## 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 8, 2024

## **TOURMALINE BIO, INC.**

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)

001-40384 (Commission File Number)

83-2377352 (I.R.S. Employer Identification No.)

27 West 24th Street, Suite 702 New York, NY (Address of principal executive offices)

10010 (Zip Code)

Registrant's telephone number, including area code: (646) 481-9832

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 (see General Instruction A.2. below):

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

П 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, par value \$0.0001 per share	TRML	The Nasdaq Global Market

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 8, 2024, Tourmaline Bio, Inc. (the "Company") made available an updated corporate presentation that may be used in connection with presentations at conferences and investor meetings, which can be found on the Company's website (the "Corporate Presentation"). The Corporate Presentation is furnished as Exhibit 99.1 to this Current Report on Form 8-K and incorporated by reference in this Item 7.01.

On January 8, 2024, the Company also issued a press release (the "Press Release"). A copy of the Press Release is furnished as Exhibit 99.2 to this Current Report on Form 8-K and incorporated by reference in this Item 7.01.

The information furnished under this Item 7.01, including Exhibits 99.1 and 99.2, shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or subject to the liabilities of that section, nor shall it be deemed to be incorporated by reference into any of the Company's filings with the Securities and Exchange Commission (the "SEC") under the Exchange Act or the Securities Act of 1933, as amended (the "Securities Act"), whether made before or after the date hereof, regardless of any general incorporation language in such a filing, except as otherwise expressly stated in such filing.

#### Item 8.01 Other Events.

As noted above under Item 7.01, the Company issued the Press Release on January 8, 2024. Key highlights from the Press Release include:

- The Company is planning to commence a pivotal Phase 3 trial for TOUR006, its lead product candidate, in thyroid eye disease ("TED") in 2024. This second pivotal trial will replace the previously planned TED basket trial and does not impact the Company's expected cash runway through 2026. Topline data from the ongoing Phase 2b spiriTED trial are expected in the first half of 2025 and data from the planned Phase 3 trial are expected in 2026.
- Alignment has been reached with the U.S. Food & Drug Administration on the clinical development program for atherosclerotic cardiovascular disease ("ASCVD"), including a Phase 2 trial evaluating the reduction of Creactive protein (CRP), a validated biomarker for inflammation, with quarterly dosing of TOUR006 in patients with elevated cardiovascular risk. This trial is targeted to commence in the first half of 2024, with topline data
  expected in the first half of 2025. Pending success, the results from the Phase 2 trial are expected to position the Company to be ready in 2025 to commence a pivotal Phase 3 trial in cardiovascular disease.

#### Forward-Looking Statements

This Form 8-K contains forward-looking statements within the meaning of The Private Securities Litigation Reform Act of 1995, including without limitation statements regarding the timing, initiation and success of ongoing and new clinical trials for TOUR006 in TED and ASCVD; and expectations regarding the sufficiency of the Company's capital resources and cash runway. The words "anticipate," "believe," "could," "estimate," "expect," "intend," "may," "plan," "potential," "predict," "project," "target," "should," would," and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. Actual results or events could differ materially from the plans, intentions and expectations disclosed in these forward-looking statements as are suited to actors, including the uncertainties associated with the clinical development and regulatory approval of product candidates, including potential delays in the commencement, enrollment and completion of clinical trials; risks related to the inability of the Company to obtain sufficient additional capital to continue to advance is product candidates and its clinical programs; uncertainties in obtaining successful clinical results for the Company is product candidates to market; the impacts of general macroeconomic and geopolitical conditions, rising inflation, and uncertain credit and financial markets on the Company's business, clinical trials, and financial position; and other risks aducertainties described under the caption "Risk Factors" in the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2023, which is on file with the SEC; and risks described in other filings that the Company wave forward-looking statements contained in this Form 8-K speak only as of the date hereof, and the Company expressly disclaims and obligation to update any forward-looking statements, whether because of new information, future events or otherwise.

#### Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

Exhibit No.	Description
99.1	Corporate Presentation dated January 8, 2024
99.2	Press Release dated January 8.2024
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

#### SIGNATURES

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

#### TOURMALINE BIO, INC.

 By:
 /s/ Ryan Robinson

 Name:
 Ryan Robinson

 Title:
 Interim Chief Financial Officer, Vice President, Finance and Controller

Date: January 8, 2024

**Corporate Overview** 

January 2024

## **Disclaimer**

The material in this presentation regarding Tourmaline Bio, Inc. ("we," "us" or the "Company") is for informational purposes only. This presentation contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 that involve substantial risks and uncertainties. All statements, other than statements of historical facts, contained in this presentation, including statements regarding the timing of initiation, progress and results of the Company's current and future preclinical and clinical trials for its product candidates, including TOUR006; the therapeutic potential of TOUR006; the timing and likelihood of seeking regulatory approval for the Company's product candidates, including TOUR006; the timing and likelihood of seeking regulatory approval for the Company's product candidates; and the Company's estimates regarding expenses, future revenue, capital requirements, cash runway and needs for additional financing. The words "may," "will," "should," "expects," "intends," "plans," "anticipates," "believes," "estimates," "predicts," "potential," "continue," and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. The Company may not actually achieve the plans, intentions, or expectations disclosed in these forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in these forward-looking statements. Many factors may cause site activation rates or clinical trial enrollment rates that are lower than expected, changes in the regulatory environment, changes in expected or existing competition, unexpected litigation or other disputes, and other risks and uncertainties, including these described in the sectors" in the Company's most recent flings with the Securities and Exchange Commission. The forward-looking statements included in this presentation represent the Company's most recent flings with the Secur

In addition, certain information contained in this presentation relates to or is based on studies, publications, surveys and other data obtained from third-party sources and 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. In addition, all of the market data included in this presentation involves a number of assumptions and limitations, and there can be no guarantee as to the accuracy or reliability of such assumptions. Finally, while we believe our own internal research is reliable, such research has not been verified by any independent source.

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#### TOURMALINE

## **Our mission**

We are driven by our mission to develop transformative medicines that dramatically improve the lives of patients with life-altering immune and inflammatory diseases

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## **Experienced leadership team**

## Management Team



Sandeep Kulkarni, MD Co-founder and Chief Executive Officer







Susan Dana Jones, PhD Chief Technology Officer



Kevin Johnson, PhD Chief Regulatory Officer

Mark McDade

**Aaron Kantoff** 

Sapna Srivastava, PhD

Board of Directors Clay Siegall, PhD Chairman

Caley Castelein, MD

**Parvinder Thiara** 

Ryan Robinson, CPA Interim Chief Financial Officer

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Ryan larrobino Senior Vice President, Product Development



Emil deGoma, MD Senior Vice President, Medical Research

Dora Rau Senior Vice President, Head of Quality

Sandeep Kulkarni, MD

4

## Key highlights

	An IL-6 renaissance is underway: new insights emerging about a broad range of indications where IL-6 may be clinically validated
1	<b>TOUR006 has demonstrated best-in-class potential:</b> long-acting, low immunogenicity, and low-volume subcutaneous administration
ú	Two strategic paths to significant value creation: FcRn+ and cardiovascular inflammation
बबब 11 11 11	A late-stage clinical company: topline data from pivotal Phase 2b spiriTED trial and Phase 2 CV trial both expected in H1 2025, pivotal Phase 3 TED trial also expected to commence in H2 2024
	Accomplished leadership team: extensive experience developing and commercializing antibodies for immune and inflammatory diseases
<b>Q</b> ,	Well-financed: cash expected to fund operations through 2026, enabling the delivery of key milestones for both strategic paths
JURMAL	ine



# TOUR006: an anti-IL-6 antibody with the potential to deliver significant value to patients

TOUR006 attributes	Potential value to patients
>90% pathway inhibition after single 10mg dose <sup>1</sup>	Fast, deep, and durable impact across diseases
Existing data from 448 study participants <sup>2</sup>	Generally well-tolerated safety profile to date
Long-acting with terminal half-life of ~7 weeks <sup>2</sup>	Dosing every 8 weeks <sup>5</sup> or quarterly <sup>6</sup>
High affinity to IL-6 <sup>3</sup>	Volume of ≤1ml for SC injection⁵
Fully human with ADAs in only 0.5% of pt⁴	Durable benefit without need to increase dose
Data on file; single intravenous 10mg dose in Ph1 MAD study in RA patien protein (CRP), a pharmacodynamic marker of IL-6 signaling           20         Across six clinical trials in healthy volunteers and RA. SLE, and CD patient           30         Data on file;	Sty as measured by C-reactive 4)     Generated from Medarex transperio mouse platform; across 448 subjects dosed with TOUR006, only 2     subjects generated ADAs following treatment     S     To be assessed in prior Phase 2 trial     To be evaluated in CV Phase 2 trial

## Two strategic paths to unlock major value creation



## Clinical development plan for TOUR006

	Phase 2b tepline data
	expected in H1 2025
	Phase 3 expected to begin in H2 2024
	Evaluation ongoing
	Phase 2 expected to begin in H1 2024 Phase 2 topline data expected in H1 2025

## Key value-creating milestones expected through 2026

	$\geq$			
	2023	2024	2025	2026
FoBat	☑ Q3 2023: Initiated pivotal	H2 2024: Initiate pivotal     TED Phase 3 trial	H1 2025: spiriTED topline data	2026: TED Phase 3     topline data
FCKN+	Phase 2b spiriTED trial	H1 2024: Satra Phase 3 MG (LUMINESCE) topline data	<ul> <li>2025. Satial TED Filase 3</li> <li>(Satra-GO) topline data</li> <li>2025: Satra AE Phase 3</li> <li>(CIELO) topline data</li> </ul>	2026: Satra MOGAD Phase 3 (Meteoroid) topline data
Cardiovascular	☑ Q4 2023: Received FDA	H1 2024: Initiate CV	H1 2025: CV Phase 2 topline data	> 2026: Zilti AMI Phase 3
Inflammation	alignment on proposed CV program	Phase 2 trial	<ul> <li>2025: Zilti ASCVD in CKD Phase 3 (ZEUS) topline data</li> </ul>	(ARTEMIS) topline data
Milestones key:	ernal > External			
TOURMALINE	AE: autoimmune encephalitis; AMI: a glycoprotein antibody-associated di	acute myocardial infarction; ASCVD: atheroscle sease; Satra: satralizumab; TED: thyroid eye dis	rotic cardiovascular disease; MG: myasthenia g ease; Zilti: ziltivekimab	ravis; MOGAD: myelin oligodendrocyte

# FcRn+

# FcRn inhibition has garnered substantial attention to date, however significant unmet need persists

What	is FcRn? <sup>1</sup>	FcRn market validatio	Key limitations of <u>FcRn inhibition<sup>7</sup></u>
<ul> <li>Neonatal Fc m inhibition lowe</li> <li>Mechanism re mediated by p autoantibodie</li> <li>Two anti-FcRr approved for with additiona CIDP, RA, and</li> </ul>	eceptor (FcRn) ers IgG antibodies elevant in disorders pathogenic IgG is in therapies myasthenia gravis al supportive data in d TED <sup>2,3,4</sup>	<ul> <li>First approved FcRn inhibitor annualizing ~\$1.3B sales in 2' year of launch in MG<sup>5</sup></li> <li>FcRn companies account for &gt;\$30B in market capitalization</li> </ul>	<ul> <li>Suboptimal efficacy: incomplete clinical response observed</li> <li>Lack of durable efficacy: clinical worsening occurs soon after cessation of therapy</li> <li>High burden dosing profile: burdensome weekly or biweekly IV or high-volume SC infusions/injections</li> <li>Unknown long-term safety profile: uncertain rate of infectious or other complications from sustained non-specific reduction of total IgG</li> </ul>
TOURMALINE	<ol> <li>Pyzik et al., Nat Rev Immunol</li> <li>Chronic inflammatory demyel Topline Data from ADHERE st</li> <li>Rheumatoid arthritis (RA): Tay</li> <li>Thyroid eye disease (TED): Ka</li> </ol>	(2023)         5.         A           nating polyneuropathy (CIDP): ARGX, "argenx Reports Posit         6.         Fi           vig/	IRGX quarterly earnings reports actSet as of 1229/23; assumes Momenta acquisition for \$6.58, UCB market capitalization not clubed YVGART, YVVGART HYTRULO, and RYSTIGGO FDA labels.

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## **TOUR006** has broad potential beyond autoantibody reduction An FcRn+ opportunity

Modes of action for IL-6 inhibition<sup>1,2</sup>

Potential benefits of IL-6 inhibition versus FcRn inhibition

IL-6 inhibition impacts:		IL-6 inhibition <sup>1,2,3</sup>	FcRn inhibition <sup>4,5,6</sup>
· Dethogonia R coll and plasma	Autoantibody reductions	$\checkmark$	$\checkmark$
cell proliferation	Inhibition of autoantibody production	$\checkmark$	×
Pathogenic Th17 and Tfh cell proliferation and differentiation	Anti-inflammatory effects beyond autoantibody reduction	$\checkmark$	×
Acute phase proinflammatory	Durability of effect	$\checkmark$	×
	Low administration burden	$\checkmark$	×
autoantibodies	Favorable long-term safety profile	$\checkmark$	?

# IL-6 inhibition has demonstrated the potential to outperform FcRn inhibition



## TED: our beachhead indication to validate TOUR006's FcRn+ potential in autoantibody-driven diseases



## High unmet medical need with significant market opportunity

- · Potentially sight-threatening disease characterized by proptosis, double-vision, and pain
- ~30k new patients each year in the U.S. (average age at diagnosis is ~45)<sup>1,2</sup> .
- ~80%3 of eligible TED patients not receiving an FDA-approved treatment due to significant limitations: risk of • permanent hearing impairment / loss, limited durability, and inconvenience / complexity<sup>4</sup>

## 2 Extensive clinical validation that IL-6 inhibition may address key unmet needs

• 40+ publications with 300+ patients demonstrate the therapeutic potential of IL-6 pathway inhibition in TED

15

· IL-6 may play a more central and upstream role in TED pathogenesis than IGF-1R or FcRn

#### 3 TOUR006 has best-in-disease potential in TED

2. 3. 4.

- · Deep inhibition of IL-6 pathway offers potential for durable efficacy across many endpoints
- · Existing clinical database supports the potential for a well-tolerated profile at selected doses
- Q8W dosing allows for a patient-friendly, low burden treatment course •

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Lazarus, Best Pract. Res. Clin. Endocrinol. Metab. (2012) Bartalena et al., Front. Endocrinol. (2020) Horizon Q3 2022 earnings call Tourmaline market research

# IGF-1R class limitations present a significant opportunity for novel therapeutic approaches in TED



## Despite an FDA-approved medicine, vast majority of moderate-tosevere TED patients remain untreated



# IL-6 inhibition has the potential to address a central and upstream driver of TED



# Over 40 publications demonstrate the therapeutic potential of IL-6 pathway inhibition in TED

		Study	N	Proptosis response	CAS response	% autoantibody			Study	N	Proptosis response	CAS response	% autoantibody	We believe many	/ of
First autnor	rear	type	treated	rate	rate	reduction	First author	Year	type	treated	rate	rate	reduction	these reports m	av
Perez-Moreiras	2021	Retro	04	70	05	/5	Sy	2017	CS .	2	0	50	69	undersetimete the	-
Sanchez-Blibao	2020	Obs	48	NR	NP NF		Copperman	2019	CS	2	100	0	NR	underestimate the	tru
Atienza-Mateo	2018	Retro	29	70	100		Coy	2019	CS CS	2	100	50	NR	efficacy of IL-6 bloc	ckad
Perez-Moreiras	2014	Prosp	10	12	100	/0	Park	2021	CS CS	2	100	100	NR		
Perez-moreiras	2018	RCT	15	93	00	NS ND	Abeilion-du Payra	0040	CS	2	100	50	NR		
de la Fuente Burson	2020	Retro	15	INR	INP		Butharu	2013	CR		INR	100	NR		
Pereira	2023	Retro	14	NR	NE	NR OI	Gomez Rodrigue	z 2014	CR	1	NR	100	NR	and a second	
Boutzios	2023	Obs	12	NR	NF	6 84	Bieleteid	2017	CR			NR	NR	<ul> <li>300+ mostly steroid</li> </ul>	d-
Pampin-Sanchez	2022	Retro	11	/5	13	D NR	Canas	2016	CR	1	100	INR	NR	refractory patients	
Moi	2022	Retro	10	CI	80	/5	Pascual-Camps	2018	CR		NR	NR	NR	rendetory patiente	
Contez	2022	Prosp	10	10	100	81	Garreta Fontelles	2019	CR	1	NR	INR	93	al the law period production	18 14:00
Silkiss	2020	CS	9	CI	56	5 74	Menmet	2020	CR	1	0	NR	NR	<ul> <li>Late IL-6 inhibition</li> </ul>	(>9
Smith	2021	Retro	9	78	100	54	Kapian	2020	CR	1	NR	100	85	months post sympt	tom
Bielefeld	2019	Obs	8	NR	NF		Cayon-bianco	2020	CR		INR	100	NR NR	ansat) when disease	ansat) when disease
Ceballos-Marcias Jos	ie 2020	CS	8	NR	/:	41	Tran	2020	CS	1	NR	NR	NR	onset) when diseas	50
Bennedjai	2020	Retro		NR	NF	( 73	Ruiz	2021	CR		INR	NR	NR	may have exited ac	ctive
Moas	2022	Obs	(	NR	NH	92	Albrashdi	2022	CR	1	100	NR	NR	phase	
Toro-Tobon	2023	Retro	6	50	NF	R NR	Cezara	2022	CR	1	NR	0	NR		
de Pablo Gomez	2018	CS	5	NR	60	) NR	Monamed	2022	CS	1	100		NR	<b>F</b>	
Navarrete	2022	Retro	5	NR	NF		Moleiro	2022	CR		100	INR	00	<ul> <li>Exposure to IL-6</li> </ul>	
Ribi	2017	CS	3	33	67	NR	Almazrouei	2023	CR	1	NR	NR	NR	inhibition may have	e bee
Maldiney	2020	CS	3	67	NF	R NR	Cuculescu	2023	CR	- 1			NR	suboptimal (<6 mo	nths
Stevens	2022	Retro	3	100	67	NR	Nirmalan	2023	CS	3	NK	NR	NR	Suboptiniai (40 mo	intrio
Russell	2017	CS	2	NR	C	) NR		Weig	hted Mea	in	72%	78%	74%		
							Smith 201	7 (tepr	o Phase	2)	71%	69%	N/A		
							Douglas 202	0 (tepr	o Phase	3)	83%	59%	N/A		-

approval of tocilizumab or saniumab in TED. The majority of these studies were not designed with power to detect statistical significance. Retro: retrospective. Obs: observational. Prosp: prospective. RCR: randomized controlled trial. CS: case series. CR: case report. NR: not reported. NR: not reported. NS: not significant. CI: clear improvement. Tepro: teprotumumab. Publications available upon

# Market research indicates TOUR006's potential to become the optimal first-line TED therapy

Potential target profile of TOUR0	00	R0	JI	U	Ю	Т	٥f	0	e	fil	O	p	et	ra	tar	ial	ten	Po	F
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# TOUR006 offers the potential to stop disease progression in the inflammatory active phase





# **Cardiovascular Inflammation**

# TOUR006 is poised to capitalize on emerging insights into targeting IL-6-driven inflammation in cardiovascular diseases



Emerging breakthrough insights support IL-6-driven inflammation as a key driver of CV diseases, particularly ASCVD, a leading cause of death worldwide



TOUR006's potentially best-in-class profile with quarterly subcutaneous administration will be evaluated in Phase 2 study



TOUR006 is anticipated to be Phase 3-ready for CV disease in 2025 and well-positioned to capitalize on key external de-risking events

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## Burden of inflammatory risk in ASCVD is significant





# **Breakthrough insight #1:** Inflammation predicts future MACE even better than cholesterol in high-risk populations



# **Breakthrough insight #2:** Anti-inflammatory CV outcome trials highlight importance of IL-6 inhibition and lowering hsCRP

	Year	Drug	Class/Mechanism	hsCRP Reduction	MACE Reduction
$\leftrightarrow$ No significant reduction	2007	pexelizumab	C5 inhibitor	$\leftrightarrow$	$\leftrightarrow$
↓ Significant reduction	2008	succinobucol	antioxidant	$\leftrightarrow$	$\leftrightarrow$
	2014	darapladib	LpPLA2 inhibitor	$\leftrightarrow$	$\leftrightarrow$
	2014	varespladib	sPLA2 inhibitor	$\leftrightarrow$	$\leftrightarrow$
	2016	losmapimod	MAPK inhibitor	$\leftrightarrow$	$\leftrightarrow$
Indirect IL-6 inhibitor $ ightarrow$	2017	canakinumab	IL-1β inhibitor	$\checkmark$	$\checkmark$
	2019	methotrexate	DHFR inhibitor	$\leftrightarrow$	$\leftrightarrow$
Indirect IL-6 inhibitor $\rightarrow$	2019	colchicine	NLRP3 inhibitor*	$\checkmark$	$\checkmark$
Direct IL-6 inhibitor $\rightarrow$	2025E	ziltivekimab	IL-6 inhibitor	$\checkmark$	2025E

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Yaar: CVDT publication date or estimated completion date. DHRP: dhybrobiliste metudases. LpH:A2 ligoportal-associated physrophysiones A2. MA97: mitogen-assignated portain history. LBR: and pyrint demain-containing patients. 32: 4A2: Secondry physrophysiones A2: Physrophysiones A2: MA97: MIOL, MICH and Mitod, Jack 20: 4A3: MIOL and MIOL analysiones A2: MA97: MIOL and MIOL analysiones A3: MA97: MIOL ANAI A37: MIOL ANAI

# **Breakthrough insight #3:** Emerging precision medicine approaches may enhance potential CV benefit of IL-6 inhibition

Among high-risk patients with clonal hematopoiesis of indeterminate potential (CHIP), a genetic variant mimicking IL-6 inhibition lowered risk of MACE ~50%<sup>1</sup>

Among high-risk patients in CANTOS with CHIP (TET2), canakinumab lowered risk of MACE ~60%<sup>2</sup>





CANTOS: Canakinumab Anti-Inflammatory Thrombosis Outcomes Study, CHIP: clonal hematopoiesis of indeterminate potential. TET2: ten-eleven translocation-2. HR: hazard ratio. MACE: 29 major adverse cardiovascular events. LISP 0.Ap355Nat: IL-6 receptor gene variant associated with 7-8% lower hoteRP per allele (Sarwar Lancet 2012, Swerdlow Lancet 2012). "Bick Circulation 2020. "Swerdlow Lancet 2012, Hadjusted for age, time from inst MI, baseline log2(hsCRP), sex, diabetes, fold cholester, IAUL-0.Assing, hypertension."







Reduction in MACE shown as 1-Hazard Ratio. MACE: major advense carcliovascular events including CV death, myocardial infarction (MI), stroke. Overall CANTOS analysis presents data for 150mg dose group; values for CANTOS subanklyses; combine all dose (50, 150, 300 mg); Rider NEJJU 2017; Rider Lancet 2018. Adjusted for age, gender, smiching, hypertension, diabetes, BMI, baseline hs/CRP; baseline LDL-C. Rider Eur Heart J 2018. Adjusted for age, gender, smiching, hypertension, diabetes, BMI, baseline tables, BMI, baseline hs/CRP; baseline LDL-C. Rider Eur Heart J

# Lessons from canakinumab (anti-IL-1 $\beta$ mAb): Robust inhibition of IL-6 pathway has transformative potential in ASCVD



# *Lessons from ziltivekimab (monthly anti-IL-6 mAb):* Directly inhibiting IL-6 lowers hsCRP more than upstream IL-1β blockade



## Lessons from ziltivekimab (monthly anti-IL-6 mAb): Three concurrent Phase 3 CVOTs enrolling ~22,000 patients



## **TOUR006 offers best-in-class potential in ASCVD**

	TOUR006	Ziltivekimab	Clazakizumab
Company	TOURMALINE	novo nordisk	CSL
Monoclonal antibody	fully human (IgG2) Medarex UltiMAb mouse	fully human (IgG1k, YTE mutation) phage display	humanized rabbit (lgG1k)
Anti-drug antibodies <sup>1</sup>	0-1%	6-13% <sup>3,4</sup>	0-10% <sup>7-9</sup>
Route of administration <sup>2</sup>	SC 0.6 mL	SC <sup>5,6</sup> 1.0 mL	IV <sup>10</sup>
Longest dosing intervals in completed studies	Q8W (SLE, CD)	Q4W (NDD-CKD) <sup>5,6</sup>	Q4W <sup>10</sup> (HD-CKD)
Targeted dosing intervals	Quarterly	Monthly	Monthly

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CD: Crohn's disease, CKD: chronic kidney disease, HD: hemodialysis, NDD: non-dialysis dependent, SLE: systemic lupus ery/thematoxus, 1, incidence of ADAs in repeat-dose studies calculated as reported per dosing arm. 2, Route of administration in planned or organing studies in patients with or at high-risk of ASCVD 3. Clinicalinalia gov ACT01496561. Data reported J patients and a Caracial 2023. 7. Clinicalinalia gov ACT014905.8. Clinicalinality policy TO11506000. S Windblark HINTER Sharens Sharens Sharens Caracial 2023. 7. Clinicalinalia gov ACT014905.8. Clinicalinality policy TO11506000. S Windblark HINTER Sharens Sharens Sharens Caracial 2023. 7. Clinicalinalia gov ACT014905.8. Clinicalinality policy TO11506000. S Windblark HINTER Sharens Shar

34

## TOUR006 achieved robust and durable suppression of CRP in patients with high-grade inflammatory autoimmune disorders



CRP: C-reactive protein, CD: Crohn's disease, OLE: open-label extension, RA: rhe CRP 9.0 mg/L, Key eligibility: active disease, background methodrexate. Crohn's d TNFa: CD OLE B0151005 study report. Table 14.2.4.1. Median pre-baseline hsCR 22 mg/L s, SLE systemic lupus erythematosus. Rheumatoid arthritis: B0151002 study report. Table 14.4.7.1.1. Median baseline 03 study report. Table 14.2.4.7.1.3. Median baseline hs/CRP 21.1 mg/L. Key eligibility: active disease, failed/infoirant to anti-satien ha/CRP 40 and SL\_Stetmic house erythematosus: B015005 study report. Table 14.3.4.7. Kedian baseline ha/CRP 2015005 study report. Table 14.3.4.7. Kedian baseline ha/CRP 2015005 study report. Table 14.3.4.7. Kedian baseline ha/CRP 2015005 study report. Table 14.4.7. Kedian baseline ha/CRP 2015005 study report. Table 14.3.4.7. A: rheumatoid arthritis, SLE: syst nn's disease: B0151003 study re hsCRP 16.4 mg/L, baseline hsC

# PK/PD modeling supports potential for quarterly dosing of TOUR006 SC in ASCVD

Results of PK/PD model developed from five studies in patients with RA, SLE, CD and healthy volunteers



## TOUR006 CV Phase 2 study planned to initiate in H1 2024

Randomized, double-blind, placebo-controlled trial – FDA aligned with overall study design\*

гто	UR006 – 50 mg SC quarterly	
n = 120 🕂 TC	TOUR006 – 25 mg SC quarterly TOUR006 – 15 mg SC monthly	
(30 / arm)		
	cebo	
Fla	Treatment period: 6 mor	nths Safety follow-up period: 6 months
Study population:	Treatment period: 6 mor	hths Safety follow-up period: 6 months Key endpoints:
Study population: • CKD stage G3-4 (eGF • hsCRP ≥ 2.0 mg/L	Treatment period: 6 mor	<ul> <li>Safety follow-up period: 6 months</li> <li>Key endpoints:</li> <li>Pharmacodynamics: hsCRP, serum amyloid A, fibrinogen, lipoprotein(a), and other biomarkers</li> </ul>

## Two strategic paths to unlock major value creation



## Tourmaline Bio Announces Expected Upcoming Key Milestones for the Clinical Development of TOUR006, a Long-Acting Subcutaneous Inhibitor of IL-6 with Best-in-Class Potential, in Thyroid Eye Disease (TED) and Atherosclerotic Cardiovascular Disease (ASCVD)

Tourmaline plans to accelerate the initiation of a pivotal Phase 3 trial in 2024 evaluating subcutaneous TOUR006 every 8 weeks as first-line treatment for TED, with topline data expected in 2026

Alignment has been reached with the FDA on the clinical development program in ASCVD, including a Phase 2 trial evaluating quarterly dosing of TOUR006 in patients with elevated cardiovascular risk

Topline data from the ongoing pivotal Phase 2b trial in TED (spiriTED) and the Phase 2 trial in patients with elevated cardiovascular risk are both expected in the first half of 2025

Tourmaline continues to expect cash runway through 2026, including key TOUR006 data readouts in TED and cardiovascular disease

NEW YORK, Jan. 8, 2024 – Tourmaline Bio, Inc. (Tourmaline) (NASDAQ: TRML), a late-stage clinical biotechnology company developing transformative medicines to dramatically improve the lives of patients with life-altering immune and inflammatory diseases, announced today that:

- It is planning to commence a pivotal Phase 3 trial for TOUR006 in TED in 2024. This second pivotal trial will replace the previously planned TED basket trial and does not impact Tourmaline's expected cash runway through 2026. Topline data from the ongoing Phase 2b spiriTED trial are expected in the first half of 2025 and topline data from the planned Phase 3 trial in TED are expected in 2026.
- Alignment has been reached with the U.S. Food & Drug Administration (FDA) on the ASCVD clinical development program, including a Phase 2 trial evaluating the reduction of C-reactive protein (CRP), a validated biomarker for inflammation, with quarterly dosing of TOUR006 in patients with elevated cardiovascular risk. This trial is targeted to commence in the first half of 2024, with topline data expected in the first half of 2025. Pending success, the results from the Phase 2 trial are expected to position Tourmaline to be ready in 2025 to commence a pivotal Phase 3 trial in cardiovascular disease.

TOUR006 is a long-acting, fully-human, anti-IL-6 monoclonal antibody with best-in-class potential and differentiated properties including a naturally long half-life, low immunogenicity, and high binding affinity to IL-6. To date, TOUR006 has been studied in 448 participants, including patients with autoimmune disorders, across six clinical trials.

"It is an exciting time in the IL-6 field, as new insights and evidence emerge identifying a central role for this validated drug target in TED and across many autoantibody and inflammation-driven diseases," said Sandeep Kulkarni, MD, Co-Founder and Chief Executive Officer of Tourmaline. "We believe TOUR006 offers the potential to fulfill the promise of this IL-6 renaissance as we are aiming to achieve a bestin-class and best-in-disease profile by addressing IL-6 mediated autoantibody production and inflammation, while providing a patient-friendly treatment through long-acting, low-volume subcutaneous injections."

#### Planned TED Development

Tourmaline's pivotal Phase 3 trial is expected to evaluate first-line use of TOUR006 in patients with TED. Subject to FDA and other regulatory feedback, this trial is planned to be a randomized, double-masked, placebo-controlled trial evaluating TOUR006 administration on an eight-week dosing schedule. The primary endpoint is expected to be proptosis response, or reduction of abnormal eve protrusion, as

measured at week 20 following three subcutaneous (SC) administrations. Other efficacy endpoints are anticipated to include additional measures such as clinical activity score (CAS), diplopia and quality of life (QoL).

The ongoing spiriTED Phase 2b trial is the first of two pivotal trials in TED evaluating TOUR006. This randomized, double-masked, placebo-controlled trial is evaluating 20 mg and 50 mg doses versus placebo given by low-volume SC injections every eight weeks. The study is enrolling a planned 81 participants with moderate-to-severe TED who are in the active (inflammatory) phase of disease. The primary endpoint is proptosis response as measured at week 20 following three SC administrations. Other endpoints include important additional efficacy measures such as CAS, diplopia and QoL, as well as safety, pharmacokinetics, pharmacokinetics, and immunogenicity.

#### Planned ASCVD Development

TOUR006 is also being developed for ASCVD using quarterly, low-volume, SC administrations, in contrast to other IL-6 pathway inhibitors that are in development that have more frequent dosing regimens. The Phase 2 clinical trial of TOUR006 in patients with elevated cardiovascular risk is expected to be a randomized, double-blind, placebo-controlled trial with 120 patients across four different SC treatment arms: 50 mg quarterly, 25 mg quarterly, 15 mg monthly, and placebo. The primary endpoint for this trial is change from baseline in high-sensitivity C-reactive protein (hsCRP), a validated marker of IL-6 mediated inflammation in ASCVD. The study will also evaluate other biomarkers of IL-6 pathway activation as well as safety, pharmacokinetics, and immunogenicity.

"Despite important advances in the management of atherosclerotic cardiovascular disease, there continues to be a large number of patients worldwide who remain at high risk for major adverse cardiovascular events", said **Yung Chyung, MD, Chief Medical Officer of Tourmaline**. "We believe TOUR006 has the potential to address this significant unmet medical need by targeting the IL-6 pathway as well as by offering a patient-friendly, quarterly, low-volume subcutaneous dosing regimen."

#### About Tourmaline Bio, Inc.

Tourmaline is a late-stage clinical biotechnology company driven by its mission to develop transformative medicines that dramatically improve the lives of patients with life-altering immune and inflammatory diseases.

#### About TOUR006

TOUR006 is a long-acting, fully-human, anti-IL-6 monoclonal antibody with best-in-class potential and differentiated properties including a naturally long half-life, low immunogenicity, and high binding affinity to IL-6. To date, TOUR006 has been studied in 448 participants, including patients with autoimmune disorders, across six clinical trials. Tourmaline is developing TOUR006 in TED and ASCVD as its first two indications, with additional diseases under consideration.

#### 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, including but not limited to, express or implied statements regarding the potential of, and expectations regarding, Tourmaline's product candidates, including TOUR006; the timing, initiation and success of ongoing and new clinical trials for TOUR006 in TED and ASCVD; expectations concerning decisions of regulatory bodies, including the FDA, and the timing thereof; other drug candidates in development; expectations regarding the sufficiency of Tourmaline's capital resources and cash runway; and other statements that are not historical fact. All statements other than statements of historical fact contained in this press release are forward-looking statements. These forward-looking statements are made as of the date they were first issued, and were

based on the then-current expectations, estimates, forecasts, and projections, as well as the beliefs and assumptions of management. There can be no assurance that future developments affecting Tourmaline will be those that have been anticipated.

Forward-looking statements are subject to a number of risks and uncertainties, many of which involve factors or circumstances that are beyond Tourmaline's control. Tourmaline's actual results could differ materially from those stated or implied in forward-looking statements due to a number of factors, including but not limited to (i) the uncertainties associated with Tourmaline's platform technologies, as well as risks associated with the clinical development and regulatory approval of product candidates, including potential delays in the commencement, enrollment and completion of clinical trials; (ii) risks related to the inability of Tourmaline to obtain sufficient additional capital to continue to advance its product candidates and its preclinical programs; (iii) uncertainties in obtaining successful clinical results for product candidates of Tourmaline and unexpected costs that may result therefrom; (iv) risks related to the failure to realize any value from product candidates and preclinical programs being developed and anticipated to be developed by Tourmaline in light of inherent risks and difficulties involved in successfully bringing product candidates to market; and (v) the impacts of general macroeconomic and geopolitical conditions, rising inflation, and uncertain credit and financial markets on Tourmaline's business, clinical trials and financial position. These and other risks and uncertainty Report on Form 10-Q for the quarter ended September 30, 2023. You should not place undue reliance on these forward-looking statements, which are made only as of the date hereof or as of the dates indicated in the forward-looking statements containe to relize publicly any updates or revisions to any forward-looking statements contained to realize any change in the restrict or any change in the restrictions or circumstances on which any such statements are based. This press release does not purport to summarize all of the conditions, risks and other attributes of an investment in Tourmaline.

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