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): March 28, 2022

ELIEM THERAPEUTICS, INC.
(Exact name of Registrant as Specified in Its Charter)

Delaware	**001-40708**	**83-2273741**
(State or Other Jurisdiction of Incorporation)	**(Commission File Number)**	**(IRS Employer Identification No.)**

23515 NE Novelty Hill Road, **Suite B221 #125** **Redmond, WA**	**98053**
(Address of Principal Executive Offices)	**(Zip Code)**

Registrant's Telephone Number, Including Area Code: (425) 276-2300

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(s)	Name of each exchange on which registered
Common Stock, par value $0.0001 per share	**ELYM**	**The Nasdaq Stock Market LLC (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.

A copy of a slide presentation that Eliem Therapeutics, Inc. (Eliem, or the Company) will use at investor conferences and presentations is attached to this Current Report as Exhibit 99.1 and is incorporated herein solely for purposes of this Item 7.01 disclosure.

The information in this Item 7.01 (including Exhibit 99.1) is being furnished, not filed, pursuant to Regulation FD. Accordingly, the information in this Item 7.01 will not be incorporated by reference into any registration statement filed by the Company under the Securities Act of 1933, as amended, unless specifically identified therein as being incorporated therein by reference. The furnishing of the information in this Item 7.01 is not intended to, and does not, constitute a determination or admission by the Company that this information is material or complete, or that investors should consider this information before making an investment decision with respect to any security of the Company.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

Exhibit Number	Description
99.1	Investor Presentation dated March 28, 2022
104	Cover Page Interactive Data File (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 thereunto duly authorized.

Eliem Therapeutics, Inc.

Date: March 28, 2022

By: /s/ James B. Bucher

James B. Bucher
Executive Vice President and General Counsel

Exhibit 99.1

Clinical Stage Neurology Company Focused on Neuronal Excitability Disorders

Corporate Presentation | March 28, 2022

eliem Therapeutics

Forward-Looking Statements

This presentation contains forward-looking statements that involve substantial risks and uncertainties. All statements other than statements of historical facts contained in this presentation, including statements regarding our future financial condition, results of operations, business strategy and plans, and objectives of management for future operations, as well as statements regarding industry trends, are forward-looking statements. In some cases, you can identify forward-looking statements by terminology such as "anticipate," "believe," "continue," "could," "estimate," "expect," "intend," "may," "plan," "potentially," "predict," "should," "will" or the negative of these terms or other similar expressions. We have based these forward-looking statements largely on our current expectations and projections about future events and trends that we believe may affect our financial condition, results of operations, business strategy and financial needs. These forward-looking statements are subject to a number of risks, uncertainties and assumptions, including, among other things, risks related to: the success, cost and timing of our product development activities and clinical trials; our expectations about the timing of achieving regulatory approval and the cost of our development programs; our ability to obtain funding for our operations, including funding necessary to complete further development and commercialization of our product candidates; the impact of the COVID-19 pandemic on our operations; the commercialization of our product candidates, if approved; our plans to research, develop and commercialize our product candidates; our plans to develop additional product candidates; our ability to obtain, maintain, expand, protect and enforce our intellectual property rights; our ability to operate our business without infringing, misappropriating or otherwise violating the intellectual property rights of third parties; our ability to attract collaborators with development, regulatory and commercialization expertise; future agreements with third parties in connection with the commercialization of our product candidates; the size and growth potential of the markets for our product candidates and our ability to serve those markets; the rate and degree of market acceptance of our product candidates; regulatory developments in the United States and foreign countries; regulatory application, review and approval processes and our compliance with applicable legal and regulatory requirements; our ability to contract with third-party suppliers and manufacturers and their ability to perform adequately; the success of competing products that are or may become available; and our ability to attract and retain key scientific or management personnel. These risks are not exhaustive. New risk factors emerge from time to time and it is not possible for our management to predict all risk factors, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in, or implied by, any forward-looking statements. More information about the risks and uncertainties faced by Eliem is contained under the caption "Risk Factors" set forth in Eliem's Annual Report on Form 10-K for the fiscal year ended December 31, 2021, which is available on the SEC's website at www.sec.gov, and in other subsequent reports and filings Eliem will make with the SEC from time to time. You should not rely upon forward-looking statements as predictions of future events. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance or achievements. Except as required by law, we undertake no obligation to update publicly any forward-looking statements for any reason after the date of this presentation.

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 we believe these third-party sources to be reliable as of the date of this presentation, we have not independently verified, and make 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. 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. These and other factors could cause results to differ materially from those expressed in the estimates made by the independent parties and by us. Finally, while we believe our own internal research is reliable, such research has not been verified by any independent source.

In addition, statements that "we believe" and similar statements reflect our beliefs and opinions on the relevant subject. These statements are based upon information available to us as of the date of this presentation, and while we believe such information forms a reasonable basis for such statements, such information may be limited or incomplete, and our statements should not be read to indicate that we have conducted an exhaustive inquiry into, or review of, all potentially available relevant information. These statements are inherently uncertain and investors are cautioned not to unduly rely upon these statements.

Rethinking treatment for nervous system disorders

- **Highly experienced** management team
- **Clinical and preclinical pipeline** based on clinically validated mechanisms of action
- Two clinically differentiated lead product candidates with **top-line data readouts across five indications over next 24 months**
- **~$160M* cash runway to late 2023** allows for top line data readouts and advancement of preclinical assets

* Unaudited cash, cash equivalents and marketable securities as of December 31, 2021

Powered by Successful and Talented Executives from Pioneering Organizations

General Management, Commercial & Corporate Development

Robert Azelby, MBA
Chief Executive Officer

Erin Lavelle
Chief Operating Officer & Chief Financial Officer

James Bucher, J.D.
EVP and General Counsel

Research & Development

Valerie Morisset, Ph.D.
EVP R&D and Chief Scientific Officer

Joanne Palmer, Ph.D.
Chief Development Officer

Mark Versavel, M.D., Ph.D.
Interim Chief Medical Officer

Deep expertise in neuroscience research, clinical development and commercialization

- Lyrica, Neurontin, Trobalt, Vyepti, Vixotrigine, Nimotop, Aptiom, Lunesta, Geodon

Leadership experience in both large pharma and small biotech

- Large: Amgen, GSK, Novartis, Biogen, Bayer, Pfizer
- Small: Alder, Juno, Convergence, Cavion, Exelixis

Highly skilled in public/private capital raising and corporate development with successful exits

- Exits: Alder, Convergence, Juno, Immunomedics, Cascadian, Cavion

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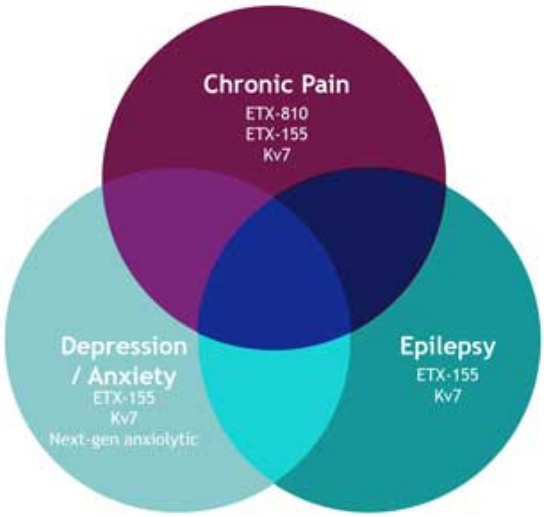
Eliem is Developing Novel Therapies With Multiple Opportunities to Address Interrelated Diseases



Approaching **interrelated disease states** with multiple MOAs

Innovating within **clinically validated** mechanisms of action

Multiple **"pipeline-in-a-product"** opportunities

Eliem Pipeline: Four Programs with Clinically Validated MOAs and Multiple Upcoming Clinical Catalysts

Product Candidate (Mechanism)	Lead indications	Preclinical	Phase 1	Phase 2	Phase 3	Anticipated Clinical Milestones
ETX-810 (PEA prodrug)	Diabetic peripheral neuropathic pain					Topline Phase 2a data (1H 2022)
	Lumbosacral radicular pain (sciatica)					Topline Phase 2a data (2H 2022)
ETX-155 ($GABA_A$ receptor PAM)	Major depressive disorder (MDD)					Topline Phase 2a data (2H 2023)
	Perimenopausal depression (PMD)					Topline Phase 2a data (2H 2023)
	Focal onset seizure (FOS)					Phase 1b photosensitive epilepsy data (1H 2022)
Kv7 Program (Kv7.2/3 channel opener)	Pain, Epilepsy, Depression					
Next Gen Anxiolytic (2,3-benzo)	Generalized anxiety disorder (GAD)					

PEA: palmitoylethanolamide
$GABA_A$ PAM: $GABA_A$ receptor positive allosteric modulator

ETX-810

Anticipated Milestones

Diabetic Peripheral Neuropathic Pain (DPNP)
Phase 2a Data 1H 2022

Lumbosacral Radicular Pain (LSRP)
Phase 2a Data 2H 2022

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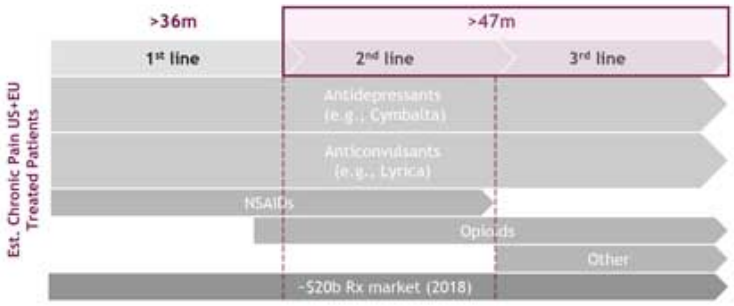
Chronic Pain: Large Commercial Opportunity with High Unmet Need

Current Treatment Paradigm



Unmet Need

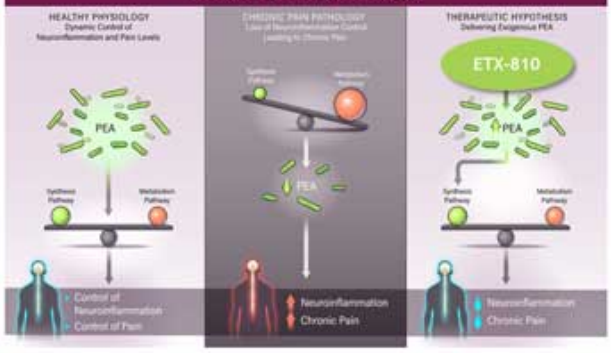
- **<50% of patients achieve ≥50% reduction in pain** → significant residual pain
- **Significant tolerability issues** (e.g., dizziness, nausea, somnolence, weight gain)
- **Poor compliance / frequent switching**
- **Abuse liabilities** (e.g., opioids)
- **Novel MoAs** → polypharmacy/ combination therapy

ETX-810 has opportunity to be preferred 2nd line monotherapy or used in combination

Sources:
Decision Resources Group (DRG), Neuropathic Pain Landscape and Forecast (June 2020); DRG Current Treatment: Physician Insights, Neuropathic pain (October 2019)
Decision Resources Group (DRG), Chronic Pain Landscape and Forecast (March 2021); DRG Current Treatment: Physician Insights, Chronic Pain (July 2019)

ETX-810: Prodrug of PEA (palmitoylethanolamide), an Endogenous Bioactive Lipid Acting as a Master Regulator of Neuroinflammation and Pain Signaling

Reduced PEA levels hypothesized in chronic pain pathology[1]



PEA is a master regulator of neuroinflammation and pain signaling with a pleiotropic mechanism[1]

- **Inhibition of inflammatory mediator release** from mast cells/monocytes/macrophages
- **Agonism of PPAR-alpha** → inhibition of pro-inflammatory gene expression
- **Agonism of GPR55** → action on microglia activation and phagocytic activity
- **Entourage effect via FAAH inhibition** → increase endocannabinoid levels (AEA, 2-AG, OEA)

ETX-810 is being developed to restore PEA levels to reduce persistent neuroinflammation and pain signaling in chronic pain

1. Petrosino and Di Marzo, Br J Pharmacol. 2017 174(1349

Clinical Validation of PEA: Compelling Body of Evidence Highlighting PEA's Activity and Tolerability in Chronic Pain

PEA in Chronic Pain

>2,500 patients treated with PEA in >35 published clinical studies of PEA

>1,500 patients studied in 15 RCTs ~900 patients treated with PEA

Meta-Analyses of PEA Chronic Pain Clinical Studies

Reference	Key Conclusions
Paladini 2016[1] (12 studies)	**81% achieved "mild pain" by day 60** (compared to 41% in control)
Artukoglu 2017[2] (8 RCTs)	**2-point pain score reduction*** vs control

*Mean pain score delta vs placebo for benchmark chronic pain drugs:	Cymbalta - 0.8 to 1.2[3]; Lyrica - 0.5 to 1.1[4]

Consistent, clinically meaningful reductions in pain

Benign tolerability profile

Activity across a broad range of chronic pain conditions

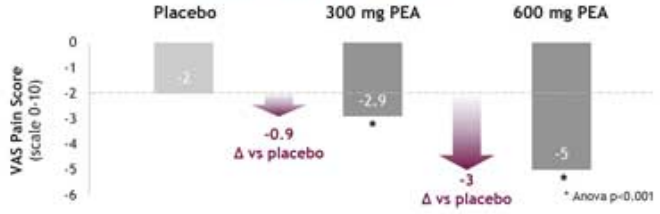
1. Paladini et al, *Pain Physician*, 2016, 19:11-24
2. Artukoglu et al, *Pain Physician*, 2017, 20:353-362
3. From Cymbalta (duloxetine) meta-analyses in chronic pain: Osani et al., *Korean J Intern Med*, 2019;34(5):966-973; Weng et al., *Osteoarthritis Cartilage*, 2020;28(6):721-734; Enomoto et al., *J Pain Res*, 2017;10:1357-1368; Ney et al., *Pain Medicine*, 2013;14:706-719
4. From Lyrica (pregabalin) meta-analyses in chronic pain: Onakpoya et al., *BMJ Open*, 2019;9(1):e023600; Parsons et al., *Curr Med Res Opin*, 2016;32(5):929-37; Zhang et al., *Acta Anaesthesiol Scand*, 2015;59(2):147-59; Ney et al., *Pain Medicine*, 2013;14:706-719

Clinical Validation of PEA: Two Large Placebo-Controlled Studies Demonstrate Clinical Activity and Dose-Dependent Response

Guida 2010[1] – Low back pain / sciatica

N=636, PEA monotherapy 300 mg / 600 mg vs placebo, 21-day BID dosing

Pain Score Reduction

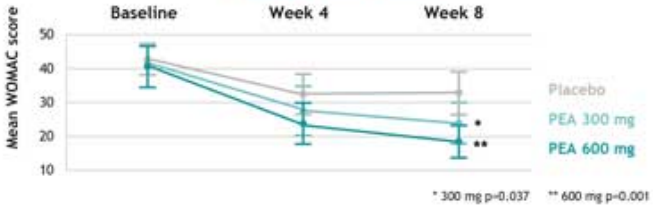


- **Statistically significant reduction in pain** vs placebo at d21
- 600 mg significantly better than 300 mg
- **82%** of 600 mg group had ≥50% reduction in pain[2]
- Higher neuropathic pain correlated with higher efficacy[2]

Steels 2019[3] – Knee osteoarthritis

N=111, PEA monotherapy 300 mg / 600 mg vs placebo, 8-week BID dosing

WOMAC total score



- **Significant reduction in WOMAC total score** (pain, stiffness, and function) vs placebo at Wk 8, with dose-dependent response
- **Statistically significant reduction in NRS pain** vs placebo at Wk 8 (-2.1 pain reduction vs placebo at 600mg, data not shown)

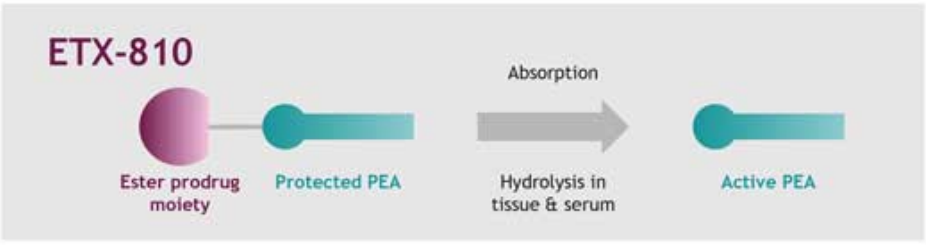
1. Guida et al., DOLOR, 2010; 25:35-42
2. Post-hoc analysis of Guida low back pain study by Cruciu et al., CNS & Neurological Disorders - Drug Targets, 2019; 18:491-495
3. Steels et al., Inflammopharmacology, 2019;27:475-485

VAS: Visual Analog Scale
WOMAC: Western Ontario and McMaster Universities Osteoarthritis Index
NRS: Numerical Rating Scale (segmented numeric version of VAS scale)

ETX-810: Opportunity to Be a First-in-Class PEA Prescription Therapeutic for Chronic Pain

Program Rationale

- **Clear dose response** in PEA RCTs
- **Opportunity to enhance exposure**
- **Develop new chemical entity** (NCE) through prodrug approach



Program Goals

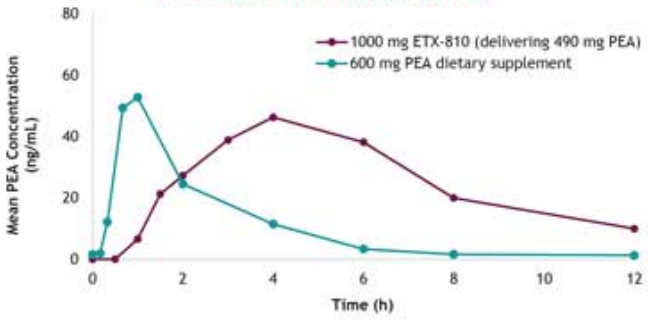
- **Optimize PK of bioactive PEA**
- **Maximize probability of clinical trial success**
- **Bring regulated PEA product to market** supported by robust RCTs

- **Rapid oral absorption and release of** biologically active PEA through series of enzymatic hydrolysis steps
- **Favorable pharmacokinetics** - increased half-life and dose-dependent increase in exposure
- **Strong preclinical activity and dose-dependent effect** in models of inflammatory pain and neuropathic pain
- **New IP generated** with patent protection to 2037

ETX-810 Has an Improved PK Profile and 3X Higher Exposure Compared to Dietary Supplement PEA

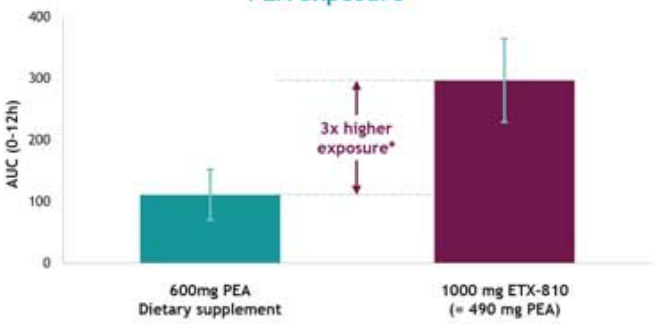
Prodrug pharmacokinetics results in higher PEA concentration over time and 3x exposure improvement

PEA concentration over time



Longer half-life of bioactive PEA
Significantly higher area under the curve

PEA exposure



1000 mg BID dosing expected to yield 6x higher PEA exposure

*Up to ~6x higher exposure on daily basis with 1000 mg BID dosing

Encouraging Tolerability in Phase 1 Study With All AEs Being Mild and at Similar Rates as Placebo, With No Discontinuations

SAD Study (n=60)

Adverse Event	ETX-810 (50-1200mg) (n=48*)	Placebo (n=12)
Any AE	29%	33%
Somnolence	10%	8%
Dizziness	8%	0%
Headache	4%	0%
Disorientation	2%	0%
Euphoric mood	2%	0%
Paraesthesia	2%	0%
Nausea	6%	17%
Diarrhoea	2%	0%
Dry mouth	2%	0%
Dyspepsia	0%	8%
Fatigue	2%	17%
Pallor	2%	0%
Palpitations	2%	0%

* same subjects participated in both the 150mg fasted and fed dosing conditions

MAD Study (n=20)

Adverse Event	ETX-810 1000mg BID (n=8)	ETX-810 500mg BID (n=8)	Placebo (n=4)
Any AE	38%	38%	50%
Nausea	25%	0%	25%
Vomiting	0%	0%	25%
Menorrhagia	0%	25%	0%
Dysmenorrhea	0%	13%	0%
Insomnia	0%	13%	0%
Headache	13%	0%	25%
Dizziness	13%	0%	0%
Muscle twitching	13%	0%	0%
Muscle spasms	13%	0%	0%

Phase 2 dose

- Participants were dosed every 12 hrs for 6 consecutive days; a single dose was administered on day 7
- All doses were administered following a meal

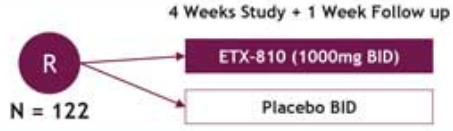
Highly differentiated Phase 1 tolerability profile for a chronic pain drug

ETX-810: Two Phase 2a Proof of Concept Studies With Topline Data Expected in 2022

Diabetic Peripheral Neuropathic Pain (DPNP)

Fully enrolled
Anticipated topline data
1H 2022
NCT04688671

Lumbosacral Radicular Pain (LSRP)



Anticipated topline data
2H 2022
NCT04778592

Objectives:

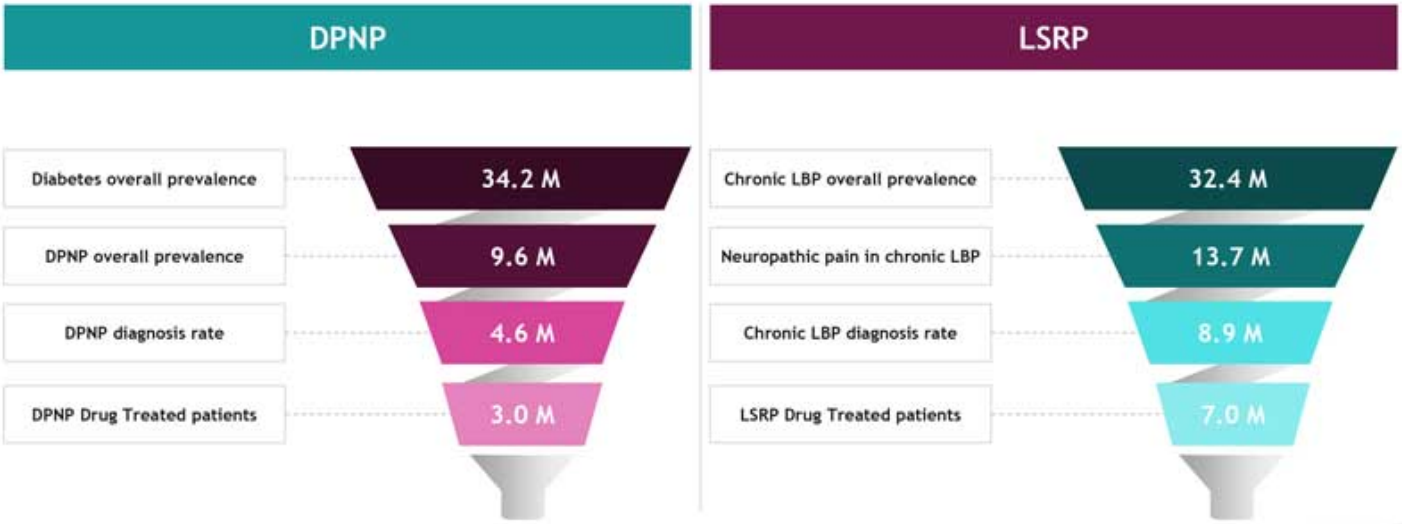
- Demonstrate clinically meaningful improvement in neuropathic pain
- Confirm safety & tolerability

Primary Outcome Measure:

- Change from baseline to Week 4 in weekly average of the daily pain score
- Rated on 11-point pain intensity numerical rating scale (PI-NRS)
- 80% power to detect a 1-point difference from placebo

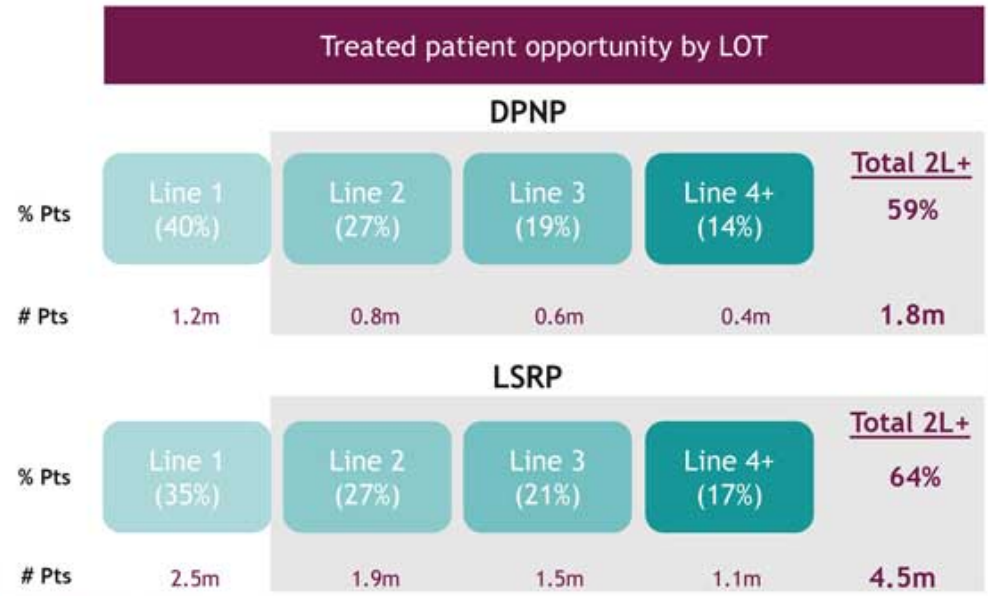
Implementing clinical development strategies to refine patient population and limit placebo effect

There are a total of ~10 million treated patients in the DPNP and LSRP indications in the US



Sources: Eliem market research

~60% of the treated US patient opportunity is in 2nd line and beyond (2L+)



- **<50% of patients achieve ≥50% reduction in pain** → significant residual pain across all lines
- **Significant tolerability issues** (e.g., dizziness, nausea, somnolence)
- **Abuse liabilities** (e.g., opioids)
- **Compliance challenges**
- **Polypharmacy**

Source: Symphony claims; Analysis excludes underlying NSAID usage across all lines

A $15B+ branded opportunity exists in LoT2+

	Drug Treated	Branded Dollar Opportunity
DPNP	~3.0 M	~$5 B
LSRP	~7.0 M	~$11 B
Both Indications	~10.0 M	~$16 B

Assumptions:

- 60% LOT2+
- 195 Average DoT
- ~$5000 WAC

Both Cymbalta and Lyrica achieved >$1B in US peak sales in pain

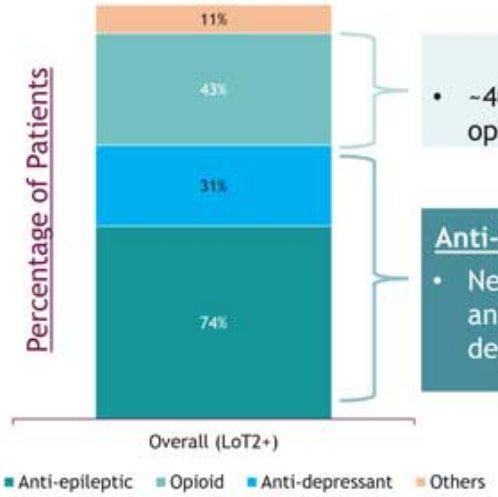
Cymbalta® duloxetine HCl
Peak year: 2013
Pain revenue: ~$1.3B

LYRICA® PREGABALIN
Peak year: 2018
Pain revenue: ~$3.1B

DoT : Days on Therapy

Each 10% share of the LoT2+ patients is a $1.5B+ opportunity

Percentage of Patients in LoT2+ across DPNP and LSRP



Opioids

- ~40%+ of patients are taking opioids consistently

Anti-Epileptics / Anti-Depressants

- Nearly every patient is on an anti-epileptic or an anti-depressant

Opportunity

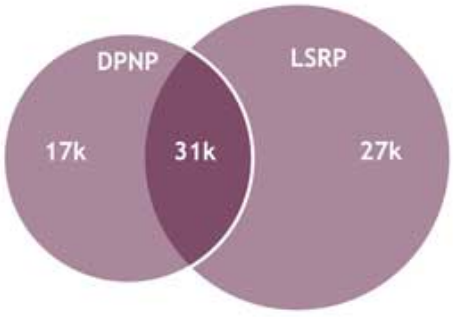
Total Branded Opportunity = $16B

	Share of Lot2+ patients		
	10%	20%	30%
$ Opportunity	$1.6B	$3.2B	$4.8B

Source: Symphony claims

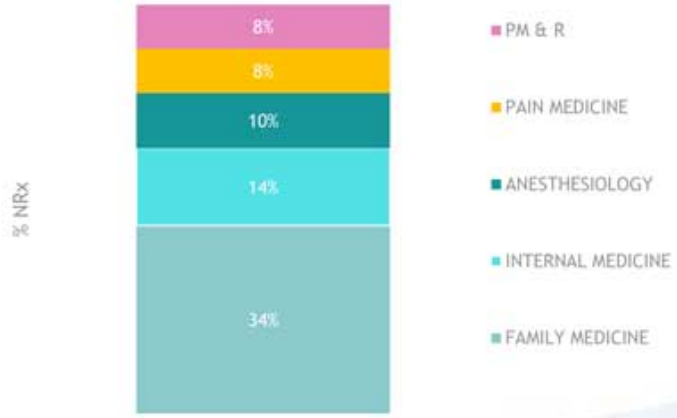
We believe we can target 70% of the market (~75k HCPs) with a field team of ~500-550

HCP Universe



~75k unique HCPs

Top specialties across DPNP & LSRP by NRx volume



PM & R: Physical Medicine and Rehabilitation
Source: Symphony claims

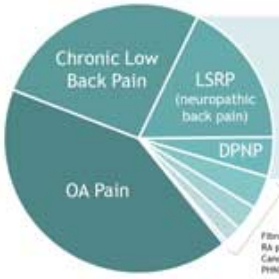
Aiming to Develop a NCE with Desired Clinical Profile to Address the Large Chronic Pain Market

Target Profile for a New Chronic Pain Treatment

- Non-opioid, with no abuse liability
- Novel mechanism of action
- Efficacy as monotherapy and in combination
- Benign side effect profile
- No drug-drug interactions (DDIs)

Commercial Opportunity

2028 US+EU Forecast:
~50m 2nd line or later drug-treated chronic pain patients



- ~10m ≥2nd line treated LSRP and DPNP patients in US+EU
- At ~$5K annual price, every 2% patient market share is worth ~$1b/year in LSRP and DPNP alone
- Broad expansion opportunities into large chronic low back pain and OA pain indications

A novel chronic pain therapy with a desirable product profile is a multi-billion dollar opportunity

* Decision Resources Group estimated chronic pain 2028 prevalence by indication, February 2021

ETX-155

Anticipated Milestones

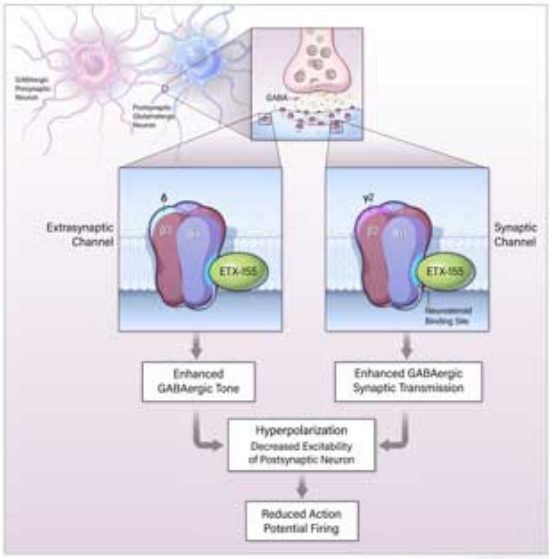
Photosensitive Epilepsy
Data Expected 1H 2022

Major Depressive Disorder
Topline Phase 2a Expected 2H 2023

Perimenopausal Depression
Topline Phase 2a Expected 2H 2023

ETX-155: A Differentiated Neuroactive Steroid $GABA_A$ Positive Allosteric Modulator

- **Clinical validation for MOA ($GABA_A$ PAM)**
- **Dual potent activity at synaptic and extrasynaptic $GABA_A$ receptors**, with high intrinsic efficacy
- **No clinically meaningful food effect**
- Convenient **once-daily dosing with ~40-hr half-life**
- **Well tolerated** at exposure levels that have translated to clinical efficacy for other $GABA_A$ PAMs
- **Strong IP position** with patent protection to 2039



Clinical Development Focused on Depressive Disorders and Focal Onset Seizure – Large Markets With Considerable Unmet Need

	Major Depressive Disorder (MDD)	Perimenopausal Depression (PMD)	Epilepsy / Focal Onset Seizure (FOS)
MoA Rationale	• Reduced GABA levels → increased MDD severity[1] • Clinically validated (SAGE-217)	• Reduced neurosteroid levels → PMD symptoms • Clinically validated in neurosteroid-driven PPD (SAGE-217)	• GABAergic deficits → epileptic state • Clinically validated in orphan epilepsies (ganaxolone)
Unmet Needs	• Faster onset of action • Improved tolerability/efficacy • Novel MoAs	• Same as MDD • Novel MoAs directly addressing reduced neurosteroid levels	• Novel MoAs → better seizure control • Positive impact on mood as #1 comorbidity is depression[4]
Estimated annual prevalence (US+EU)	**~32m** (~9m failed ≥1 prior therapy)[2]	**~8m** (~2m with no history of MDD)[3]	**~2m** (~0.8m with uncontrolled seizures)[5]

1. Lucher et al, *Mol Psychiatry*, 2011;16(4):383-406
2. Decision Resources Group (DRG)- *Unipolar Depression Disease Landscape and Forecast*
3. Freeman et al., *JAMA Psychiatry*, 2014;72(1):36-43
4. Kanner AM, *Biol Psychiatry*, 2003;54(3):388-98
5. DRG - *Epilepsy Disease Landscape and Forecast*, May 2021

ETX-155 Differentiation: Significantly Longer Half-Life, Lack of Food Effect, Favorable Bioavailability and Broad $GABA_AR$ Activity

Company	Molecule	$GABA_AR$ Activity		Pharmacokinetics			Clinical Validation (positive RCT)		
		Synaptic	Extra-synaptic	Food effect	Half-life	Oral Bioavailability	MDD	PPD or PMD	Epilepsy
eliem Therapeutics	ETX-155	✓	✓	No	~40 hrs	~70% (tablet)	2H 2023	2H 2023	2024
Sage Therapeutics	SAGE-217 (zuranolone)	✓	✓	Yes	14-18 hrs	68% (capsule)	✓	✓	-
MARINUS	ganaxolone	✓	✓	Yes	2-3 hrs	10% (capsule)	-	-	✓
PRAXIS	PRAX-114	✗	✓	Yes	12-15 hrs	Not disclosed	TBD	TBD	-

Sources:
SAGE-217: Hoffmann et al., *Clin Pharmacokinet*. 2020;59(1):111-120; Hoffmann et al., ASCP 2018, poster #782; Botella et al, *J Med Chem*. 2017;60(18):7810-7819.
PRAX-114: Praxis Precision Medicines. 2020 Form S-1 Registration Statement
Ganaxolone: Hulihan et al., American Epilepsy Society Annual Meeting 2020, poster

RCT: randomized, controlled clinical trial
PPD: Postpartum Depression; MDD: Major Depressive Disorder; PMD: Perimenopausal Depression; PTSD: Post-Traumatic Stress Disorder; ET: Essential Tremor

Phase 1 Study in Healthy Subjects: Excellent Pharmacokinetics and Safety & Tolerability Profile with No Severe or Serious Adverse Events

Most common treatment-emergent AEs

(In ≥10% of ETX-155 treated subjects across repeat dose studies)

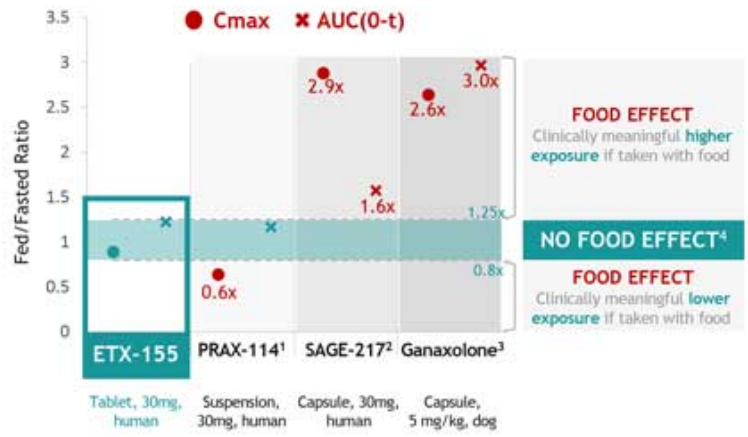
	7-day Repeat Dose		14-day Repeat Dose		Combined	
	ETX-155 60 mg (n=9)	Placebo (n=6)	ETX-155 60 mg (n=15)	Placebo (n=5)	ETX-155 60 mg (n=24)	Placebo (n=11)
	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)
≥1 TEAE	**5 (56)**	3 (50)	**9 (60)**	4 (80)	**14 (58)**	7 (64)
Somnolence	**1 (11)**	2 (33)	**6 (40)**	2 (40)	**7 (29)**	4 (36)
Fatigue	**0**	0	**4 (27)**	1 (20)	**4 (17)**	1 (9)
Headache	**2 (22)**	2 (33)	**1 (7)**	0	**3 (13)**	2 (18)
Dizziness	**1 (11)**	0	**2 (13)**	0	**3 (13)**	0

ETX-155 Phase 1 Repeat-Dose Results

- **Favorable pharmacokinetics**
  - Steady state reached at day 8
  - ~40-hour half-life at steady state
- **60 mg evening dosing was well tolerated**
  - **No SAEs or discontinuations**
  - **All AEs were mild/moderate** and transient
- **CNS AE details**
  - **The rate of CNS AEs were comparable in ETX-155 and placebo groups**
  - Most CNS AEs occurred at Tmax (3-4 hrs post-dose)
  - **7 reports of somnolence** out of 24 ETX-155-treated patients (**no subject reported somnolence more than once** during dosing period)
  - Leeds Sleep Evaluation Questionnaire indicates **no difference in next-morning alertness or disruption in sleep quality** compared to placebo

ETX-155 Does Not Have a Clinically Meaningful Food Effect: Potential to Impact Efficacy, Safety, and Compliance

Reported Fed/Fasted Ratios for $GABA_A$ PAM class



Presence of a food effect may impact:

Efficacy
Exposure reduced or increased if medication not taken with food

Safety and Tolerability
Timing/severity of AEs associated with Cmax

Compliance
More strict daily routine required to maintain drug levels within the required range for efficacy and safety

1. Praxis Precision Medicines, Form S-1/A, Oct 15, 2020
2. Hoffmann et al., Clin Pharmacokinet. 2020;59(1):111-120; Hoffmann et al., ASCP 2018., poster #782
3. U.S. Patent No. 9,029,355
4. Range of fed/fasted ratios for AUC and Cmax required to claim absence of food effect on bioavailability, per FDA Guidance For Industry: Food-Effect Bioavailability and Fed Bioequivalence Studies, December 2002

ETX-155 has not been assessed in a head-to-head study against PRAX-114, SAGE-217, or ganaxolone, and the study designs and analytical methods for all four product candidates may be different. As a result, such data may not be directly comparable.

eliem Therapeutics

Progressing ETX-155 in Epilepsy: Phase 1b Proof-of-Concept Trial in Photosensitive Epilepsy (PSE) to De-risk Focal Onset Seizure Study

Rationale

- PSE is characterized by a **photoparoxysmal response (PPR)** triggered by light stimulation
- Single dose PSE trials are valuable in predicting efficacy in epilepsy and aiding in dose selection for later phase trials
- Reduction of an induced PPR EEG response in PSE has proven a **reliable biomarker of anticonvulsant activity** in epilepsy for most approved ASMs[1]

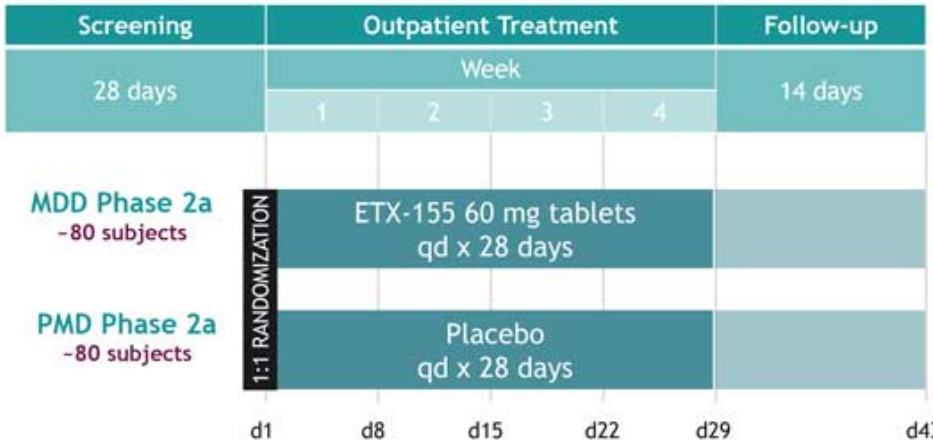
Study Details

- **Design:** Phase 1b, single-center, randomized, double-blind, placebo-controlled, 2-sequence crossover study
- **Objective:** Provide evidence of inhibition of PPR in subjects with PSE
- **Dose:** Single dose of 135 mg (MTD), then titrate down until loss of effect
- **N= 6**
- **Primary Outcome Measure:** Change in PPR range vs placebo at 1, 2, 4, 6, and 8hr

Data anticipated 1H 2022

1. Yuen and Sims. Seizure. 2014; 23:490-493

Progressing ETX-155 in Depressive Disorders: Two Phase 2a RCTs of ETX-155 in MDD and PMD, with Topline Data Anticipated in 2H 2023



Primary Endpoint
(both PMD and MDD studies)

Change from baseline in HAMD17
over days 3, 8, 15, 22, and 29

Key Secondary Endpoints

Change from baseline in HAMD17
at day 3, 8, 15, 22, 29, and 43

50% response rate in HAMD17
at day 3, 8, 15, 22, 29

Topline data from both studies anticipated 2H 2023

HAMD17: Hamilton Depression Rating Scale

ETX-155: Potentially Clinically Differentiated Oral Neuroactive Steroid in Markets with Significant Unmet Needs

Unmet Needs

Depressive Disorders

Slow onset of efficacy (~6+ wks)

High refractory rates

Tolerability issues limit compliance

Focal Onset Seizure

30% of patients on ASMs have uncontrolled seizures

#1 co-morbidity is depression

ETX-155 Opportunities

Improve Efficacy
Leverage absence of food effect & significantly longer half-life

Improve Tolerability
Highly encouraging CNS AE rates in healthy subjects

Improve Durability
Leverage longer half-life and evaluate longer dosing periods (i.e., ≥28 days)

Novel MoA
Clinicians combine different MoAs to improve seizure control

Well Tolerated
Encouraging Phase 1 tolerability data when considering use as an add-on therapy

Positive impact on mood
Potential to provide differentiated benefit on common depression comorbidity

Kv7.2/3 Program: Developing a Differentiated Kv7.2/3 Opener For Multiple Neuronal Excitability Indications

Kv7 Opportunity

- Human genetic validation
- Strong clinical validation in pain and epilepsy (retigabine, flupirtine, XEN1101)
- Metabolic/safety liabilities with existing molecules
- Clear translational path to clinical efficacy

Eliem Kv7 Program Goal

Maintain efficacy with improved tolerability and safety

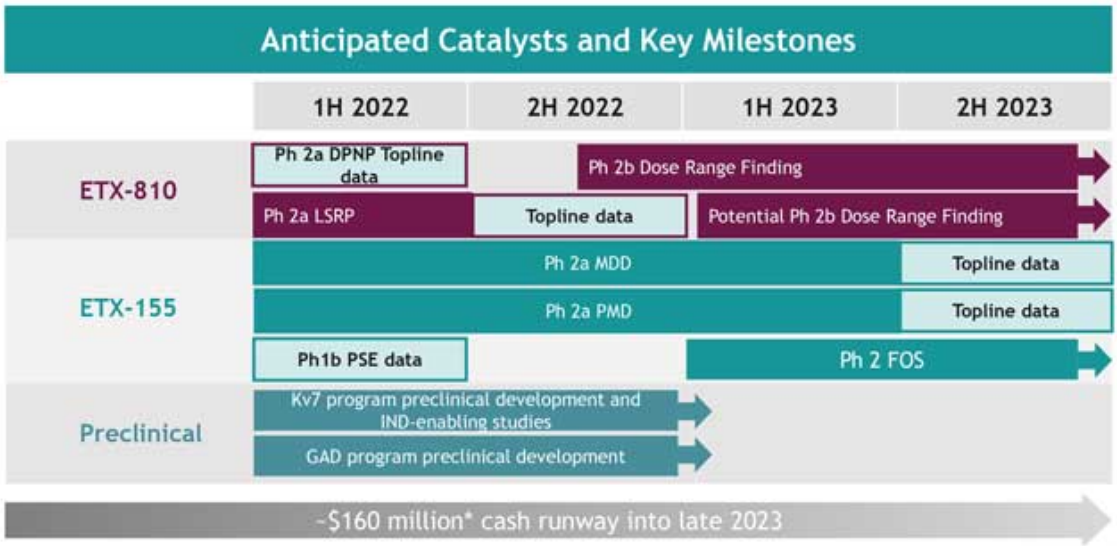
Program Status

- Multiple lead and backup chemotypes in novel IP space
- Improved metabolic stability
- Potent at Kv7.2/3 and selective vs Kv7.1/4

Opportunity across multiple indication areas

IND-enabling studies anticipated to initiate in 2022

Multiple Catalysts and Value-Creating Milestones Across Pipeline – Existing Cash Runway Through Five Topline Data Catalysts



* Unaudited cash, cash equivalents and marketable securities as of December 31, 2021

Rethinking treatment for nervous system disorders

- **Highly experienced** management team
- **Clinical and preclinical pipeline** based on clinically validated mechanisms of action
- Two clinically differentiated lead product candidates with **top-line data readouts across five indications over next 24 months**
- **~$160M* cash runway to late 2023** allows for top line data readouts and advancement of preclinical assets

* Unaudited cash, cash equivalents and marketable securities as of December 31, 2021

eliem Therapeutics


eliem
Therapeutics
For more information:
www.eliemtx.com
InvestorRelations@eliemtx.com