Targeted Therapies for People of All Ages

June 2022

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This presentation and the accompanying oral commentary contain forward-looking statements that are based on our management's beliefs and assumptions and on information currently available to our management. Forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified. In some cases, you can identify forward-looking statements by terminology such as "may," "will," "should," "could," "expect," "plan," anticipate," "believe," "estimate," "predict," "intend," "potential," "would," "continue," "ongoing" or the negative of these terms or other comparable terminology. Forward-looking statements include all statements other than statements of historical fact contained in this presentation, including information concerning our future financial performance, including the sufficiency of our cash and cash equivalents to fund our operations, business plans and objectives, timing and success of our planned nonclinical and clinical development activities, timing and results of nonclinical studies and clinical trials, efficacy and safety profile of our product candidates, the execution of the Phase 2 clinical trial for DAY101 as designed, any expectations about safety, efficacy, timing and ability to complete clinical trials and to obtain regulatory approvals for DAY101 and other candidates in development, the ability of DAY101 to treat pLGG or related indications, the potential therapeutic benefits and economic value of our product candidates, potential growth opportunities, competitive position, industry environment and potential market opportunities, our ability to protect intellectual property, and the impact of the COVID-19 pandemic on our business and operations.

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Day One: Developing Targeted Therapies That Address The Urgent Needs of Children With Cancer

	Mission That Creates Value		Tovorafenib (DAY101) Lead Program		Growing Portfolio and Runway Beyond Clinical Milestones
	Day One's mission is to help children with cancer, from day one and every day after	•	Investigational, oral, CNS-penetrant pan-RAF inhibitor	•	 Two clinical-stage MEKi assets, in-licensed for combination trials
•	Develop medicines for genomically- defined cancers Establish first-in-class position through rapid pediatric registration	•	Being studied as tablets and pediatric-friendly liquid suspension Breakthrough Therapy Designation Rare Pediatric Disease Designation		 Projected cash runway into 2025 Multiple key milestones: Top-line data from FIREFLY-1 trial in Q1 2023, NDA
	Expand to adolescent and adult populations in parallel and pursue those opportunities with the same commitment we do for children	•	Orphan Drug Designation (US/EU)		 submission in 1H 2023, if data are supportive First patient dosed in frontline pLGG, Phase 3 (FIREFLY-2 /LOGGIC) trial expected Q3 2022

Pediatric Markets Create Opportunity for High Impact and Capital Efficiency



Regulatory and reimbursement tailwinds

- Lack of approved products create potential first-in-class opportunities
- Pricing flexibility for important new therapies
- Supportive and engaged advocacy and investigator community desiring better treatment options





Enriched responder populations informed by underlying biology

- Many pediatric tumors are genetically simple and genomically stable
- Genetic alterations are often oncogenic

Rapid clinical development

- Early engagement with global regulatory authorities
- Small trials and clear endpoints that permit rapid development to clinical proof-of-concept and potential approval

A Senior Team with Deep Experience Developing and Commercializing Products in Pediatric and Adult Oncology Markets



Jeremy Bender, PhD, MBA Chief Executive Officer

VP of Corporate Development at Gilead; COO Tizona Therapeutics; CBO Sutro Biopharma; founding Board member of VaxCyte



Samuel Blackman, MD, PhD Chief Medical Officer & Founder

Pediatric Heme/Onc and Neuro-Onc; Oncology Clinical Development at Mavupharma, Silverback, Juno, Seattle Genetics, GSK



Charles York II, MBA Chief Operating and Financial Officer

CFO and Head of Corporate Development at Aeglea; Consulting CFO at Bridgepoint Consulting; PricewaterhouseCoopers



Lisa Bowers Chief Commercial Officer

CEO of Rhia Ventures, COO of The Tara Health Foundation, VP of the North American Supply Chain and Commercial Leader at Genentech



Mike Preigh, PhD Chief Technical Officer

Head of CMC at Array for 10+ years. Brought >20 drug candidates to IND & clinical development



Davy Chiodin, PharmD Chief Development Officer

VP Regulatory Science, Acerta/AZ; Global Regulatory Leader, Pediatric Oncology, Roche/Genentech



Jaa Roberson Chief People Officer

Head of Human Resources at Bellicum Pharmaceuticals; Human Resources Roles at Achaogen, Roche/Genentech

Our Pipeline

Product Candidate	Indication	Preclinical	Phase 1	Phase 2	Phase 3	Recent & Anticipated Milestones
 Tovorafenib (DAY101) Type II Pan-RAF Inhibitor FDA Breakthrough Therapy Designation for relapsed pLGG FDA Rare Pediatric Disease Designation (PRV Eligible) for pLGG FDA Orphan Drug Designation for gliomas EC Orphan Designation for gliomas 	Relapsed pLGG	FIREFLY-1 ¹ (pivotal)				Pivotal cohort enrollment complete: May 2022 Initial data presented: June 2022 Topline data expected: Q1 2023
	Frontline pLGG	FIREFLY-2 (pivotal)				First patient dosed expected: Q3 2022
	RAF-altered solid tumors ² (monotherapy)	FIRELIGHT-1*	RELIGHTS			First patient dosed: November 2021
Pimasertib MEK 1/2 Inhibitor	MAPK-altered solid tumors ³ (Combo w/Tovorafenib)	FIRELIGHT-1*	RELIGHT.			First patient dosed: May 2022

*Includes patients >12 years of age. ¹ FIREFLY-1 Arm 1 expected to support registration. ² DAY101 adult monotherapy Phase 1 dose escalation and expansion trial previously completed. ³ Pimasertib Phase 1 dose escalation and expansion trial previously completed. pLGG, pediatric low-grade glioma. Tovorafenib and Pimasertib are investigational products. Safety and efficacy have not been established by any health authority. Day One Biopharmaceuticals

Tovorafenib (DAY101)

Type II Pan-RAF Inhibitor

Pediatric Low-Grade Gliomas (pLGG)

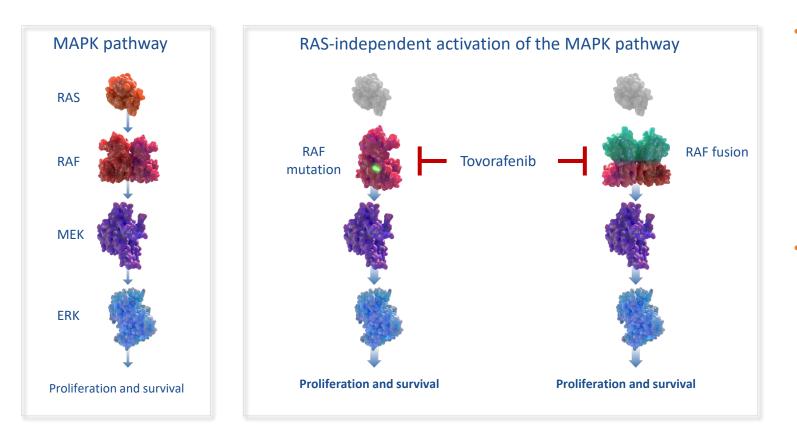


6 y/o with large relapsed BRAF fusion-positive optic pathway glioma

- Despite being the most common brain tumor in children, there are no approved agents and no standard-of-care for the majority of patients with relapsed/progressive disease^{1,2}
 - 70% of patients will require systemic therapy
 - Patients have a high rate of recurrence and are frequently treated with multiple lines of systemic therapy over the course of their disease
- The majority of pLGGs are driven by BRAF alterations³
 - 85% of BRAF-altered tumors harbor a *KIAA1549-BRAF* gene fusion
 - 15% are driven by BRAF V600E mutation
- Despite low-grade histology and high long-term survival, pLGGs are chronic and relentless¹⁻⁴
 - Goal of therapy is to stabilize or shrink tumors while minimizing treatment-associated toxicities from surgery, chemotherapy, and radiation
 - Many patients today suffer profound tumor and treatment-associated morbidity and significant late effects that persist throughout life

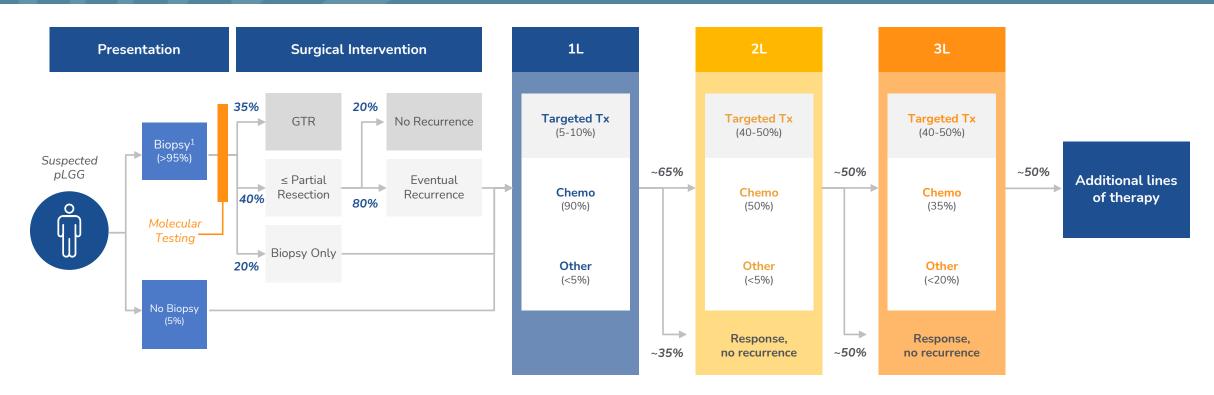
^{1.} Ostrum QT et al., Neuro Oncol. 2015; 16(Suppl 10):x1-x36; 2. De Blank P. et al., Curr Opin Pediatr. 2019 Feb; 31(1):21-27. 3. Jones DTW et al., Cancer Res. 2008; 68:8673–77. 4. Traunwieser T et al., Neurooncol Adv. 2020; 2:vdaa094;

Tovorafenib (DAY101) Inhibits Both BRAF Fusions and BRAF V600 Mutations



- Tovorafenib (DAY101) is an investigational, oral, selective, CNS-penetrant, type II pan-RAF inhibitor that was designed to inhibit both monomeric and dimeric RAF kinase
 - Activity in tumors driven by both RAF wildtype fusions and BRAF V600E mutations
 - Tablet and pediatric-friendly liquid suspension; once weekly dosing
- Currently approved type I RAFi are indicated for use only in adults and patients 6+ with relapsed tumors harboring a BRAF V600 mutation
 - Type I RAF inhibitors cause paradoxical MAPK activation in the setting of wild-type RAF, increasing the risk of tumor growth in *BRAF* fusion-driven and other non-V600 mutant cancers

The Current pLGG Treatment Paradigm Reflects the Unrelenting Nature of this Chronic Brain Tumor



Because many pLGGs undergo senescence when patients reach their 20s, the goal of therapy is to **maximize tumor control** while **minimizing treatment-associated toxicities** from surgery, chemotherapy, and radiation. As a result, a large number of pLGG patients will undergo **multiple lines of systemic therapy** over the course of their disease.

Source: Physician Interviews, Bandopadhayay et al. Pediatric Blood Cancer. 2014; Sievert and Fischer. J Child Neurol. 2009; ClearView Analysis. GTR: Gross Total Resection 1Molecular testing of biopsied samples occurs in all patients. Kandels et. al. Retrospective analysis of comprehensive SIOP registry; Hargrave et. al. Phase I/II;Fangusaro et. al. Phase II

Pivotal Phase 2 Trial Of Monotherapy Tovorafenib (DAY101) In Relapsed Or Progressive pLGG (FIREFLY-1)

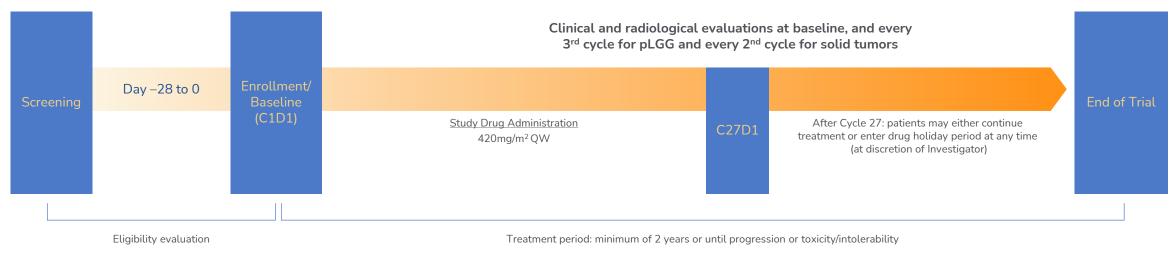


Trial Design

- Three arm, open-label, global registrational phase 2 trial
- Pivotal arm 1 (recurrent/progressive LGG): n = ~ 60 RANO-evaluable patients aged 6 months to 25 years harboring a *KIAA1549-BRAF* fusion or BRAF V600 mutation
- Arm 2 (expanded access recurrent/progressive LGG): patients aged 6 months to 25 years harboring an activating RAF alteration
- Arm 3 (extracranial solid tumors): patients aged 6 months to 25 years harboring an activating RAF fusion

Endpoints (Pivotal Arm 1)

- Primary endpoint: ORR based on RANO criteria, assessed by blinded independent central review
- Secondary endpoints: ORR by RAPNO criteria; PFS; safety

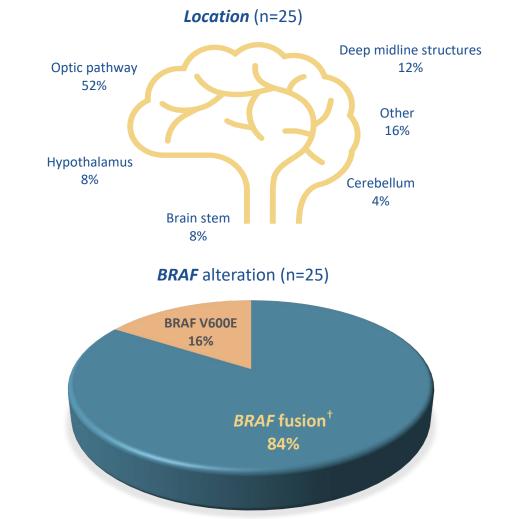


Abbreviations: C, cycle; D, day; LGG, low-grade glioma; ORR, objective response rate; PFS, progression-free survival. NCT04775485

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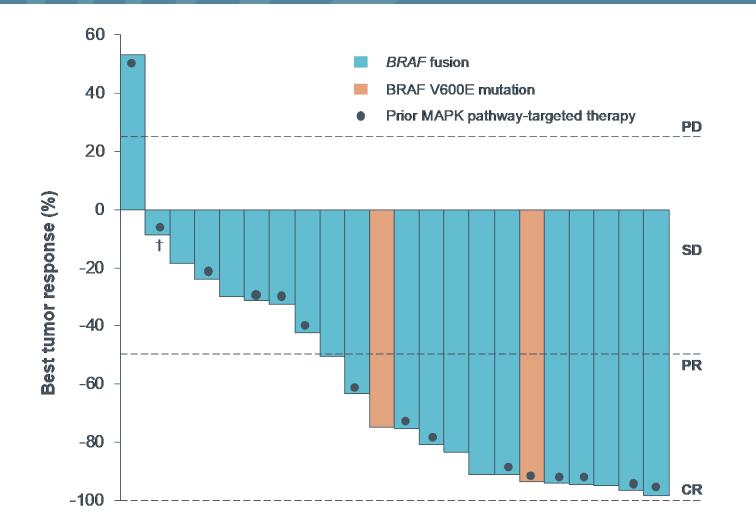
Baseline Characteristics

Characteristic	Arm 1 (N=25)
Median age, years (range)	8 (3-18)
Sex, n (%) Male Female	13 (52) 12 (48)
Race, n (%) Black or African American Asian White Other*	1 (4) 2 (8) 15 (60) 7 (28)
Karnofsky/Lansky performance status, n (%) 50-70 80-100	1 (4) 24 (96)
Number of lines of prior therapy Median (range) 1, n (%) 2, n (%) ≥3, n (%)	3 (1-9) 5 (20) 6 (24) 14 (56)
Prior MAPK pathway targeted therapy, n (%) Yes No	18 (72) 7 (28)



Apr 14, 2022 data cutoff; *Includes 4 patients with race not specified. †Includes 2 patients with BRAF duplication and 1 with BRAF rearrangement per fluorescence in situ hybridization. MAPK, mitogen-activated protein kinase; prior MAPK pathway targeted therapy indicates either prior MEKi and/or prior type I RAFi therapy.

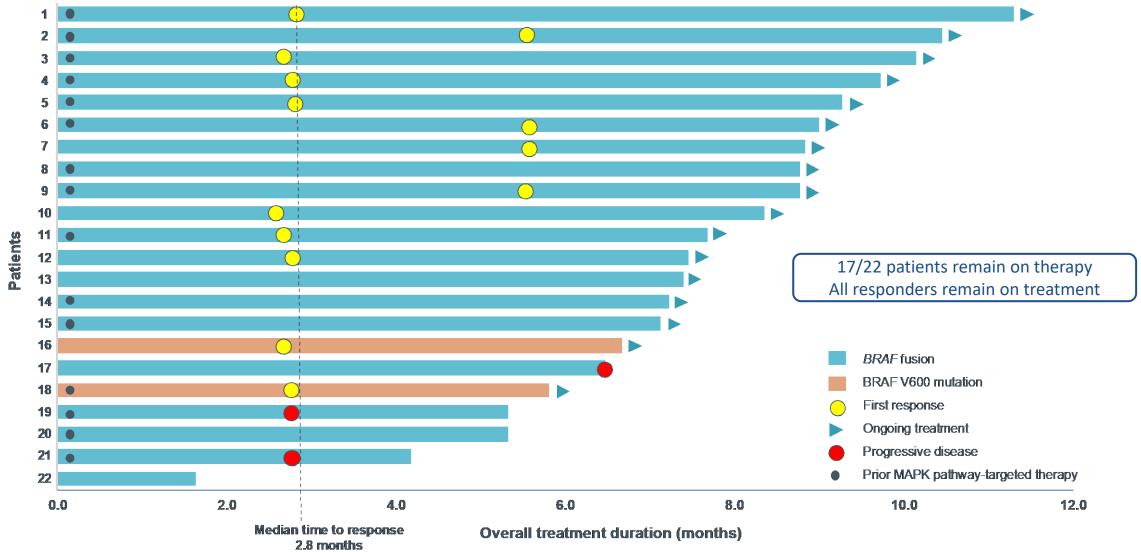
Tumor Response To Tovorafenib (DAY101) For All Patients With RANO-Evaluable Lesions (n=22)*



RANO Evaluable N=22*		
64% (41-83)		
60% 100%		
59%		
5%		
27%		

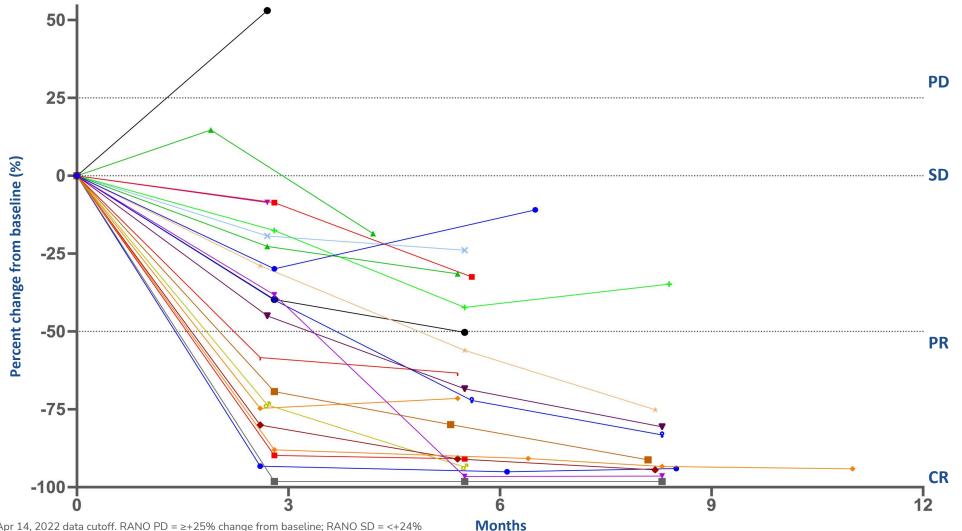
Apr 14, 2022 data cutoff. Total % of response maybe may be different than the sum of the individual overall response due to rounding. *3/25 patients lacked evaluable lesions per RANO criteria based on IRC evaluation. †Progressive disease due to presence of new lesions. #patients with best overall response of CR, PR/uPR and SD. CBR, clinical benefit rate; IRC, independent radiological review committee; ORR, overall response rate; MAPK, mitogen-activated protein kinase; PR, partial response; SD, stable disease; uPR, unconfirmed partial response

Duration of Tovorafenib (DAY101) Therapy For All Patients with RANO-Evaluable Lesions (n=22)



Individual Patient Tumor Change From Baseline

(n=22 RANO-Evaluable By Blinded Independent Central Review)



Apr 14, 2022 data cutoff. RANO PD = \geq +25% change from baseline; RANO SD = <+24% to > -50% change from baseline; RANO PR = \leq -50% change from baseline; RANO CR = -100% change from baseline.

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Tovorafenib (DAY101) Safety Data For the First 25 Enrolled Patients (TEAEs \geq 25% Any Grade)

	Treatment-emergent AEs		
Preferred term, n (%)	Any grade	Grade ≥3	
Blood creatine phosphokinase increased	20 (80)	2 (8)	
Hair color changes	17 (68)	-	
Anemia	14 (56)	3 (12)	
Aspartate aminotransferase increased	14 (56)	-	
Vomiting	14 (56)	2 (8)	
Rash*	13 (52)	3 (12)	
Blood lactate dehydrogenase increased	12 (48)	-	
Headache	10 40)	-	
Dry skin	9 (36)	-	
Epistaxis	9 (36)	-	
Constipation	8 (32)	-	
Hypocalcemia	8 (32)	-	
Nausea	8 (32)	-	
Alanine aminotransferase increased	7 (28)	1 (4)	
Fatigue	7 (28)	-	

- Most treatment-emergent AEs were grade 1 or 2 (96%)
- Other important treatment-emergent AEs included:
 - Decreased weight (24%)
 - Decreased appetite (16%)
 - Hyponatremia (16%)
- 7 patients (28%) required dose modifications due to treatment-related AEs
- No patient discontinued treatment due to AEs

Key Takeaways

- Encouraging initial efficacy data from FIREFLY-1 for pediatric patients with relapsed LGG harboring BRAF fusion or BRAF V600 mutation, for whom there is no standard-of-care and no approved agents for the majority of patients
 - 64% ORR and 91% clinical benefit rate (partial response/unconfirmed partial response + stable disease) in the 22 RANO-evaluable patients:
 - 14 partial responses (13 confirmed responses and 1 unconfirmed response)
 - 6 patients with stable disease
 - All patients with stable disease (n=6) were noted to have tumor shrinkage, ranging between 19% and 43%
 - Responses were observed in patients with both BRAF fusions and BRAF V600E mutations who received prior MAPK-targeted therapy
 - The median-time-to-response was 2.8 months
 - A heavily-pretreated population, with a median of 3 prior lines of therapy (range: 1-9)
 - All patients who responded remain on therapy (n=14) and no patients have discontinued treatment due to treatment-related adverse events
- Initial safety data, based on the first 25 patients, indicated monotherapy tovorafenib (DAY101) to be generally well-tolerated
 - Majority of AEs were grade 1 or 2; most common treatment-related AEs were CPK elevation, rash, and hair color changes
 - Treatment-related AEs of grade 3 or greater occurred in nine patients (36%)
- Plan to present additional initial study results from FIREFLY-1 at an upcoming medical conference in 2H 2022
- Topline results from the full registrational cohort (n=~60) of FIREFLY-1 expected to be available 1Q 2023, with NDA submission planned for 1H 2023
- Early results from FIREFLY-1 support plan to evaluate tovorafenib (DAY101) in parallel Phase 3 frontline pLGG study (FIREFLY-2)
 - Primary endpoint of ORR based on RANO criteria, assessed by blinded independent central review

Incidence and Prevalence of BRAF-altered pLGG in the U.S.

	2020 Estimated Incidence Under 25	2017 Estimated SEER Prevalence Under 25
US Population ¹	~105,000,000	NA
Rate of CNS Tumors (0.00521%) ²	~5,500	~130,000 ³
Gliomas (63%) ²	~3,500	~82,000
Low Grade (77%) ²	~2,600	~63,000
Has Received Drug Tx (58%) ²	~1,500	~36,000
BRAF Mutated (70%) ²	~1,100	~26,000
	~1,100 Estimated Annual Incidence	~26,000 Estimated Prevalence (SEER)

¹. US Census; ² CBTRUS, Qaddoumi et al 2009, Schreck et al 2019, ClearView Analysis; ³ SEER US complete prevalence counts of patients aged under 25 with Brain and Other Nervous Systems tumors as of January 1, 2017.

Estimated annual incidence and estimated prevalence (SEER) are Day One calculations based on publicly available data.

FIREFLY-2/LOGGIC

Pivotal Phase 3 Trial of Tovorafenib (DAY101) in Newly Diagnosed pLGG

FIREFLY-2/LOGGIC Pivotal Phase 3 Trial Of Tovorafenib (DAY101) In Newly Diagnosed pLGG

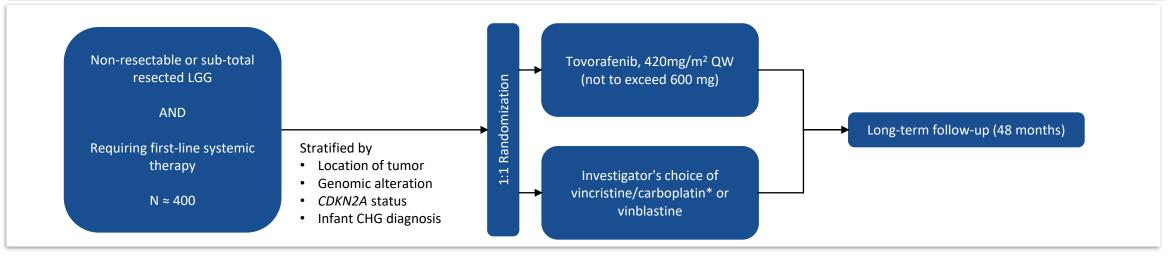


Trial Design

- Randomized, global, registrational Phase 3 trial of monotherapy tovorafenib (DAY101) vs SoC chemotherapy
- Eligibility: Patients aged 6 months to <25 years with LGG harboring a RAF alteration and requiring first-line systemic therapy
- Tovorafenib (DAY101) available as tablets and pediatric-friendly liquid suspension
- Patients who progress after stopping tovorafenib (DAY101) may be re-challenged
- Patients who progress in the SoC arm during or post-treatment may cross-over to receive tovorafenib

Endpoints

- Primary endpoint: ORR based on RANO criteria, assessed by blinded independent central review
- Key secondary endpoints: PFS and DoR by RANO criteria, ORR by RAPNO criteria
- Other secondary endpoints: changes in neurological and visual function, safety, and tolerability
- Key exploratory objectives: QoL and health utilization measures



* COG or SIOPe-LGG regimen

Abbreviations: CHG, chiasmatic, hypothalamic glioma; DoR, duration of response; LGG, low-grade glioma; ORR, objective response rate; QoL, quality of life; QW, once weekly; SoC, standard of care

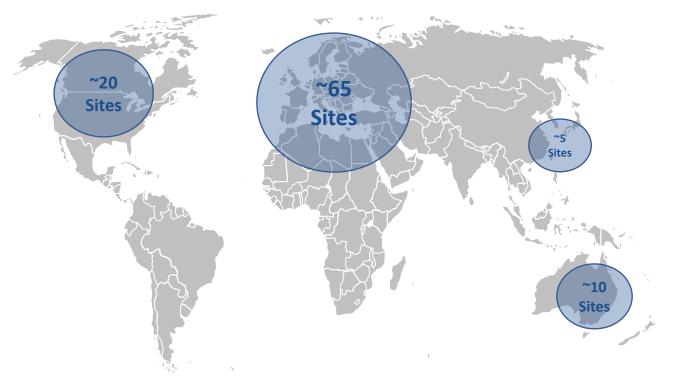
FIREFLY-2/LOGGIC: Pivotal Phase 3 Study Of Tovorafenib (DAY101) In Newly Diagnosed pLGG

- Collaboration between Day One and the LOGGIC consortium, internationally recognized experts in pLGG research
- Coupled with the LOGGIC-CORE molecular diagnostic program
- Worked jointly on the study design and discussions with the U.S. and EU regulatory authorities
- Approximately 100 potential sites (~65 from the LOGGIC consortium)



LOGGIC: LOw Grade Glioma In Children





Our Pipeline

Product Candidate	Indication	Preclinical	Phase 1	Phase 2	Phase 3	Recent & Anticipated Milestones
Tovorafenib (DAY101) Type II Pan-RAF Inhibitor	Relapsed pLGG	FIREFLY-1 ¹ (pivotal)		KITE FRP		Pivotal cohort enrollment complete: May 2022 Initial data presented: June 2022 Topline data expected: Q1 2023
 FDA Breakthrough Therapy Designation for relapsed pLGG FDA Rare Pediatric Disease Designation (PRV Eligible) for pLGG 	Frontline pLGG	FIREFLY-2 (pivotal)	A REFERENCE			First patient dosed expected: Q3 2022
 FDA Orphan Drug Designation for gliomas EC Orphan Designation for gliomas Pimasertib MEK 1/2 Inhibitor 	RAF-altered solid tumors ² (monotherapy)	FIRELIGHT-1*	RELIGHTI			First patient dosed : November 2021
	MAPK-altered solid tumors ³ (Combo w/Tovorafenib)	FIRELIGHT-1*	() ELIGITI			First patient dosed : May 2022

*Includes patients >12 years of age. ¹ FIREFLY-1 Arm 1 expected to support registration. ² DAY101 adult monotherapy Phase 1 dose escalation and expansion trial previously completed. ³ Pimasertib Phase 1 dose escalation and expansion trial previously completed. pLGG, pediatric low-grade glioma. Tovorafenib and Pimasertib are investigational products. Safety and efficacy have not been established by any health authority. Day One Biopharmaceuticals



 \oslash

Clinical activity demonstrated in relapsed melanoma patients; preclinical activity demonstrated in RAF fusions, BRAF non-V600 mutations, and BRAF V600 mutations

- >225 adult patient exposures
- Responses in BRAF V600E mutant tumors similar to type I BRAF inhibitors
- Responses in relapsed BRAF and NRAS-mutant melanoma, suggesting tovorafenib (DAY101) may be active in tumors currently unaddressed by approved Type I BRAF inhibitors

Differentiated safety profile for tovorafenib (DAY101) vs. existing BRAF and MEK inhibitors

- Less frequent and less severe acneiform rash
- No observed ophthalmologic liabilities (RVO/CSR)
- No observed CV liabilities (changes in LVEF)
- No type I BRAF SAEs: SCCs/KAs, pyrexia, arthralgia



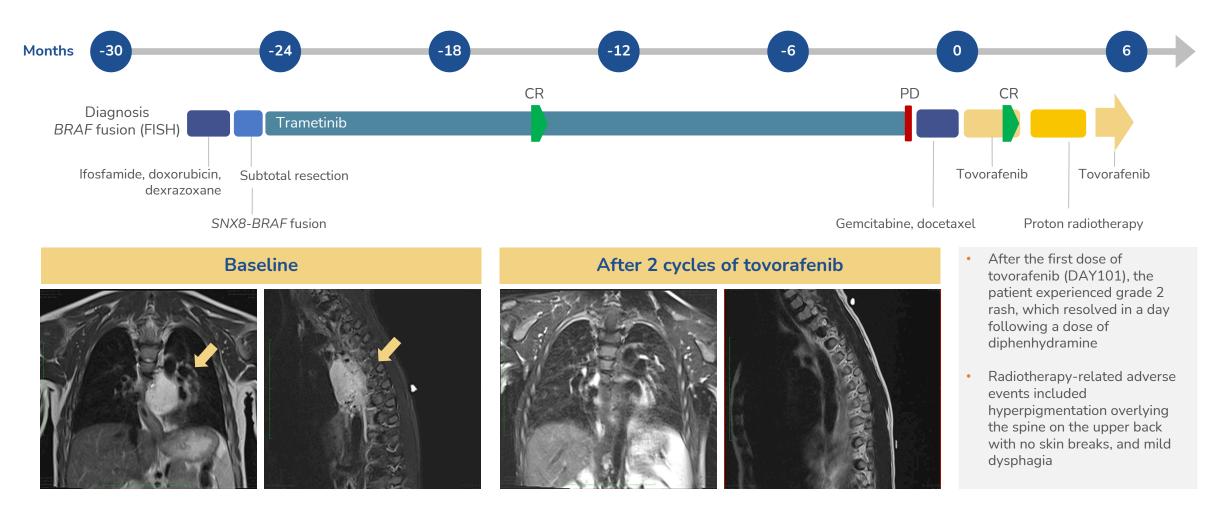
We *initiated* an adult solid tumor *study* to further evaluate monotherapy tovorafenib (DAY101) in patients with RAF altered tumors for which there are no currently approved therapies

- Same study will include combination cohorts of tovorafenib (DAY101) + pimasertib
- First patient dosed in Phase 2 monotherapy study in November 2021

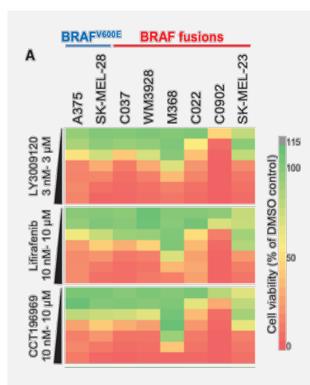
Source: Olszanski AJ et. al. European Society for Medical Oncology Congress; Poster #410P, 2017 Unpublished clinical study results

Activity of Tovorafenib (DAY101) in SNX8:BRAF Fusion Spindle Cell Sarcoma

A male child spindle cell sarcoma, 5-years of age at diagnosis

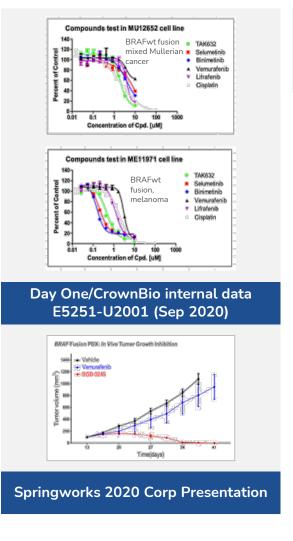


Next-generation RAF Inhibitors are Unique in Their Ability to Address Adult Cancers Associated with RAF Wild-type Fusions



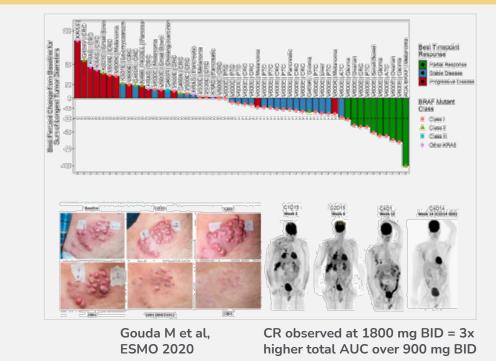
Botton T et al, Cell Reports, 2019

LY3009120: Lilly pan-RAFi Lifirafenib: Beigene pan-RAF/EGFRi CCT196969: CRUK RAF "paradox breaker"



Only tovorafenib (DAY101) has demonstrated *monotherapy clinical activity* in KIAA1549:BRAF and SRGAP3:CRAF wildtype fusions in pLGG





Phase 2 Study of Monotherapy Tovorafenib (DAY101) in Solid Tumors (FIRELIGHT-1)

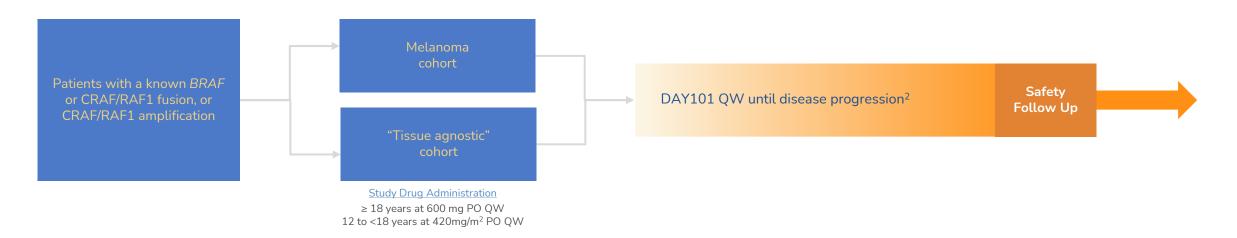


Trial Design¹

- Single arm, open-label, global phase 1b/2a trial
- n = 40 patients (approximately)
- Eligibility: Patients aged 12 years and older with nonhematologic tumor with an activating BRAF fusion, CRAF/RAF1 fusion, or CRAF/RAF1 amplification

Endpoints

- Primary endpoint: ORR by RECIST version 1.1 for non-CNS solid tumors and RANO criteria for any CNS tumors
- Secondary endpoints: safety and additional efficacy parameters

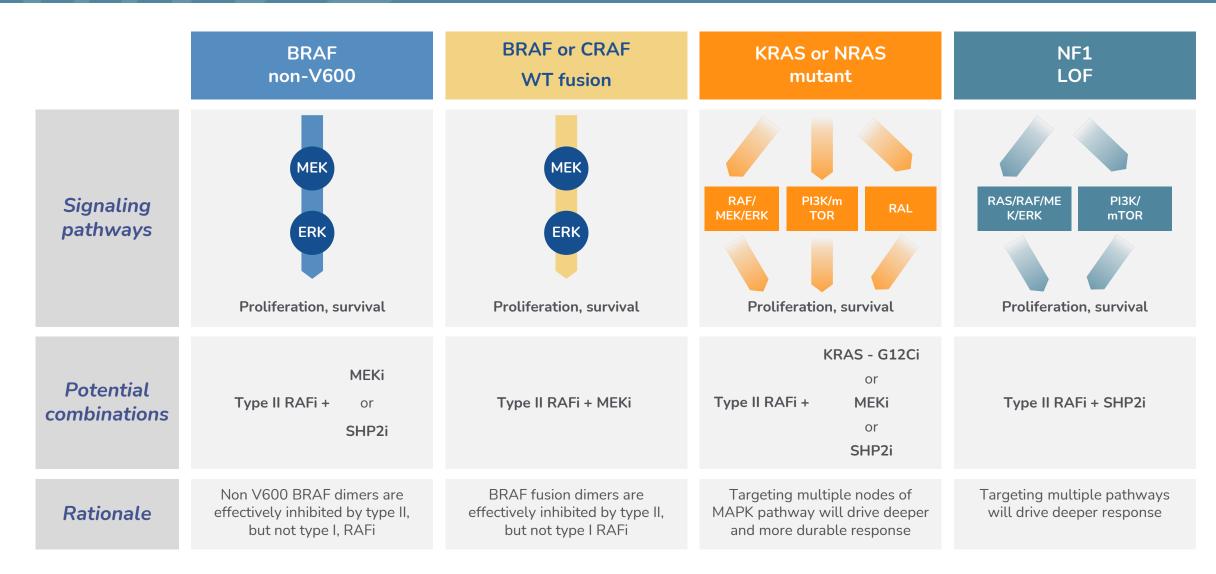


Abbreviations: ORR, objective response rate; QW, once weekly ; PO, by mouth; BRAF, B-Raf proto-oncogene.0

1. Umbrella master study – DAY101-102 (main protocol) DAY101 and MAPK pathway aberration, Sub-study 1 monotherapy (DAY101-102a), Sub-study 2 MEK combo (DAY101-102b).

2. DAY101 QW until disease progression, intolerable toxicity, withdrawal of consent, or death

Strong Scientific Rationale for Combining Tovorafenib (DAY101) with Additional MAPK Pathway Inhibitors



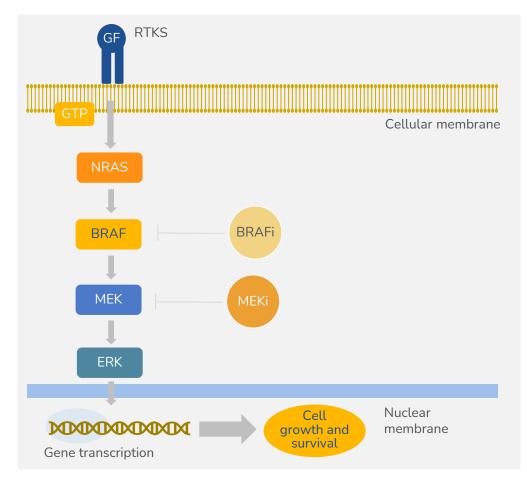
Pimasertib

MEK1/2 Inhibitor

Day One Biopharmaceuticals

Pimasertib: Allosteric MEK1/2 Inhibitor with Demonstrated Activity in MAPK-driven Solid Tumors

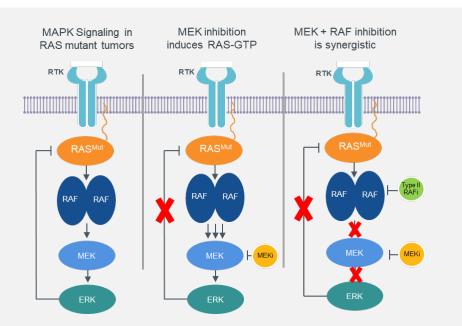
- Pimasertib is an orally-bioavailable, selective, non-competitive MEK1/2 inhibitor in-licensed from Merck KGaA in February 2021
- Extensive non-clinical and clinical development work through Phase 2, including a solid tumor trial in Japan and combinations with other MOAs
- Main AEs typical for all in-class allosteric MEK inhibitors (GI, CPK elevation, skin rash, visual disturbances)
- Nearly three-fold higher CNS penetration than other MEKi inhibitors (trametinib or selumetinib)
- Pimasertib showed monotherapy clinical activity, including an improvement in median PFS versus dacarbazine in NRAS mutant melanoma
- Combination with tovorafenib (DAY101) and other targeted therapies may unlock the full value of pimasertib in advanced solid tumors

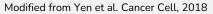


Source: Hepner, Salgues, Anjos, et al. 2017.

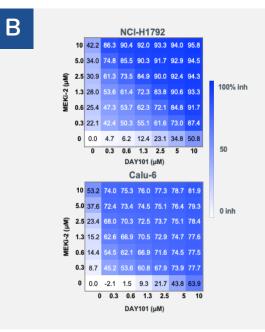
Vertical MAPK Pathway Inhibition with Tovorafenib (DAY101) and Pimasertib Unlocks Potential Synergy for Adult Solid Tumors

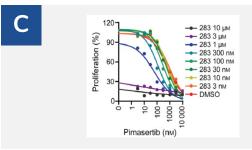
- The MAPK pathway normally has multiple feedback loops that negatively regulate upstream (RAS/RAF) activation to ensure optimal signaling
- Monotherapy MEK inhibition disables these feedback loops and induces RAS signaling as well as RAF dimerization and activation
- Combination therapy with a MEK inhibitor and type II RAF inhibitor is synergistic in KRASmut and BRAFmut tumor models





- A Mechanistic model for vertical MAPK pathway inhibition (modified from Yen et al. Cancer Cell, 2018) .
- B DAY101 + MEK inhibitor is synergistic in KRAS G12C and Q61 mutant tumor cell models (Day One internal data)
 - Sensitivity of KRAS Q61 mutant cells to pimasertib is enhanced when cells are treated with the type II RAF inhibitor BGB-283 (Yuan et al., Mol Onc 2020)





Tovorafenib (DAY101) / Pimasertib Combination to be Evaluated in Solid Tumors (FIRELIGHT-1)

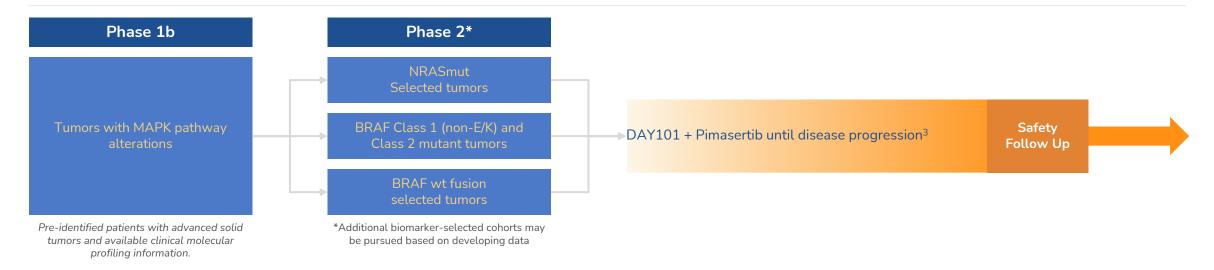


Trial Design¹

- Combination dose escalation, global phase 1b/2 trial²
- Phase 1b, BOIN (adaptive), n = 10/cohort (approximately)
- Phase 2, Simon 2-stage, n = 25/cohort (approximately)
- Eligibility: Patients aged 12 years and older, dose escalation will be performed in advanced solid tumor patients with any MAPK alteration. Expansion cohorts will focus on indications with a potential path to accelerated approval

Endpoints

- Phase 1b: PK, PD and Safety, MTD/RP2D
- Phase 2: Efficacy (ORR, DOR)



Abbreviations: BOIN, Bayesian Optimal Interval Design; BRAF, B-Raf proto-oncogene, serine/threonine kinase; MAPK, mitogen-activated protein kinase; NRAS, neuroblastoma rat sarcoma viral oncogene. 1. Umbrella master study – DAY101-102 (main protocol) DAY101 and MAPK pathway aberration, Sub-study 1 monotherapy (DAY101-102a), Sub-study 2 MEK combo (DAY101-102b). 2. Intend to open U.S. and ex-U.S. clinical sties. ³DAY101 + Pimasertib until disease progression, intolerable toxicity, withdrawal of consent, or death

Summary

Day One Biopharmaceuticals

Financial Summary: DAWN

Cash and cash equivalents as of March 31, 2022: \$262.7 million (no debt)

Follow-on in June 2022: \$172.5 million in gross proceeds, includes full exercise of underwriters' option

61.9 million shares of common stock outstanding as of May 9, 2022

\$ Millions	Three Months Ended 3/31/22	Three Months Ended 3/31/21
R&D Expense	\$15.0	\$12.6
G&A Expense	\$12.7	\$3.5
Net Loss	\$27.7	\$16.1

Projected cash runway into 2025	 FIREFLY-1: Pivotal Phase 2 clinical trial of tovorafenib (DAY101) Pivotal cohort enrollment completed in May 2022 Initial clinical data presented in June 2022 Full topline results expected in Q1 2023 NDA submission planned in 1H 2023, if data from FIREFLY-1 is supportive FIREFLY-2/LOGGIC: Pivotal Phase 3 clinical trial of tovorafenib (DAY101) in newly diagnosed pLGG First patient dosed expected in Q3 2022 FIRELIGHT-1: Tovorafenib (DAY101) and pimasertib combination First patient dosed in May 2022
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Momentum for a More Inclusive Era of Drug Development, Starting at Day One Pursuing Fast-to-Market Pediatric and Adult Targeted Therapies

Key Highlights 2022 Outlook Tovorafenib (DAY101)¹ Tovorafenib (DAY101) FIREFLY-1 (Relapsed pLGG) FIREFLY-1 (Relapsed pLGG) First patient dosed in Pivotal FIREFLY-1 trial: May 2021 Topline data on full trial population expected: Q1 2023 Pivotal cohort enrollment complete in May 2022 NDA submission planned for 1H 2023, if data from FIREFLY-1 are supportive Encouraging interim efficacy data from FIREFLY-1 in June 2022 Breakthrough Therapy Designation & Rare Pediatric Disease FIREFLY-2 (Frontline pLGG) Designation First patient dosed expected: Q3 2022

¹ Worldwide rights for all indications Abbreviations: PTE, Patent Term Extension

Intellectual Property

Pimasertib¹

FIRELIGHT-1 (RAF-altered solid tumors - monotherapy)

to late 2030s / early 2040s via broad patent portfolio

First patient dosed in phase 2 monotherapy trial: November 2021

Composition of matter to mid-2030s with PTE, potential exclusivity

FIRELIGHT-1 (MAPK-altered solid tumors – Combo w/Tovorafenib) First patient dosed in phase 1b/2 combination trial: May 2022

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Day One Biopharmaceuticals

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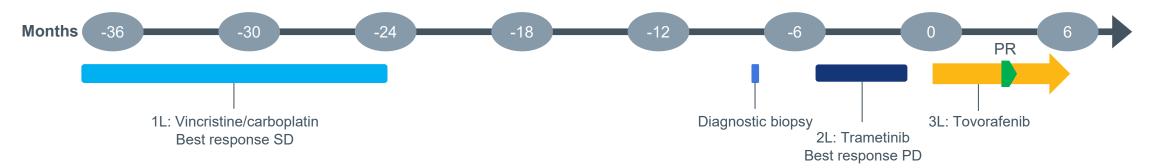
Appendix

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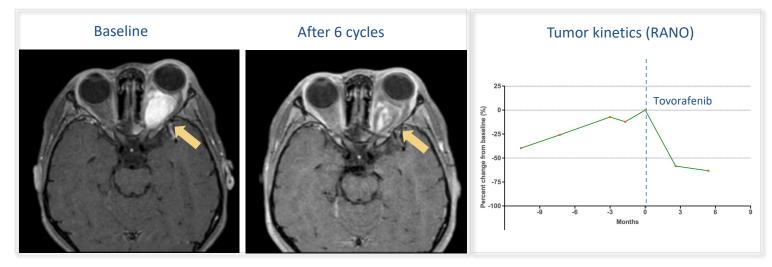


Case Study: Activity Of Tovorafenib (DAY101) In KIAA1549-BRAF Fusion Optic Pathway Glioma

A 7-years-old female child with an optic pathway glioma, with very poor vision, entropion, folliculitis, eczema, mouth ulceration and xerosis



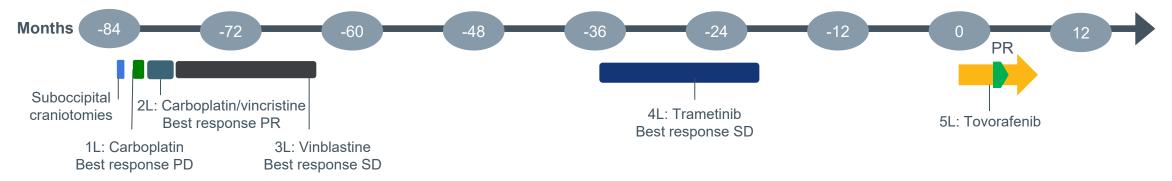
- PR (-58%) and improvement in vision reported at cycle 3
- AEs included grade 3 erythematous rash requiring dose interruption and dose reduction (400 mg QW to 300 mg QW in cycle 1), and grade 2 eczema and maculopapular rash
- Patient continues to receive weekly tovorafenib



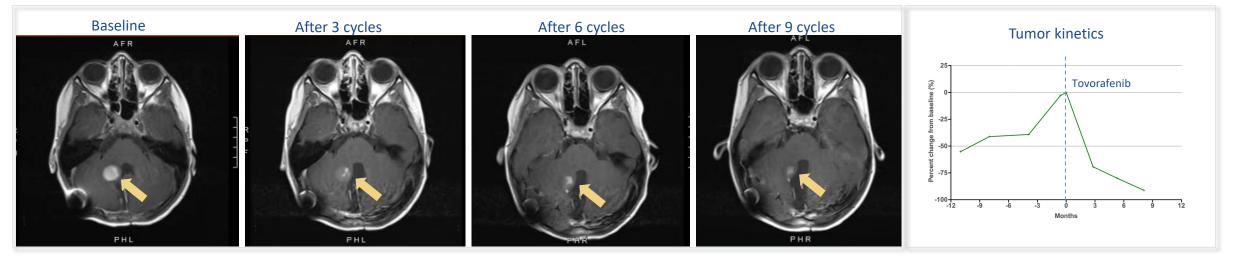
Apr 14, 2022 data cutoff. Tovorafenib is an investigational agent. Safety and efficacy have not been established by any health authority.

Case Study: Activity Of Tovorafenib (DAY101) In KIAA1549-BRAF Fusion Posterior Fossa Pilocytic Astrocytoma

An 8-years-old female child with a posterior fossa pilocytic astrocytoma, eczema, nausea and constipation



- PR (-69%) at cycle 3 with 500 mg QW tovorafenib, with a deepening of response (80% and 91% in cycles 6 and 9, respectively) over time
- AEs included grade 2 decrease in neutrophil count, pustular rash, and upper respiratory infection
- Patient continues to receive weekly tovorafenib



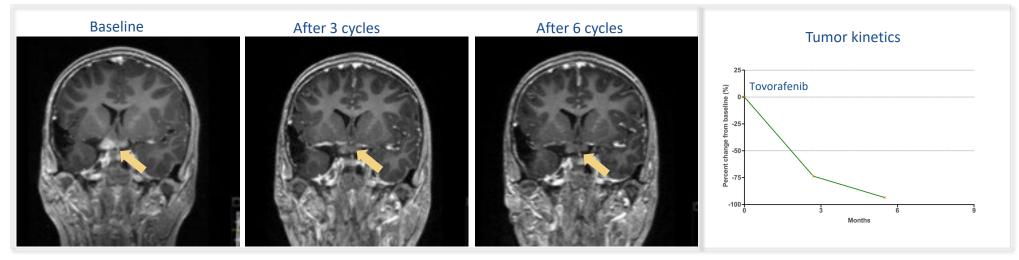
Apr 14, 2022 data cutoff. Tovorafenib is an investigational agent. Safety and efficacy have not been established by any health authority.

Case Study: Activity Of Tovorafenib (DAY101) In BRAF V600E Mutation Deep Midline Astrocytoma

A 9-year-old female child with deep midline BRAF V600E-mutant astrocytoma with precocious puberty



- PR (-74%) at cycle 3, with a deepening of response (-94%) at cycle 6
- AEs included grade 3 maculopapular rash and increased CPK, requiring drug interruption and dose reduction (500 mg QW to 400 mg QW in cycle 1)
- Tovorafenib dose was re-escalated back to 500 mg QW in cycle 4; patient continues on treatment



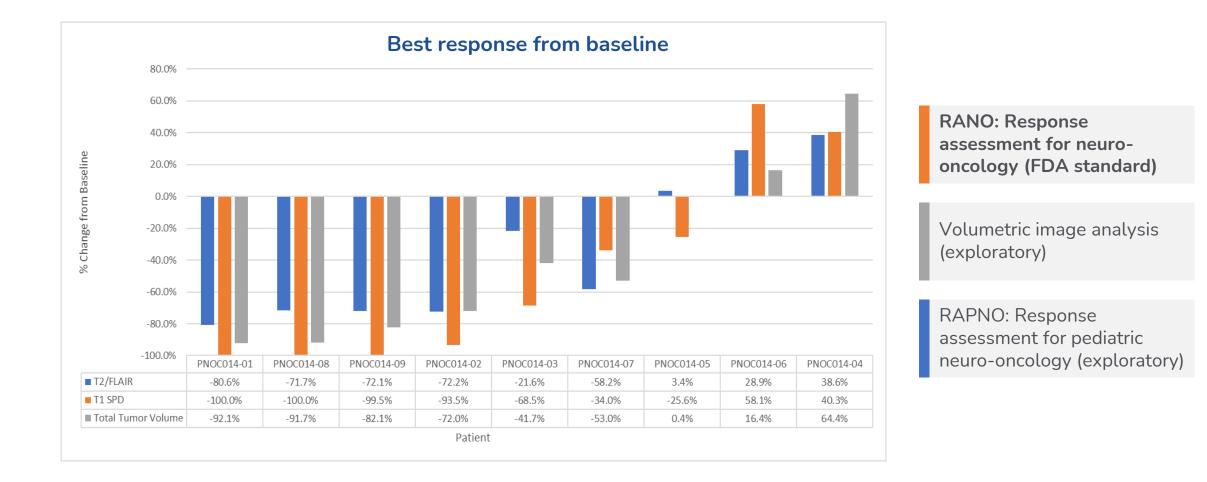
Apr 14, 2022 data cutoff. Tovorafenib is an investigational agent. Safety and efficacy have not been established by any health authority.

FIREFLY-1 Study Status

- First patient dosed in May 2021. Registrational pLGG arm completed enrollment in May 2022
- ~35 sites opened across 11 countries
- Expanded access to patients with pLGG (arm 2) and *RAF* fusion-positive solid tumors (arm 3)
- Interim efficacy and safety analysis in the first 25 consecutively enrolled patients who had:
 - Received at least 1 dose of study treatment
 - At least 6 months of follow-up as of April 14, 2022
- Tumor assessments according to RANO criteria, as determined by a blinded independent radiological review committee
- 22 patients with RANO-evaluable tumors



Results from Independent Radiology Review of PNOC014



Multiple Rapid, Deep and Durable Responses Observed following Initiation of Tovorafenib (DAY101) Treatment of pLGG Patients in PNOC014



Drug-related Adverse Events Observed for Tovorafenib (DAY101) in PNOC014 Showed Favorable Safety and Tolerability Profile in pLGG

DAY101 AE summary

- Most common toxicity: skin
- AEs reversible and all manageable
- Single, reversible Grade 3 event
- No Grade 4 AEs
- No dose reductions (vs. 40% of patients on selumetinib montherapy required dose reductions)

Drug-related AEs	for Tovorafe	nib (DAY:	101)
Toxicities	Grade 1-2	Grade 3	Grade 4
Anemia	6 (67%)		
Hypophosphatemia	4 (44%)		
Fatigue	5 (55%)		
Rash	8 (89%)		
Achromotrichia	7 (78%)		
Pruritis	6 (67%)		
Photosensitivity	1 (11%)		
Nevus	7 (78%)		
Alopecia	3 (34%)		
Epistaxis	2 (22%)		
Dry skin	3 (34%)		
Myalgias/arthralgias	3 (34%)		
Anorexia	2 (22%)		
Cheilitis	3 (34%)		
Hypermagnesemia	1 (11%)		
Bleeding gums	1 (11%)		
Increased AST	4 (44%)		
Nausea/vomiting	3 (33%)		
CPK elevation		1 (11%)	
Weight loss	2 (22%)		

Drug-related AEs for selumetinib					
Toxicities	Grade 1-2	Grade 3	Grade 4		
Increased ALT	20 (40%)	1 (2%)			
CPK elevation	34 (68%)	5 (10%)			
Diarrhea	27 (54%)	2 (4%)			
Decreased ejection fraction	19 (38%)	1 (2%)			
Gastric haemorrhage		1 (2%)			
Headache	14 (28%)	1 (2%)			
Decreased lymphocyte count	19 (38%)		1 (2%)		
Neutropenia	14 (28%)	3 (6%)			
Paronychia	19 (38%)	3 (6%)			
Rash (acneiform)	29 (58%)	2 (4%)			
Rash (maculopapular)	26 (52%)	5 (10%)			
Skin infection	7 (14%)	1 (2%)			
Tooth infection		1 (2%)			
Weight gain	5 (10%)	1 (2%)			
Vomiting	22 (44%)				
Nausea	21 (42%)				
Increased AST	25 (50%)				
Anemia	28 (56%)				
Pruritis	10 (20%)				
Dyspnea	30 (60%)				