FENNEC PHARMA

November 2019 | Corporate Deck

SAFE HARBOR STATEMENT

During the course of this presentation we will make statements that constitute forward-looking statements. These statements may include operating expense projections, the initiation, timing and results of pending or future clinical trials, the actions or potential action of the FDA, the status and timing of ongoing research, corporate partnering activities and other factors affecting Fennec Pharma's financial condition or operations. Such forward looking statements are not guarantees of future performance and involve risk, uncertainties and other factors that may cause actual results, performance or achievements to vary materially from those expressed or implied in such statements.

These and other risk factors are listed from time to time in reports filed with the SEDAR and the Securities and Exchange Commission, including but not limited to, reports on Forms 10-Q and 10-K. Fennec does not intend to update any forward looking information to reflect actual results or changes in the factors affecting forward-looking information.

PLATINUM-BASED CHEMOTHERAPHY : CISPLATIN

Introduction: 1980s, “Penicillin of Cancer”

Demonstrated high efficacy in the treatment of a variety of solid pediatric tumors

Effects

Can cause irreversible high frequency hearing loss, or ototoxicity in children

Wide Use

Stand-alone and combination mainstay use despite the approval of new chemotherapy treatments, targeted agents and immunotherapy drugs

Ototoxicity

Is permanent, irreversible and can be severe

Health Care Surveillance

As high survival rates for childhood cancers have been achieved, there is a growing need for monitoring the long-term effects of platinum based chemotherapy in primary care settings

COMPANY OVERVIEW

US-based biopharmaceutical company focused on the development of PEDMARK™ (a unique formulation of sodium thiosulfate (STS)) for the prevention of platinum-induced ototoxicity in children with solid tumors*

- 7.5 YEARS US MARKET EXCLUSIVITY
  Pediatric Orphan Drug Designation
- 10 YEARS EU MARKET EXCLUSIVITY
  Pediatric-use Marketing Authorization (PUMA)

*PEDMARK is an investigational drug and has not yet been approved by the U.S. Food and Drug Administration (FDA) or any regulatory authority

COMPANY OVERVIEW

Proof of Concept Study : COG ACCL0431

131 patients with heterogeneous solid tumors

Achieved primary efficacy endpoint - ASCO 2014

Final results : Lancet Oncology - December 2016

Pivotal Study : SIOPEL 6

109 patients with standard risk hepatoblastoma (SR-HB)

Achieved primary efficacy endpoint - SIOP 2017

Showed no evidence of tumor protection

Final results : New England Journal of Medicine - June 2018

Granted Fast Track and Breakthrough Therapy Designation by FDA

Initiated Rolling NDA to FDA

PEDMARK is proposed to be indicated for the prevention of ototoxicity induced by cisplatin chemotherapy in patients 1 month to < 18 yrs of age with localized, non-metastatic, solid tumors

Positive opinion on Pediatric Investigation Plan (PIP) received by Pediatric Committee (PDCO) at EMA

PEDMARK™ has the potential to fill a significant unmet medical need with no approved treatments on market

PLATINUM HEARING LOSS EFFECTS

Ototoxicity

Is often a dose-limiting side effect

Effects

Can be seen after as little as the second or third dose

Hearing Loss

Loss of high frequency hearing sensitivity (consonants f/th/p/k/h/t)

Disability

Background noise compounds disability in critical settings

Speech / Language

Infants and young children at critical stage of development, result in a lack of speech language development and literacy

Lack of Development

Older children and adolescents lack social-emotional development and educational achievement

At least 60% of children develop irreversible ototoxicity* = Devastating and life-long impact on quality of life

*Neuwelt and Brock. J Clin Oncol 2010;28:1630-1632

DEVASTATING IMPACT ON QUALITY OF LIFE

Long term follow up of neuroblastoma survivors with hearing loss

Grade Setbacks

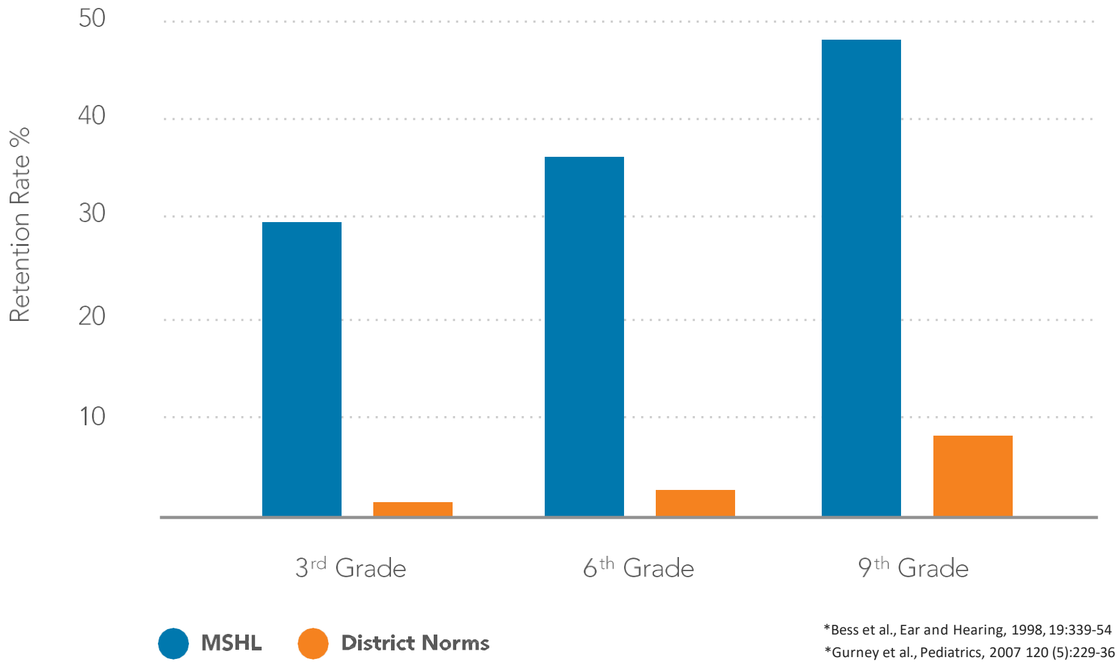
High risk for being held back a grade (37% versus 3%)

Learning Problems

Twice the rate of parents reported problems with reading, math, attention and need for special education

Quality of Life

Poorer child-reported quality of life and school functioning

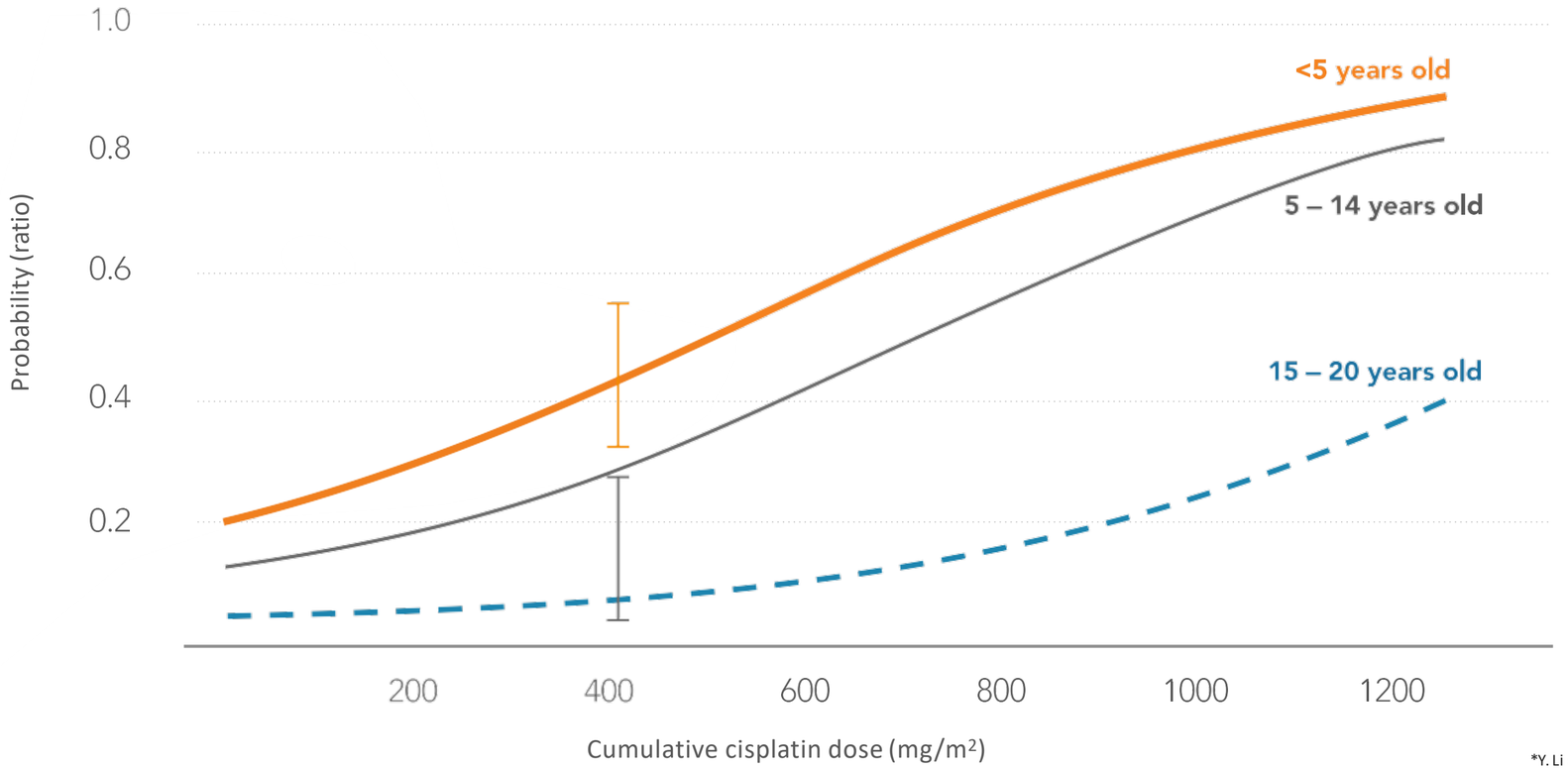


*Bess et al., Ear and Hearing, 1998, 19:339-54
*Gurney et al., Pediatrics, 2007 120 (5):229-36
Minimum sensorineural hearing loss (MSHL)

Even minimal hearing loss is damaging

RISK FACTORS

Probability of Brock's Level 2 or worse hearing loss



*Y. Li et al. | European Jounal of Cancer 40 (2004)2445-2451

Children <5 years old : 21 times the risk for hearing loss compared to adolescents

MARKET OPPORTUNITY

Annual incidence of pediatric solid tumor cases eligible for Platinum-based therapy in both US and EU markets

~30% 1,462 Metastatic
~70% 3,554 Localized, non-metastatic

~30% 1,711 Metastatic
~70% 4,215 Localized, non-metastatic

*Sources: Company estimates, ACCIS, and Ward, E. (2014). Childhood and Adolescent Cancer Statistics, 2014.

PEDMARK : SODIUM THIOSULFATE (STS)

Development*

PEDMARK is a unique formulation of STS in development for the prevention of otoxicity from cisplatin in pediatric patients

Drug Delivery

PEDMARK STS is administrated 6 hours post cisplatin infusion in a bolus dose i.v. over 15min

Toxicology

STS is generally recognized as safe (GRAS in US)

Mechanism of Action**

Anticancer activity of cisplatin occurs during the first two hours after administration when the free (unbound) cisplatin distributes into the cancer cells

Inactivation of protein-bound platinum complexes causing ototoxicity in the inner ear

STS reacts irreversibly with cisplatin to form Pt (S_2O_3) which is not cytotoxic and is readily excretable

*PEDMARK is an investigational drug and has not yet been approved by the U.S. Food and Drug Administration (FDA) or any regulatory authority.

**Howell and Taetle 1980; Neuwelt, Brummett et al. 1996

PROOF OF CONCEPT STUDY

COG ACCL0431 | Lancet Oncology 2016

1

Primary Endpoint

Evaluate efficacy of STS for prevention of hearing loss in children receiving cisplatin chemotherapy (hypothesis: 50% relative reduction in hearing loss). Measured by hearing status at 4 weeks post-therapy defined by American Speech-Language-Hearing Association (ASHA) criteria :

> 20 dB loss at 1 frequency or > 10 dB at 2 consecutive frequencies

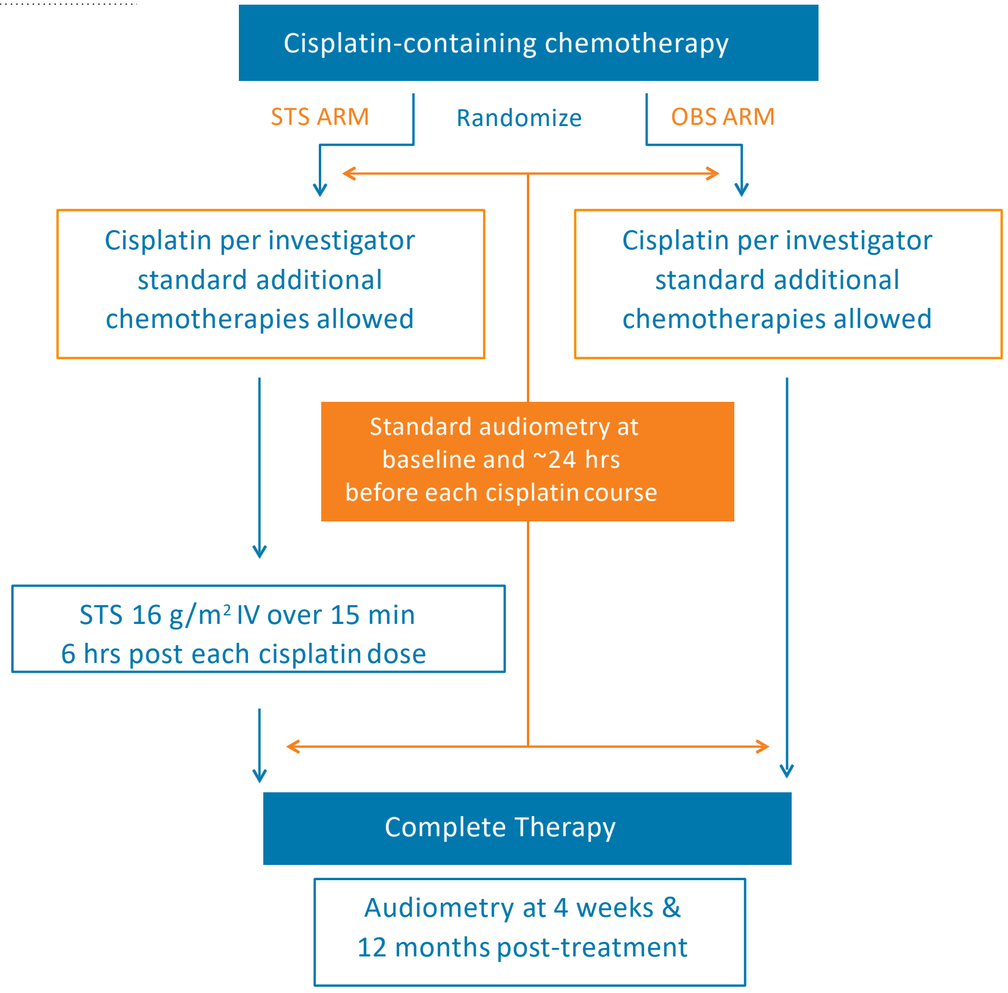
2

Secondary Endpoints

Compare change in mean hearing thresholds

Compare incidence of other Grade 3/4 toxicities (renal and hematological)

Monitor EFS and OS in two randomized groups



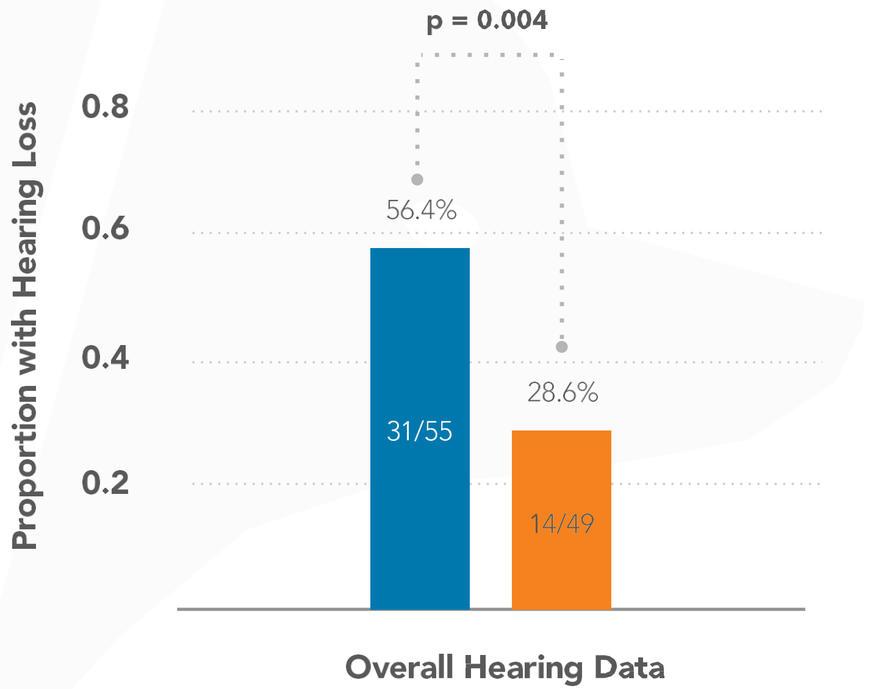
COG ACCL0431 | Lancet Oncology 2016

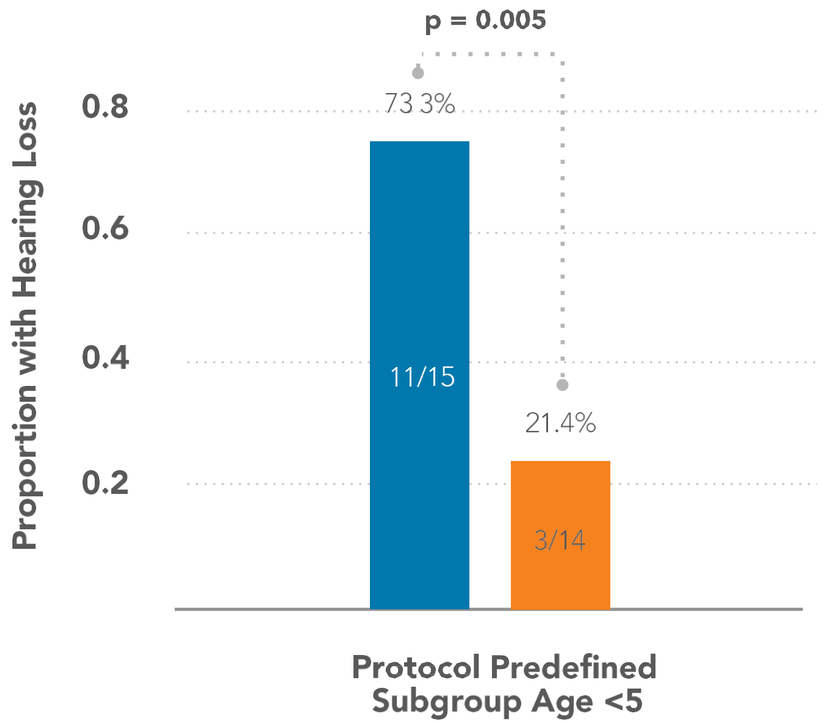
PARTICIPANT CHARACTERISTICS

		n CONTROL	%	n STS	%
	Number Eligible	64	–	61	–
Age (years)	<5	22	34.4	22	36.1
	5 – 9	13	20.3	7	11.5
	10 – 14	14	21.9	16	26.2
	15 – 18	15	23.4	16	26.2
Diagnosis	Germ Cell Tumor	16	25.0	16	26.2
	Hepatoblastoma	5	7.8	2	3.2
	Medulloblastoma/PNET	14	21.9	12	19.7
	Neuroblastoma	12	18.8	14	23.0
	Osteosarcoma	15	23.4	14	23.0
	Other	2	3.1	3	4.9
Extent of disease	Localized	38	59.4	39	63.9
	Disseminated	26	40.6	21	34.4
	Unknown	0	0	1	1.6

COG ACCL0431 | Lancet Oncology 2016

HEARING LOSS RANDOMIZED ARM



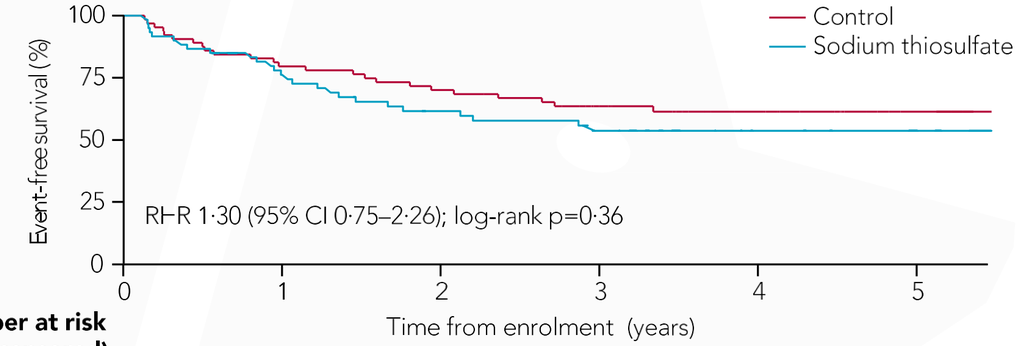


N = 104 evaluable patients

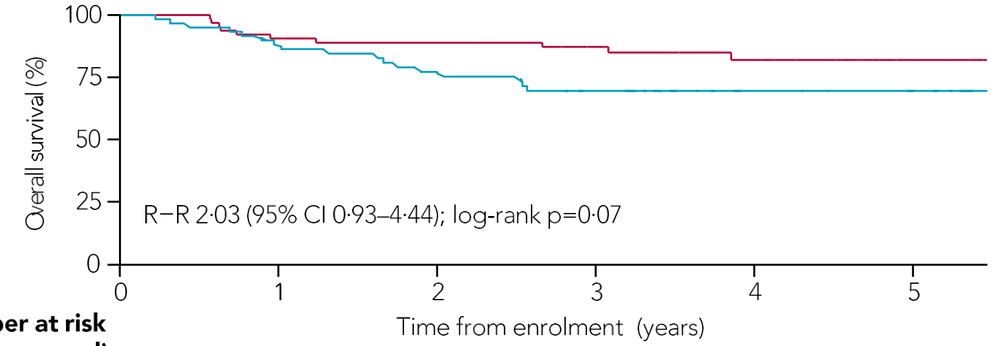
OBS STS

COG ACCL0431 | Lancet Oncology 2016

EFS/OS : ALL PARTICIPANTS



Number at risk (number censored)						
Control	64 (0)	50 (1)	44 (0)	34 (6)	19 (14)	4 (15)
Sodium thiosulfate	61 (0)	43 (3)	32 (3)	25 (3)	10 (15)	6 (4)

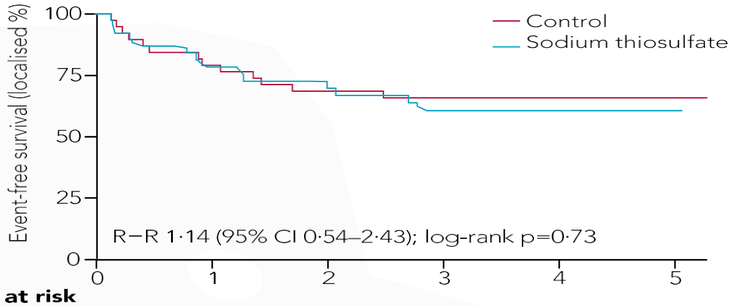


Number at risk (number censored)						
Control	64 (0)	56 (2)	54 (1)	44 (9)	26 (16)	8 (18)
Sodium thiosulfate	61 (0)	50 (3)	41 (3)	32 (5)	13 (19)	8 (5)

COG ACCL0431 | Lancet Oncology 2016

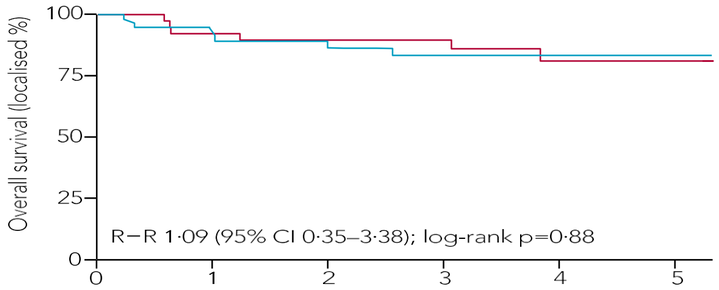
POST HOC EFS/OS : EXTENT OF DISEASE*

Localized Disease (n=77)



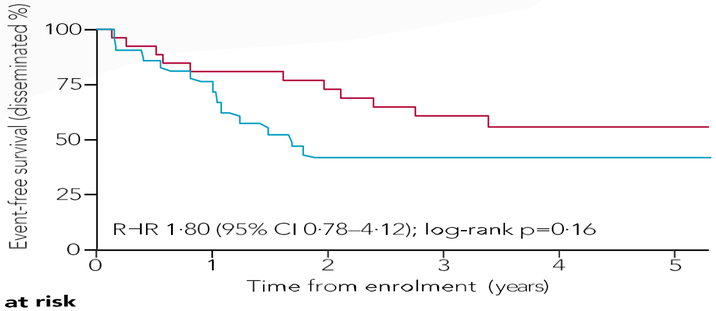
Number at risk (number censored)

Control	38 (0)	30 (0)	26 (0)	19 (6)	10 (9)	3 (7)
Sodium thiosulfate	39 (0)	27 (3)	25 (0)	19 (2)	7 (12)	5 (2)



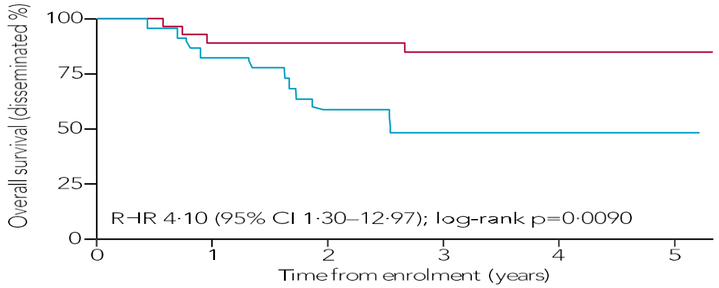
	38 (0)	35 (0)	34 (0)	26 (8)	15 (9)	6 (9)
	39 (0)	32 (3)	31 (0)	25 (4)	9 (16)	6 (3)

Disseminated Disease (n=47)



Number at risk (number censored)

Control	26 (0)	20 (1)	18 (0)	15 (0)	9 (5)	1 (8)
Sodium thiosulfate	21 (0)	15 (0)	7 (2)	6 (1)	3 (3)	1 (2)



	26 (0)	21 (2)	20 (1)	18 (1)	11 (7)	2 (9)
	21 (0)	17 (0)	10 (2)	7 (1)	4 (3)	2 (2)

*Determined post hoc (i.e., retrospectively during the preliminary data analysis after completion of accrual).

COG ACCL0431 | Lancet Oncology 2016

PIVOTAL STUDY

SIOPEL 6 | New England Journal of Medicine 2018

Objectives

Assess the efficacy of STS to reduce the hearing impairment caused by cisplatin in SR-HB

Monitor any potential impact of STS on response (protocol pre-specified IDMC tumor response review at 20, 40, 60, 80 and 100 patients) to cisplatin and overall survival

Study Population

Children 1 month - 18 years old with histologically confirmed newly diagnosed SR-HB, PRETEXT I, II or III, serum AFP > 100 µg/L

First patient in the study enrolled in 2007, last patient in Dec 2014

1

Primary Endpoint

Centrally reviewed absolute hearing threshold, at the age of ≥3.5 yrs, by pure tone audiometry, graded by Brock criteria

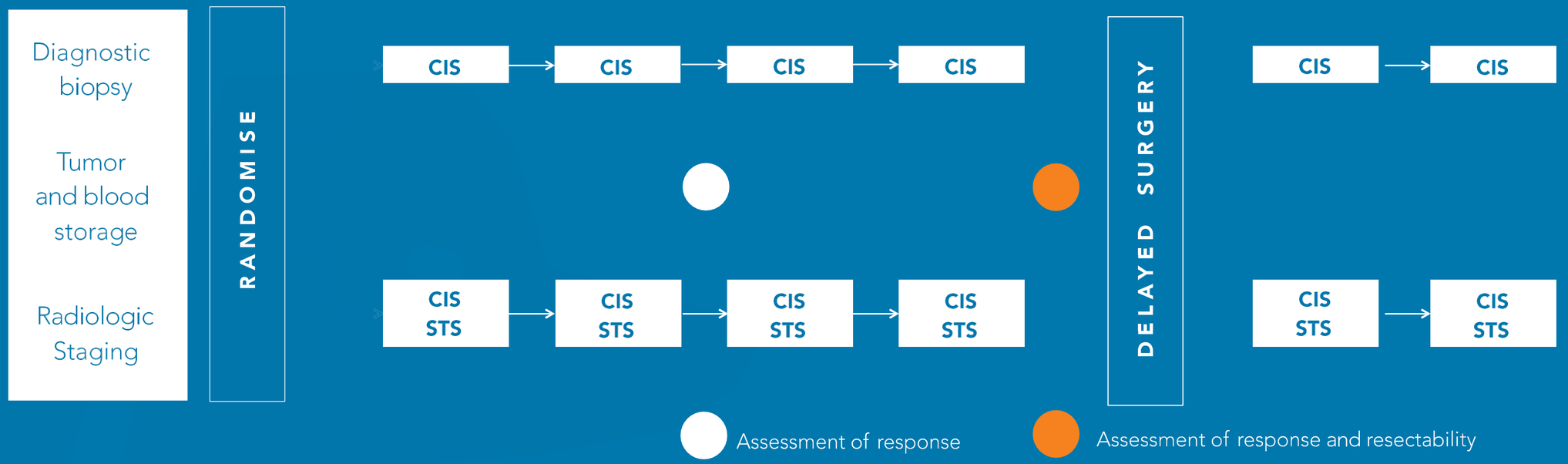
80% power to detect 60% vs.35% hearing loss

2

Secondary Endpoints

Response, resection, EFS, OS and long term renal function

SIOPEL 6 METHODS & DESIGN



Cisplatin alone : IV infusion over 6 hrs (80 mg/m^2 for children > 10kg, 2.7 mg/kg for infants and children 5-10kg or 1.8 mg/kg for infants < 5kg)

OR

Cisplatin (same dose) and STS : administered IV exactly 6 hours after stop of cisplatin over 15 minutes at 20 g/m^2 for children > 10kg, 15 g/m^2 for infants and children of 5-10 kg or 10 g/m^2 for infants < 5kg

Stratification by Country, age (above and below 15 months), PRETEXT (I and II vs III)

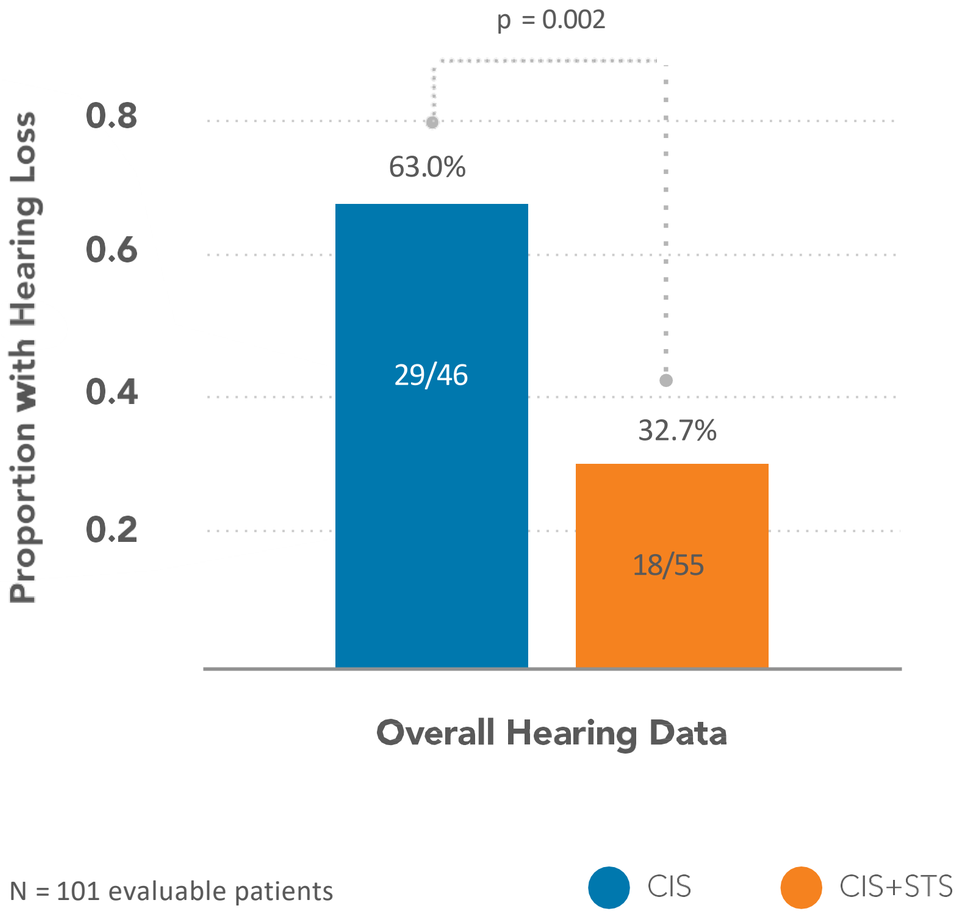
Serum sodium monitored 1 hr, 6 hrs and 18 hrs post STS

Tumor response assessed preoperatively, after 2 and 4 cycles, with serum AFP and liver imaging

In case of progressive disease : stop STS and add doxorubicin

SIOPEL 6 | New England Journal of Medicine 2018

HEARING LOSS : RANDOMIZED ARM



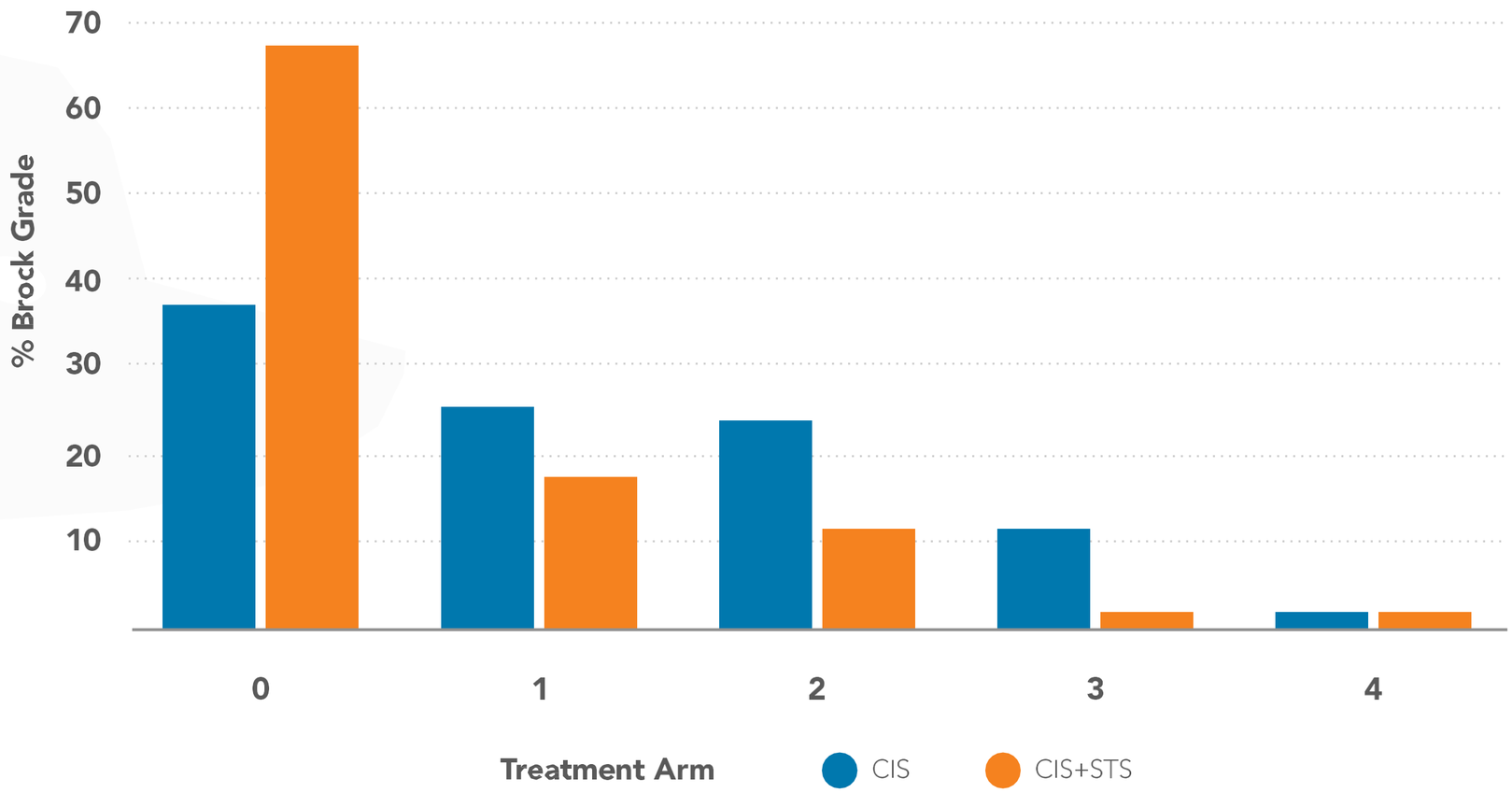
N = 101 evaluable patients

SIOPEL 6 | New England Journal of Medicine 2018

SENSITIVITY OF HEARING LOSS BY BROCK GRADE

Bilateral Hearing Loss	Grade	Designation
< 40 dB at all frequencies	0	Minimal
>= 40 dB at 8kHz only	1	Mild
>= 40 dB at 4kHz and above	2	Moderate
>= 40 dB at 2kHz and above	3	Marked
>= 40 dB at 1Khz and above	4	Severe

A Brock grade of 0 indicates hearing at less than 40 dB at all frequencies and does not necessarily equate to completely normal hearing. Grades 1, 2, 3, and 4 indicate hearing levels at 40 dB or higher at 8 kHz, 4 kHz, 2 kHz, and 1 kHz and above, respectively. The grade was determined according to the hearing level in the child's better ear.

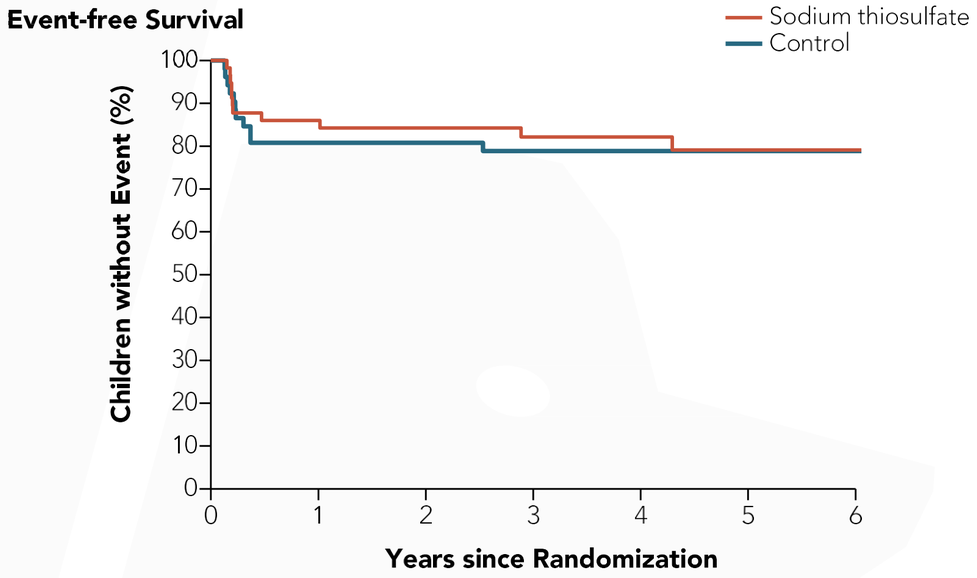


SIOPEL 6 | New England Journal of Medicine 2018

EFS/OS : RANDOMIZED ARM

Median Follow-Up 52 months

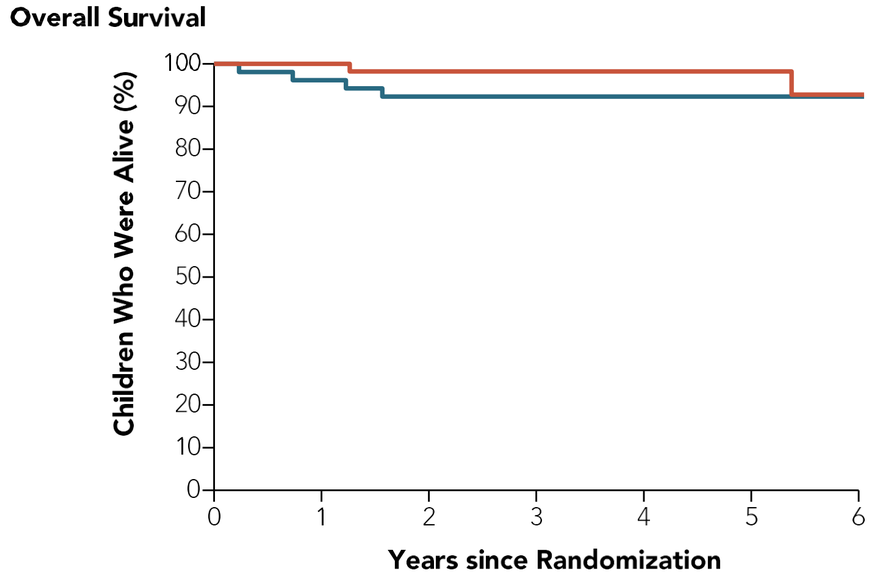
3yr-EFS : CIS 78.8% CIS+STS 82.1%



No. at Risk

Cisplatin–sodium thiosulfate	57	49	46	37	29	19	9
Cisplatin alone	52	42	42	37	22	13	8

3yr-OS : CIS 92.3% CIS+STS 98.2%



No. at Risk

Cisplatin–sodium thiosulfate	57	57	54	45	35	24	12
Cisplatin alone	52	50	48	43	28	17	11

SIOPEL 6 | New England Journal of Medicine 2018

SODIUM THIOSULFATE AND CISPLATIN INDUCED HEARING LOSS | NEJM EDITORIAL

”Taken together, these trials provide definitive evidence that sodium thiosulfate reduces the incidence of cisplatin-induced hearing loss and suggest that sodium thiosulfate is safe to use in patients with standard-risk hepatoblastoma and probably in those with other localized cancers. However, the use of sodium thiosulfate in patients with disseminated disease may affect survival, and caution is warranted in that context.”*

*David R. Freyer, D.O. | A. Lindsay Frazier, M.D. | Lillian Sung, M.D., Ph.D.

“We agree with Freyer et al. that drawing conclusions for clinical practice from our trial and ACCL04311 would support the use of sodium thiosulfate for protection from cisplatin-induced hearing loss in patients with any localized solid tumor and encourage careful further clinical assessment in patients with metastatic disease. No definitive conclusion or therapeutic direction should be drawn from any post hoc analysis, particularly in ACCL0431, in which children were not randomly assigned according to disease-specific key prognostic factors that are important in determining outcome in metastatic disease.”*

*Penelope R. Brock, M.D., Ph.D. | Rudolf Maibach, Ph.D. | Edward A. Neuwelt, M.D.

PATIENT FOCUSED DRUG DEVELOPMENT (PFDD) MEETING - SEPTEMBER 13, 2018

The PFDD meeting was organized by several patient advocacy groups to help regulators understand the burden of platinum induced hearing loss in children and establish the benefits and risks as expressed by patients and their caregivers

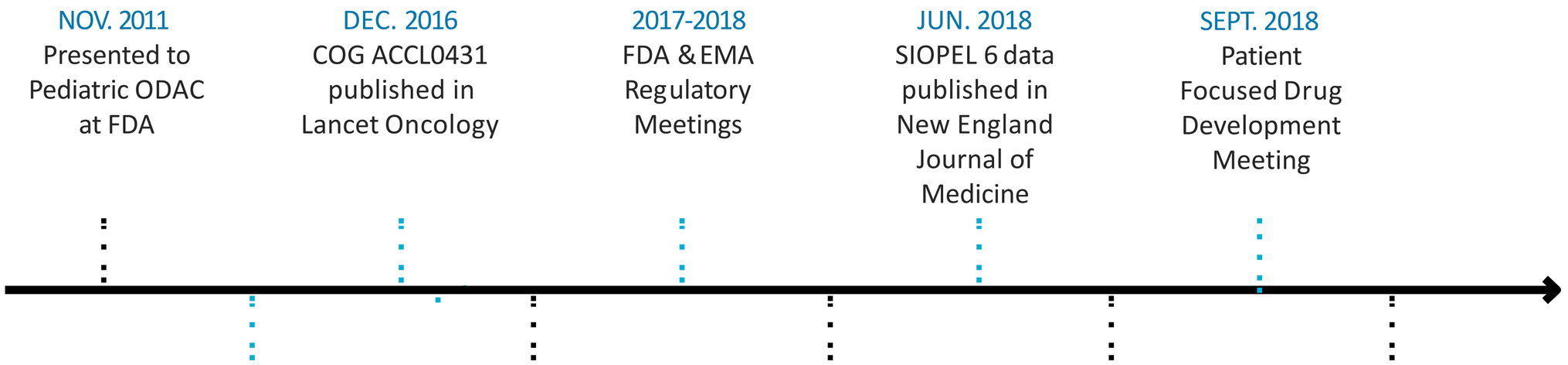
According to FDA, “Input can inform FDA’s oversight both during drug development and during our review of a marketing application.”

Over 30 long term survivors with various tumor types unanimously in agreement that hearing loss has a profound impact on their ability to live normal social lives, frequently citing loneliness, depression, lack of job opportunities and being a burden upon others

Several mothers requested that regulators put the choice back in the hands of patients and their families and make drugs like PEDMARK available to clinicians

Closing comment from Dr. Gregory Reaman, Associate Director for Oncology Sciences at the FDA, included: “assure you we heard you… we need to evaluate things differently as this is a very serious life altering toxicity”

PEDMARK™ DEVELOPMENT TIMELINE



NOV. 2011
Presented to Pediatric ODAC at FDA

JUN. 2014
COG ACCL0431 Phase 3 Preliminary Clinical Data presented at ASCO

DEC. 2016
COG ACCL0431 published in Lancet Oncology

OCT. 2017
SIOPEL 6 Final Efficacy and Safety Results presented at SIOP

2017-2018
FDA & EMA Regulatory Meetings

MAR. 2018
Fast Track and Breakthrough Therapy Granted by FDA

JUN. 2018
SIOPEL 6 data published in New England Journal of Medicine

AUG. 2018
Positive opinion received on PIP from PDCO at EMA

SEPT. 2018
Patient Focused Drug Development Meeting

DEC. 2018
Initiated rolling NDA to US FDA for patients 1 month to < 18 years of age with localized, non-metastatic, solid tumors

Pedmark Targeted Submission Completion Early 2020

CAPITAL STRUCTURE | SHARE INFORMATION

Stock Listings	FENC – NASDAQ | FRX – TSX, Canada
Current Share Price	USD $5.4
Shares Outstanding	19.9M
Market Cap	USD $107.46M
Insider Ownership	Approx. 9% fully diluted
Cash @ Sept 30, 2019	USD $15.2M
2018 Cash Burn	USD $8.0M
Debt	$0 with $12.5M facility to be funded at the Company's option upon NDA approval

INSTITUTIONAL OWNERSHIP

Southpoint Capital – 20%

Leadiant Bio – 16%

683 Capital – 6%

Avoro Capital Advisors – 6%

Eventide Funds – 4%

BOARD OF DIRECTORS & MANAGEMENT

Dr. Khalid Islam | Chairman

Former Chairman & CEO at Gentium S.p.A. Sold to Jazz Pharma for $1 billion.

Dr. Marco Brughera | Director

Currently CEO & Global Head of Leadiant Bio (Sigma Tau Rare Disease). Successfully out licensed defibrotide US rights to Jazz Pharma and sold Oncaspar to Baxalta for $1 billion.

Adrian Haigh | Director

Currently SVP & General Manager PTC Therapeutics, Inc. Previously COO at Gentium S.p.A. Sold to Jazz Pharma for $1 billion.

Chris Rallis | Director

Previously President & COO of Triangle Pharmaceuticals. Sold to Gilead for $500 million.

Jodi A. Cook, PhD | Director

Head of Gene Therapy Strategy at PTC Therapeutics, Inc. Prior to joining PTC Therapeutics, she was one of the founding members of Agilis Biotherapeutics, a clinical-stage company focused on gene therapies for patients with rare diseases which was sold to PTC Therapeutics in 2018.

Rosty Raykov | CEO & Board Member

Robert Andrade | Chief Financial Officer

Shubh Goel | Chief Commercial Officer

Mark Gowland | Controller

FENNEC PHARMA

FOR FURTHER INFORMATION, PLEASE CONTACT:

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