UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 8-K

CURRENT REPORT
Pursuant to Section 13 or 15(d)
of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): January 30, 2025

Tectonic Therapeutic, Inc.
(Exact name of registrant as specified in its charter)

Delaware	**001-38537**	**81-0710585**
(state or other jurisdiction of incorporation)	**(Commission File Number)**	**(I.R.S. Employer Identification No.)**

490 Arsenal Way, Suite 210
Watertown, Massachusetts **02472**
(Address of principal executive offices) **(Zip Code)**

Registrant's telephone number, including area code: (339) 666-3320

Not applicable
(Former name or former address, if changed since last report.)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	**Trading Symbol**	**Name of each exchange on which registered**
Common Stock, $0.0001 par value per share	TECX	The Nasdaq Stock Market LLC

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Item 7.01 Regulation FD Disclosure.

On January 30, 2025, Tectonic Therapeutic, Inc. (the "Company") posted a presentation titled "TX45 Phase 1b PH-HFpEF Interim Data Release for Single Dose Hemodynamic Trial" on its website, a copy of which is attached as Exhibit 99.1 to this Current Report on Form 8-K.

The information under Item 7.01 in this Current Report on Form 8-K, including Exhibit 99.1 attached hereto, is being furnished and shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to the liabilities of that section. Such information and the accompanying Exhibit 99.1 are not incorporated by reference in any filing of the Company under the Securities Act of 1933, as amended, or the Exchange Act, whether made before or after the date hereof, regardless of any general incorporation language in such filing, except as shall be expressly set forth by specific reference in such filing.

Item 8.01 Other Events.

On January 30, 2025, the Company issued a press release titled "Tectonic Therapeutic Announces Positive Interim Data from Phase 1b Trial for TX45 in Patients with Group 2 Pulmonary Hypertension in HFpEF." A copy of the press release is attached as Exhibit 99.2 to this Current Report on Form 8-K and, other than the quotes contained therein, is incorporated herein by reference.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

Exhibit No.	Description
99.1	Presentation dated January 2025.
99.2	Press Release dated January 30, 2025.
104	Cover Page Interactive Data File (the cover page XBRL tags are embedded within the Inline XBRL document)

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

TECTONIC THERAPEUTIC, INC.

By: /s/ Daniel Lochner
Daniel Lochner
Chief Financial Officer

Dated: January 30, 2025

Exhibit 99.1

TX45 Phase 1b PH-HFpEF Interim Data Release for Single Dose Hemodynamic Trial

January 2025

TECTONIC Therapeutic

DISCLAIMER

Statements contained in this presentation regarding matters that are not historical facts are "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995, as amended. Words such as "anticipates," "believes," "expects," "intends," "plans," "potential," "projects," "would" and "future" or similar expressions are intended to identify forward-looking statements. Each of these forward-looking statements involves substantial risks and uncertainties that could cause actual results to differ significantly from those expressed or implied by such forward-looking statements. Forward-looking statements contained in this presentation include, but are not limited to, statements regarding: the design, objectives, initiation, timing, progress and results of current and future preclinical studies and clinical trials of our product candidates, including the ongoing Phase 1b and Phase 2 clinical trial for TX45, in Group 2 Pulmonary Hypertension; the expected timing of program updates and data disclosures; the timing of filing INDs and other regulatory documents; the timing and likelihood of seeking regulatory approval for our product candidates including TX45; the competitive landscape for and market potential of our product candidates; and our ability to identify and develop additional product candidates as well as pursue additional indications.

These forward-looking statements reflect our current beliefs and expectations. Many factors may cause differences between current expectations and actual results, including the early stage of our development efforts; success in preclinical testing and earlier clinical trials does not ensure that later clinical trials will generate the same results or otherwise provide adequate data to demonstrate the efficacy and safety of a product candidates; clinical site activation rates or clinical trial enrollment rates that are lower than expected; changes in expected or existing competition; changes in the regulatory environment; the uncertainties and timing of the regulatory approval process; the impact of macroeconomic conditions, including the conflict in Ukraine and the conflict in the Middle East, heightened inflation and uncertain credit and financial markets, on our business, clinical trials and financial position; and unexpected litigation or other disputes. These and other risks are described more fully in our filings with the Securities and Exchange Commission ("SEC"), including the risks detailed in our Quarterly Report on Form 10-Q filed with the SEC on November 12, 2024, and other documents we subsequently filed with or furnished to the SEC. All forward-looking statements contained in this presentation speak only as of the date on which they were made. Except as required by law, we assume no obligation to update any forward-looking statements contained herein to reflect any change in expectations, even as new information becomes available.

This presentation also contains estimates and other statistical data made by independent parties and by us relating to market size and growth and other data about our industry. This data involves a number of assumptions and limitations, and you are cautioned not to give undue weight to such estimates. Neither we nor any other person makes any representation as to the accuracy or completeness of such data or undertakes any obligation to update such data after the date of this presentation. In addition, projections, assumptions and estimates of our future performance and the future performance of the markets in which we operate are necessarily subject to a high degree of uncertainty and risk.

Tectonic Tx: GPCR-Targeted Therapies for High-Value Opportunities

Clinical-Stage Biotech

TECX focused on discovery & development of GPCR-target biologics with significant unmet need

- Founded in 2019 by Tim Springer and Andrew Kruse, TECX went public via reverse merger (AVROBIO) in June 2024 with a concurrent private placement of approximately $131 million

Tenured Team

Executive team with numerous accomplishments, resulting in 20 "first" approvals

TX45 Lead Pipeline Asset

Long-acting relaxin in Phase 2 trial, supported by Phase 1b interim results

- Initial indication targeting Group 2 Pulmonary Hypertension (PH) associated with Heart Failure with Preserved Ejection Fraction (HFpEF), or PH-HFpEF, with Phase 2 trial enriched for CpcPH
- Positive Phase 1a clinical trial results support best-in-class potential, including favorable safety profile
- Positive interim Phase 1b clinical trial results achieved or exceeded all hemodynamic goal targets, supporting Phase 2 trial

Relaxin Potentially Ideal for PH-HFpEF

Relaxin physiologic and hemodynamic effects further demonstrated in prior clinical studies

- Prior clinical development of relaxin by Novartis adds to clinical rationale for TX45 targeting PH-HFpEF

PH-HFpEF Significant Market Potential

~1.4M+ Group 2 PH-HFpEF patients in the U.S. with no approved therapy*; high 5-year mortality

- Potential peak multi-billion-dollar* revenue potential for Group 2 PH-HFpEF patients with EF > 40%
- Astra Zeneca is pursuing a Group 2 PH relaxin program targeting both HFpEF and HFrEF patients

TX2100 Second Pipeline Asset

Targeting rare bleeding disorder called Hereditary Hemorrhagic Telangiectasia (HHT)

- Significant market potential, no approved therapies for HHT, estimated ~75K patients in the U.S. alone (15-20% severe)
- Phase 1 clinical trial initiation expected in Q4'25 / Q1'26

Potential to Broaden TX45 to HFrEF Patients

TX45 Phase 1b, hemodynamic topline results in PH-HFrEF subjects expected in 2H'25

- Positive PH-HFrEF results could potentially expand the addressable TX45 patient population by ~1.1M patients in the U.S.*

Well-Capitalized

~$159 million in cash as of 9/30/24, expected to provide a cash runway into mid-2027

** Estimates based on company sponsored market analysis conducted by Health Advances*

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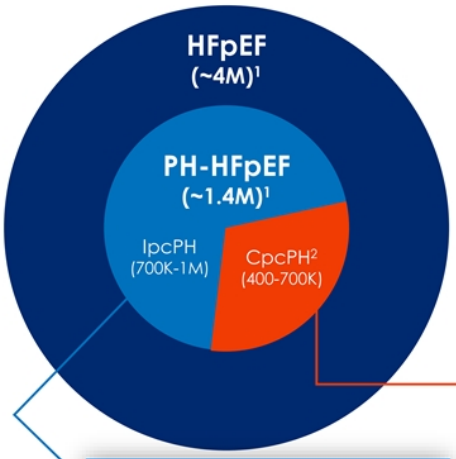
Initial Focus on Group 2 PH due to Heart Failure with Preserved EF (PH-HFpEF), Enriched for CpcPH Patients

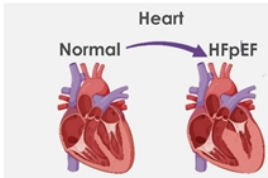
Clinical program designed to enable evaluation of efficacy in overall population and CpcPH



Group 2 PH-HFrEF could add ~1.1M[1] on top of the ~1.4M for PH-HFpEF

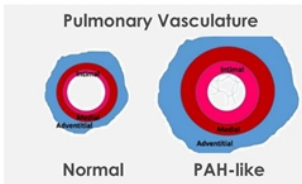
IpcPH (**I**solated, **p**ost **c**apillary **PH**)

Increased Left Ventricle Filling Pressures
↓
Increased Pulmonary Venous Pressures
↓
Passive Pressure Backflow
↓
Pulmonary Hypertension



CpcPH (**C**ombined, **p**re- and post **c**apillary **PH**)

Chronic PH, HF, and/or Other Drivers
↓
Permanent Vascular Changes, e.g. Pulmonary Artery Remodeling
↓
Increased Vascular Resistance
↓
Right Heart Failure



1. US prevalence numbers for Class 2 and 3, estimates based on company sponsored market analysis conducted by Health Advances
2. 400K CpCPH and 1M IpcPH assumes diagnosis based on PVR≥3; 700K CpCPH and 700K IpcPH assumes diagnosis based on PVR≥2.

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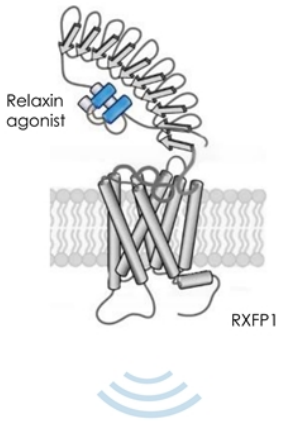
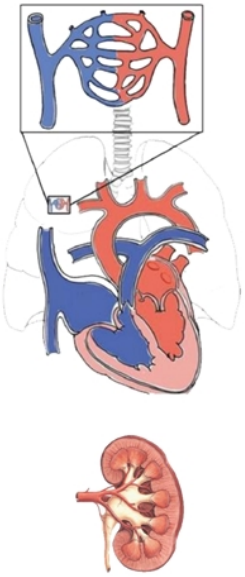
Relaxin Addresses Multiple Organ System Pathologies in PH-HFpEF

Phase 1b data is anticipated to capture the acute impact of vasodilation and LV relaxation





↑ **Vasodilation** Pulmonary & Systemic ↑ NO ↓ Endothelin-1	↓ RV / LV* Afterload
↑ **LV Relaxation** ↑ SERCA2 function	Improved LV Diastolic Function
↓ **Fibrosis** Anti-Inflammatory ↑ MMPs ↓ TGFβ	RV / LV and Pulmonary Artery Reverse Remodeling
↑ **Renal Blood Flow**	↑ Na^+ Excretion ↓ RV / LV Preload

** RV: right ventricle; LV: left ventricle*

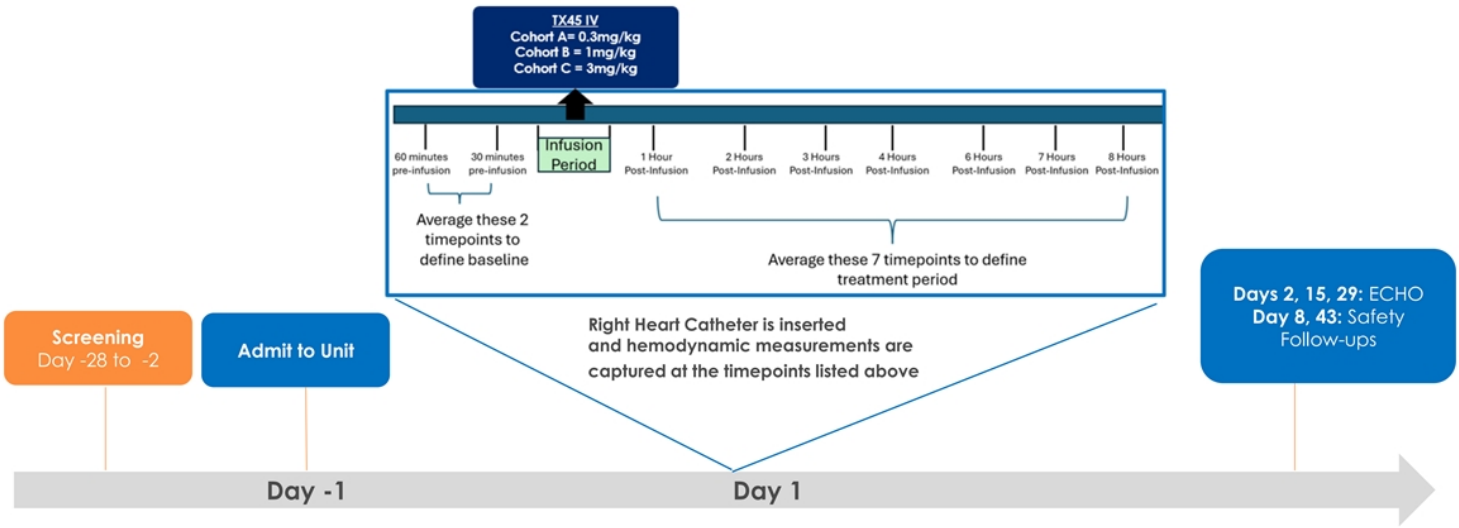
TECTONIC Therapeutic

TX45 Background and Clinical Program Status

- TX45 is a human relaxin-2-Fc fusion protein with a potential best in class half-life of 2-3 weeks
- The Phase 1b hemodynamic clinical trial is ongoing:
  - **Part A** - Enrollment and dosing of PH-HFpEF subjects is completed (N=19)
    - Efficacy data is available for 16 of 19 subjects
      - Hemodynamic data on the last 3 subjects are in line with the findings on the first 16 [3]
      - Last 3 patients all have IpcPH, therefore the CpcPH cohort data is final
    - Safety data is available on 16 patients, 15 of whom have completed the full 43-day safety follow-up
  - **Part B** - Enrollment in PH-HFrEF[2] subjects is expected to initiate near term with data in 2H'25
- TX45 is currently enrolling in a Phase 2 trial for subjects with PH-HFpEF[1] enriched for CpcPH with results expected in 2026

[1] *PH-HFpEF = Pulmonary Hypertension due to Heart Failure with Preserved Ejection Fraction (LVEF ≥ 40%)*
[2] *PH-HFrEF = Pulmonary Hypertension due to Heart Failure with Reduced Ejection Fraction*
[3] *Based on data available to date*

Phase 1b (Part A) Trial Design, A Single Dose, Open-Label Acute Hemodynamic Trial in IpcPH and CpcPH Subjects



Hemodynamic data was prespecified to be pooled across all doses. After IV administration, all dose levels result in exposures which are in the predicted efficacious range during the 8-hour assessment period (i.e. above trough exposure of 2 ug/ml)

Key Hemodynamic Measures Assessed in Phase 1b Trial

Goal: Treatment for PH-HFpEF needs to **both** increase LV function and improve pulmonary vascular component of the disease

Hemodynamic	Definition	Significance
PCWP *(Pulmonary Capillary Wedge Pressure)*	• Measure of left atrial pressure	• Key marker of left ventricular (LV) function
PVR *(Pulmonary Vascular Resistance)*	• Measure of resistance to blood flow in pulmonary vessels • PVR = (mPAP – PCWP)/CO	• Health of the pulmonary vessels
TPR *(Total Pulmonary Resistance)*	• Measure of right ventricular afterload • TPR = mPAP/CO	• Key marker of resistance, how hard must the right ventricle (RV) work
CO *(Cardiac Output)*	• Amount of blood heart pumps (volume/time) • CO = heart rate x stroke volume	• How well is the heart working (both RV and LV)
SV *(Stroke Volume)*	• Amount of blood ejected from ventricle per beat	• Effectiveness of the heart at pumping blood (both RV and LV)

Note: mPAP = mean Pulm. Artery Pressure = average pressure required to pump blood through the lungs

TX45 Phase 1b Trial Results Are Expected to Improve Probability of Success of TX45 in Phase 2 Clinical Trial

Phase 1b predefined hemodynamic target goals were:

- **~15-20% decrease in pulmonary capillary wedge pressure (PCWP) in overall patient population**
  - PCWP provides insight into left ventricular function and correlates with exercise capacity in HFpEF, HFrEF[1] and Group 2 pulmonary hypertension (CpcPH)[2]
- **~15-20% decrease in pulmonary vascular resistance (PVR) in patients with CpcPH[a]**
  - PVR is normal in IpcPH[b], so a floor effect is likely in this subgroup
  - In PAH, lowering of PVR is associated with improvement in 6MWD[3]
  - In Group 2 PH (CpcPH), lowering of PVR is correlated with increased 6MWD[2]
- **Reduction in total pulmonary resistance (TPR) in overall patient population**
- **No bar set for Cardiac Output as Cardiac Output is normal at rest in patients with HFpEF**

1.Wolsk E et al. Eur. J. Heart Fail. 2018
2.Zhang H et al. JACC: Cardiovascular Interventions. 2019
3.www.accessdata.fda.gov/drugsatfda_docs/nda/2017/209279Orig1s000MedR.pdf
a CpcPH = Combined Pre- and Post-Capillary Pulmonary Hypertension
b IpcPh = Isolated Post-Capillary Pulmonary Hypertension

Phase 1b (Part A) Demographics & Medical History

	All Subjects N = 16
Age (mean, SD)	64.3 (9.2)
Females [n (%)]	6 (37.5%)
BMI (mean, SD)	28.0 (3.2)
Creatinine (uMol/L; mean, SD)*	80.8 (18.7)
Comorbidities	
Hypertension [n (%)]	13 (81.3%)
Atrial fibrillation [n (%)]	10 (62.5%)
Diabetes mellitus [n (%)]	5 (31.3%)
Coronary artery disease [n (%)]	10 (62.5%)
NYHA Class [n (%)]	
NYHA Class II	9 (56.3%)
NYHA Class III	7 (46.8%)

Key Concomitant Medications	All Subjects N = 16
ACEi/ARB [n (%)]	8 (50.0 %)
MRA [n (%)]	13 (81.3 %)
SGLT2i [n (%)]	6 (37.5 %)
Loop Diuretic [n (%)]	11 (68.8 %)
Beta-blocker	12 (75.0 %)
Digoxin [n (%)]	5 (31.3 %)

*Creatinine normal range (uMol/L):
Males: 61.9-114.9
Females: 53.0 to 97.2

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Phase 1b (Part A) - Summary of Baseline Hemodynamics

Parameter	Baseline Value [mean, SD]
Heart Rate (bpm)	68.1 (10.9)
Systolic Blood Pressure (mm Hg)	128.8 (11.6)
Diastolic Blood Pressure (mm Hg)	78.5 (6.0)
Mean Pulmonary Artery Pressure (mm Hg)	26.6 (4.4)
Pulmonary Capillary Wedge Pressure (mm Hg)	16.7 (3.2)
Pulmonary Vascular Resistance (Woods Units)	2.45 (1.1)
Cardiac Output (L/min)	4.3 (1.0)
Stroke Volume mL	65 (18)
Total Pulmonary Resistance (Woods Units)	6.5 (1.6)

PVR < 2WU	2 WU ≤ PVR < 3WU	PVR ≥3 WU
7	4	5

If CpcPH is defined as PVR >3:
Total IpcPH = 11
Total CpcPH = 5

If CpcPH is defined as PVR >2:
Total IpcPH = 7
Total CpcPH = 9

Phase 1b (Part A) - Primary Endpoint: TX45 Is Well Tolerated

Treatment-emergent adverse events (# of Subjects)

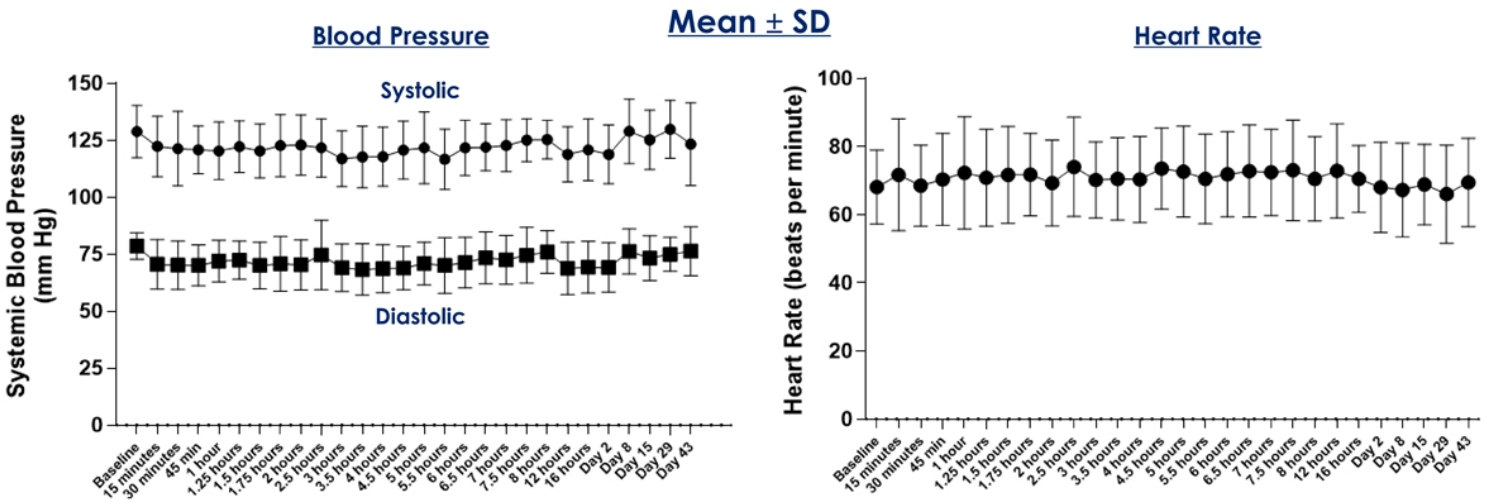
Preferred Term	Cohort A 0.3 mg/kg (n=3)	Cohort B 1 mg/kg (n=7)	Cohort C 3 mg/kg (n=6)	Total N=16
Fatigue*	0	0	4	4 (25%)
Nasopharyngitis	0	0	1	1 (6.3%)
Back pain	0	1	0	1 (6.3%)
Gout (worsening)	0	1	0	1 (6.3%)
Viral infection	0	0	1	1 (6.3%)
Procedural pain (catheter)	0	0	1	1 (6.3%)

- There were 9 treatment-emergent adverse events (TEAEs) in 7 patients
- There were no serious or severe adverse events, discontinuations, infusion reactions or drug related adverse events
- There were no clinically significant changes in vital signs, physical exam or safety laboratory values
- *4 participants reported fatigue in the evening of D1; all reports of fatigue were brief (< 3 hours) and self-limited; there were no reports of fatigue after D1

Phase 1b (Part A) Results - TX45 Achieved or Exceeded all Hemodynamic Target Goals

Secondary Endpoints	Absolute CFB, Mean [95% CI]	Average % CFB, [95% CI]
Hemodynamics (Key 2°) (N = 16)		
Mean Δ PCWP in all participants	- 2.9 [-1.7 to -4.2] mm Hg	**-17.9% [-9.8% to -26.1%]**
Mean Δ PVR in CpcPH (PVR ≥ 2 WU) (n= 9)	- 1.06 [-0.78 to -1.34] Woods Units	**-32.0% [-28.1% to -35.9%]**
Mean Δ PVR in CpcPH (PVR ≥ 3 WU) (n= 5)	- 1.35 [-1.15 to -1.55] Woods Units	**-35.5% [-32.5% to -38.6%]**
Other Hemodynamic Effects		
Mean Δ Cardiac Output in all participants	+0.65 [0.34 to 0.96] L/min	**+17.4% [8.9% to 25.9%]**
Mean Δ Stroke Volume in all participants	+7 [2 to 12] mL	**+13.8% [5.3% to 22.3%]**
Mean Δ TPR in all participants	-1.79 [-1.24 to -2.34] Woods Units	**-26.3% [-20.1% to -32.5%]**
Mean Δ mPAP in all participants	-4.33 [-3.02 to -5.65] mmHg	**-15.9% [-11.2% to -20.6%]**

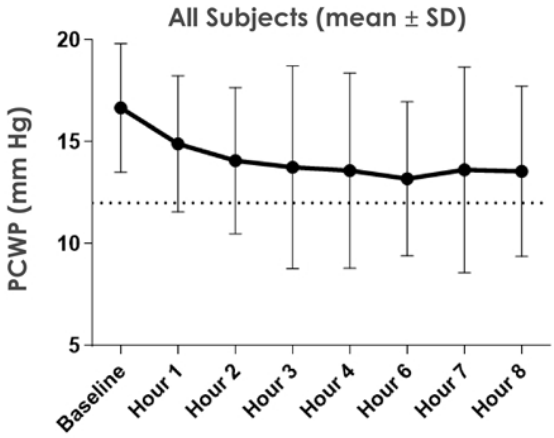
IV Administration of TX45 Resulted in a Transient, Asymptomatic Decrease in Blood Pressure



Transient, asymptomatic 5-12 mm Hg mean decrease in blood pressure was observed post- IV dosing of TX45 which resolved at subsequent visits

TX45 Decreases PCWP in PH-HFpEF

	Baseline (mm Hg) mean (SD)	Treatment Period (mm Hg) mean (SD)	Absolute CFB (mm Hg) mean (95% CI)	Average % CFB, (95% CI)
All subjects (N = 16)	16.7 (3.2)	13.7 (3.7)	-2.9, [-1.7 to -4.2]	**-17.9% [-9.8 to -26.1]**
Baseline PVR ≥ 2 WU (n = 9)	16.2 (2.7)	13.0 (3.5)	-3.2 [-2.0 to -4.4]	**-20.6% [-12.5 to -28.6]**
Baseline PVR ≥ 3 WU (n = 5)	16.0 (2.4)	13.3 (2.7)	-2.7 [-1.3 to -4.1]	**-17.1% [-7.8 to -26.4]**



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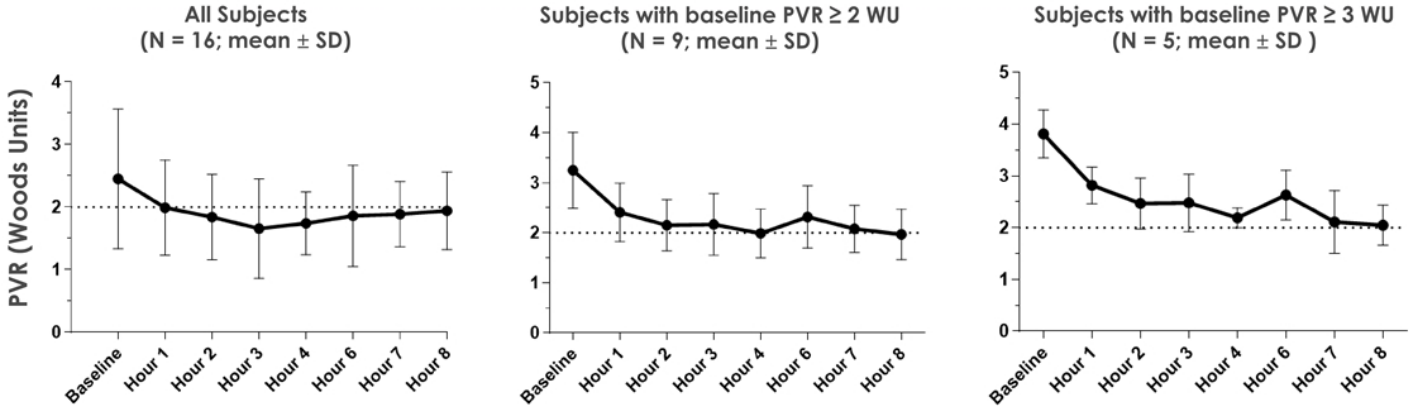
TX45 Decreases PVR in Patients with CpcPH

	Baseline (WU) mean (SD)	Treatment Period (WU) mean (SD)	Absolute CFB (WU) mean [95% CI]	Average % CFB mean [95% CI]
All subjects (N = 16) *	2.45 (1.12)	1.84 (0.57)	-0.61 [-0.22 to -0.99]	**-12.3% [-38.3 to +13.7]**
Baseline PVR ≥ 2 WU (n = 9)	3.25 (0.76)	2.19 (0.44)	-1.06 [-0.78 to -1.34]	**-32.0% [-28.1 to -35.9]**
Baseline PVR ≥ 3 WU (n = 5)	3.81 (0.46)	2.46 (0.34)	-1.35 [-1.15 to -1.55]	**-35.5% [-32.5 to -38.6]**

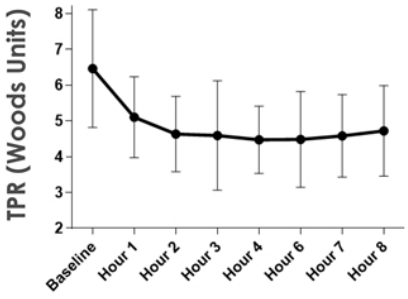


** All subjects include both IpcPH and CpcPH subjects*

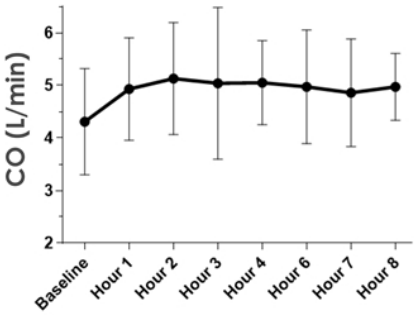
TX45 Improves Other Relevant Hemodynamics in PH-HFpEF

All Subjects (N = 16)	TPR (WU)	Cardiac Output (L/min)	mPAP (mm Hg)
Baseline (mean, SD)	6.46 (1.65)	4.31 (1.01)	26.6 (4.4)
Treatment Period (mean, SD)	4.68 (1.01)	4.96 (0.87)	22.3 (3.8)
Absolute CFB (mean, 95% CI)	-1.79 [-1.24 to -2.34]	+0.65 [0.34 to 0.96]	-4.3 (-3.0 to -5.7)
Average % CFB (mean, 95% CI)	**-26.3% [-20.1 to -32.5]**	**+17.4% [8.9 to 25.9]**	**-15.9% [-11.2 to -20.6]**

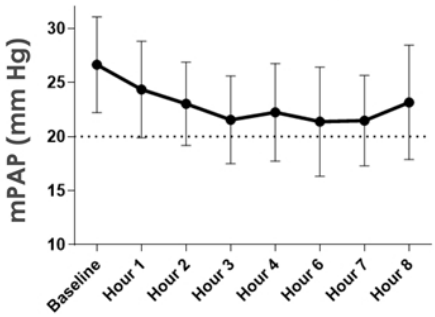
Total Pulmonary Resistance
(N = 16; mean ± SD)



Cardiac Output
(N = 16; mean ± SD)



Mean Pulmonary Artery Pressure
(N = 16; mean ± SD)



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TX45 Decreases TPR and Increase CO in Both the Overall Population and CpcPH

Total Pulmonary Resistance

	Baseline (WU) mean (SD)	Treatment Period (WU) mean (SD)	Absolute CFB (WU) mean (95% CI)	Average % CFB, (95% CI)
All subjects (N = 16)	6.46 (1.65)	4.68 (1.01)	-1.79 [-1.24 to -2.34]	**-26.3% [-20.1 to -32.5]**
Baseline PVR ≥ 2 WU (n = 9)	7.34 (1.50)	4.97 (0.89)	-2.37 [-1.68 to -3.06]	**-31.5% [-25.2 to -37.9]**
Baseline PVR ≥ 3 WU (n = 5)	8.31 (1.11)	5.51 (0.77)	-2.80 [-1.89 to -3.71]	**-33.5% [-25.8 to -41.1]**

Cardiac Output

	Baseline (L/min) mean (SD)	Treatment Period (L/min) mean (SD)	Absolute CFB (L/min) mean (95% CI)	Average % CFB, (95% CI)
All subjects (N = 16)	4.31 (1.01)	4.96 (0.86)	+0.65 [0.34 to 0.96]	**+17.4% [8.9 to 25.9]**
Baseline PVR ≥ 2 WU (n = 9)	4.08 (1.19)	4.79 (0.93)	+0.70 [0.30 to 1.10]	**+20.5% [7.3 to 33.6]**
Baseline PVR ≥ 3 WU (n = 5)	3.62 (0.94)	4.46 (1.00)	+0.84 (0.35 to 1.32)	**+24.5% [7.4 to 41.5]**

Combined Decrease in PCWP and PVR Appears to Enhance Improvement in Exercise Capacity

- Decreasing **PCWP alone** is expected to improve exercise capacity
  - SGLT2 inhibitor dapagliflozin decreased resting PCWP 20%[1] and increased 6MWT by 20m in HFpEF[2]
- Decreasing **both PCWP and PVR** appears to further increase in exercise capacity
  - CpcPH patients undergoing pulmonary artery denervation surgery achieved a treatment-adjusted average decrease of 19% in PCWP and 32% in PVR, and increased 6MWT distance 69m[3]

[NOTE: This was a severe population of CpcPH patients (mean PVR>6 WU) and we expect impact on 6MWD will be clinically important but not as large as demonstrated in this study]

[1] Borlaug B et al. Circulation 2023
[2] Lewis GD et al. Circ. Heart Failure 2023
[3] Zhang H et al. JACC Cardiovasc. Interv. 2019

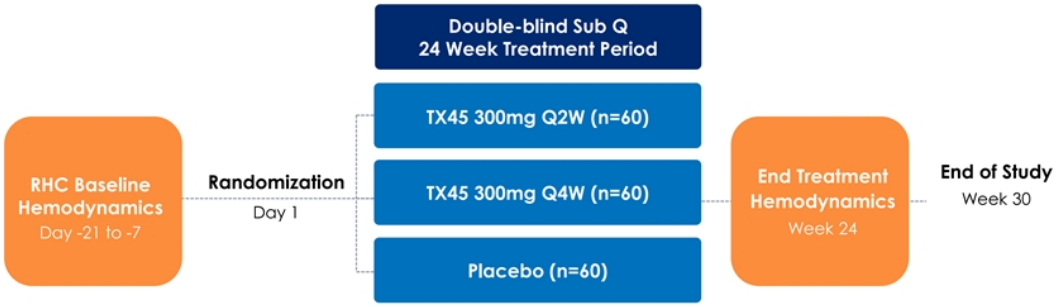
TX45 Phase 1b Interim Data in PH-HFpEF Met/Exceeded our Expectations, Increasing Probability of Phase 2 Success

- **TX45 was well-tolerated**
  - Transient asymptomatic decreases in BP were observed over the first 24 hours after an IV dose
- **TX45 observed to improve left heart function and pulmonary hemodynamics, which together should increase probability of success of Phase 2 Trial**
  - **Left Heart Function**: 17.9% decrease in PCWP and 17.4% increase in Cardiac Output in overall population
  - **Pulmonary Hemodynamics**: 32.0-35.5% decrease in PVR in CpcPH and 26.3% decrease in TPR in overall pop.
- **TX45 has a differentiated profile compared with PAH drugs which improved pulmonary hemodynamics without an improvement in left heart function and failed in PH-HFpEF**
- **These data support our focus on PH-HFpEF as the first indication for TX45, with enrichment in our Phase 2 trial for subjects with CpcPH where the benefit could be the greatest**

APEX Phase 2 Efficacy Trial Design for TX45

Clinical trial in subjects with PH-HFpEF enriched for subjects with CpcPH subgroup

- Global multicenter, double-blind, randomized, placebo-controlled proof-of-concept clinical trial to evaluate the efficacy of TX45



- **Primary Endpoint:**
  Change from baseline in PVR
- **Secondary Endpoints:**
  Change from baseline in PCWP, 6MWD, KCCQ*

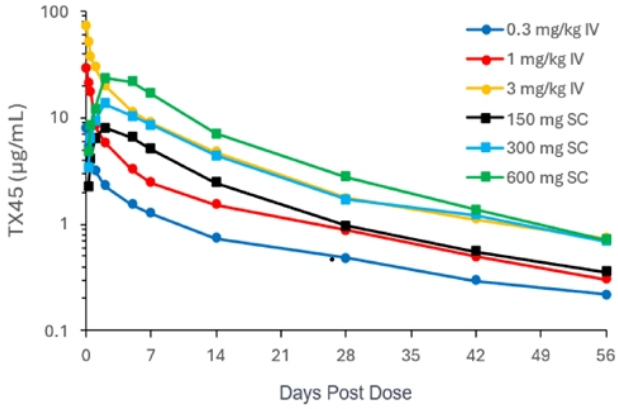
** Kansas City cardiomyopathy questionnaire*

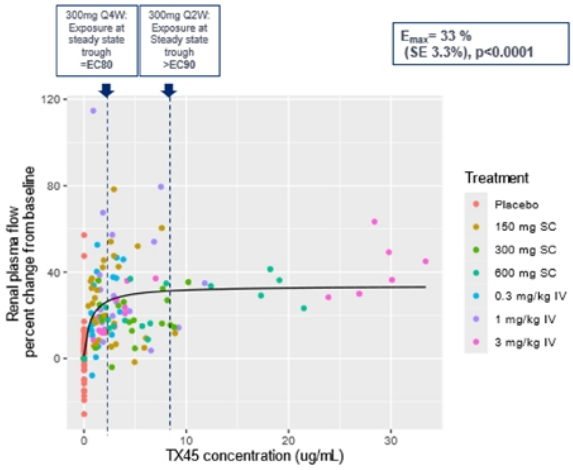
TECTONIC Therapeutic

Phase 1a Trial In Healthy Volunteers (IV) Enabled Sub-Q Dose Selection for Phase 2 Trial

- Phase 2 doses provide maximal to near-maximal agonism of RXFP1 throughout the dosing interval
  - Near maximal agonism at trough provided for maximal effect in preclinical models

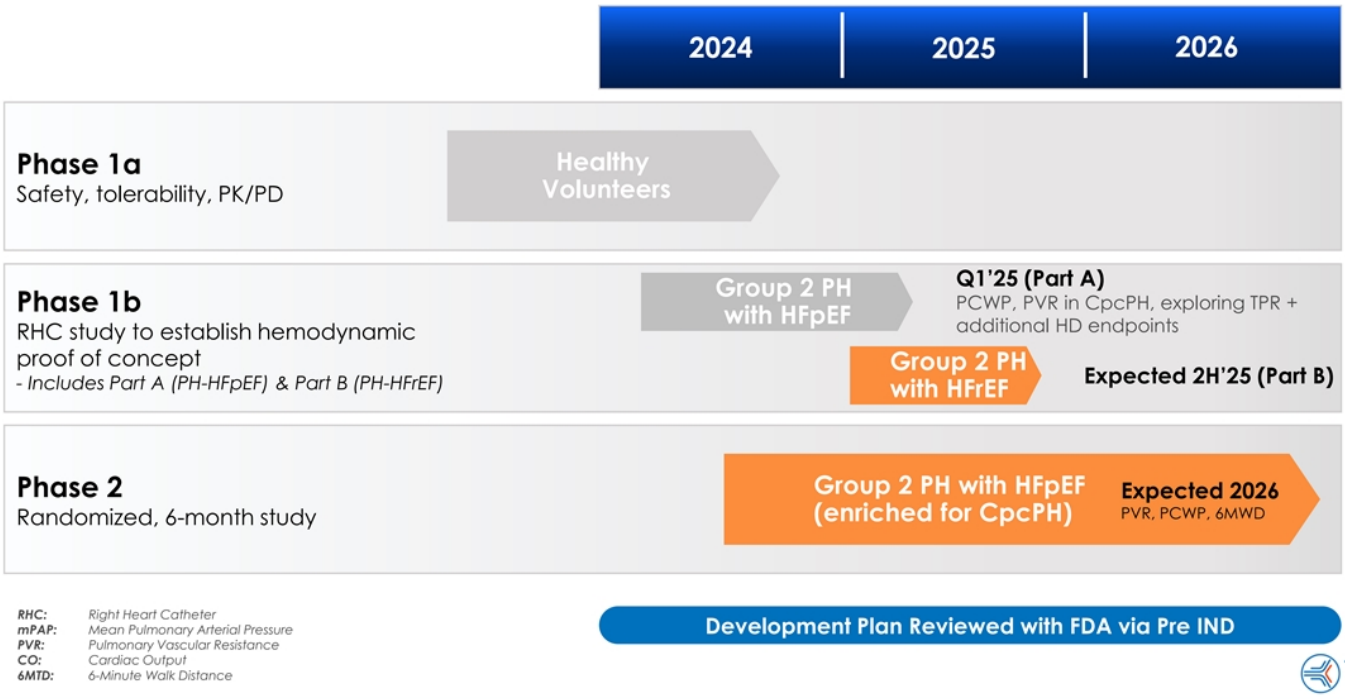
- 3 mg/kg exposure over two to four weeks is similar to 300 mg Sub-Q





TECTONIC Therapeutic

TX45 Development Program Clinical Readouts in 2025-2026



RHC: *Right Heart Catheter*
mPAP: *Mean Pulmonary Arterial Pressure*
PVR: *Pulmonary Vascular Resistance*
CO: *Cardiac Output*
6MTD: *6-Minute Walk Distance*

Development Plan Reviewed with FDA via Pre IND

TECTONIC Therapeutic

Exhibit 99.2

Tectonic Therapeutic Announces Positive Interim Data from Phase 1b Trial for TX45 in Patients with Group 2 Pulmonary Hypertension in HFpEF

- TX45 improved both left ventricular function and pulmonary hemodynamics in patients with Group 2 Pulmonary Hypertension in Heart Failure with preserved Ejection Fraction ("PH-HFpEF"), supporting endpoints and patient populations in ongoing APEX Phase 2 clinical trial
- Interim analysis demonstrated that TX45 achieved 17.9% reduction in Pulmonary Capillary Wedge Pressure ("PCWP") in the total study population of PH-HFpEF and >30% reduction in Pulmonary Vascular Resistance ("PVR") in Combined pre- and post-capillary PH ("CpcPH"), a subpopulation with more severe disease
- TX45 was well tolerated in patients with PH-HFpEF with no serious or severe adverse events, significant hypotension, or immune related reactions
- Company to host conference call and webcast today at 8:00 a.m. ET

WATERTOWN, Mass., January 30, 2025 (GLOBE NEWSWIRE) — Tectonic Therapeutic, Inc. (NASDAQ: TECX) ("Tectonic"), today announced positive interim data from the Phase 1b acute hemodynamic clinical trial of its lead product candidate, TX45, a long-acting, Fc-relaxin fusion protein. The interim data showed that a single intravenous dose of TX45 resulted in meaningful improvements in both left ventricular function and pulmonary hemodynamics in patients with Group 2 Pulmonary Hypertension in Heart Failure with Preserved Ejection Fraction ("PH-HFpEF"). In the trial, TX45 was well tolerated in patients with PH-HFpEF with no serious or severe adverse events.

In the overall study population, TX45 achieved a 17.9% reduction in pulmonary capillary wedge pressure ("PCWP"), an endpoint known to correlate with exercise capacity, morbidity and mortality in patients with heart failure. In the subpopulation with combined pre- and post-capillary pulmonary hypertension ("CpcPH") who have an elevated Pulmonary Vascular Resistance ("PVR") and more severe disease, TX45 demonstrated >30% reduction in PVR, which along with PCWP is correlated to exercise capacity and mortality in these patients. The Phase 1b trial enrolled a patient population and evaluated hemodynamic endpoints which are similar to our ongoing APEX Phase 2 clinical trial (ClinicalTrials.gov NCT06616974). APEX is a 24-week clinical trial in PH-HFpEF with topline results expected in 2026.

"These interim results show that TX45 achieved improvements in hemodynamics which met and exceeded our prespecified objectives. We are highly encouraged that TX45 improved left ventricular function and pulmonary hemodynamics, because we believe improving both parameters is necessary to improve exercise capacity and outcomes in patients with pulmonary hypertension with HFpEF," said Alise Reicin, M.D., President and Chief Executive Officer of Tectonic. "We believe these Phase 1b interim data accelerate momentum of our TX45 clinical program as our ongoing Phase 2 APEX trial is designed to enroll a similar patient population and evaluate the same endpoints. These data strengthen our confidence in advancing TX45 for the many patients with PH-HFpEF who face high mortality and have no currently approved treatments."

"These therapeutic results show remarkably consistent and meaningful improvement across multiple clinically important hemodynamic measures in this patient population," said John Teerlink, MD, Professor of Medicine, University of California, San Francisco. "I am excited about the prospects ahead for the continued development of TX45 which appears to address the underlying pathologies of PH-HFpEF that lead to impairment of exercise capacity, poor outcomes and increased mortality. This patient population is in desperate need of treatment options."

Highlights from interim Phase 1b results and overview of the Phase 1b trial

The interim results from the Phase 1b open label clinical trial are based on 16 of 19 enrolled patients with PH-HFpEF, with the remaining 3 patients currently completing Part A of the protocol. Within the 16 patients in the interim analysis, 9 patients had CpcPH, as measured by PVR≥2 Wood units. Hemodynamic measures evaluating left ventricular function included PCWP, Cardiac Output ("CO") and Stroke Volume ("SV"). Hemodynamic measures evaluating the pulmonary vasculature included PVR, Total Pulmonary Resistance ("TPR") and mean Pulmonary Artery Pressure ("mPAP").

Safety Results: TX45 was well tolerated with no serious or severe adverse events, discontinuations, infusion reactions or drug-related adverse events.

- There were no clinically significant changes in vital signs, physical exam or safety laboratory values.
- Transient asymptomatic decreases in blood pressure were observed over the first 24 hours after TX45 dosing.

Hemodynamic Results: TX45 administration resulted in meaningful improvement in both left ventricular function and pulmonary hemodynamics, representing a differentiated profile for TX45 compared to other PAH drugs that are pulmonary vasodilators but have not shown improvement in left ventricular function and have not shown efficacy in PH-HFpEF.

- *Improvement in left ventricular function:* In the overall population, TX45 achieved 17.9% [95% CI, -9.8% to -26.1%] reduction in PCWP and 17.4% [95% CI, 8.9% to 25.9%] increase in CO.
- *Improvement in pulmonary hemodynamics:* TX45 achieved 32.0% [95% CI, -28.1% to -35.9%] reduction in PVR in the subgroup of patients with CpcPH who have elevated PVR at baseline, a 26.3% [95% CI, -20.1% to -32.5%] reduction in TPR and a 15.9% [95% CI, -11.2% to -20.6%] reduction in mean pulmonary artery pressure in the overall population.
- As a relaxin therapeutic, the unique mechanism of TX45 improves both left ventricular function and pulmonary hemodynamics, which most strongly matches the more severe pathophysiology of patients with CpcPH.

"We are excited about these interim Phase 1b results in demonstrating promising hemodynamic improvements and tolerability in a broad patient population with PH-HFpEF", said Marcella K. Ruddy, M.D., Chief Medical Officer of Tectonic. "We are particularly encouraged by the striking results in CpcPH patients who saw improvements in both PCWP and PVR. This finding suggests that these patients, who have more severe disease, may have the greatest benefit from a relaxin therapeutic. These data support our planned enrichment of CpcPH patients in our Phase 2 APEX trial.

The Phase 1b open label clinical trial is designed to evaluate the safety and hemodynamic effect of single doses of TX45 in patients with Group 2 pulmonary hypertension. Part A is examining the effect of TX45 in PH-HFpEF and Part B will evaluate effects of TX45 in Pulmonary Hypertension in Heart Failure with reduced Ejection Fraction ("PH-HFrEF"). The design of the clinical trial is as follows: after obtaining informed consent, a right heart catheter, which is the gold standard for the measurement of cardiopulmonary hemodynamics, is inserted and baseline measurements are obtained, an intravenous dose of TX45 is administered, and hemodynamic effects are evaluated over 8 hours post dose. Participants are then followed for 45 days post dose for safety and exploratory biomarker

endpoints. Part A enrollment has completed. Part B enrollment will start in February with topline data expected in the second half of 2025. The complete Phase 1b clinical trial results in PH-HFpEF and PH-HFrEF patient populations are planned to be presented at future medical meetings.

Conference Call

Tectonic will host a conference call and webcast today, January 30, 2025, at 8:00 a.m. ET. To access the conference call via phone, please dial 1-877-423-9813 or 1-201-689-8573 (International) and ask to join the Tectonic Therapeutic call. A live webcast of the event will be available here and under Events and Presentations in the Investors section of the Company's website at www.tectonictx.com. A replay of the webcast will also be available on the Company's website after the call's conclusion.

About Group 2 Pulmonary Hypertension in HFpEF

The World Health Organization has defined 5 groups of pulmonary hypertension ("PH"). Tectonic is focused on the Group 2 subtype, a condition that develops due to left-sided heart disease, specifically Pulmonary Hypertension in Heart Failure with preserved Ejection Fraction ("PH-HFpEF"). In patients with PH-HFpEF, chronic heart failure leads to increased blood pressure in the pulmonary arteries, exerting severe strain on the right side of the heart, which adapts poorly to the increased pressure. This increased pulmonary pressure gradually causes worsening exercise capacity, shortness of breath and right-sided heart failure which can lead to death. PH-HFpEF is further segmented based on pulmonary hemodynamics into Isolated, post-capillary PH ("IpcPH") and Combined pre- and post-capillary PH ("CpcPH"). CpcPH is more severe, accounts for about one third to one half of the 1.4 million PH-HFpEF patients in the U.S. and is characterized by additional, abnormal changes to the pulmonary vasculature, leading to an increase in Pulmonary Vascular Resistance ("PVR"). Although several Group 1 PH (Pulmonary Arterial Hypertension, "PAH") medications have been explored in Group 2 PH, to date, no medications have been approved for its treatment.

About TX45, a long-acting Fc-relaxin fusion protein

TX45 is an Fc-relaxin fusion protein with optimized pharmacokinetics and biophysical properties that activates the RXFP1 receptor, the G-protein coupled receptor target of the hormone relaxin. Relaxin is an endogenous protein, expressed at low levels in both men and women that is a pulmonary and systemic vasodilator with lusitropic, anti-fibrotic and anti-inflammatory activity. In normal human physiology, relaxin is upregulated during pregnancy where it exerts vasodilative effects, reduces systemic and pulmonary vascular resistance and increases cardiac output to accommodate the increased demand for oxygen and nutrients from the developing fetus. Relaxin also exerts anti-fibrotic effects on pelvic ligaments to facilitate delivery of the baby.

About Tectonic

Tectonic is a biotechnology company focused on the discovery and development of therapeutic proteins and antibodies that modulate the activity of G-protein coupled receptors ("GPCRs"). Leveraging its proprietary technology platform called GEODe™ (GPCRs Engineered for Optimal Discovery), Tectonic is focused on developing biologic medicines that overcome the existing challenges of GPCR-targeted drug discovery and harness the human body to modify the course of disease. Tectonic focuses on areas of significant unmet medical need, often where therapeutic options are poor or nonexistent, as these are areas where new medicines have the potential to improve patient quality of life. Tectonic is headquartered in Watertown, Massachusetts. For more information, please visit www.tectonictx.com and follow on LinkedIn.

Forward-Looking Statements

This press release contains "forward-looking statements" within the meaning of the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995. All statements in this press release other than statements of historical facts are "forward-looking statements. These statements may be identified by words such as "aims," "anticipates," "believes," "could," "estimates," "expects," "forecasts," "goal," "intends," "may," "plans," "possible," "potential," "seeks," "will" and variations of these words or similar expressions that are intended to identify forward-looking statements, although not all forward-looking statements contain these words. Forward-looking statements in this press release include statements regarding: the design, objectives, timing, progress and results of clinical trials of Tectonic's product candidates, including the ongoing Part B of Phase 1b and Phase 2 (APEX) clinical trials for TX45 in Group 2 PH-HFpEF; and the potential properties and benefits of TX45. These forward-looking statements are based on Tectonic's expectations and assumptions as of the date of this press release. Each of these forward-looking statements involves risks and uncertainties that could cause Tectonic's clinical development programs, future results or performance to differ materially from those expressed or implied by the forward-looking statements. Many factors may cause differences between current expectations and actual results, including: the potential that success in preclinical testing and earlier clinical trials does not ensure that later clinical trials will generate the same results or otherwise provide adequate data to demonstrate the efficacy and safety of a product candidate; the impacts of macroeconomic conditions, heightened inflation and uncertain credit and financial markets, on Tectonic's business, clinical trials and financial position; unexpected safety or efficacy data observed during preclinical studies or clinical trials; clinical trial site activation or enrollment rates that are lower than expected; Tectonic's ability to realize the benefits of its collaborations and license agreements; changes in expected or existing competition; changes in the regulatory environment; the uncertainties and timing of the regulatory approval process; and unexpected litigation or other disputes. Other factors that may cause Tectonic's actual results to differ from those expressed or implied in the forward-looking statements in this press release are identified under the heading "Risk Factors" in Tectonic's quarterly report on Form 10-Q filed with the SEC on November 12, 2024, and in other filings that Tectonic makes and will make with the SEC in the future. Tectonic expressly disclaims any obligation to update any forward-looking statements contained herein, whether as a result of any new information, future events, changed circumstances or otherwise, except as otherwise required by law.

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