

retension
PHARMACEUTICALS

Retension Pharmaceuticals Proprietary Information

# Corporate Presentation

October 2026

**Disclaimer**

- This presentation shall not constitute an offer to sell or the solicitation of an offer to buy any securities, nor shall there be any sale of securities in any state or jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of such state or jurisdiction.
- This presentation has been prepared by Retension Pharmaceuticals, Inc. (the "Company") and should be read together with the Company's final prospectus, dated October 8, 2026, filed with the Securities and Exchange Commission (the "SEC") pursuant to Rule 424(b) under the Securities Act of 1933, as amended, on October 9, 2026, relating to its Registration Statement on Form S-1 (File No. 333-299024) (the "Prospectus"), and any subsequent documents the Company files with the SEC, which are available free of charge on EDGAR at www.sec.gov.
- This presentation, including statements made orally during this presentation, is provided as of the date of this presentation (unless otherwise indicated), is for informational purposes only and is not intended to be comprehensive or to provide investment, legal, tax or other advice. Except as required by law, the Company assumes no obligation to update or revise the information contained in this presentation.

**Forward Looking Statements**

- This presentation contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, which are intended to be covered by the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. All statements other than statements of historical fact contained in this presentation are forward-looking statements, including statements regarding the characteristics, safety, efficacy and potential differentiation of RTN-001 and any future product candidates; the initiation, timing, progress and results of the Company's preclinical studies and clinical trials, including the expected timing of initial data from the Phase 2b clinical trial of RTN-001 in uncontrolled hypertension and the Company's planned Phase 3 clinical trial; the timing and likelihood of regulatory filings and approvals, including the Company's ability to take advantage of abbreviated regulatory pathways; the potential market size for RTN-001; the Company's business strategy and plans; and the Company's estimates regarding expenses, capital requirements and the period over which it expects its cash and cash equivalents to be sufficient to fund its operations. In some cases, you can identify forward-looking statements because they contain words such as "anticipate," "believe," "can," "contemplate," "continue," "could," "design," "estimate," "expect," "intend," "may," "might," "objective," "plan," "potential," "predict," "project," "shall," "should," "target," "will," or "would," or the negative of these words or other similar terms or expressions. These forward-looking statements are based on management's current expectations and assumptions about future events, which are inherently subject to uncertainties, risks and changes in circumstances that are difficult to predict. Actual results may differ materially from those expressed in, or implied by, these forward-looking statements as a result of various important factors, including, without limitation: the Company's limited operating history and significant operating losses since inception; substantial doubt about the Company's ability to continue as a going concern; the Company's need for substantial additional capital; the Company's current dependence entirely on the success of RTN-001, its only product candidate, all completed clinical trials of which were conducted by Surface Logix, Inc.; the risk that results of prior preclinical studies and clinical trials of RTN-001 are not necessarily predictive of future results, and that interim, topline or preliminary data may materially change as more patient data become available; delays in the commencement or completion of clinical trials; adverse side effects, adverse events or other safety risks associated with RTN-001; the risk that RTN-001 may not receive regulatory approval on a timely basis, if at all, including as a result of disruptions at the U.S. Food and Drug Administration caused by workforce reductions, funding shortages or prolonged shutdowns; the Company's reliance on its exclusive sublicense with Kadmon Corporation, LLC, a wholly owned subsidiary of Sanofi (through its sublicense agreement with Redux Therapeutics, LLC), and on upstream licenses for the intellectual property rights to develop and commercialize RTN-001; the Company's ability to protect its intellectual property, including following the scheduled nominal expiration in 2027 of the licensed U.S. composition of matter patent covering RTN-001; its reliance on third parties to conduct clinical trials and manufacture RTN-001; developments relating to the Company's competitors and industry; its dependence on its management and other clinical and scientific personnel; and unfavorable global economic conditions, including tariffs and geopolitical events. These and other risks are described more fully under the caption "Risk Factors" in the Prospectus and in any subsequent documents the Company files with the SEC. You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date of this presentation and are qualified in their entirety by this cautionary statement. The Company does not undertake any obligation to update these statements except as required by applicable law.

**Industry Information**

- Certain information contained in this presentation relates to or is based on studies, publications and other data obtained from third-party sources, as well as the Company's own internal estimates and research. While the Company believes these third-party sources to be reliable as of the date of this presentation, it has not independently verified, and makes no representation as to the adequacy, fairness, accuracy or completeness of, any information obtained from third-party sources. Management's internal estimates have not been verified by any independent source, and such estimates involve a number of assumptions and limitations; you are cautioned not to give undue weight to them.

**Trademarks**

- This presentation contains references to trademarks, service marks and trade names of the Company and of other entities, which are the property of their respective owners. Solely for convenience, trademarks and trade names referred to in this presentation may appear without the ® or TM symbols, but such references are not intended to indicate in any way that the Company will not assert, to the fullest extent under applicable law, its rights or the rights of the applicable licensor to these trademarks and trade names. The Company does not intend its use or display of other entities' trade names, trademarks or service marks to imply a relationship with, or endorsement or sponsorship of the Company by, any other entity.

**Investigational Product**

- This presentation discusses RTN-001, a product candidate that is under clinical investigation and has not yet been approved for marketing by the U.S. Food and Drug Administration or any other regulatory authority. It is currently limited by federal law to investigational use, and no representation is made as to the safety or effectiveness of RTN-001 for the use for which it is being studied. Any preliminary, interim or topline data presented are subject to change as additional data become available. Any comparisons to other product candidates or therapies, including first-generation PDE-5 inhibitors, are not based on head-to-head clinical trials, and differences in trial design, patient populations and other factors may limit the reliability of such cross-trial comparisons.

# Experienced Team With a Proven Track Record of Developing Drugs That Achieve Commercial Success

## Eric L. Keller, JD
Chief Executive Officer



nanoterra

NT Life Sciences

George Whitesides' companies

Hyperion BIOSYSTEMS

noveome BIOTHERAPEUTICS

response PHARMACEUTICALS

## Paul Sweetnam, PhD
Chief Scientific Officer



Surface Logix

NT Life Sciences

George Whitesides' companies

Pfizer

BAYER

## Alison Schecter, MD
Chief Medical Officer



MINERALYS

Mount Sinai

sanofi

NOVARTIS

Johnson&Johnson

Baxalta

Selecta Biosciences

axcella

## Alex Schwartz
Chief Financial Officer



Lilly ventyx BIOSCIENCES

ngmbio

ESPERION

STIFEL

# Retension Pharmaceuticals: Aiming to Develop a Differentiated Treatment for Hypertension and Cardiovascular Health

**Large, Underserved Hypertension Market**

- Hypertension (HTN) is one of the most prevalent chronic diseases worldwide and the leading preventable risk factor for cardiovascular disease, including heart attack, stroke, heart failure, and kidney disease
- ~120M US HTN patients, including ~30M uncontrolled (uHTN) and ~10M treatment-resistant (rHTN)

**RTN-001: Next-Generation PDE5 Therapeutic Approach**

- RTN-001 is being developed as a once-daily, oral, next-generation PDE5 inhibitor designed to restore nitric oxide signaling and lower blood pressure in HTN patients, realizing the original therapeutic potential for PDE5 inhibition

**Differentiated Mechanism Targeting Central Arteries**

- Compared to first-generation PDE5 inhibitors, RTN-001 is optimized for activity in central arteries and branches, enabling clinically meaningful BP reduction by targeting core hypertension pathophysiology
- Clinically meaningful reductions in systolic and diastolic BP were observed in Phase 2 pilot trials.
- Well-tolerated, consistent with safety and tolerability profile of the PDE5 inhibitor class

**Clinically Validated, Phase 2b Underway**

- RTN-001 has been evaluated in nine clinical trials conducted by a predecessor company (SurfaceLogix); Retension's ongoing Phase 2b trial is based on clinical data observed from results of such trials.
- Phase 2b trial in uHTN with modified release formulation of RTN-001 initiated in Q4 2025; data expected 1H 2027.

**IP protection to at least 2044; Streamlined FDA regulatory pathway for potential approval**[1,2]

1. FDA Guidance 2011; 2. FDA Guidance 2018

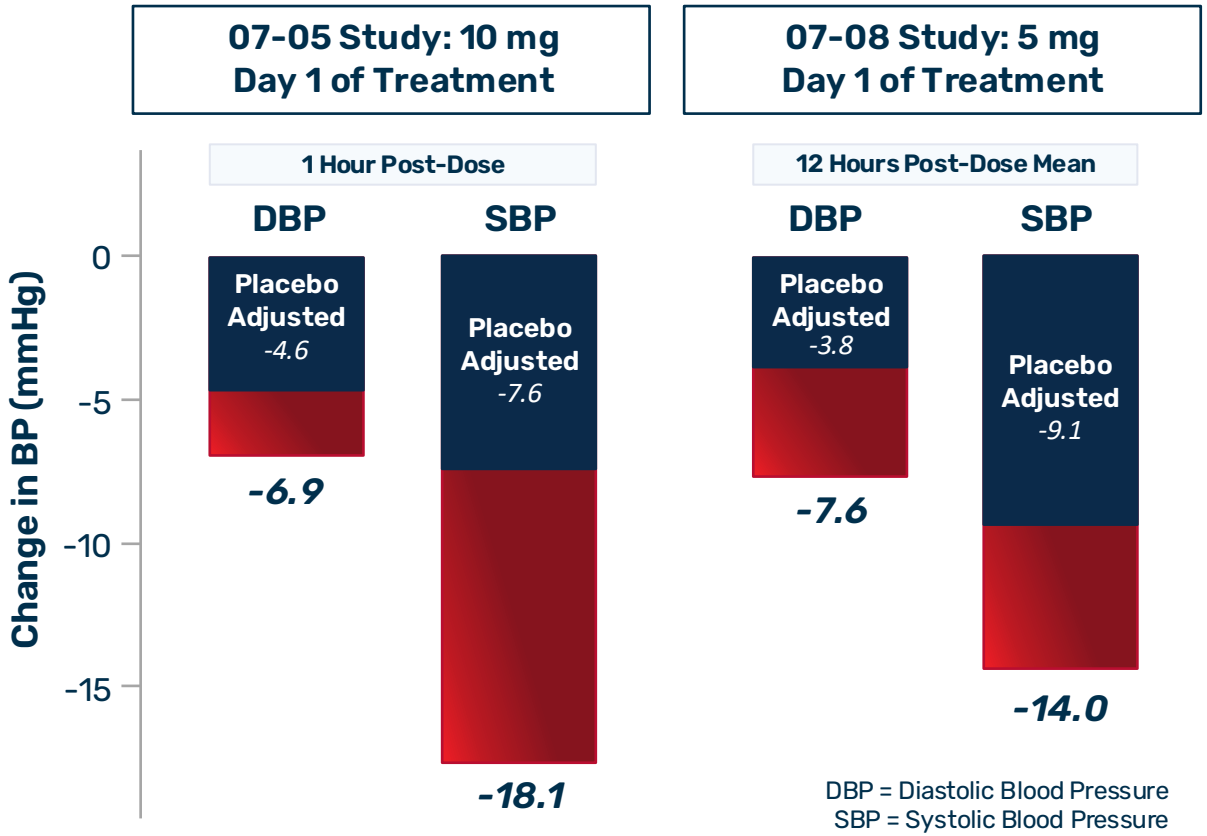
# Phase 2 Pilot Results: RTN-001 Observed to Lower BP in Hypertension Patients[1]

Change in blood pressure from baseline at single timepoint (Study 07-05) and 12 hour mean (Study 07-08)

**07-05 Study Part B** – examined RTN-001 in 23 patients with HTN on up to 4 different hypertension medications.

**07-08 Study** – examined RTN-001 in 40 patients with HTN on up to 3 different hypertension medications

Central blood pressure showed a placebo-adjusted reduction of **-10 mmHg SBP** and **-7.3 mmHg DBP** at trough (07-05 Study).

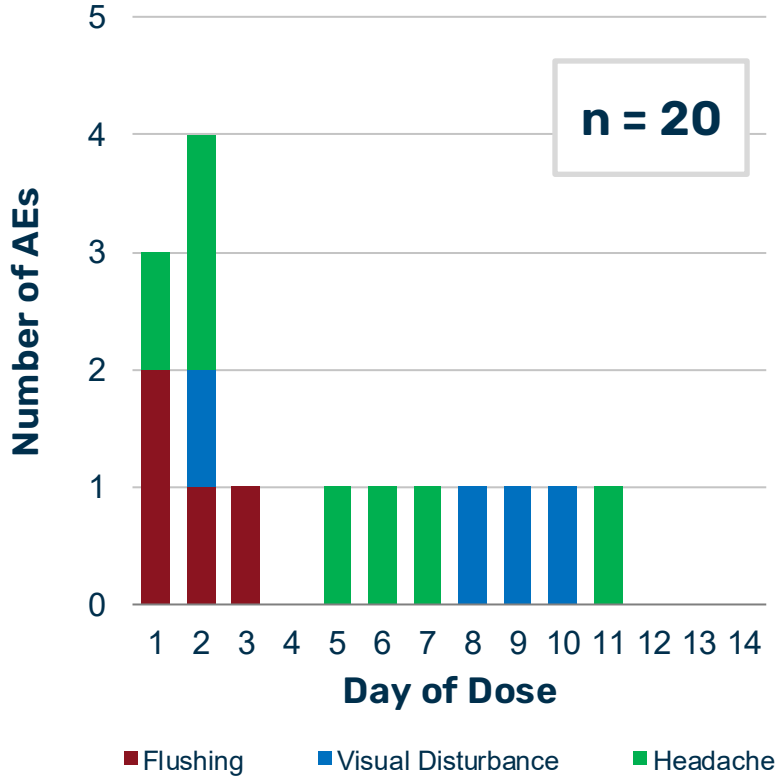



1. Unpublished studies SLX-2101-07-05 and SLX-2101-07-08

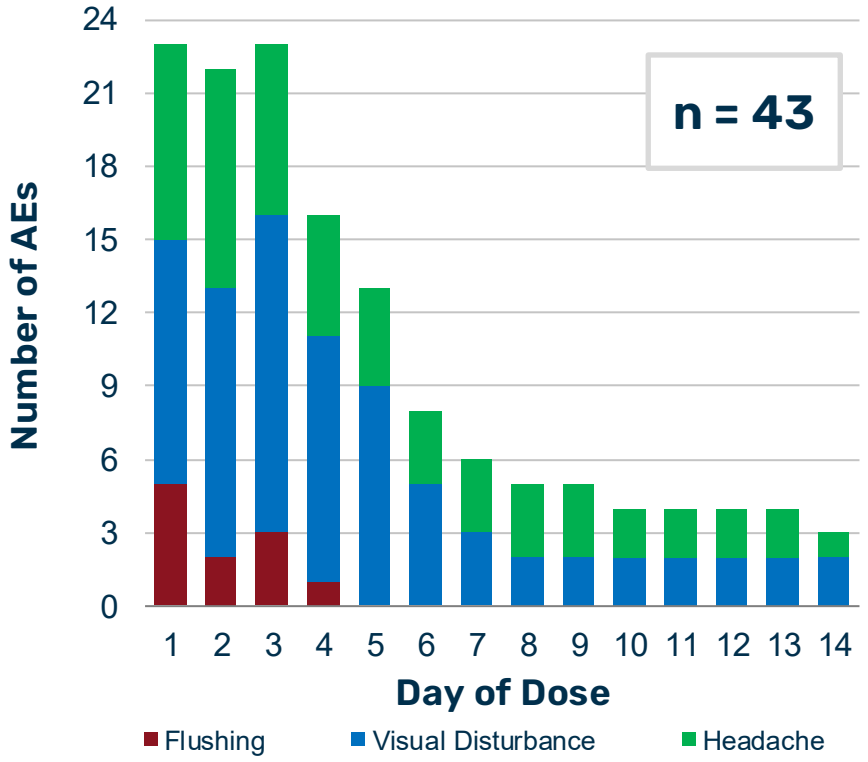
Trough = timepoint just before next dose when drug levels are at their lowest

# Observed AE Frequency Declined With Repeat Dosing[1]

## Frequency of AEs 5 mg (07-08 Study)[1]




## Frequency of AEs 10 mg (07-05 + 07-08 Study)[1]




* One Subject with all 3 AEs withdrew on Day 3

**Most AEs were observed early in the dosing period, with reported frequency declining upon continued dosing**

1. Internal analysis of unpublished studies SLX-2101-07-05 & SLX-2101-07-08

# RTN-001 Origin: The Surface Logix Modulon Platform

RTN-001 was developed from a biochemically validated target and scaffold using Surface Logix's platform approach, leveraging biophysical chemistry to improve upon first-generation molecules by optimizing tissue distribution, absorption, half-life, and PK/PD designed to develop a differentiated therapy.

## Modulons

**Dynamic spatial conformation**

Fine tune small molecule drugs with property modifying molecular fragments (Modulons) that guide distribution & PK/PD without losing potency

Modulon design and implementation guided by:

## Interfacial determinants

**Absorption / Permeability**

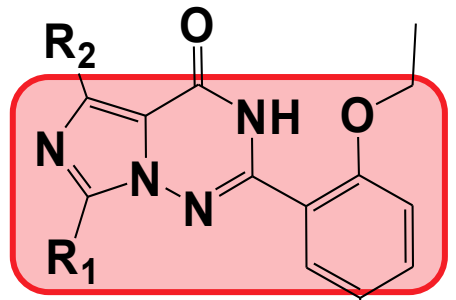
Properties of modulons on self-assembled monolayers initially developed by **Prof George Whitesides at Harvard** are experimentally measured and selected to impart their properties to small molecules

## Protein interaction profiles

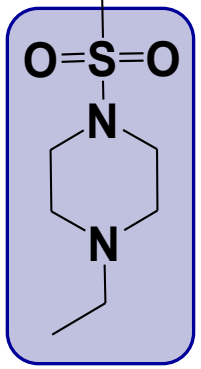
**Distribution control**

Modulon design can influence protein interactions of small molecule drugs, such as reducing non-specific vessel-wall binding

**Core Scaffold**




**Modulon Replacement**

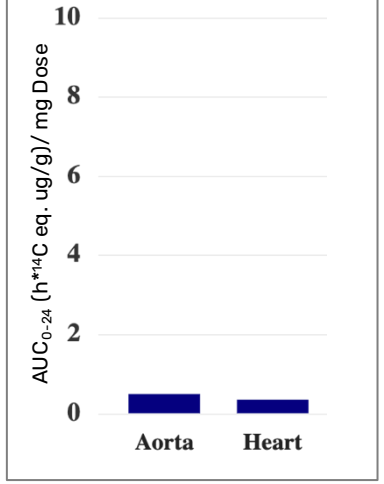


# RTN-001 is Designed to Enhance Cardiovascular Tissue Exposure and Drives Meaningful Blood Pressure Reduction in Clinical Trials

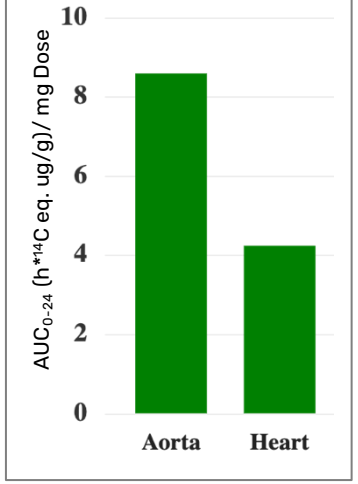
**Difference in Systolic Blood Pressure Changes between First Generation PDE5 Inhibitors and RTN-001 (Not evaluated in a head-to-head study. Results may be different in a head-to-head trial.)**

## Tissue Exposure

**First Generation PDE5i (e.g., Levitra)[1]**

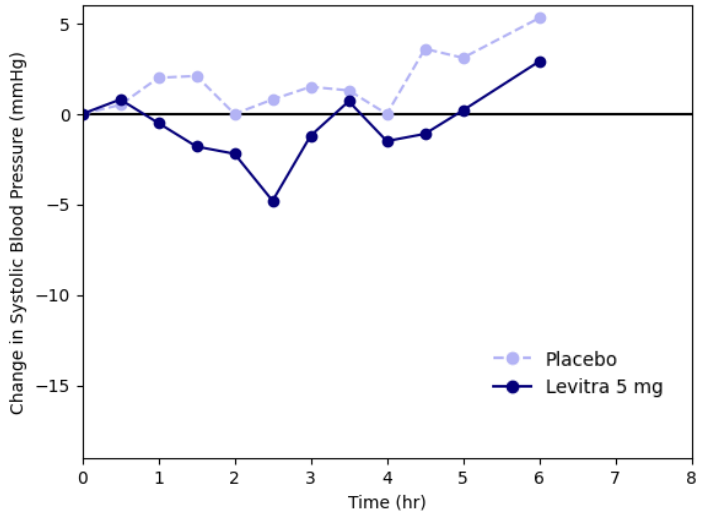



**RTN-001[2]**

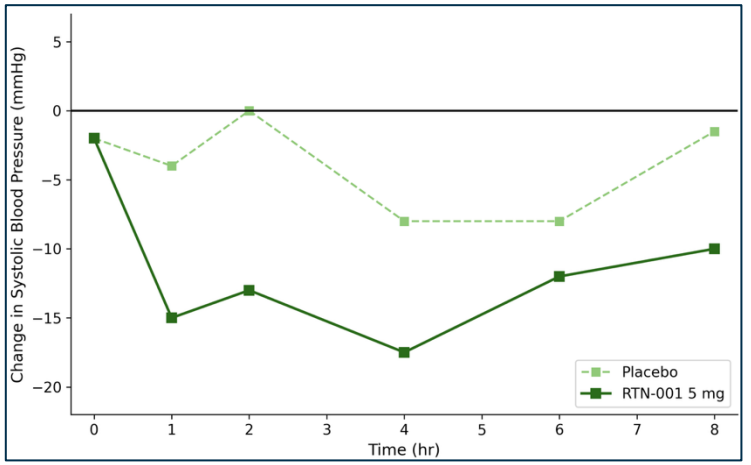



## Systolic Blood Pressure Effect

**First Generation PDE5i (e.g., Levitra)[3]**




**RTN-001[4]**



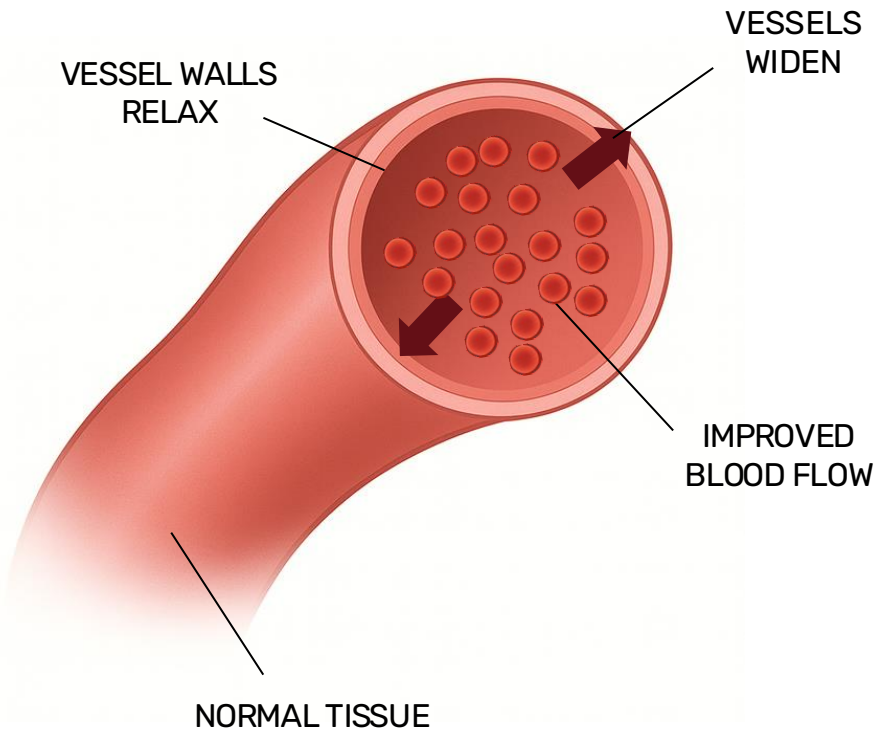

**Levitra** (vardenafil), a first generation PDE5 inhibitor, showed **limited distribution within cardiovascular tissues** in male rats and **limited effects on blood pressure in humans** outside of normal day-to-day variations.

**RTN-001**, a second generation PDE5 inhibitor, showed **robust distribution within cardiovascular tissues** in male rats and **clinically meaningful reduction in blood pressure in humans** within one hour after dosing.

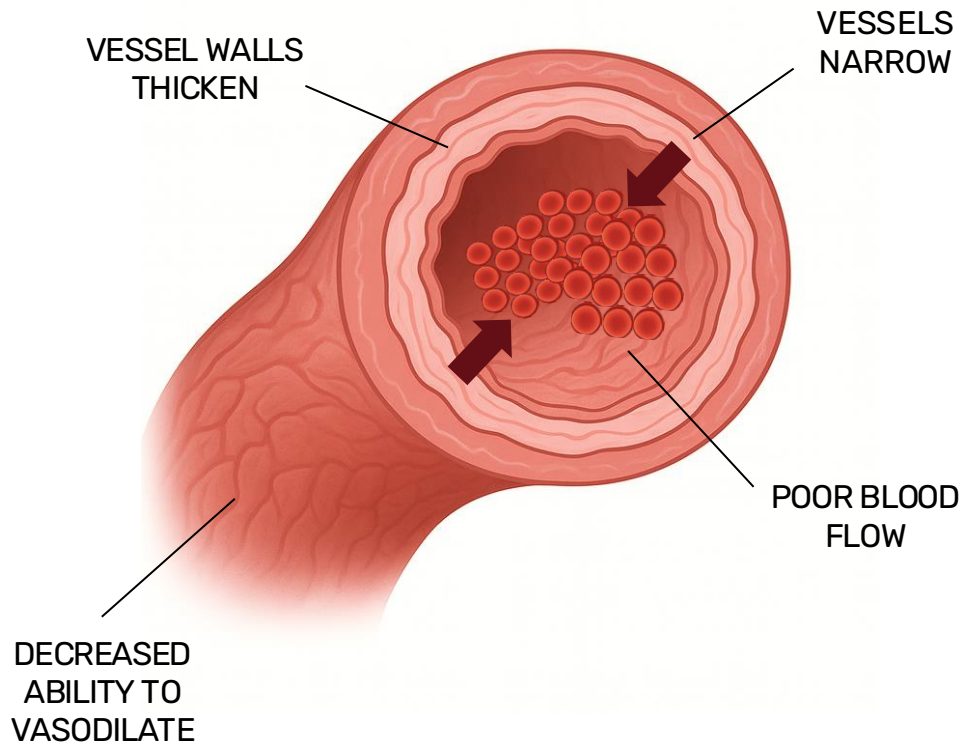
1. Vardenafil NDA evaluating 1 mg/kg dosage of 14C-labeled vardenafil; 2. Unpublished SLx PK and Tissue Distribution Report evaluating 5 mg/kg (~1.375 mg) dosage of RTN-001, dose-adjusted to show 1 mg/kg data; 3. Vardenafil data from Vardenafil US Package Insert (USPI); 4. RTN-001 data from unpublished study SLX-2101-07-08

# Nitric Oxide Effects on Blood Vessels

## HEALTHY BLOOD VESSEL




## NITRIC OXIDE-DEFICIENT BLOOD VESSEL




**Enhancing nitric oxide signaling via PDE5 inhibitors is approved for use in erectile dysfunction and pulmonary arterial hypertension**[1,2]

1. *International Journal of Molecular Sciences* Analysis of PDE5i in Modulating Inflammatory Markers in Humans; 2. *Journal of Translational Medicine* 2014

# Endothelial Nitric Oxide Dysfunction is a Core Mechanism of Hypertension[1]

**Role of Nitric Oxide**
- Signals vessel walls to relax to control blood pressure
- Reduces inflammation and scarring in vessel walls

**Scientific Validation**
- The 1998 Nobel Prize was awarded for the foundational work on nitric oxide pathway

**Nitric Oxide Deficiency**

**Vascular Effects**
- Loss of nitric oxide-mediated vessel relaxation
- Reduced cGMP signaling
- Sustained vasoconstriction

**Cellular Effects**
- Loss of nitric oxide's anti-inflammatory signaling
- Exacerbates oxidative stress & vascular injury
- Increased fibrosis in vessel walls



Hypertension



Heart Failure



Chronic Kidney Disease

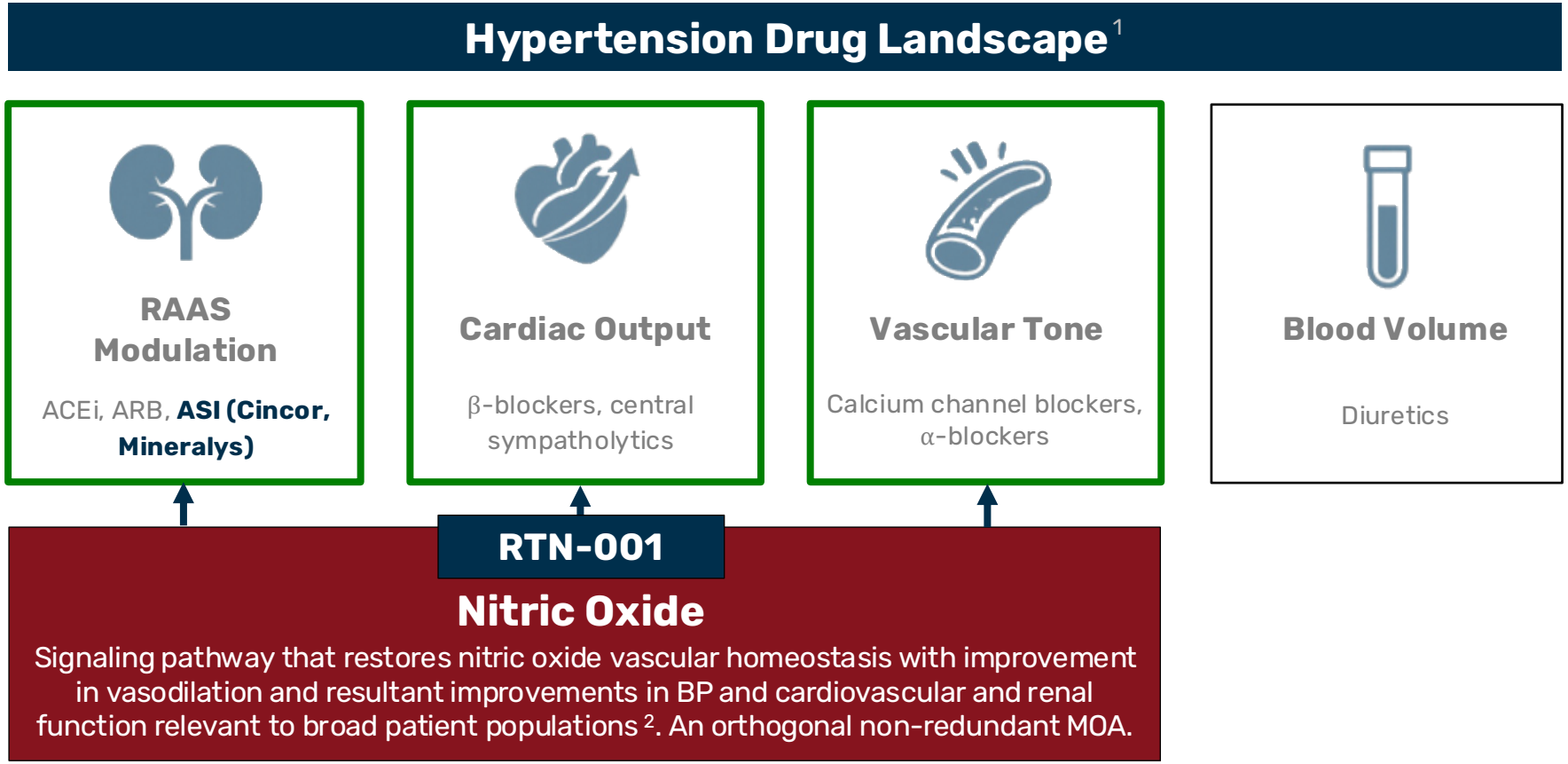


Vascular Complications

**Early Mortality**

*1. Hypertension* 2013

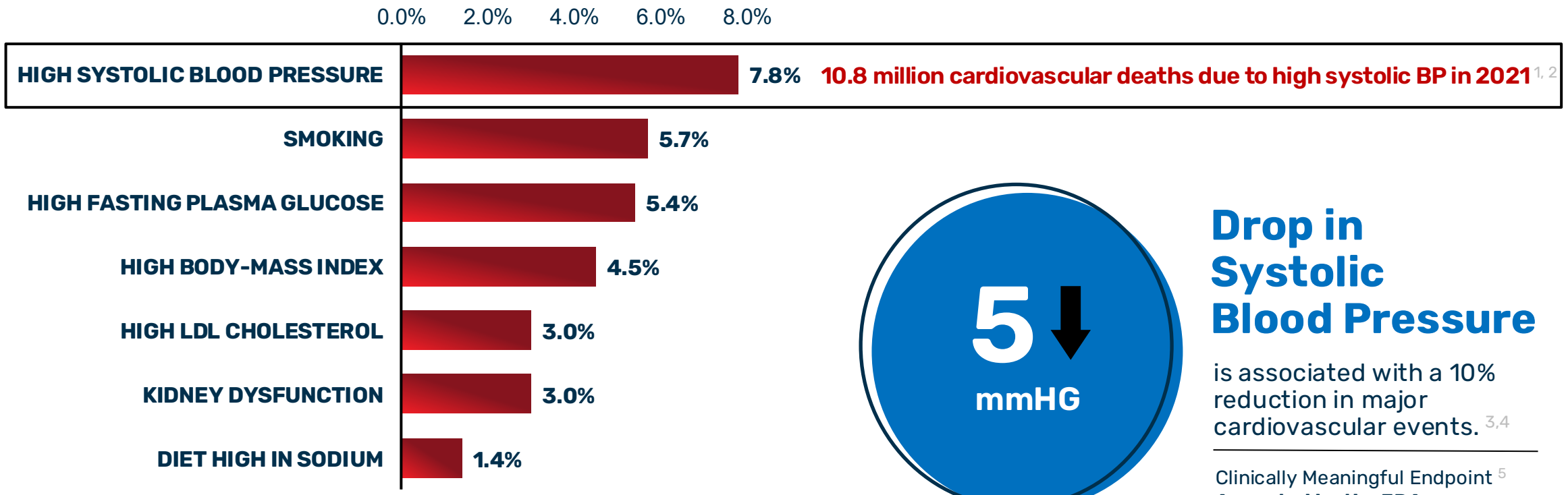
# Evolving Guidelines Create Opportunity for Differentiated Mechanism for Blood Pressure Lowering




**130/80 mmHg BP target in the current 2025 AHA/ACC guidelines meaningfully expand the treatable population and demand for new adjunctive therapeutic options[3,4]**

1. AHA "Types of Blood Pressure Medications"; 2. Ahmad et al., *Int J Mol Sci*, 2018; 3. AHA Guidance 2017; 4. AHA Guidance 2025

# Hypertension is the Leading Modifiable Risk Factor for Cardiovascular Mortality




[1] Percentage of DALYs (Disability-Adjusted Life Years) attributable to top risk factors for both sexes combined, 2021




## Drop in Systolic Blood Pressure

is associated with a 10% reduction in major cardiovascular events. [3,4]

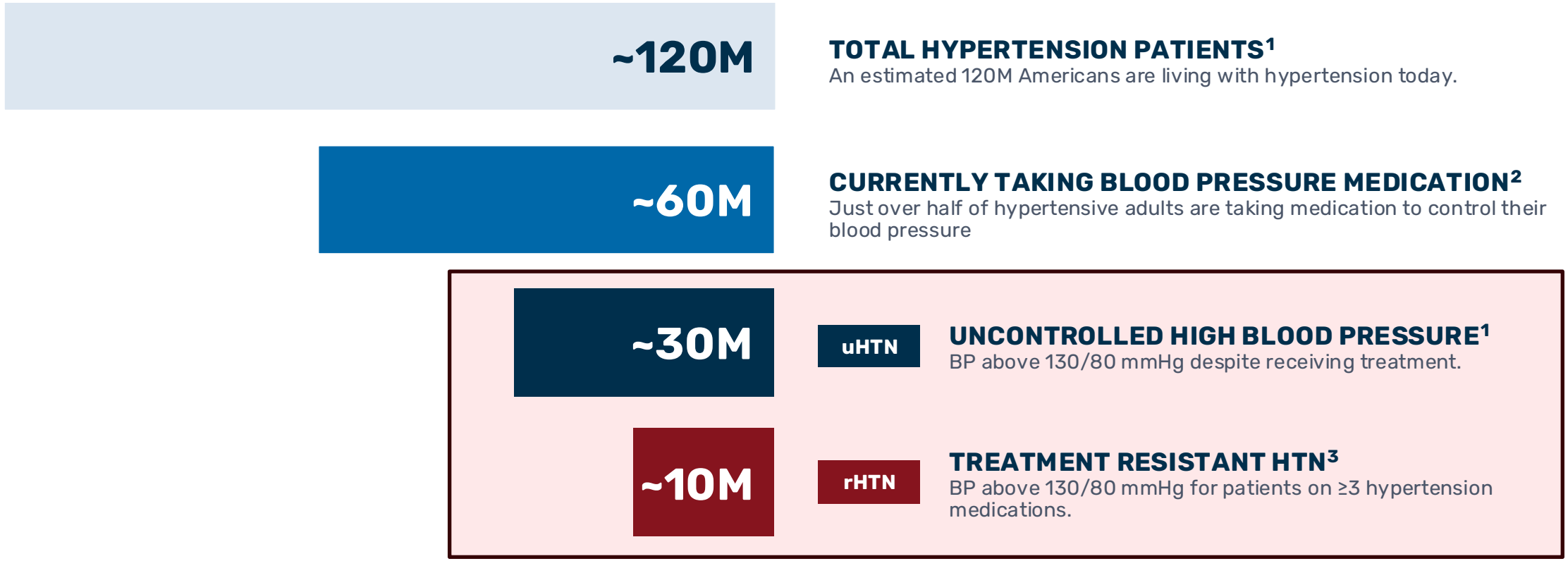
Clinically Meaningful Endpoint [5]
**Accepted by the FDA**

## Lowering Blood Pressure Reduces Risk of Mortality

1. *The Lancet* Global Burden of Disease Study 2021; 2. The Global Burden of Cardiovascular Diseases and Risk: A Compass for Future Health 2021; 3. Current Cardiology Report 2022; 4. *Jama Cardiology* SBP Reduction and Risk of CV Disease and Mortality 2017; 5. *New England Journal of Medicine* 2014

# ~120M Americans Suffer from Hypertension Today

Yet a majority of those on treatment still have high blood pressure despite taking multiple hypertension medications.




**Most Patients on Treatment Fail to Reach BP Goals With Existing Hypertension Drugs.**[1]

1. MillionHearts 2020; 2. NCHS Data Brief 2024; 3. AHA Prevalence of Treatment Resistant Hypertension 2018

# Study Design for Retension's Phase 2b Trial in Hypertension

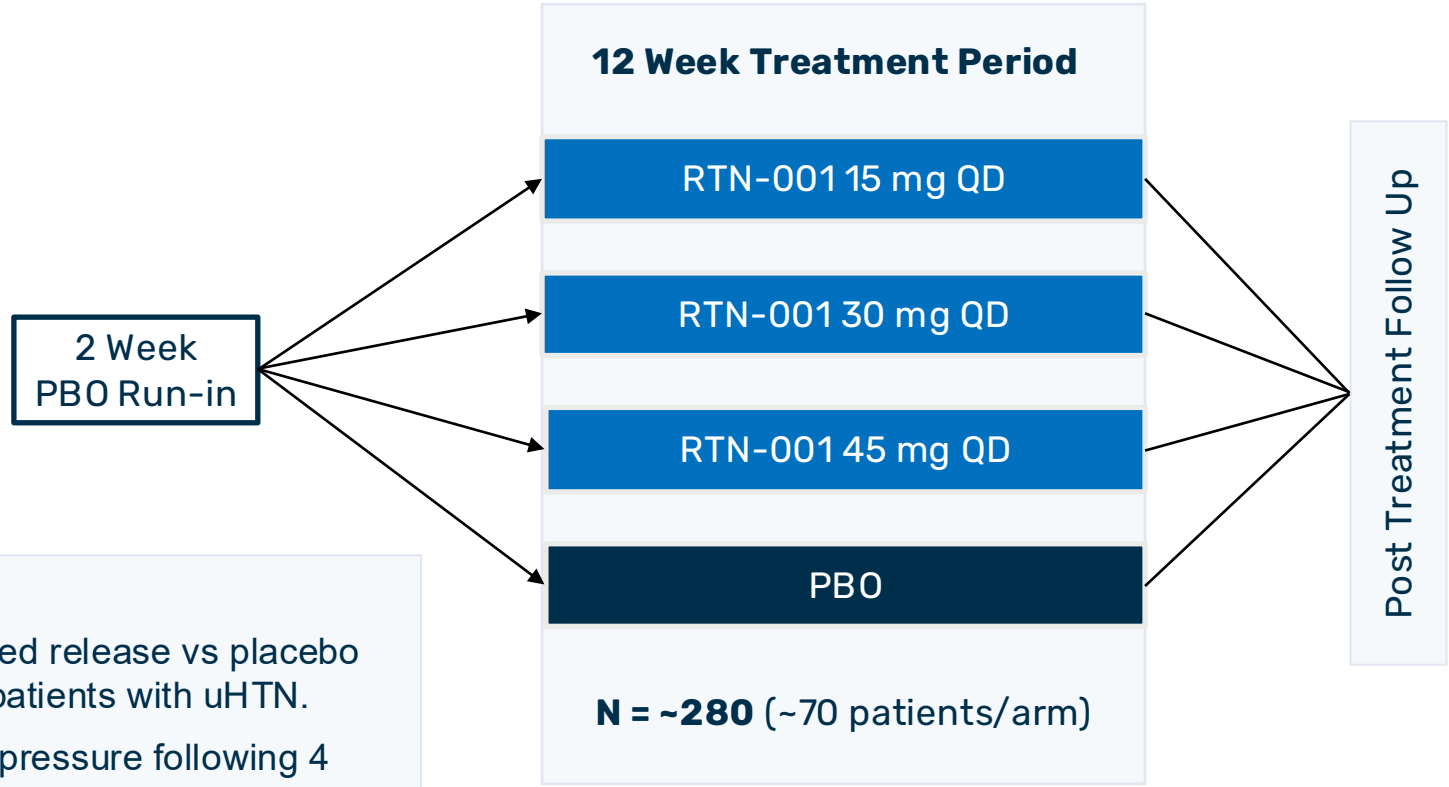
## RTN-001 Modified Release (MR) Phase 2b Hypertension Study Data Expected in 1H 2027

**Overview**

A 12-week parallel arm, double-blind, placebo-controlled study in 280 adult patients with uncontrolled hypertension (BP >135/80, receiving 2-5 anti-HTN meds[1])

**Primary Endpoint**

Reduction in Office-Seated Systolic Blood Pressure at 4 weeks




**Study Primary Objectives**

- Evaluate the effect of 4 weeks of RTN-001 modified release vs placebo on mean change in peripheral blood pressure in patients with uHTN.
- Assess changes in ambulatory and central blood pressure following 4 weeks of RTN-001 vs placebo.

1. A combination pill is considered 2 antihypertensive agents. Abbreviations: BP = blood pressure; HTN = hypertension; meds = medications; OT = off treatment; PBO = placebo; S = screening; T = treatment

# Selected Phase 2b Formulation Observed to Result in Higher 24-hour Timepoint Concentration (C24)

**Peak (Cmax)**

**↓ 79%**

5.14 vs 24.0 ng/mL – parent + metabolite Cmax also observed to be less variable

**24-h trough (C24)**

**↑ 5.6×**

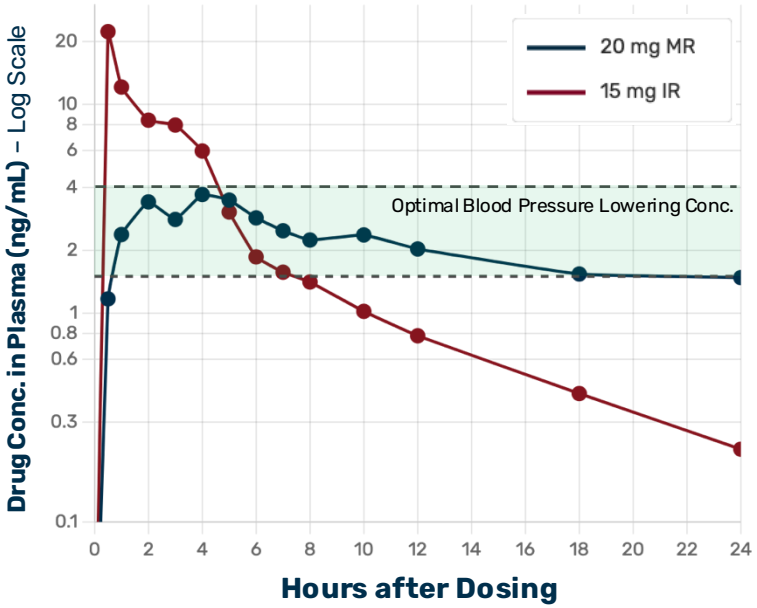
1.48 vs 0.263 ng/mL

**Coverage (MRT)**

**+24 hr**

Above 1 ng/mL target

## PK Comparison of MR vs IR Formulation[1]




## Plasma Concentration Target

- The majority of blood pressure reduction has been observed at plasma concentrations of 1-2 ng/mL for RTN-001[2]
- We believe a modified release formulation that keeps plasma concentrations above this level for 24 hours should provide robust blood pressure control with a once-a-day tablet

1. CSR RTN-001-09-09
2. Internal analysis of unpublished studies SLX-2101-07-08

# Layered IP Estate Extends RTN-001 Exclusivity to 2044+

## POLYMORPH
ISSUED

**2044**

***US 12,258,350 – granted Mar 2025***

Crystalline Form A composition + method-of-use for HTN. Continuation and CIP layer in additional crystal forms and the salt form.

## COMBINATION THERAPY
PENDING

**2044**[1]

***Provisional filed Nov 2024***

RTN-001 + amlodipine and related compounds: directly supports the orthogonal-to-RAAS positioning for resistant hypertension.

## INTERNATIONAL
PENDING

**PCT**

***Patent-pending***

PCT filings initiated Nov 2025 establish patent-pending status across major ex-US markets, including EU, Japan, and China.

**RTN-001 Legacy Exclusivity:** Active licensed composition-of-matter patent, US protection runs through 2027

1. Nominal expiration date, if granted, based on provisional patent application filed in 2024

# Differentiated Mechanism to Address a High Unmet Need

## RTN-001 Optimized to Address Hypertension

RTN-001 is designed to function in the central arterial vasculature to enable effective BP lowering and address a core pathophysiologic mechanism of hypertension.

## High Unmet Need

Nearly half of US adults, or ~120M US hypertension patients, including ~30M uncontrolled and ~10M treatment-resistant.

## Clinically Meaningful Results

In two Phase 2 Pilot clinical trials of RTN-001 clinically meaningful reductions in systolic and diastolic blood pressure were observed and RTN-001 was well-tolerated similar to first generation PDE5 inhibitor therapies with well-established safety and tolerability profiles.

## Differentiated Mechanism Complementary to Existing Therapies

RTN-001 is engineered to preferentially distribute to cardiovascular tissues and enhance nitric oxide signaling, a well-established mechanism central to blood pressure control and endothelial health.





retension
PHARMACEUTICALS