



Solaxa

Targeting Nerve Dysfunction

Mr. Christian Walker, CEO

April 25th, 2023

www.solaxa.com

OVERVIEW

Seed-stage
seeking \$8M

6K obtainable
\$300M+ initial market

\$25M to FDA 505b2 in 2025
IPO in 2026

Repurposing FDA approved drugs for hereditary ataxia & nerve injury

PROGRESS



1

Human pilot
complete



2

Investigator IND
trials enrolling



3

Issued &
12 pending
patents licensed



\$8M

Non-dilutive
grants to co-
founders



20

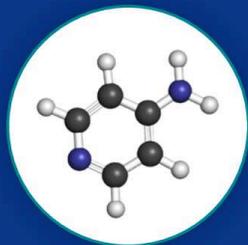
Peer-reviewed
publications



Solaxa

Mission & Purpose

Repurposing aminopyridines to treat **nerve dysfunction** caused by disease, genetics or injury



Dalfampridine

4-Aminopyridine (4-AP)

FDA approved in multiple sclerosis (MS) since 2010

Nerve Dysfunction

is a life
changing
problem



1M+
people

MULTIPLE SCLEROSIS (MS)
Neurodegenerative **disease**



35K
people

HEREDITARY ATAXIA
Rare **genetic** condition



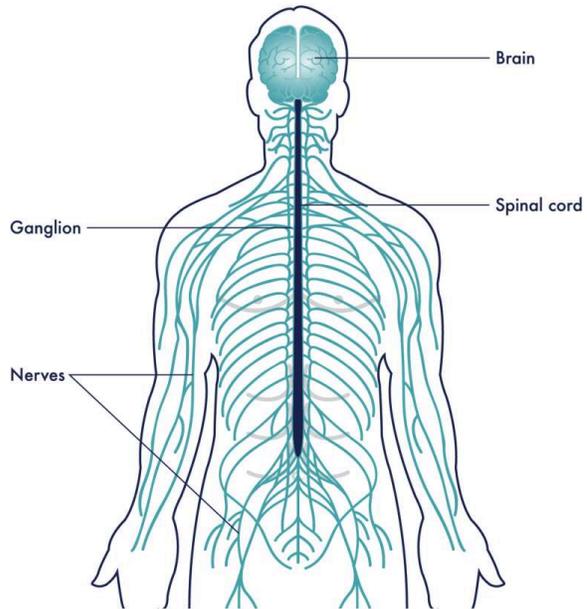
2M+
cases

TRAUMA & SURGERY
Nerve **injury**

How Nerves & Dalfampridine (4-AP) Works

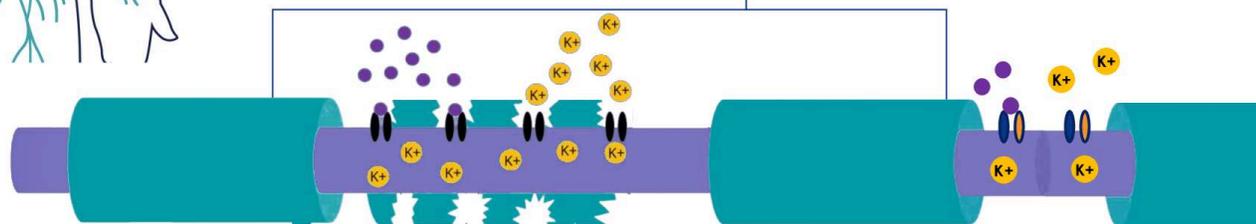
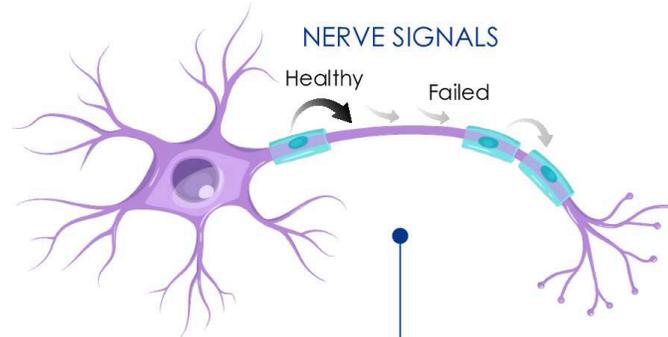
Nervous System

Brain, spinal cord and peripheral nerves all one integrated network



Neuron Damage & Channelopathies

When myelin is damaged, or ion channels don't function properly, nerve signaling is reduced

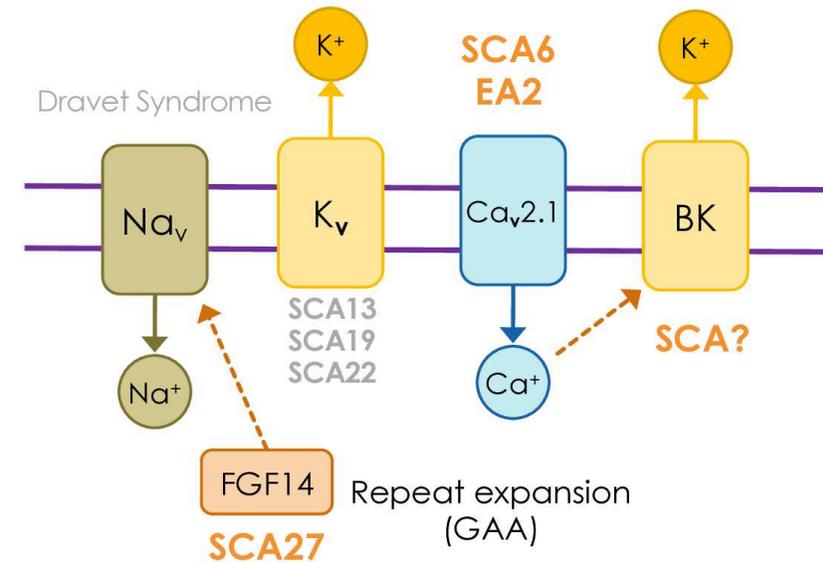


Demyelination disease or injury

-  Aminopyridine
-  Potassium
-  Ion channel
-  Ion channel with altered function

Aminopyridines

Small molecule axonal ion channel blockers that strengthen nerve signaling

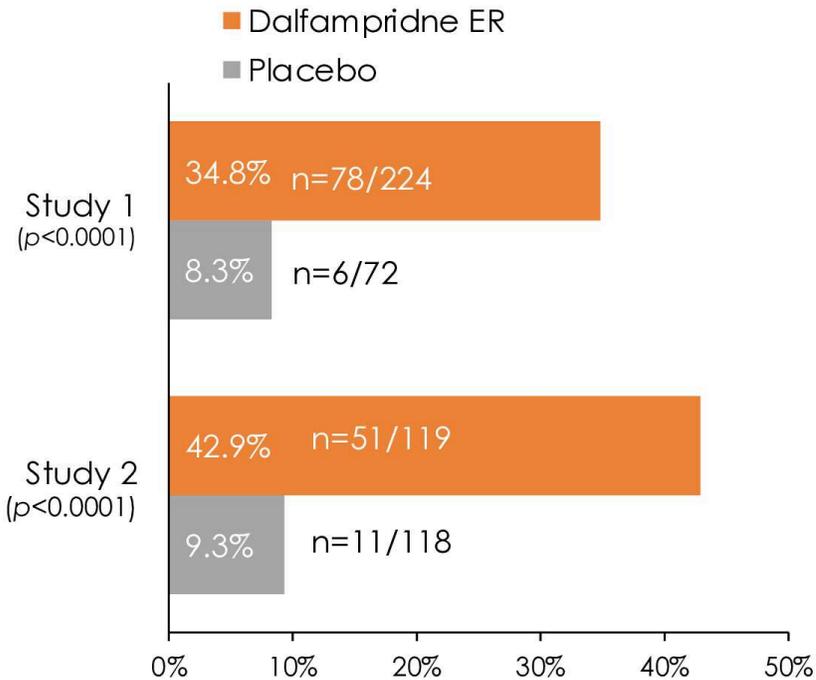


Ion Channels

pump potassium (K⁺), sodium (Na⁺) calcium (Ca⁺) ions to conduct nerve signals. Ion channels with altered function due to genetic mutations

Dalfampridine Improves Gait Ataxia in MS

Gait ataxias = walking & balance problems



~ **40%**
with MS respond to
dalfampridine ER

~ **\$50,000**
annual per patient
branded cost
(branded)

< **\$5,000**
annual per patient
cost (generic)



10mg BID



only dosage/regimen available

CANNOT BE

X Cut X Crushed X Dissolved

TITRATION NOT POSSIBLE

**In Multiple Sclerosis (MS)
One Size Fits All**

Dalfampridine ER Improves Walking Speed

150,000 +
have taken dalfampridine

\$3B+
lifetime sales

2018
lost patent protection

\$73M
2022 branded sales

150,000

suffer from ataxia
resulting in trouble with
balance, coordination
and vision

SYMPTOMS INCLUDE

- Lack of coordination
- Gait abnormalities
- Difficulty walking
- Poor balance
- Trouble eating & swallowing
- Slurred speech
- Tremors
- Eye movement abnormalities
- Deterioration of fine motor skills
- Heart problems

35,000

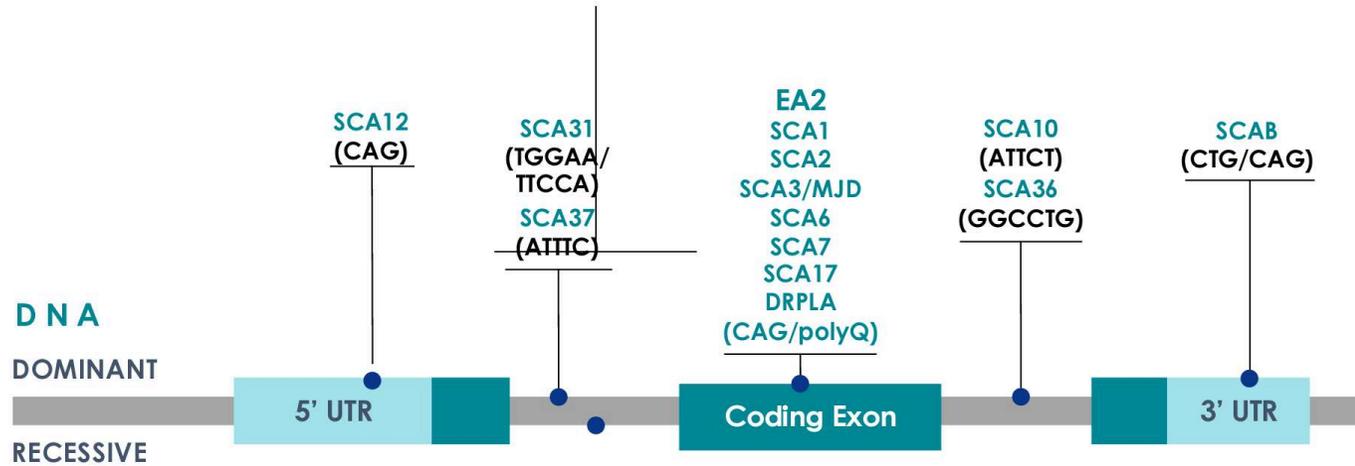
suffer from
hereditary
ataxias

FOCUS ON TWO HEREDITARY ATAXIAS

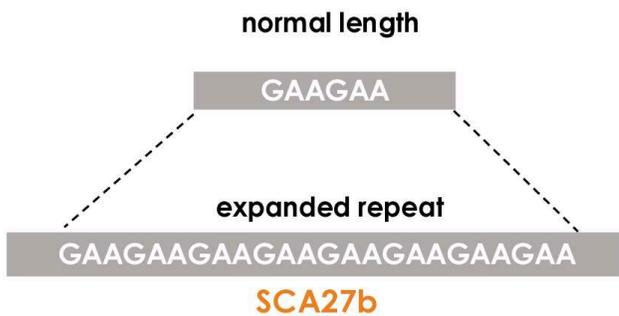
Spinocerebellar Ataxia 27b (SCA27b)	~ 2,800
Episodic Ataxia 2 (EA2)	~ 3,300

Total ~ 6,000

Newly Identified Spinal Cerebellar Ataxia 27b



Friedreich Ataxia (GAA)
SCA27b



SCA27b prevalence

~2,800 – 5,000+ in US

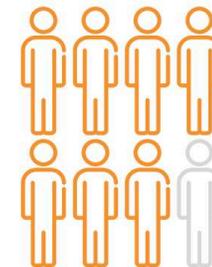


The NEW ENGLAND
JOURNAL of MEDICINE

ORIGINAL ARTICLE

Deep Intronic *FGF14* GAA Repeat Expansion in Late-Onset Cerebellar Ataxia

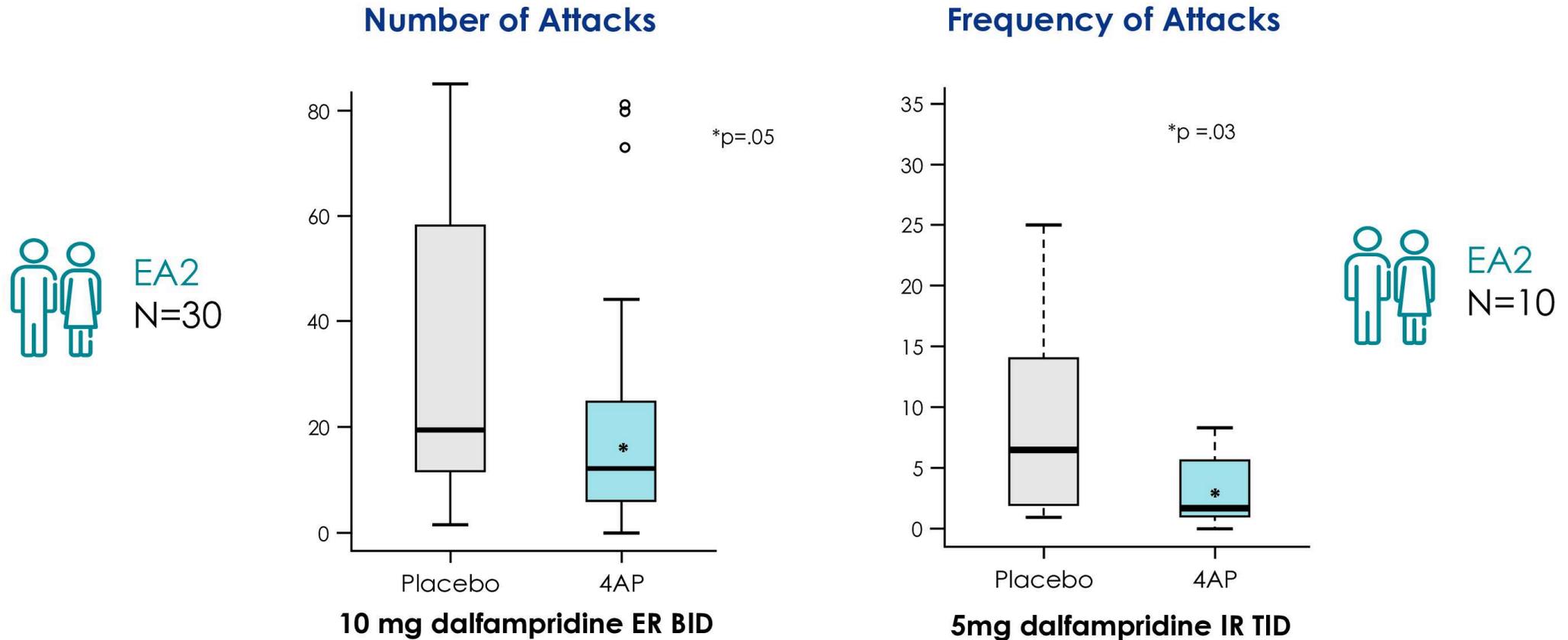
SCA27b was first published in January 2023



87.5%

7 of 8 SCA27b patients had marked to moderate reduction in the frequency or severity of ataxic symptoms when given 4-AP

Dalfampridine Works in Other Hereditary Ataxias Solaxa



Episodic Ataxia Type 2 (EA2) prevalence is 1 in 100,000: ~3,300

Dalfampridine reduces number and frequency of EA2 attacks with different dosages/regimens

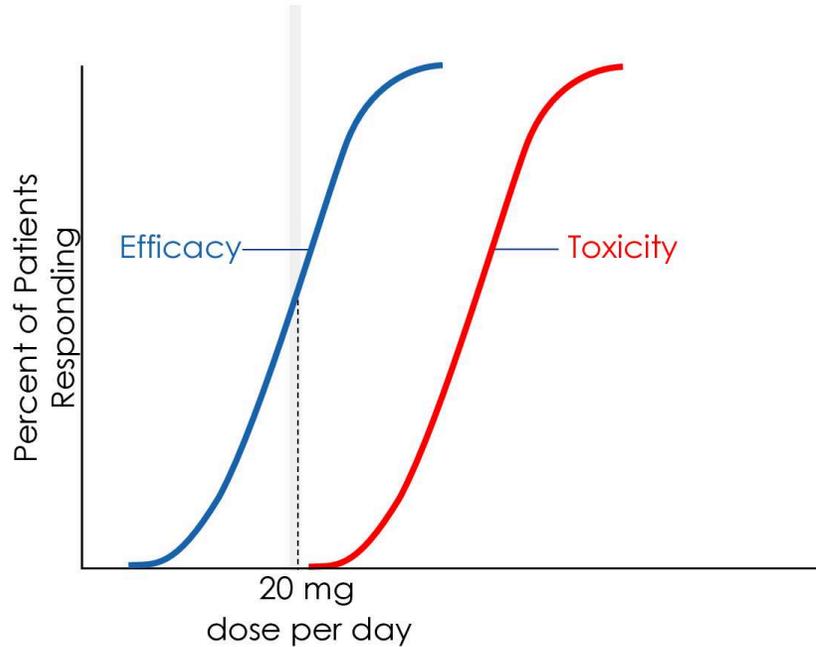
Muth C et al. (2021) Fampridine in EA2 and Related Familial EA Neurol Clin Pract. 2021 Aug 11:438-446.

Strupp M et al. (2011) A randomized trial of 4-AP in EA2 and related familial episodic ataxias. Neurology. Jul 19: 269-275.

Larger Therapeutic Window in Ataxia than MS

Dalfampridine in Multiple Sclerosis

Narrow therapeutic window

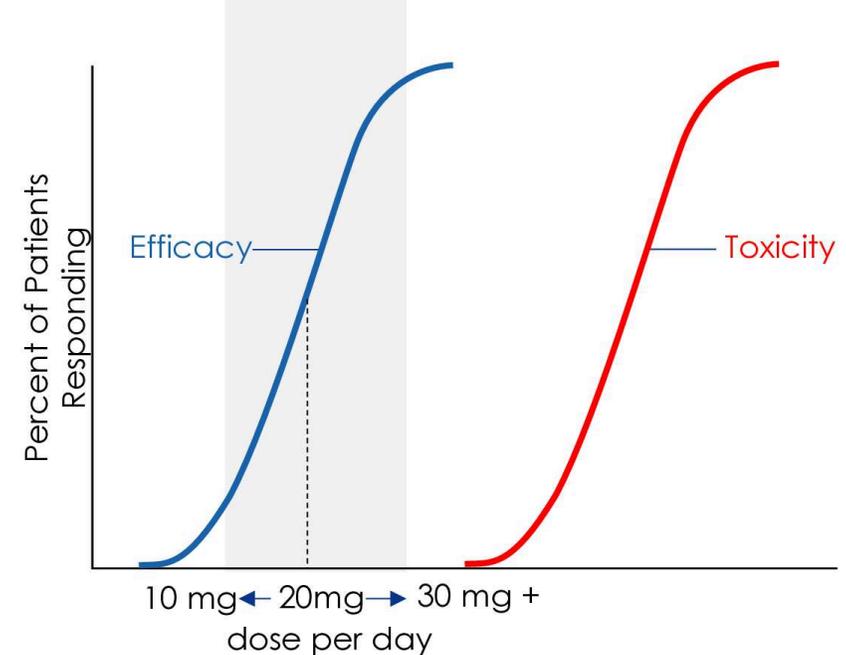


One Size Fits All

1. Higher doses increase risk
2. Lower doses aren't effective
3. Titration not possible

Dalfampridine in Ataxia

Wider therapeutic window



One Size DOES NOT Fit All

1. Higher doses effective
2. Lower doses effective
3. Personalization possible

Clinical Practice Recommendations

SCA
GAIT IMPROVEMENT
5mg 4-AP IR

EA-2
REDUCED ATTACKS
5mg 4-AP IR



Indication	Drug	Dosage	Available
● Downbeat nystagmus	4-AP IR	5 mg BID, titrate to 20 mg/d	No
Downbeat nystagmus	4-AP ER	10 mg BID	Yes
● Central positioning, upbeat & central head-shaking nystagmus	4-AP IR	5 mg BID, titrate to 20 mg/d	No
● Gait ataxia: due to cerebellar ataxia	4-AP IR	5 mg TID	No
Gait ataxia: due to cerebellar ataxia	4-AP-ER	10 mg BID	Yes
Gait ataxia: due to MS	4-AP-ER	10 mg BID	Yes
● Episodic Ataxia Type 2	4-AP IR	5 mg TID	No
Episodic Ataxia Type 2	4-AP IR	10 mg BID	Yes

No dalfampridine (4-AP) IR of any dosage is FDA approved for ANY indication

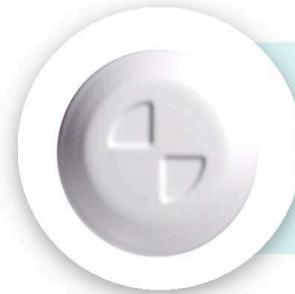
Dalfampridine Orally Dissolving Tablets (ODT)

First orally dissolving tablet for dalfampridine to market

Customization & personalization

titration enables maximization of benefits & minimization of side effects

Classic (IR) & **Ultra** (ER+) versions of dalfampridine ODT under development



Perfect for **children & dysphagia**



Dissolves **without water** in 3 seconds



Expanded dosing regimens available

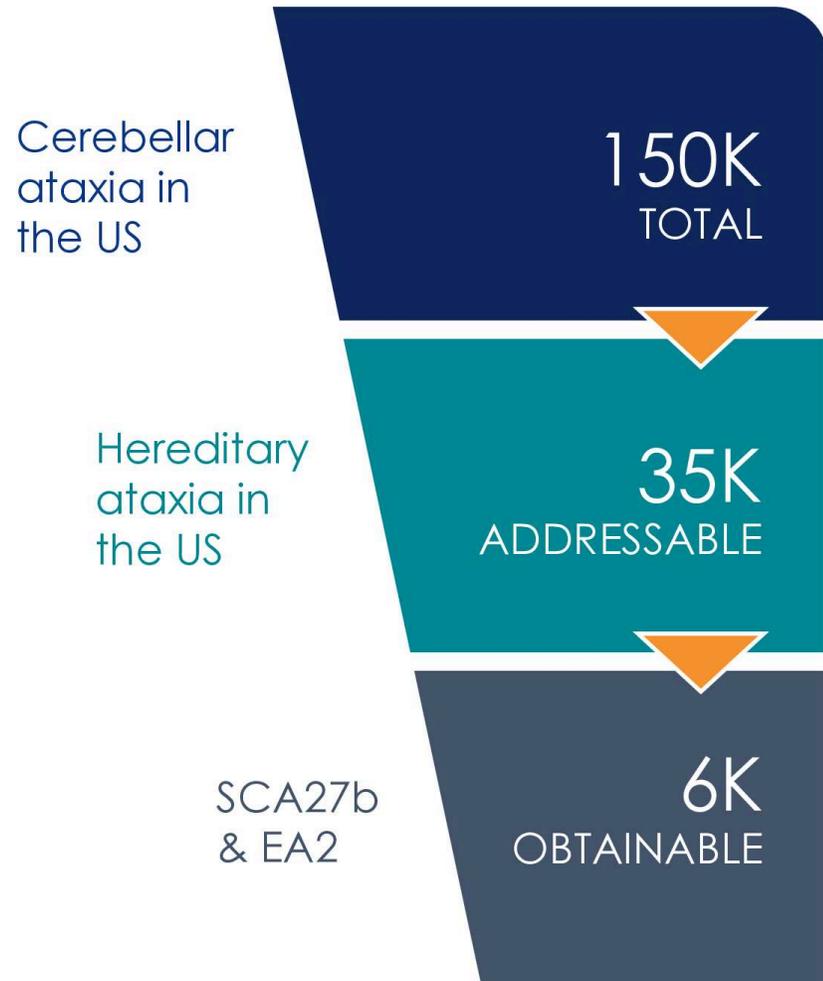


Drug delivery in **minutes not hours**



Strategic Partner
300+ patents

Ataxias are a Rare Orphan Unmet Market Need



Dalfampridine ODT Rx

\$50K - \$90K

PROJECTED ANNUAL PATIENT REVENUE

\$300M - \$540M

PROJECTED ANNUAL PEAK SALES REVENUE

2022
Comparable
Pricing

Ampyra® \$4,200 / Rx

Firdapse® \$13,800 / Rx

Priced between
76% & 87% less

Firdapse® \$375K annual

Skyclarys® \$370K annual

Forward-looking projections cannot be guaranteed.

First FDA Ataxia-Specific FDA Drug Approved

SKYCLARYS™
(omaveloxolone) 50 mg capsules

**First ever approved treatment
for Friedreich's Ataxia**

FEBRUARY 28, 2023

\$370,000
annual per
patient cost

5,000
Friedreich's
Ataxia in US

\$1.1B
in projected
annual revenue

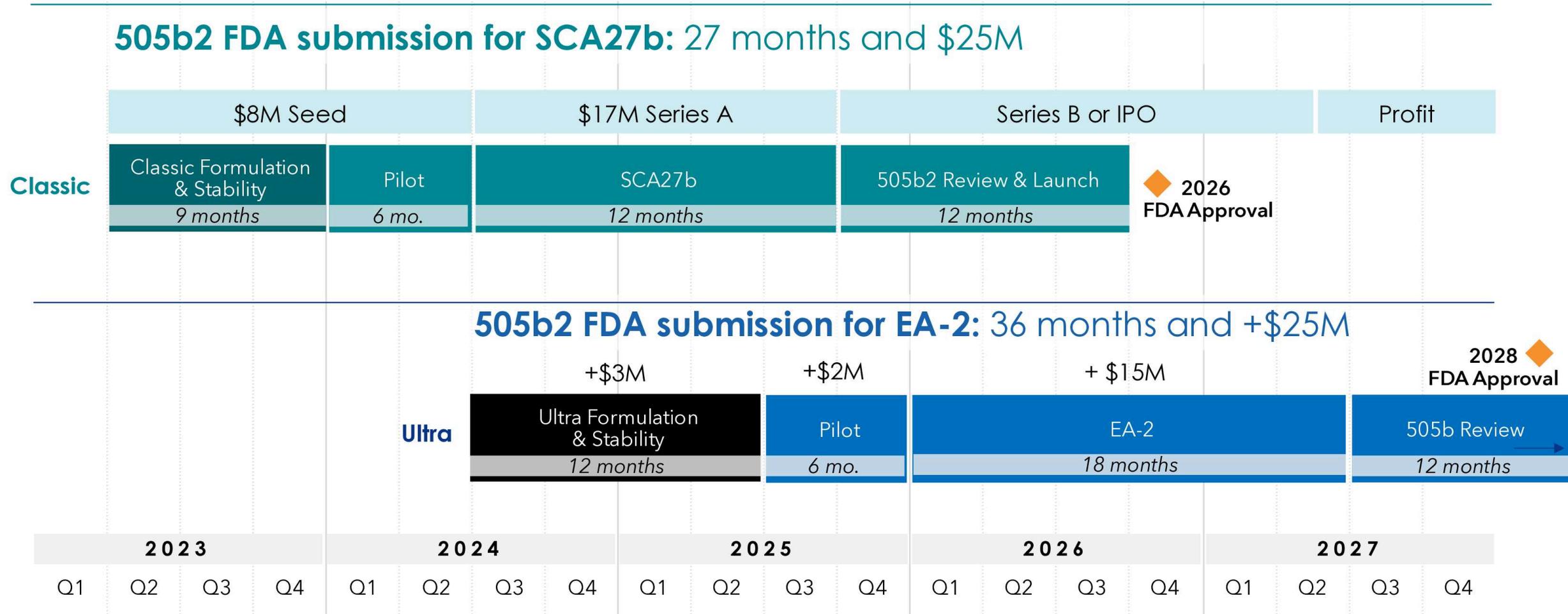


FDA approval resulted from acceptance of both clinical trial & patient history data, an important first.





Dalfampridine ODT Product Development



Forward-looking projections cannot be guaranteed

Product Pipeline

		INDICATION	DRUG	DEVELOPMENT	PRECLINICAL	PHASE 1	PHASE 2	PHASE 3	REVIEW	MARKET	PROTECTION
Hereditary ataxia	ORAL	SCA27B	Dalfampridine-IR	CLASSIC ODT					505b2	2026	2033
		EA-2	Dalfampridine-ER+	ULTRA ODT					505b2	2028	2035
Nerve injury	LOCAL	Traumatic Nerve Injury	Confidential	INJECT					505b2	2030	2036+
		Surgical Nerve Injury	Confidential	GEL					TBD	TBD	TBD

Forward-looking projections cannot be guaranteed.

3 Issued & 12 Pending Patents Exclusively Licensed



	Title	Priority	Serial No	Status	Country
	Composition & methods for peripheral nerve injury	03/2013	9,993,429	Issued	US
	Treatment of acute nerve injury	10/2015	16/696,095	Notice	US Divisional
			3,000,196	Pending	CA
				16782351.7	Notice
	Chemotherapy induced neuropathy	07/2022	Pending	Pending	Provisional
	Wound healing	01/2020	US2021/014442	Pending	PCT
	Hair loss	01/2021	63/134,407	Pending	PCT
	Bone growth & BMP2	04/2022	63/134,414	Pending	Provisional
	Burn & scarless wound healing	04/2022	Pending	Pending	Provisional



Pipeline indications for:

- Acute nerve injury
- Chemotherapy induced neuropathy
- Wound healing and more



Issued patent protection:

- through 2034: dalfampridine
- through 2036: amifampridine
- through 2038: erythropoietin

Management Team & Founders



Christian Walker, MBA, MS
CEO & Founder

Neuraptive



Jennifer Butler
Head of Commercial



Mark Noble, PhD
Scientific Co-Founder
Professor, University of Rochester



John Elfar, MD
Medical Co-Founder
Chair of Orthopedics, University of Arizona





Christian Walker, MBA, MS

Member of the Board
CEO & Founder

Neuraptive



Lauren Sabella

Chairwoman & Independent Member
Current COO & Former CCO

mannkind



Luis Gutierrez, MBA

Independent Member of the Board
Current EIR, Former CEO & CCO
(pending)



FOUNDATION PARTNERS



SERVICE PROVIDERS



NEURODEGENERATIVE DISEASE



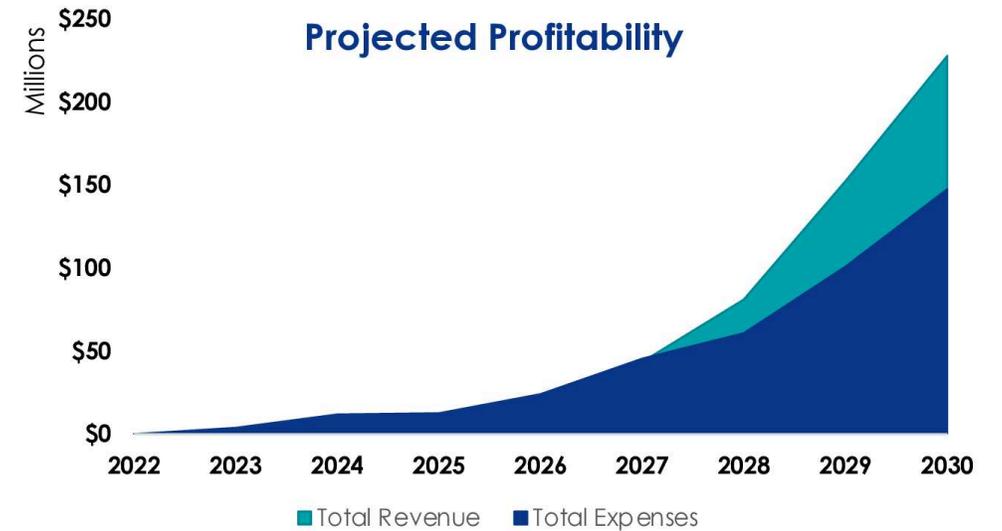
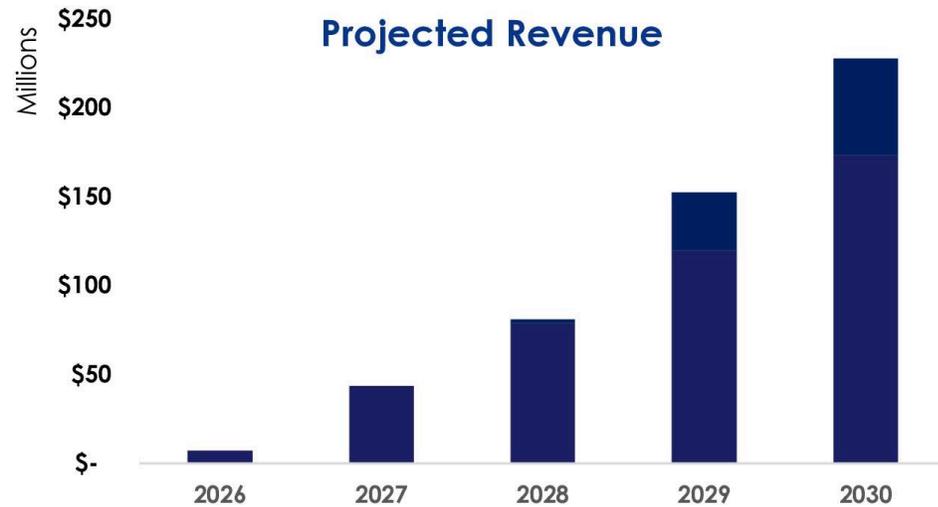
NERVE DYSFUNCTION



NERVE INJURY



Projected Revenue, Profitability



Why Invest in Solaxa?



Amazing Team

- Nerve, industry, ataxia, orphan drug & 4-AP-specific experience
- 100% founder-funded to date
- \$8M in grants with \$2M in 2022
- Seeking \$8M seed in 2023
- Seeking \$17M series A in 2024



Large Market & Clear Path

- 6K drive \$300M+ ataxia market
- 2M+ untapped nerve injury market
- \$25M & 27 months to 505b2
- IPO & sales starting in 2026
- Profitability in 2027



Strong IP & Trials Enrolling

- 15 Patents (US, EU, CA, PCT)
 - 3 issued, 12 pending
- Traumatic Nerve Injury, U of A
 - n = 1 of 60 enrolled
- Surgical Nerve Injury, U of R
 - n = 30 of 70 enrolled