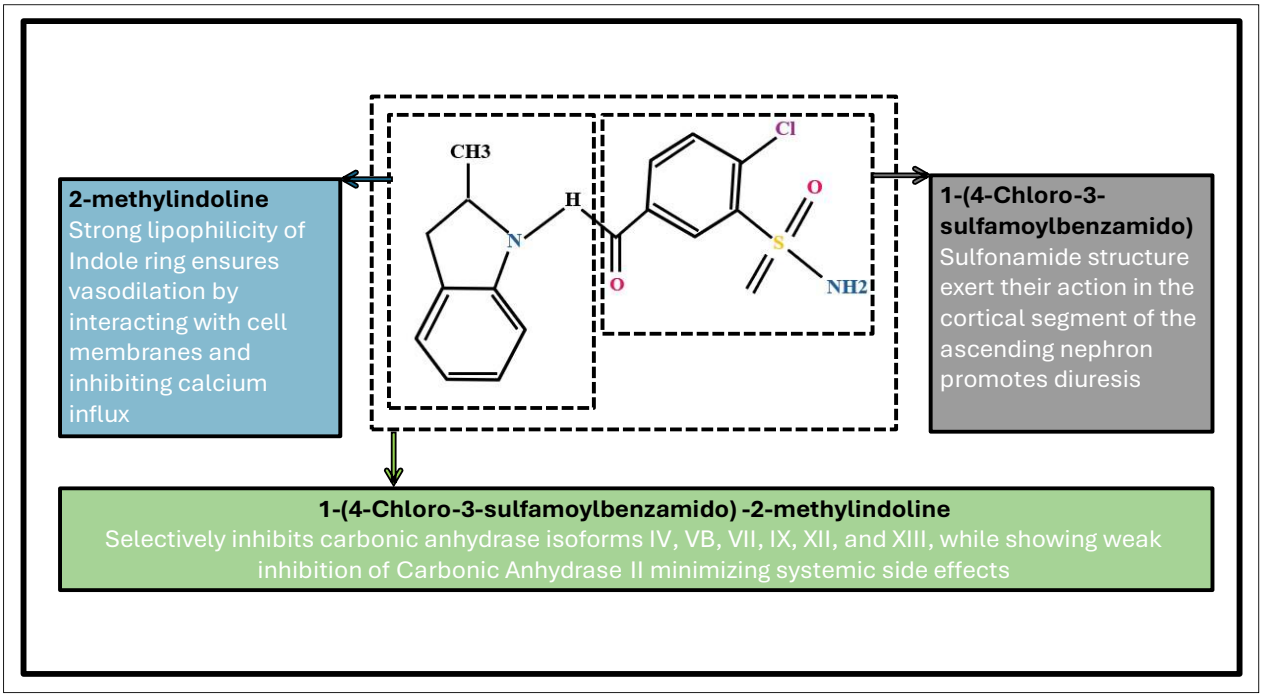

Figure 1: Chemical structure of indapamide and its functional activity.

CLINICAL OVERVIEW OF INDAPAMIDE

Indapamide has been studied extensively over decades and consistently showed its strong antihypertensive efficacy and clinically significant blood pressure reduction. Importantly, studies also highlight protective role indapamide in prevention against end-organ damage Evidence supports its ability to lower the risk of cardiovascular events, stroke and renal complications, making it a valuable option in comprehensive hypertension management.

Indapamide's antihypertensive efficacy

The efficacy of Indapamide as a monotherapy, add-on therapy and in combination with ACEi and Angiotensin II Receptor Blocker (ARB) has been investigated different hypertensive patients through several phase III, randomized, double-blind, controlled studies.

Clinical evidence evaluating Indapamide's efficacy both as monotherapy and in combination are shown in table 1. Indapamide SR 1.5 mg monotherapy decreased high blood pressure in a number of patient groups, such as diabetics, the elderly and those who were treatment resistant.[19-23] Evidence showed notable and safe blood pressure decreases in dual combinations, especially with amlodipine, especially in elderly and uncontrolled hypertensive patients.[24-28] The efficient and topspin studies revealed similar outcomes in Indian hypertensives.[26,28] Indapamide has more recently been used in triple and quadruple single-pill combinations, which have demonstrated higher efficacy than dual regimens and

significantly improved blood pressure control, especially in resistant hypertension. Indapamide was well tolerated and effective in all investigations, highlighting its use in both early and more sophisticated hypertension therapy approaches.[29-33]

In majority of clinical trials, Indapamide has demonstrated a significant reduction in systolic blood pressure in variety of hypertensive patients. Moreover, nearly 80% of patients were able to achieve their target systolic blood pressure. Current clinical evidence supports the effectiveness of Indapamide in managing difficult-to-control hypertension, both in patients with and without comorbid conditions.

Superiority of indapamide that of other diuretics

Indapamide, a thiazide-like diuretic, has demonstrated superior efficacy in blood pressure reduction with a favourable safety profile. Compared to hydrochlorothiazide (HCTZ), Indapamide achieves greater blood pressure reduction with no significant increase in adverse effects. In head-to-head comparisons of Hydrochlorothiazide with Indapamide and Chlorthalidone, 884 patients, Indapamide showed greater efficacy in managing hypertension (HTN) especially in isolated systolic hypertension (ISH). In this meta-analysis, both indapamide and chlorthalidone were found to lower SBP more effectively than HCTZ: −5.1 mmHg for indapamide and −3.6 mmHg for chlorthalidone, with minimal heterogeneity across trials and no evidence of publication bias. Although there is no direct head-to-head comparison between indapamide and chlorthalidone, current evidence supports their superior antihypertensive effect compared with HCTZ.[34] In acute heart failure, Indapamide and metolazone, when combined with intravenous furosemide, demonstrated comparable safety and efficacy. Metolazone and Indapamide, both were equally effective in severe renal dysfunction (GFR<30).[35]

Indapamide's efficacy in end organ protection

In the management of hypertension, the primary therapeutic goal is not only to reduce elevated blood pressure but also to mitigate the risk of complications arising from target organ damage. Indapamide, beyond its potent diuretic effect, exhibits organ-protective properties-demonstrated by its consistent reduction in cardiovascular events, left ventricular hypertrophy (LVH) and microalbuminuria. Furthermore, its association with a significant decline in stroke incidence and all-cause mortality reinforces its value in comprehensive hypertension care.

As Table 2 highlights the overall evidence evaluating the cardiovascular and renal benefits along with the reduction in all-cause mortality which is associated with indapamide-based antihypertensive therapy. As per the findings in Post-Stroke Antihypertensive Treatment Study (PATS), Perindopril Protection Against Recurrent Stroke Study (PROGRESS) and Hypertension in the Very Elderly Trial (HYVET) trials, indapamide-based treatment resulted in marked reductions in stroke risk and mortality outcomes.[36-38] Action in Diabetes and Vascular Disease: Preterax and Diamicron Modified Release Controlled Evaluation (ADVANCE) trial proved composite cardiovascular benefit, including reductions in cardiovascular death and major macrovascular events.[39]

Additionally, the HYVET and LIVE (Left Ventricular Hypertrophy Intervention with Enalapril) trials demonstrated reductions in heart failure risk and LVMI, respectively.[38,40] In the NESTOR trial (Natrilix SR versus Enalapril Study in Type 2 Diabetic Patients with Microalbuminuria), indapamide SR showed the significant reduction of microalbuminuria, showing effects comparable to enalapril. While albuminuria reduction is not definitive evidence of kidney outcome improvement, these findings indicate potential renal benefits of indapamide.[41]

Collectively, these findings position indapamide as a valuable therapeutic agent that extends its benefit beyond blood pressure control to encompass substantial cardiovascular and renal protection in hypertensive individuals.

SAFETY AND TOLERABILITY

As per the clinical studies, withdrawals due to adverse events or for medical reasons during indapamide treatment observed in less than 10% for indapamide with dose of 1.5 mg SR.[19-26] Overall, formulation of indapamide are well tolerated in hypertensive patients and related adverse events are infrequent. Adverse effects of indapamide are mild and transient which includes hypokalaemia, hypersensitivity reactions, asthenia, dizziness, headache, fatigue, muscle cramps, gastrointestinal disturbances and this are normally seen in the initial month of treatment. Indapamide has a relatively limited effect on kaliuresis and the hypokalaemia severity often depends on the patient's underlying clinical condition. Most of the adverse reactions are related to clinical or laboratory parameters which appears to be dose-dependent while other adverse reactions are nonspecific.[17]

Minimal electrolyte and metabolic imbalances

The NESTOR study and Meta-analysis of three studies which include dose-ranging study, equivalence study of Indapamide (1.5 mg, 2.5 mg), LIVE study- established that Indapamide demonstrates metabolic neutrality by maintaining stable glucose and lipid levels without significant changes. (41,42) 91.3% of the patients treated with indapamide SR 1.5 mg/day maintained normokalaemia, i.e., ≥3.5 mmol/l. The stability of blood glucose and serum lipid concentrations throughout the course of long-term treatment suggests that indapamide does not appear to have a major impact on glucose and lipid metabolism.[42] Throughout these studies, it controls blood pressure, demonstrating its ideal efficacy/safety

ratio and potent antihypertensive action with minimal electrolyte and metabolic imbalance even at lower dosages.

DOSAGE AND ADMINISTRATION

Indapamide SR approved by the US FDA in 1998 for hypertension, is recommended at 1.5 mg once daily (SR) or 2.5 mg once daily (IR). Indapamide tablet should not be split, crushed or chewed.[17] Recent trials have evaluated combinations with lower doses of indapamide (0.625 mg, 1.25 mg).[32,33] Blood pressure reduction is optimal after 4 weeks, with further benefits over 4–6 weeks. Indapamide can be safely used in hypertensive patients with renal impairment, though caution is advised in severe cases and it is contraindicated during pregnancy and breastfeeding.[17]

Table 1: Comprehensive overview of the clinical studies on indapamide and its combinations in hypertension management.

Study	Sample size	Inclusion criteria	Dosage regimens (duration, weeks)	Conclusion
Monotherapy				
X-cellent[19]	1758	Systolic– diastolic or isolated systolic hypertension with baseline SBP 150–179, DBP 95–114 SBP 160–179 respectively	Placebo, IND SR 1.5 mg, AMLO 5 mg, CANDE 8 mg once daily 12 weeks	IND reduced systolic BP in all patients to the same extent as compared to AML and CANDE and in ISH patients IND significantly reduced SBP, PP and maintained DBP for 24hr
Native[20]	2073	Uncontrolled hypertension on prior therapy, with a baseline SBP/DBP of 165.6/101.8 mmHg	IND SR 1.5 mg once daily for 3 months	Indapamide 1.5mg provided effective BP reduction and is well-tolerated in patients with hypertension not controlled by other therapies
Emeriau et al[21]	524	Elderly hypertensive patient with baseline SBP/DBP 174.5/ 97.9 mmHg.	IND 1.5 mg SR, AMLO 5 mg, HCTZ 25 mg once daily for 12 weeks	Indapamide demonstrated comparable efficacy to amlodipine and hydrochlorothiazide in elderly hypertensive patients, with superior efficacy over hydrochlorothiazide in isolated systolic hypertension.
Kuo et al[22]	64	Type 2 diabetic patients with mild-to-moderate hypertension with baseline SBP/DBP of 154.7/9 4mmHg	IND 1.5 mg SR or Placebo for the 3 months	Indapamide SR effectively reduced whole-day BP in hypertensive patients with type 2 diabetes without affecting lipid profiles, glucose metabolism or causing hypokalemia or hyperuricemia.
Lokhandwala et al[23]	86	Untreated mild to moderate Indian hypertensive with baseline SBP/DBP 160.3/101 mmHg	IND 1.5 mg for 6 months	IND SR effectively lowers whole-day BP in hypertensive patients with type 2 diabetes without affecting metabolic profile or causing side effects
Dual therapy				
Arbalet[24,25]	2217	Grade-1 and 2 Arterial HTN on prior therapy or treatment-naïve with baseline SBP/DBP of 161.7/ 90.7mmHg	IND SR+AMLO SPC (1.5/5mg) for 3 Months	High antihypertensive effectiveness of SPC with INDA SR and AMLO in HTN patients over 55 years

Continued.

Study	Sample size	Inclusion criteria	Dosage regimens (duration, weeks)	Conclusion
Efficient[26]	196	Uncontrolled Indian HTN on CCB monotherapy or untreated with grade 2 or 3 hypertension with baseline BP ≥140/90 mm Hg and BP ≥160/100 mm Hg respectively	IND SR/AMLO SPC (1.5-5 mg) daily for 45 days	SPC IND SR + AMLO effectively reduced BP, particularly SBP and was safe and well-tolerated across all hypertension cases
Combine[27]	213	Uncontrolled HTN on prior therapy or treatment naïve with Grade I or II hypertension	IND SR+AMLO SPC (1.5/5mg) for 3 Months	IND/ AMLO SPC associated with significant and rapid reductions in BP in Bangladeshi patients over the age of 55 years
Topspin[28]	1981	Patients with essential hypertension included with baseline SBP/DBP of ≥140/ <160 mmHg on one antihypertensive agent or clinic SBP ≥150 mmHg and <180 mmHg without prior antihypertensive treatment	AMLO 5 mg+PRDL 4 mg, PRDL 4 mg+IND 1.25 mg, AMLO 5 mg+IND 1.5 mg SR for 6 Months, if SBP is ≥120 mmHg then dose is up titrated.	Use of dual combinations of AMLO+ PRDL, PRDL+IND, AMLO+IND, is recommended for effective, well-tolerated and safe BP lowering across a broad spectrum of Indian hypertensive patients.
Triple therapy				
Nedogoda et al[29]	148	>18 years old with confirmed essential hypertension or uncontrolled on maximal dose antihypertensive monotherapy or with a single dose of dual therapy	PRDL 5 mg/IND 1.25 mg/ AMLO 5 mg, PRDL 5 mg/IND1.25 mg + AMLO 5 mg once daily for 12 weeks.	Single-pill triple-combination therapy with PRDL/INDA/AMLO was as effective as the same dose dual-pill combination of Per/Ind + Aml
GMRx2 act[30]	1385	Adults with hypertension 140-179 mmHg on 0 blood pressure (BP)-lowering drugs or 130-170 mmHg on 1 BP-lowering drug or 120-160 mmHg on 2 BP-lowering drugs or 110-150 mmHg on 3 BP-lowering drugs.	GMR×2 half dose of standard (40 /5 /2.5 mg) or to TELMI-AMLO,20/2·5 mg, TELMI-IND 20/1·25 mg or AMLO-IND 2·5/1.25mg for 12 weeks	Novel low-dose triple SPC product of telmisartan, amlodipine and indapamide provided clinically meaningful improvements in blood pressure reduction compared with dual combinations and was well tolerated
GMRx2 pct[31]	295	Adults with hypertension receiving 0 to 1 BP-lowering drugs	GMRx2 ¼ dose (telmisartan 10 mg/AMLO 1.25 mg/ IND 0.625 mg), GMRx2 ½ dose (TELMI 20 mg/AMLO 2.5 mg/IND 1.25 mg) and placebo for 4 weeks	Both dosing regimens of the novel low-dose triple single-pill combination exhibited favourable tolerability and clinically significant blood pressure reductions relative to placebo.
Quadruple therapy				
Quodro phase III study[32]	968	Patients with resistant hypertension, SBP ≥140 mmHg and 24-h ambulatory SBP ≥130 mmHg after 8 weeks of triple therapy	PRDL,IND, AMLO and BISO (10/2.5/5/5 mg or 10/2.5/10/5 mg daily) for 8 Weeks	Quadruple SPC of PRDL/IND/AMLO/BISO demonstrated superior efficacy compared to triple combination PRDL/ IND/ AMLO in resistant hypertension with a good safety profile

Continued.

Study	Sample size	Inclusion criteria	Dosage regimens (duration, weeks)	Conclusion
Quartet phase III study[33]	591	Australian adults (≥18 years) with hypertension, who were untreated or receiving monotherapy	Quadpill of IRBN 37·5 mg, AMLO 1·25 mg, INDA 0·625 mg and BISO 2·5 mg or monotherapy of IRBN 150 mg	Early treatment with a fixed-dose quadruple quarter-dose combination achieved better and sustained blood pressure control than starting with monotherapy.

Abbreviations- HTN: Hypertension, SBP: Systolic Blood Pressure, DBP: Diastolic Blood Pressure, PP: Pulse Pressure, IND: Indapamide SR: Sustained Release, IR: Immediate Release, SPC: Single-Pill Combination, AMLO: Amlodipine, TELMI: Telmisartan, CANDE: Candesartan, HCTZ: Hydrochlorothiazide, CCB: Calcium Channel Blocker, PRDL: Perindopril, BISO: Bisoprolol, IRBN: Irbesartan.

Table 2: Comprehensive overview of the clinical studies on indapamide for end organ protection.

Study	Inclusion criteria	Sample size	Dosage regimen	Years of follow-up	Primary outcome	Conclusion
PATS[36]	Poststroke (stroke or TIA) with or without HTN	5665	IND 2.5 mg compared with matching placebo	2	Stroke recurrence (fatal or nonfatal)	Relative risk of fatal and nonfatal stroke reduced by 29% and all-cause mortality by 9%
Progress[37]	Poststroke (stroke or TIA) with or without HTN	3544	PRDL 4 mg alone or+ IND 2.5 mg compared with Matching placebo	3.9	Stroke recurrence (fatal or nonfatal)	Relative risk of total major vascular events reduced by 26% and stoke by 43%
HYVET[38]	Very elderly (>80 years old) +HTN	3845	IND SR 1.5 mg±PRDL (2 or 4 mg) compared with Matching placebo	1.8	Any stroke (fatal or nonfatal)	Relative risk of fatal strokes reduced by by 39, heart failure by 64% and all-cause mortality by 21%
Advance[39]	Type 2 diabetes, age 55 years ,with or without HTN	11140	SPC PRDL 4mg/ IND 1.25 mg compared with Matching placebo	4.3	Composite endpoint: major micro- and major macrovascular events	Relative risk of death from cardiovascular disease was reduced by 18% and death from any cause reduced by 14%
Live[40]	Hypertensive patient with left ventricular Hypertrophy	252	IND SR 1.5 and Enalapril 20 mg	1	Reduction of left ventricular mass index (LVMI)	Reduction of LVMI by indapamide (-8.4± 30.5 g/m2 was significantly more than enalapril
Lokhandwala et al[23]	Indian Untreated mild to moderate Indian hypertensive with baseline SBP/DBP 160.3/101 mmHg	86	IND 1.5 mg	6 Months	Prevalence of LVH and its regression	LVH present in 24.4% and regressed in 76.2% with mean LV mass reduction of 25.4 g/m².
Nestor[41]	Hypertensive Type 2 diabetes patients with microalbuminuria	570	IND SR 1.5 mg and Enalapril 10 mg	1	Reduction of microalbuminuria	Relative risk of microalbuminuria reduced by 35% and it is equivalent to enalapril.

Abbreviations: LVH-Left ventricular hypertrophy, LVMI-Left ventricular mass index, CV-Cardiovascular, HF-Heart failure, MI-Myocardial Infarction, IND: Indapamide SR: Sustained releasee, PRDL: Perindopril.

POSITION OF INDAPAMIDE IN CURRENT HYPERTENSION GUIDELINES

Indapamide is a globally recognized as a first-line antihypertensive, proven with clinical evidence supporting its ability to reduced high blood pressure and risk of cardiovascular events. In ESC 2024, it was recognized as a first-line option for initiating hypertension treatment in the general population. Beyond general use, it has been demonstrated to be among the most effective treatments for reducing blood pressure and cardiovascular events.[5]

Furthermore, latest 2025 ADA guidelines endorse it as a first-line treatment for confirmed hypertension in nonpregnant individuals with diabetes, emphasizing its unmatched reliability and global relevance in modern hypertension care.[6] Current 2024 Indian Guidelines by the Association of Physicians of India and the Indian College of Physicians recognize Indapamide as thiazide-like diuretic which is effective at GFR <30-40 mL/min.[7] Both international and Indian guidelines endorse its use in hypertensive and diabetic hypertensive patients for its superior BP control and minimal metabolic and electrolyte disturbances.

CONCLUSION

Indapamide is a thiazide-like diuretic with dual mechanisms of action, providing superior blood pressure control with minimal effects on electrolytes and metabolism. Evidence from clinical trials, including those conducted in India, supports its efficacy in managing hypertension as a monotherapy or in combination with other drugs, making it a reliable and effective option for hypertension treatment in the Indian population.

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