



FENNEC PHARMA

Corporate Presentation

August 2015

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.

Company Overview

- **US based biopharmaceutical company focused on the development of Sodium Thiosulfate (STS) for the prevention of platinum-induced ototoxicity in pediatric patients**
 - **Granted FDA Orphan Drug Designation – 7.5 years market exclusivity**
 - **Potential for European Market Exclusivity for Pediatric Use – 10 years upon approval**
- **STS has completed enrollment of two Phase 3 trials**
 - **COG Study ACCL0431 achieved primary efficacy endpoint of greater than 50% improvement in hearing – 2014 ASCO**
 - **SIOPEL 6 presented no adverse outcome related to STS on end of treatment anti-tumor efficacy after final safety interim review – 2015 ASCO**
- **STS has the potential to fill a significant unmet medical need with no approved treatment on market or in development**

Platinum Hearing Loss is Frequent, Severe and Irreversible

Globally, >7,000 children receive platinum based chemotherapy for localized cancers

- USA: 2,000 EU: 3,000 RoW: 2,000

At least 60% develop profound irreversible ototoxicity*

- Ototoxicity is a dose-limiting side effect
- Effect can be seen after as little as the second or third dose
- Loss of high frequency hearing sensitivity (consonants /f/th/p/k/h/t)
- Background noise compounds disability in critical settings
- Infants and young children at critical stage of development, lack speech language development and literacy
- Older children & adolescents lack social-emotional development and educational achievement

Devastating and life long impact on Quality of Life



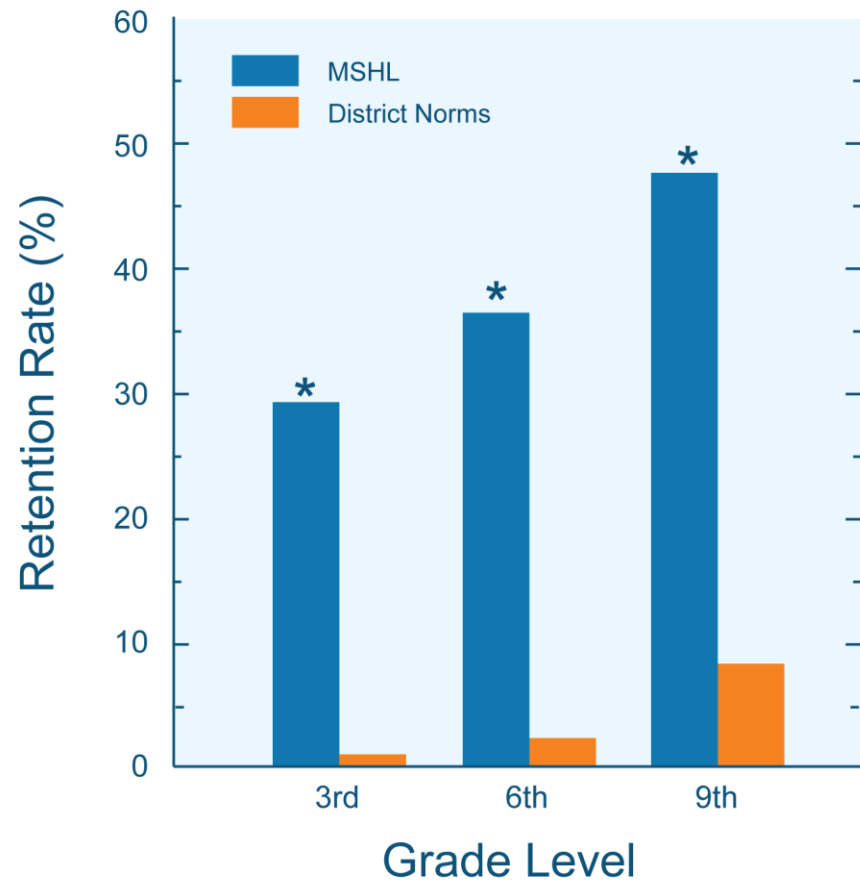
Devastating Impact on Quality of Life

Even minimal hearing loss (MSHL) is damaging

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

Neuroblastoma survivors with hearing loss

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

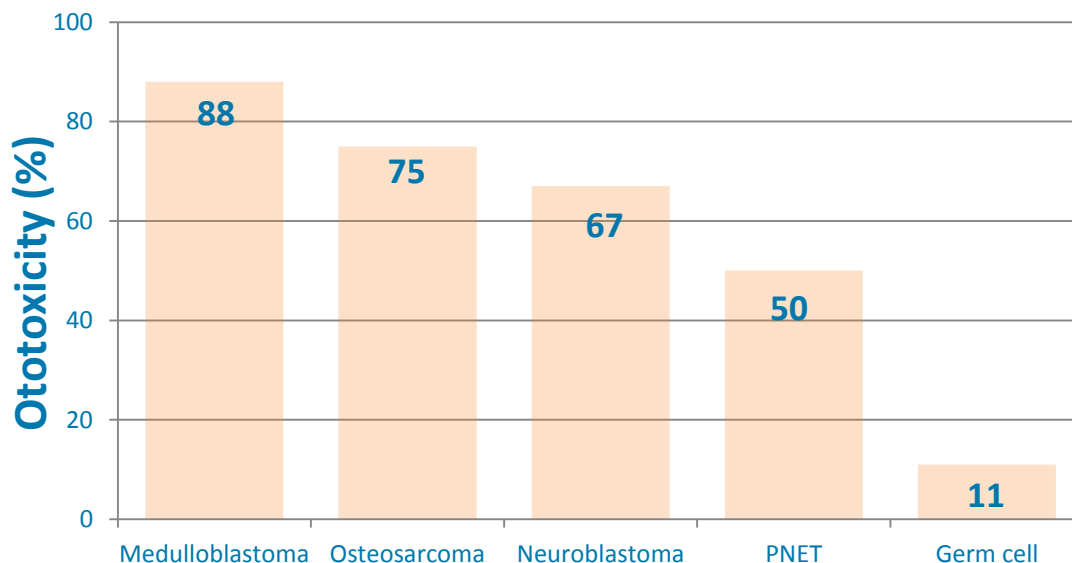
Ototoxicity in Children Treated with Cisplatin and/or Carboplatin*

61% bilateral hearing loss (ASHA criteria) at the end of treatment

41% required hearing aids that only partially restore hearing

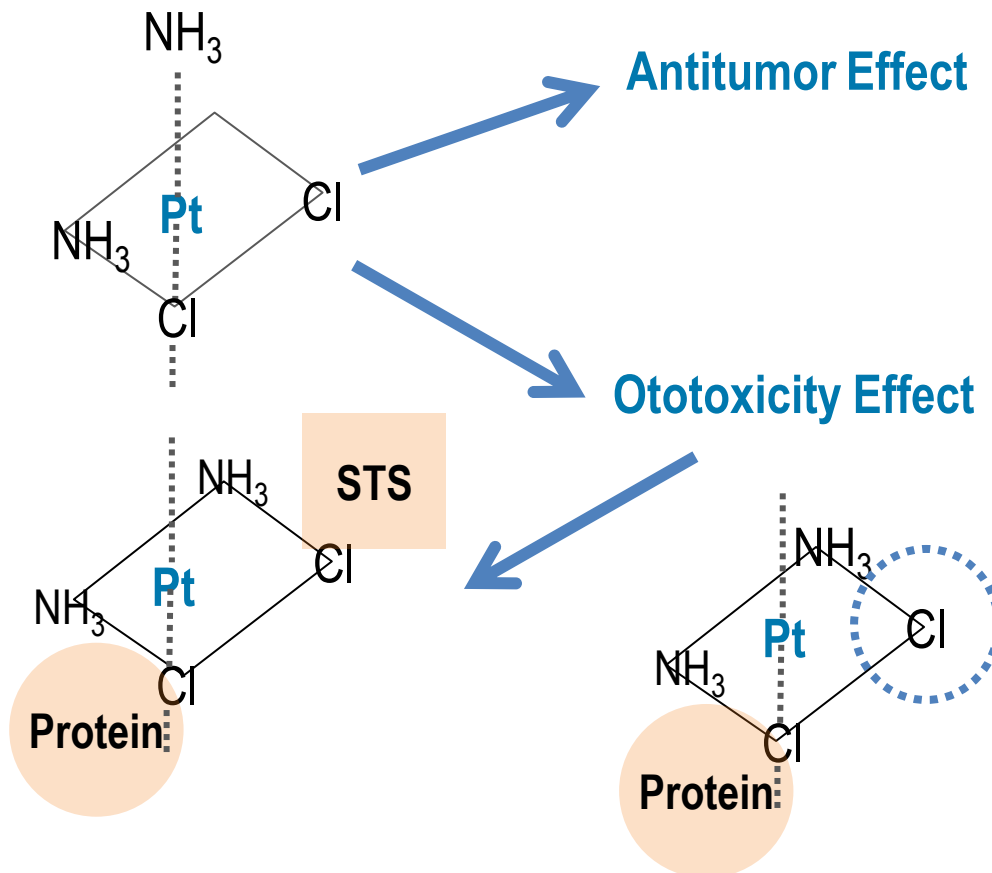
22% of patients had dose reductions due to ototoxicity

N=67 age 8 m -20 years



*Gilmer-Knight et al., Journal of Clinical Oncology, 2005, 23:8588-96

Target and Proposed STS Mechanism



- Requires both Cl unbound to crosslink DNA
- Binding to plasma proteins occurs within first hour which inactivates one binding site
- Free cDDP (unbound) short t_{1/2}: 1.5 hr
- Requires one Cl unbound to affect cochlear hair cells
- Binding to plasma proteins occurs within first hour which inactivates one binding site
- STS will bind second site preventing ototoxicity

SIOPEL 6: Rand. Phase 3 Study - Efficacy of STS in Reducing Ototoxicity in Hepatoblastoma Patients

- Newly diagnosed children with standard risk hepatoblastoma
- Single localized disease with very high historic survival rates
- Cisplatin monotherapy treatment
- Study Chair: Peppy Brock, MD, PhD, FRCPCH, International Chair of SIOPEL 6
- 116 randomized patients – recruitment completed December 2014
- 113 Enrolled / 109 Evaluable
- IDMC safety reviews of 20, 40, 60, 80 and 100 patients each time recommended study continue
- Last interim safety analysis of 100 patients presented at ASCO '15

SIOPEL 6: Objectives and Primary Endpoint

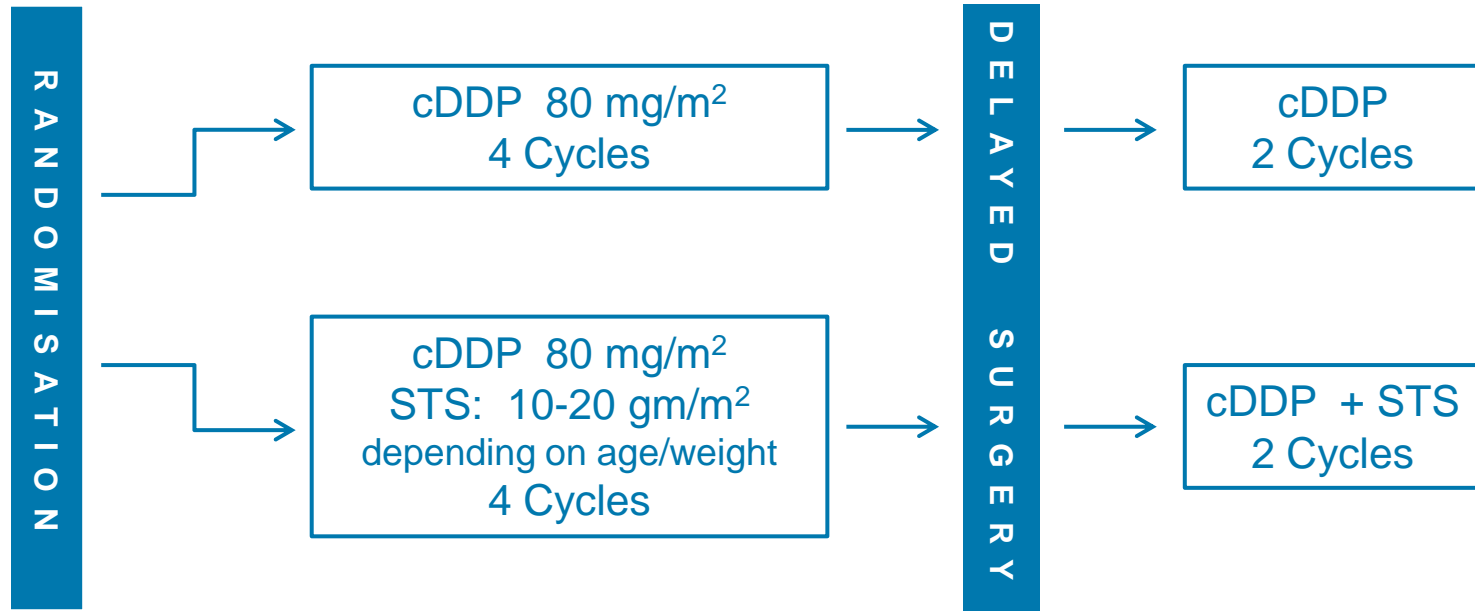
Objectives:

- To assess the efficacy of STS to reduce the hearing impairment caused by Cisplatin (CDDP)
- To carefully monitor any potential impact of STS on response to CDDP and survival

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
- Two interim and one final efficacy analyses planned for early stopping in case of a greater than expected difference between treatment arms in terms of hearing loss

SIOPEL 6 – Study Design



SIOPEL 6: Early Efficacy and Tolerability Results

ASCO 2015 Poster

- Status at end of treatment (6 cycles) for 109 evaluable patients

Efficacy	Cisplatin (n=52)	Cisplatin + STS (n=57)
Complete response	44 (84.6%)	52 (91.2%)
Stable disease	3 (5.8%)	4 (7.0%)
Progressive disease	2 (3.9%)	0
Died (1)	1 (1.9%)	0
Not available	2 (3.9%)	1 (1.8%)

(1) Died from surgical complications

SIOPEL 6: Early Efficacy and Tolerability Results

ASCO 2015 Poster

- Status at last follow up for 109 evaluable patients

Efficacy	Cisplatin (n=52)	Cisplatin + STS (n=57)
Complete Response	48 (92.3%)	52 (91.2%)
Non CR	1 (1.9%)	3 (5.3%)
Died	3 (5.8%)	1 (1.8%)
Not available	0	1 (1.8%)

SIOPEL 6: Early Efficacy and Tolerability Results

ASCO 2015 Poster

Grade 3 and 4 Acute Toxicities		Cisplatin (n=52)	Cisplatin + STS (n=57)
Allergy	3	1 (1.9%)	0
Febrile neutropenia	3	4 (7.7%)	5 (8.8%)
Infection	3	5 (9.6%)	6 (10.5%)
Hypomagnesaemia	3	1 (1.9%)	1 (1.8%)
Hypermatremia	3	0	1 (1.8%)
Vomiting	3	1 (1.9%)	3 (5.3%)
Nausea	3	3 (5.8%)	2 (3.5%)
Left ventricular systolic disfunc.	3,4	0	0
Other toxicities	3	14 (26.9%)	20 (35.1%)
Other toxicities	4	3 (5.8%)	5 (8.8%)

Other G3/4 toxicities encompass: hematological, liver and other biochemistry parameters.

SIOPEL 6: Conclusions

ASCO 2015 Poster

- This randomized phase III trial shows that it is safe to treat standard risk hepatoblastoma with six cycles of Cisplatin monotherapy with the addition of the chemoprotectant, Sodium Thiosulfate, provided that protocol instructions to add doxorubicin and stop STS in the case of a rise in AFP during treatment are followed
- The response to 4 cycles of pre-operative chemotherapy and the status at the end of treatment are comparable. The number of children developing progressive disease or receiving additional doxorubicin is equivalent
- The final analysis of the audiological end point of this trial is expected in approximately 2 years when all children will have reached 3.5 years of age

COG ACCL0431: Randomized Phase 3 Study of STS for Prevention of Cisplatin-induced Hearing Loss

- Newly diagnosed children with hepatoblastoma, germ cell tumor, osteosarcoma, neuroblastoma, medulloblastoma, and others
- Local and metastatic disease
- Study Chair: David Freyer, DO, MS
- 131 randomized patients fully enrolled
- 126 eligible patients
- Study completed in 1Q 2012 with data presented at ASCO 2014

COG ACCL0431: Specific Aims

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) criteria¹:
 - > 20 dB loss at 1 frequency or > 10 dB at 2 consecutive frequencies

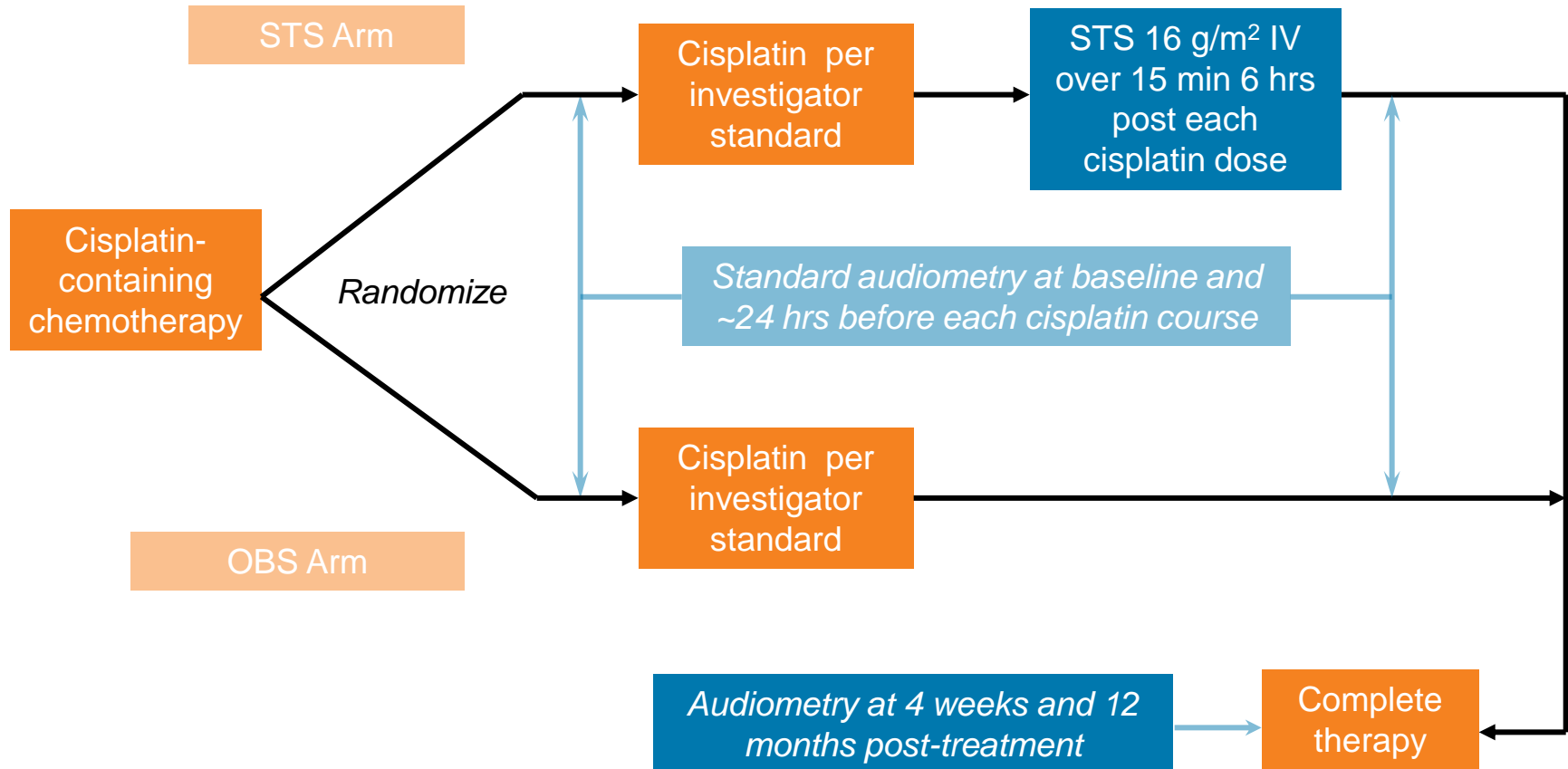
Secondary Endpoints

- 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

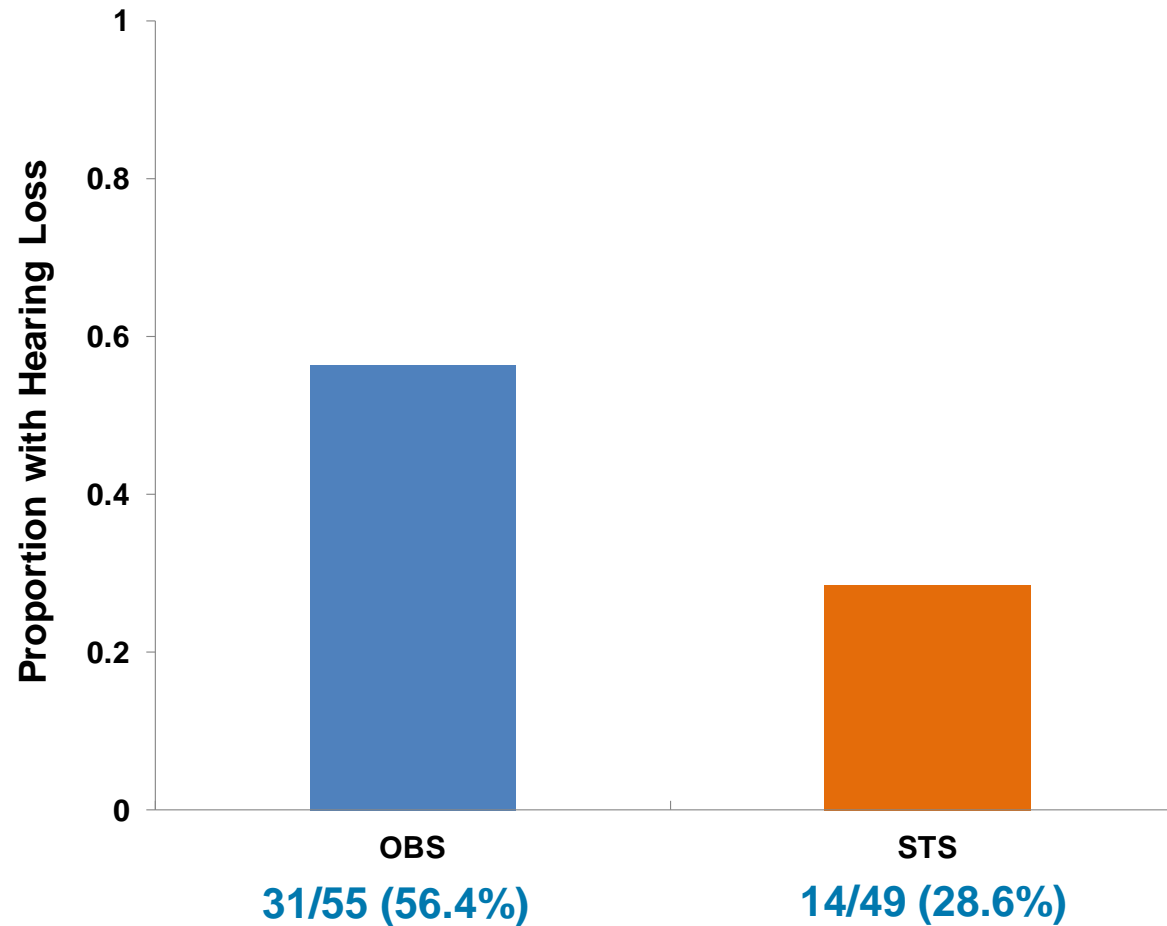
Patient Characteristics

Characteristic	Observation (%)	STS (%)
Eligible	64	62
Germ Cell Tumor	16 (25.0)	16 (25.8)
Osteosarcoma	15 (23.4)	15 (24.2)
Medulloblastoma	14 (21.9)	12 (19.4)
Neuroblastoma	12 (18.8)	14 (22.6)
Hepatoblastoma	5 (7.8)	2 (3.2)
Other	2 (3.1)	3 (4.8)
Extent of Disease		
Localized	38 (59.4)	40 (64.5)
Disseminated	26 (40.6)	21 (33.9)
Unknown	0	1 (1.6)
Cum. CDDP dose (mg/m ²)	389 (198-1441)	393 (91-605)
Prior Cranial Irradiation	5	4

COG ACCL0431: Study Design

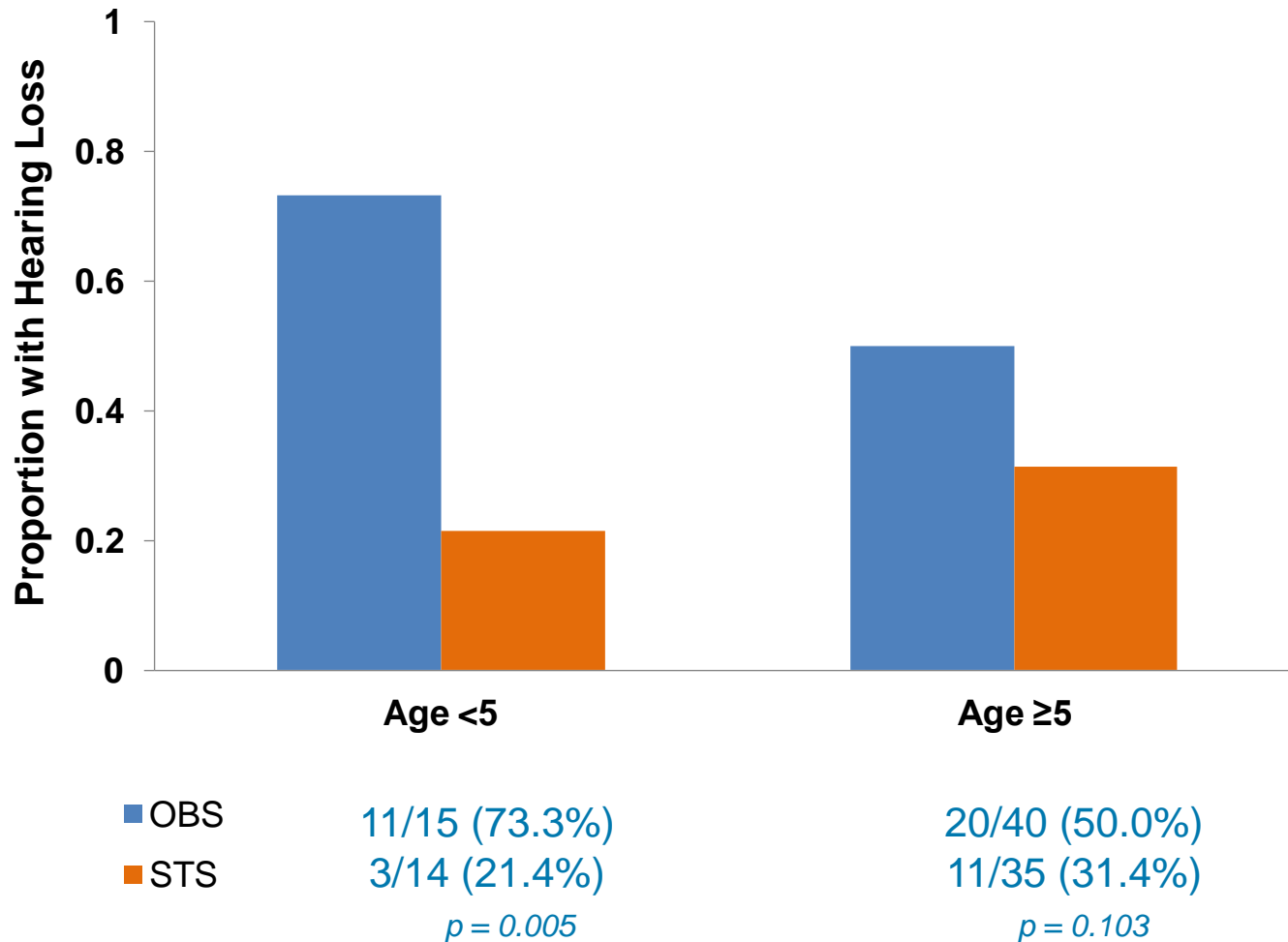


Hearing Loss By Randomized Arm

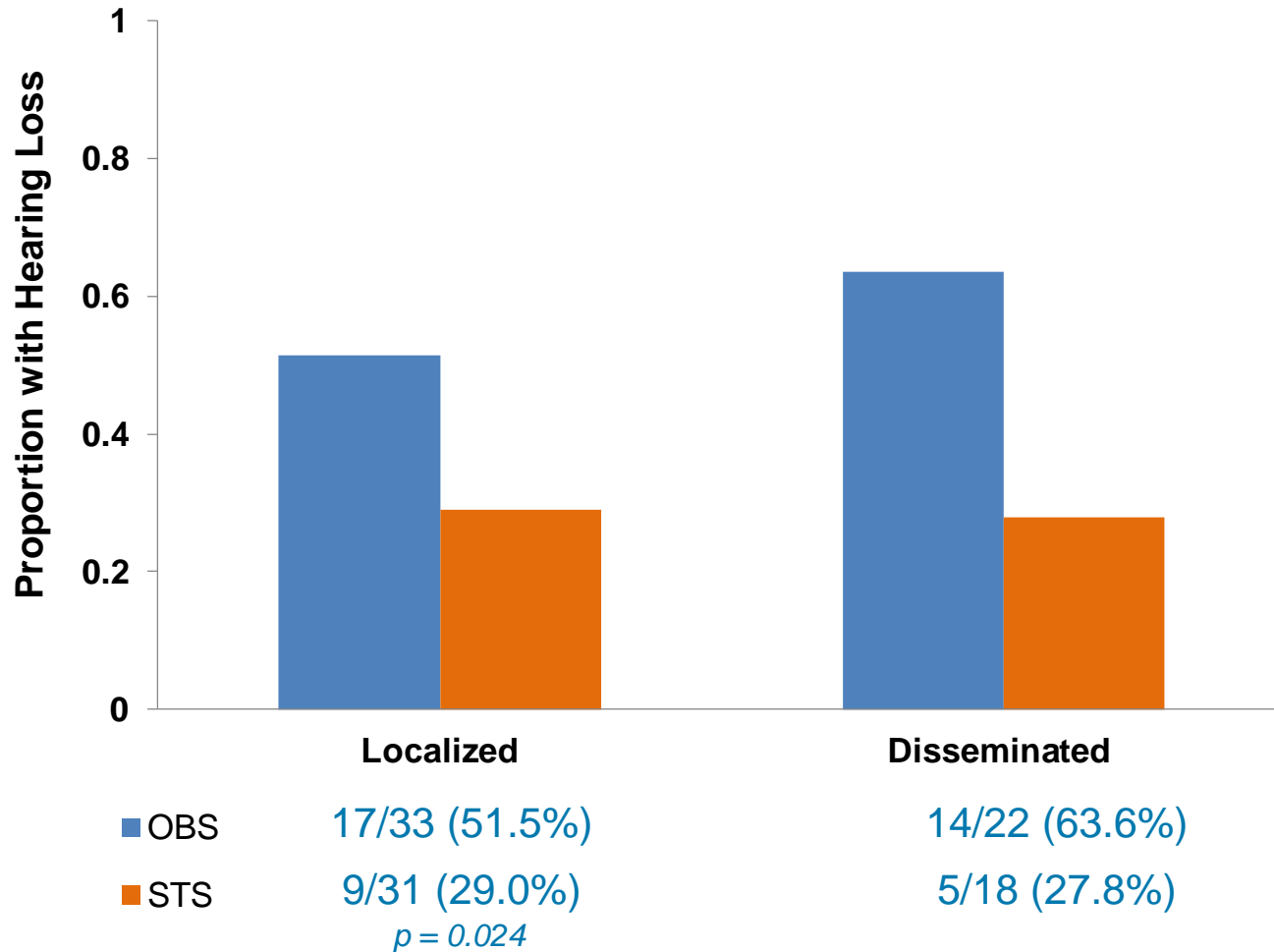


n=104 evaluable patients / p = 0.004

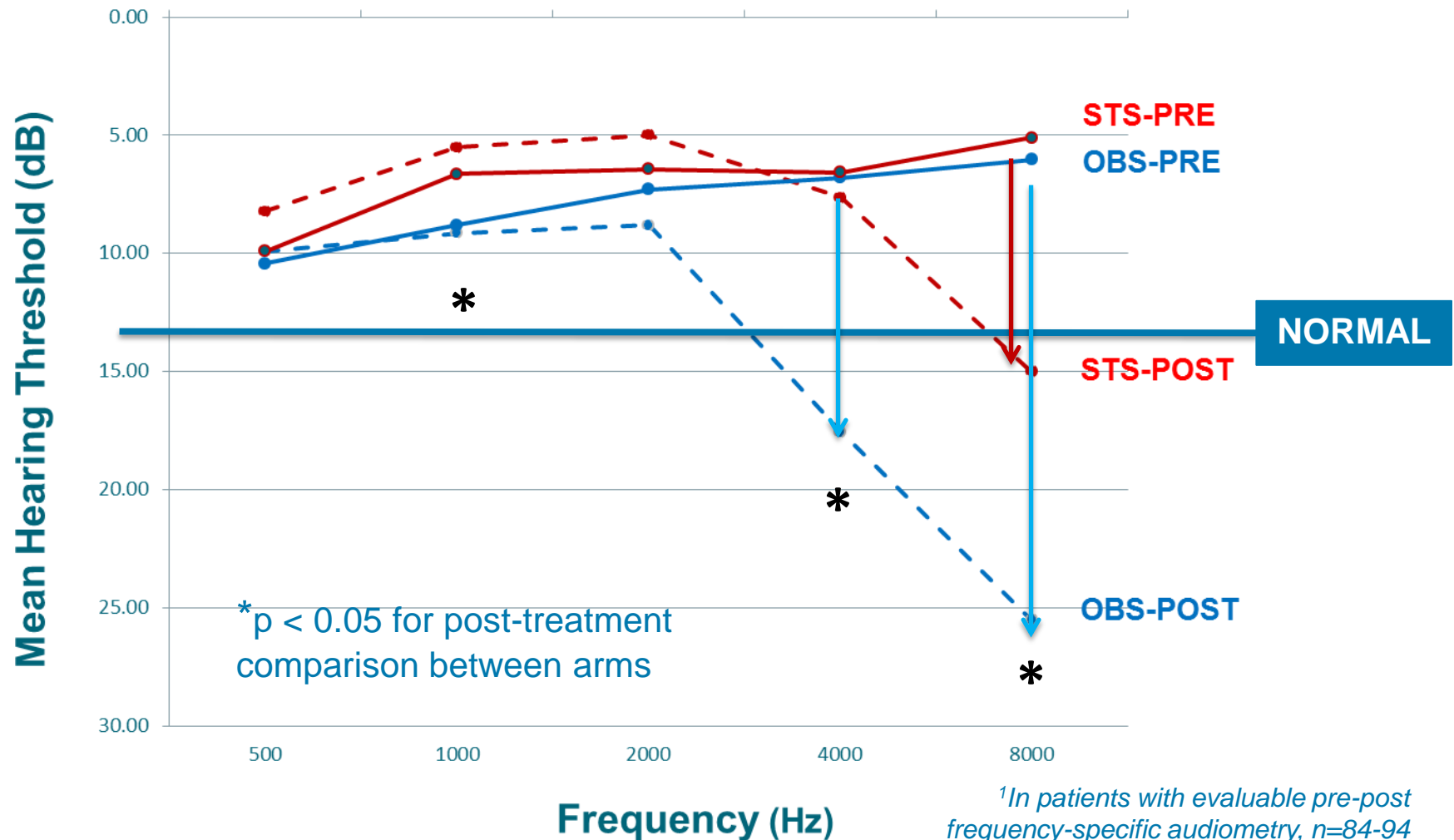
Hearing Loss By Randomized Arm and Age



Hearing Loss By Randomized Arm and Disease



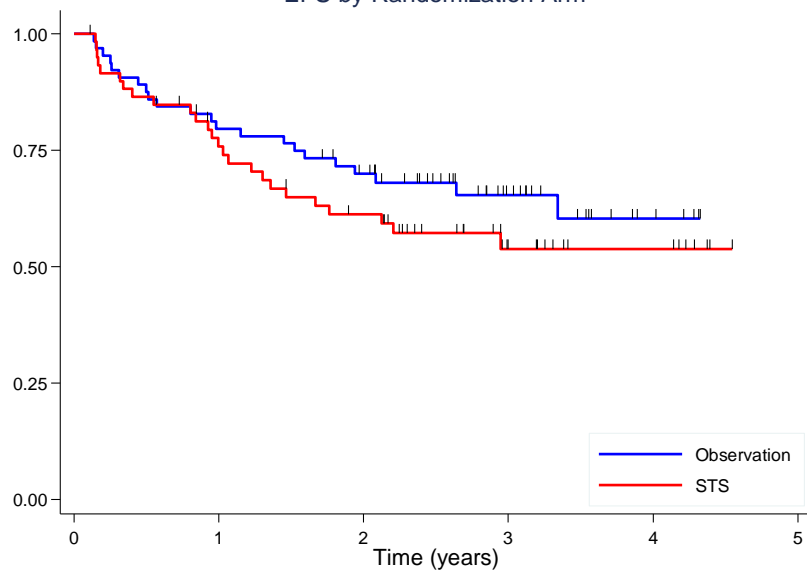
Change in Mean Hearing Thresholds by Randomized Arm¹



EFS/OS by Randomization Arm

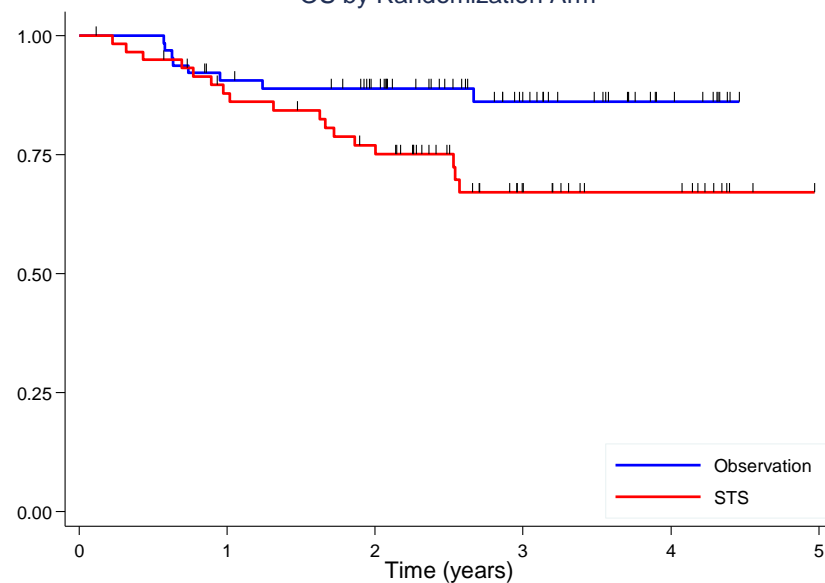
All Patients, n=126 at median f/u of 2.9 yrs

EFS by Randomization Arm



Log Rank $p = 0.31$

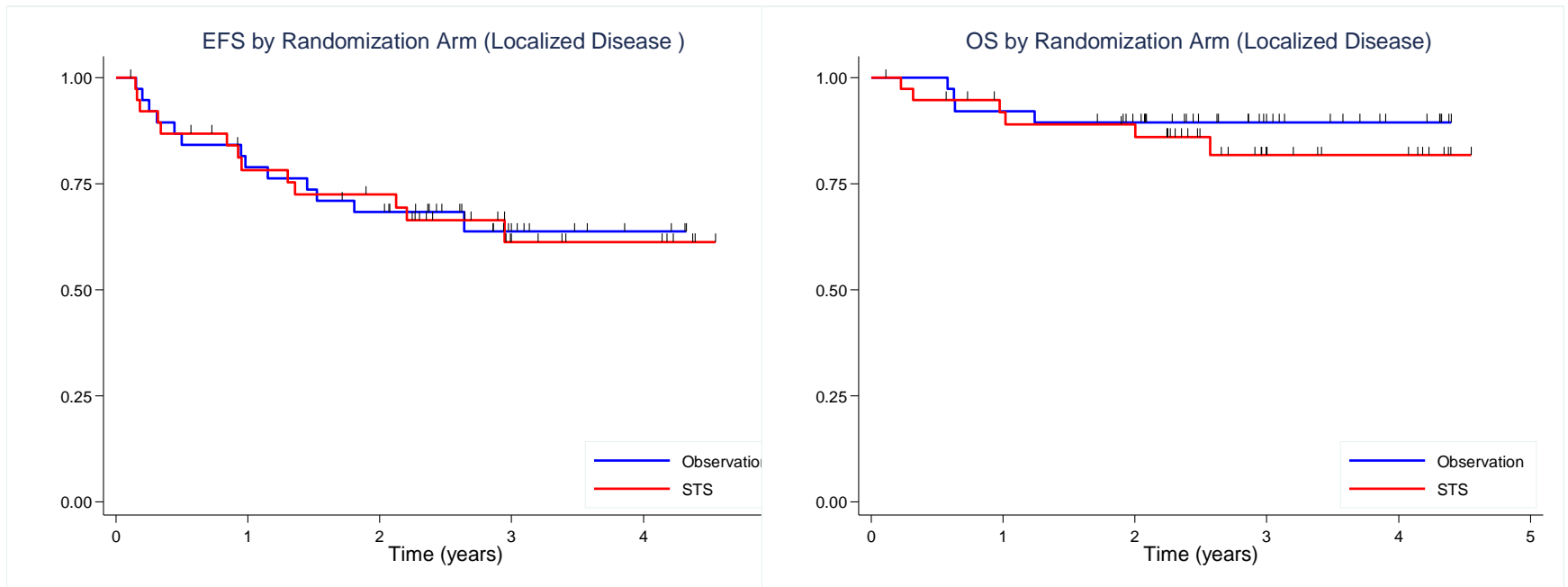
OS by Randomization Arm



Log Rank $p = 0.03$

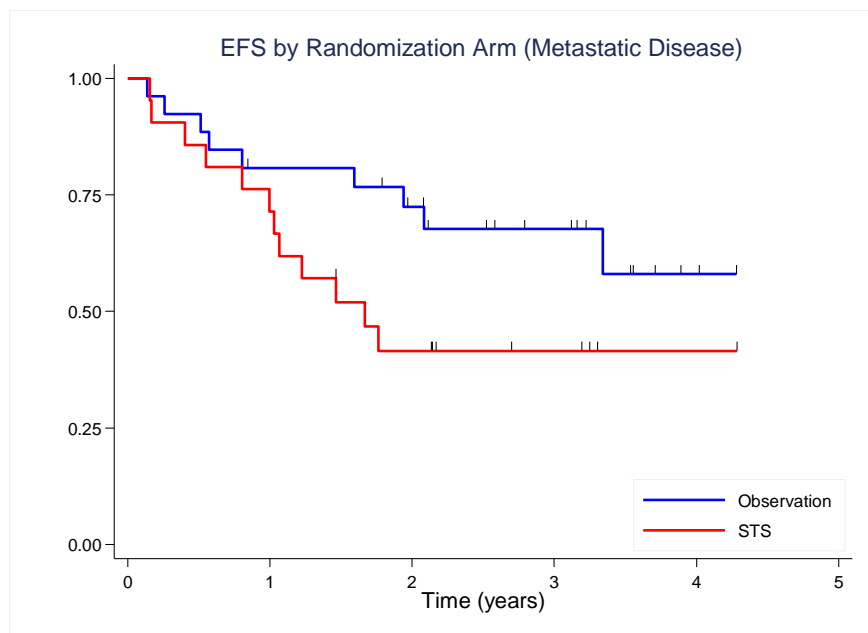
EFS/OS by Randomization Arm

Localized Disease Only, n=78

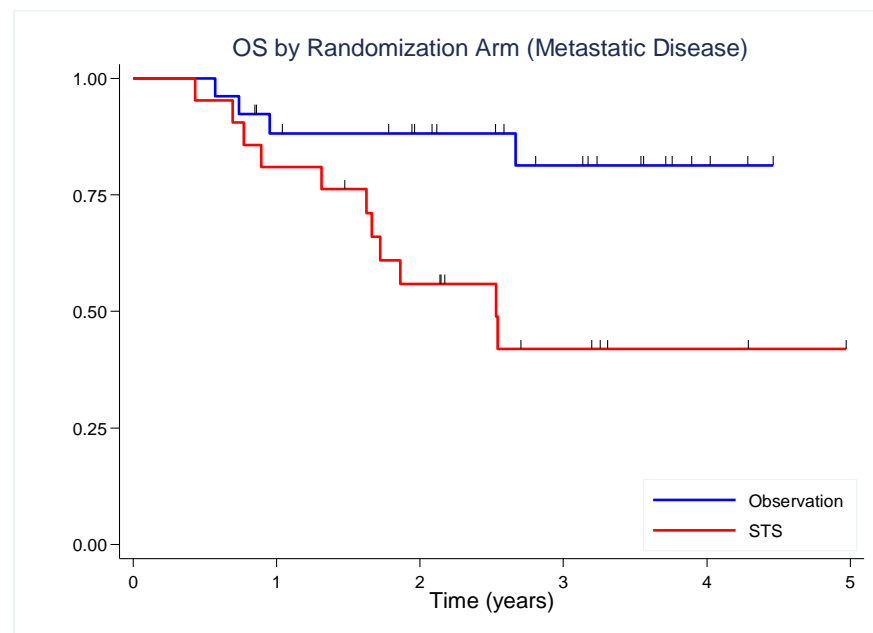


EFS/OS by Randomization Arm

Disseminated Disease Only, n=47



Log Rank $p = 0.085$



Log Rank $p = 0.011$

COG ACCL0431: Conclusions

- STS protects against cisplatin-induced hearing loss in children
- STS appears to be safe in patients with localized disease
- Lower overall survival among children with disseminated cancer at onset of treatment, tumor protection or artifact?*

* The protocol did not specify a subset analysis of *localized* vs. *metastatic* disease.

STS: Development Strategy

EVENT	TIMING
FDA Type C Clinical Development Meeting ✓	Mar 2011
Presented to Pediatric ODAC ✓ ODAC recognized challenge of demonstrating STS does not reduce efficacy of cisplatin and agreed adult study would not be appropriate	Nov 2011
COG ACCL0431 Phase 3 Clinical Data ✓	Jun 2014
SIOPEL 6 Phase 3 Final Interim Safety Analysis (N=100)✓	Feb 2015
SIOPEL 6 Phase 3 Safety and End of Treatment Anti Tumor Efficacy Results ✓	May 2015
SIOPEL 6 Phase 3 Primary Endpoint Interim Efficacy Results (N=68)	H1 2016
FDA & EMA Regulatory Development Meetings	H1 2016
NDA/MAA Submissions	TBD

Capital Structure and Share Information

Stock Listings	FRX – TSX, Canada FENCF – OTCQB, USA
Current Share Price	USD\$2.30
Shares Outstanding (millions)	10.9
Market Cap. (millions)	USD\$25.3
Warrants (millions)	1.3 with USD \$1.50 exercise price (Nov. 22, 2018) 0.1 with USD \$1.50 exercise price (Mar. 29, 2016) 0.4 with USD \$3.60 exercise price (Dec. 3, 2016) 0.8 with CAD\$4.32 exercise price (Mar. 29, 2016)
Insider Ownership	Approx. 10% fully diluted
Cash@ June 30, 2015	USD\$1.9 million with no debt
2015 Cash Burn	USD\$1.8 million
Institutional Ownership	Southpoint Capital – 36%; Manchester Mgmt – 16%; 683 Capital – 8%

Board of Directors and Management

Adrian Haigh – Director

- Currently SVP and General Manager PTC Therapeutics. Previously COO at Gentium S.p.A. - sold to Jazz Pharma for \$1 billion.

Dr. Khalid Islam – Director

- Chairman and CEO 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.

Steve Skolsky – Director

- Currently Global Head of Site Management at Quintiles. Previously President and CEO of Sequoia Pharmaceuticals and CEO of Trimeris.

Rosty Raykov – Chairman and CEO

Robert Andrade – Corp. Development

Anne McKay – Regulatory Affairs

Franck Rousseau, MD – Development Advisor

Lei Fang – Biostatistics

Krysia Lynes – CFO

Lex Smith – Pharmaceutical Development

Roy Swaringen – Chemical Development

STS Investment Highlights

- US Orphan Drug Designation (7.5 years market exclusivity)
- Potential for European Market Exclusivity for Pediatric Use (10 years)
- Completed enrollment of two Phase 3 trials
- COG Phase 3 trial achieved primary endpoint for hearing
- SIOPEL 6 Phase 3 trial reported no adverse outcomes of STS plus Cisplatin vs. Cisplatin alone
- Significant unmet medical need with no approved treatment on market or in development
- Fennec has exclusive regulatory rights to data from both studies
- Well positioned to initiate discussions with US & European regulators once hearing data is available from SIOPEL 6