

**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 07, 2022

DAY ONE BIOPHARMACEUTICALS, INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction
of incorporation)

001-40431
(Commission File Number)

83-2415215
(IRS Employer
Identification No.)

395 Oyster Point Blvd., Suite 217
South San Francisco, California
(Address of principal executive offices)

94080
(Zip Code)

Registrant's telephone number, including area code: (650) 484-0899

N/A
(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	DAWN	NASDAQ Global Select 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 2.02 Results of Operations and Financial Condition.

On March 7, 2022 Day One Biopharmaceuticals, Inc. issued a press release announcing its financial results for the quarter and year ended December 31, 2021. A copy of the press release is attached as Exhibit 99.1 to this report.

The information in this Item 2.02, including Exhibit 99.1 to this report, shall not be deemed to be “filed” for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), or otherwise subject to the liabilities of that section or Sections 11 and 12(a)(2) of the Securities Act of 1933, as amended (the “Securities Act”). The information contained in this Item 2.02 and in the accompanying Exhibit 99.1 shall not be incorporated by reference into any other filing under the Exchange Act or under the Securities Act, except as shall be expressly set forth by specific reference in such filing.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

Exhibit Number	Description
99.1	Press release issued by Day One Biopharmaceuticals, Inc. regarding its financial results for the quarter and year ended December 31, 2021, dated March 7, 2022.
99.2	Corporate Presentation
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.

DAY ONE BIOPHARMACEUTICALS, INC.

Date: March 7, 2022

By: /s/ Charles N. York II, M.B.A.
Charles N. York II, M.B.A.
Chief Operating Officer and Chief Financial Officer



Day One Reports Fourth Quarter and Full Year 2021 Financial Results and Corporate Progress

Initial data from pivotal FIREFLY-1 study with DAY101 (tovorafenib) expected in June 2022

Targeted enrollment achieved in pivotal FIREFLY-1 study

Topline results from pivotal FIREFLY-1 study expected in Q1 2023

Current cash provides runway into 2024 and through multiple expected key clinical milestones

SOUTH SAN FRANCISCO, CA, March 7, 2022 – Day One Biopharmaceuticals (Nasdaq: DAWN), a clinical-stage biopharmaceutical company dedicated to developing and commercializing targeted therapies for people of all ages with life-threatening diseases, today announced its fourth quarter and full year 2021 financial results and highlighted recent corporate achievements.

“Our clinical and corporate achievements in 2021 have set a solid foundation for a potentially transformational next 12 months,” said Jeremy Bender, Ph.D., chief executive officer of Day One. “We expect to report the initial data from our pivotal Phase 2 FIREFLY-1 trial of DAY101 in relapsed pediatric low-grade glioma in June of 2022 followed by topline results in the first quarter of 2023. In addition, we are enrolling patients in our Phase 2 FIRELIGHT-1 monotherapy trial of DAY101 in RAF-altered solid tumors and are preparing to initiate a Phase 1b/2 combination portion of the study with our oral MEK inhibitor, pimasertib. As our clinical development programs continue to advance and expand, we remain well-capitalized to fund our operations into 2024 and we will continue to execute on our mission to provide innovative targeted therapies for people of all ages.”

Program Highlights

- Initial data from FIREFLY-1, a pivotal Phase 2 clinical trial of DAY101 (tovorafenib) in pediatric low-grade glioma (pLGG), is expected in June 2022.
 - FIREFLY-1 has reached targeted enrollment across approximately 30 sites globally. Day One anticipates releasing topline results from the study in the first quarter of 2023. Pending positive results from FIREFLY-1, Day One anticipates filing a new drug application (NDA) with the U.S. Food and Drug Administration (FDA) in 2023.
 - The first patient has been dosed with a pediatric formulation in the FIREFLY-1 study.
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- The Company plans to initiate a pivotal Phase 3 clinical trial (FIREFLY-2) evaluating DAY101 as a first-line therapy in pLGG in the second quarter of 2022.
- Day One is enrolling patients in the Phase 2 FIRELIGHT-1 trial evaluating DAY101 monotherapy in adults with recurrent, progressive, or refractory solid tumors harboring MAPK pathway aberrations, with 8 sites activated. Day One plans to expand FIRELIGHT-1 to include a Phase 1b/2 portion to evaluate DAY101 in combination with pimasertib, the Company's MEK Inhibitor. The Company expects to initiate the combination portion of the study in March of 2022.

Fourth Quarter and Full Year 2021 Financial Highlights

- **Cash Position:** Cash and cash equivalents totaled \$284.3 million on December 31, 2021. Based on Day One's current operating plan, management believes it has sufficient capital resources to fund anticipated operations into 2024.
- **R&D Expenses:** Research and development expenses were \$11.2 million and \$43.6 million for the fourth quarter and full year ended December 31, 2021, respectively, as compared to \$4.2 million and \$9.1 million for the same periods in 2020. The increase was primarily due to additional employee compensation costs, milestone payments for licensing agreements, clinical trial, and product development expenses.
- **G&A Expenses:** General and administrative expenses were \$10.8 million and \$29.2 million for the fourth quarter and full year ended December 31, 2021, respectively, as compared to \$2.0 million and \$4.7 million for the same periods in 2020. The increase was primarily due to additional employee compensation costs, legal, and professional expenses associated with operating as a public company.
- **Net Loss:** Net loss totaled \$21.9 million for the fourth quarter of 2021 with non-cash stock compensation expense of \$5.1 million, compared to \$35.6 million for the fourth quarter of 2020 with non-cash stock compensation expense of \$0.4 million. Net loss was \$72.8 million for the year ended December 31, 2021, with non-cash stock compensation expense of \$13.3 million, compared to \$43.8 million for the year ended December 31, 2020, with non-cash stock compensation expense of \$0.5 million.

Upcoming Events

- **Cowen 42nd Annual Health Care Conference**
 - Management will participate in a fireside chat today, March 7 at 2:50 p.m. ET. A live and archived audio webcast of the discussion will be available by visiting the Events & Presentations section of the Company's website.
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About DAY101 (tovorafenib)

DAY101 (tovorafenib) is an investigational, oral, brain-penetrant, highly-selective type II pan-RAF kinase inhibitor designed to target a key enzyme in the MAPK signaling pathway. Studies have shown DAY101 has high brain distribution and exposure in comparison to other MAPK pathway inhibitors, thus potentially benefiting patients with primary brain tumors or brain metastases of solid tumors. DAY101 is a type II RAF inhibitor found to selectively inhibit both monomeric and dimeric RAF kinase.

DAY101 has been studied in over 250 patients, and as a monotherapy, previously demonstrated good tolerability and encouraging anti-tumor activity in pediatric and adult populations with specific MAPK pathway-alterations. DAY101 has been granted Breakthrough Therapy designation by the U.S. Food and Drug Administration (FDA) for the treatment of patients with pLGG harboring an activating RAF alteration who require systemic therapy and who have either progressed following prior treatment or who have no satisfactory alternative treatment options. The FDA has also granted Rare Pediatric Disease Designation to DAY101 for the treatment of low-grade gliomas harboring an activating RAF alteration that disproportionately affects children. In addition, DAY101 has received Orphan Drug designation from the FDA for the treatment of malignant glioma and orphan designation from the European Commission for the treatment of glioma.

DAY101 is being evaluated in a pivotal Phase 2 clinical trial (FIREFLY-1) for the treatment of pediatric low-grade glioma (pLGG). pLGG is the most common form of childhood brain cancer with no approved therapies. Day One has also initiated a Phase 1b/2 study (FIRELIGHT-1) with DAY101 in patients with recurrent or progressive solid tumors with activating RAF alterations and additional studies are planned with DAY101 alone or in combination with other agents that target key signaling nodes in the MAPK pathway, such as the Company's MEK inhibitor pimasertib, in patient populations where RAS and RAF alterations are believed to play an important role in driving disease.

About Day One Biopharmaceuticals

Day One Biopharmaceuticals is a clinical-stage biopharmaceutical company dedicated to developing and commercializing targeted therapies for people of all ages with life-threatening diseases. Day One partners with leading clinicians, families, and scientists to identify, acquire, and develop important emerging targeted treatments. The Company's lead product candidate, DAY101 (tovorafenib), is an investigational, oral, highly-selective type II pan-RAF kinase inhibitor currently being evaluated in a pivotal Phase 2 clinical trial (FIREFLY-1) in pediatric, adolescent and young adult patients with recurrent or progressive low-grade glioma (pLGG). The Company's pipeline also includes the investigational agent pimasertib, a clinical-stage, oral, small molecule found to selectively inhibit mitogen-activated protein kinases 1 and 2 (MEK), which will be evaluated in a Phase 1/2 study (FIRELIGHT-1) in combination with DAY101 (tovorafenib) for adult and adolescent patients with solid tumors with MAPK pathway aberrations. Day One is based in South San Francisco. For more information, please visit <https://dayonebio.com/>.

Cautionary Note Regarding Forward-Looking Statements

This press release contains “forward-looking” statements within the meaning of the “safe harbor” provisions of the Private Securities Litigation Reform Act of 1995, including, but not limited to: Day One’s plans to develop cancer therapies, expectations from current clinical trials, 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, and the ability of DAY101 to treat pLGG or related indications.

Statements including words such as “believe,” “plan,” “continue,” “expect,” “will,” “develop,” “signal,” “potential,” or “ongoing” and statements in the future tense are forward-looking statements. These forward-looking statements involve risks and uncertainties, as well as assumptions, which, if they do not fully materialize or prove incorrect, could cause our results to differ materially from those expressed or implied by such forward-looking statements.

Forward-looking statements are subject to risks and uncertainties that may cause Day One’s actual activities or results to differ significantly from those expressed in any forward-looking statement, including risks and uncertainties in this press release and other risks set forth in our filings with the Securities and Exchange Commission, including Day One’s ability to develop, obtain regulatory approval for or commercialize any product candidate, Day One’s ability to protect intellectual property, the potential impact of the COVID-19 pandemic and the sufficiency of Day One’s cash, cash equivalents and investments to fund its operations. These forward-looking statements speak only as of the date hereof and Day One specifically disclaims any obligation to update these forward-looking statements or reasons why actual results might differ, whether as a result of new information, future events or otherwise, except as required by law.

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Day One Biopharmaceuticals, Inc.
Consolidated Statements of Operations and Comprehensive Loss
(unaudited)
(In thousands)

	2021	Year Ended December 31, 2020	2019
Operating expenses:			
Research and development	\$ 43,584	\$ 9,100	\$ 13,899
General and administrative	29,159	4,682	1,006
Total operating expenses	72,743	13,782	14,905
Loss from operations	(72,743)	(13,782)	(14,905)
Interest income (expense), net	4	(30)	(2,077)
Other expense, net	(15)	(31)	(2)
Changes in fair value of derivative tranche liability	—	(30,000)	—
Net loss and comprehensive loss	(72,754)	(43,843)	(16,984)
Net loss attributable to redeemable convertible noncontrolling interests	(2,109)	(3,336)	(4,350)
Exchange of redeemable noncontrolling interest shares – deemed dividend*	(99,994)	—	—
Net loss attributable to common stockholders/members	\$ (170,639)	\$ (40,507)	\$ (12,634)
Net loss per share, basic and diluted	\$ (4.62)	\$ (7.33)	\$ (2.13)
Weighted-average number of common shares used in computing net loss per share, basic and diluted	36,960,569	5,529,519	5,924,640

* The exchange of redeemable non-controlling interest shares for Company common stock was accounted for as a non-cash, deemed dividend. See Note 11 in the form 10-K filed on March 7, 2022, for further information.

Day One Biopharmaceuticals, Inc.
Selected Consolidated Balance Sheet Data
(unaudited)
(In thousands)

	December 31, 2021	December 31, 2020
Cash and cash equivalents	\$ 284,309	\$ 43,728
Total assets	289,821	45,661
Total liabilities	8,673	2,200
Accumulated deficit	(127,487)	(56,842)
Total stockholders' equity/members' (deficit)	281,148	(54,205)



Day One

BIOPHARMACEUTICALS

Targeted Therapies for People of All Ages

March 2022





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, business plans and objectives, timing and success of our planned development activities, our ability to obtain regulatory approval, the potential therapeutic benefits and economic value of our product candidates, potential growth opportunities, competitive position, industry environment and potential market opportunities, and the impact of the COVID-19 pandemic on our business and operations.

Forward-looking statements are subject to known and unknown risks, uncertainties, assumptions and other factors. It is not possible for our management to predict all risks, 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 any forward-looking statements we may make. These factors, together with those that are described under the heading "Risk Factors" contained in our most recent Annual Report on Form 10-K filed with the Securities and Exchange Commission ("SEC") and other documents we file from time to time with the SEC, may cause our actual results, performance or achievements to differ materially and adversely from those anticipated or implied by our forward-looking statements.

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 although 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 a thorough 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. Furthermore, if our forward-looking statements prove to be inaccurate, the inaccuracy may be material. In light of the significant uncertainties in these forward-looking statements, you should not regard these statements as a representation or warranty by us or any other person that we will achieve our objectives and plans in any specified time frame, or at all. We undertake no obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

This presentation also contains estimates and other statistical data made by independent parties and by us relating to market size and growth and other data about our industry. This data involves a number of assumptions and limitations, and you are cautioned not to give undue weight to such estimates. 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.



- Develop medicines for genomically-defined cancers
- Goal is to establish first-in-class position through rapid pediatric registration
- Expand to adult populations in parallel

- Deep expertise in oncology, pediatric, and rare disease development, registration, and commercialization
- Extensive network in the global pediatric oncology community
- Proven track record of success in building biopharma companies

- Potential to be first-in-class oral, CNS-penetrant pan-RAFi
- Potentially the first approval in a market with no standard of care
- Monotherapy CRs and PRs in pediatric low-grade glioma (pLGG)
- Breakthrough Therapy Designation, Rare Pediatric Disease Designation

- Two clinical-stage MEKi assets, in-licensed for combination trial
- Projected cash runway into 2024
- Capital through pivotal data in pLGG and early adult solid tumor Phase 1b data



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

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

Enriched responder populations informed by underlying biology

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

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 VaxCyt



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 Aegle; 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 Bellucum Pharmaceuticals; Human Resources Roles at AstraZeneca, Roche/Genentech

Our Pipeline



Product Candidate	Indication	Preclinical	Phase 1	Phase 2	Phase 3	Milestones
DAY101 (tovorafenib) Type II Pan-RAF Inhibitor ✓ FDA Breakthrough Therapy Designation ✓ FDA Rare Pediatric Disease Designation (PRV Eligible) ✓ FDA Orphan Drug Designation ✓ EC Orphan Designation	Relapsed pLGG	FIREFLY-1 ¹ (pivotal) 				Target enrollment achieved: Mar 2022 Initial data: Jun 2022 Topline data: 1Q 2023
	Frontline pLGG	FIREFLY-2 (planned) 				Phase 3 initiation: 2Q 2022
	RAF-altered solid tumors ² (monotherapy)	FIRELIGHT-1* 				First patient dosed: Nov 2021
Pimasertib MEK 1/2 Inhibitor	MAPK-altered solid tumors ³ (Combo w/DAY101)	FIRELIGHT-1* 				Phase 1b/2 initiation: Mar 2022

¹Pivotal Phase 2 trial expected to support registration

²DAY101 adult monotherapy Phase 1 dose escalation and expansion trial previously completed

³Pimasertib Phase 1 dose escalation and expansion trial previously completed

^{*}Includes patients ≥12 years of age

pLGG = pediatric low-grade glioma

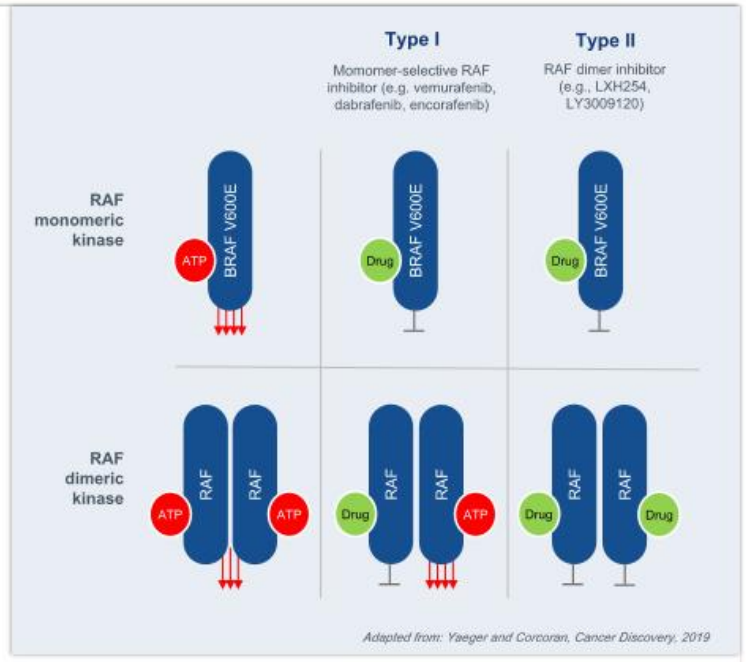


DAY101 (tovorafenib)
Type II Pan-RAF Inhibitor

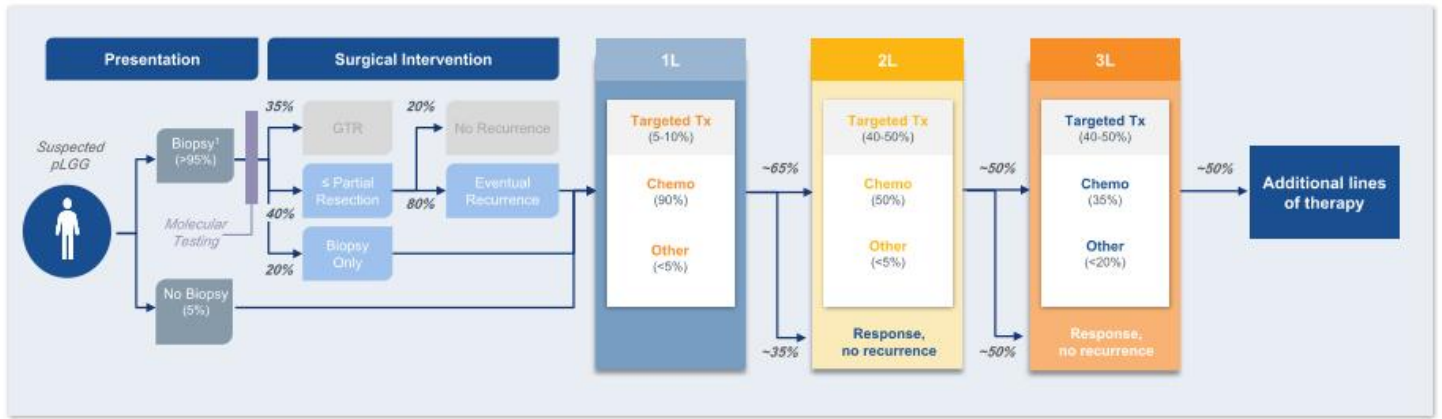
DAY101 (tovorafenib): Monotherapy Approach is Focused on RAF Fusions While Our Combination Strategy Addresses a Broad Set of MAPK Alterations



- DAY101 (tovorafenib) is a type II RAF inhibitor that selectively **inhibits both monomeric** and **dimeric** RAF kinase
- Approved BRAF products (*e.g.* vemurafenib, encorafenib) are type I RAF inhibitors that **only inhibit** RAF monomers and are therefore limited to use in BRAF V600E-altered tumors
 - Type I inhibitors can also cause paradoxical activation of the MAPK pathway, which could potentially lead to increased tumor growth
- DAY101's **inhibition of both** RAF monomers and dimers makes it a unique monotherapy approach for patients with tumors driven by RAF wild-type fusions, and a bespoke therapy for pediatric low-grade gliomas
 - Unlike type I RAF inhibitors, DAY101 **does not cause** paradoxical activation in RAF wild-type cells
- DAY101 (tovorafenib), in combination with MEK inhibitors, may act synergistically to inhibit tumors driven by other MAPK alterations and broadens its potential clinical applications



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



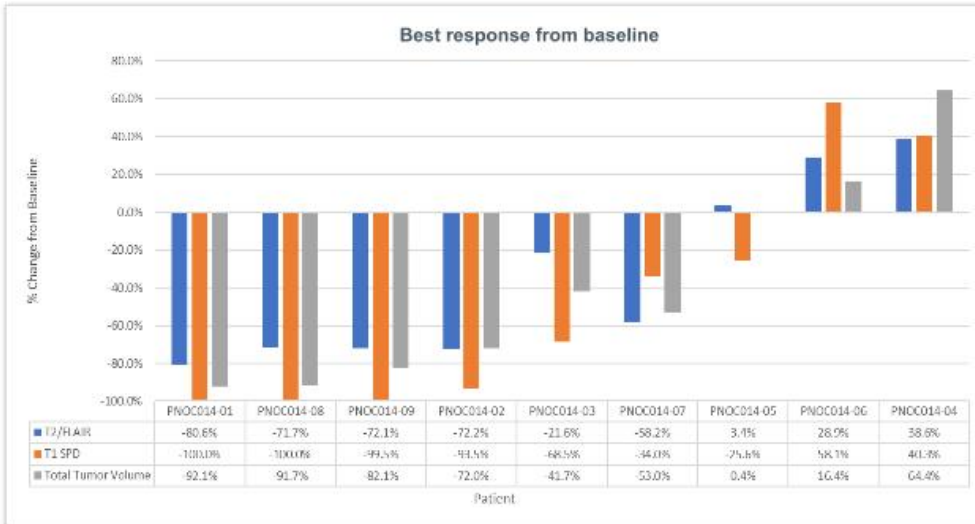
Because many pLGGs undergo senescence when patients reach their 20s, the goal of therapy is to **maximize tumor control** while **minimizing treatment-associated toxicities** from surgery, chemotherapy, and radiation. As a result, a large number of pLGG patients will undergo **multiple lines of systemic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

PNOC014 Study Results Demonstrated Responses or Stable Disease in Majority of pLGG Patients Treated with DAY101 (tovorafenib)



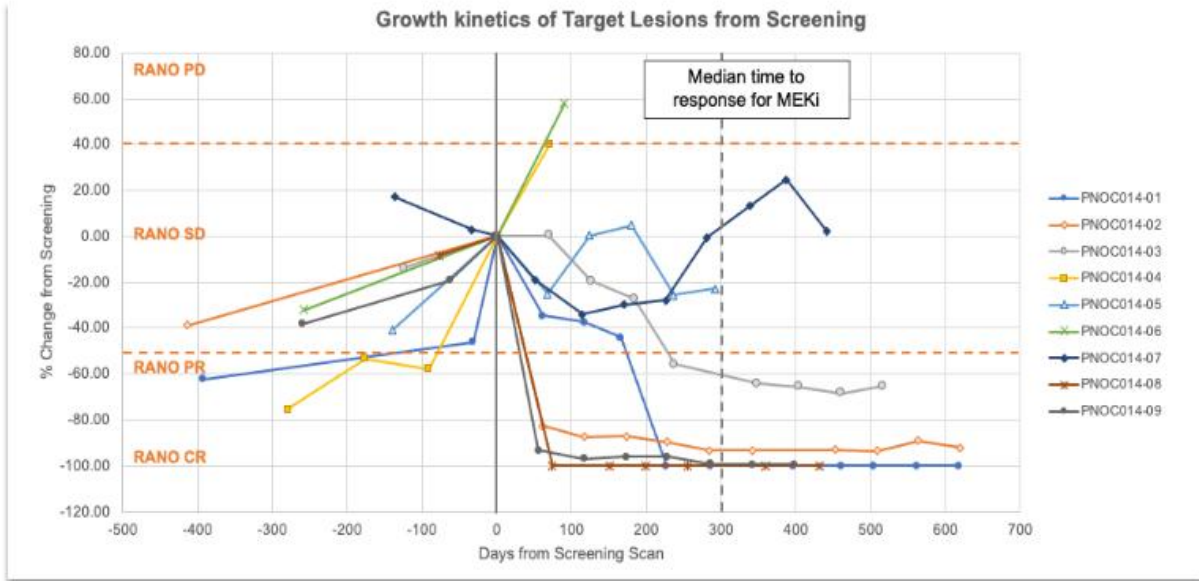
- DAY101 (tovorafenib) studied as once-weekly **monotherapy** in a Phase 1 dose escalation trial in relapsed pediatric glioma patients conducted by the Dana-Farber Cancer Institute and the Pacific Pediatric Neuro-Oncology Consortium (PNOC)
- Of the eight patients with RAF fusions (7 BRAF, 1 CRAF), **two patients** achieved a **complete response** by Response Assessment for Neuro-Oncology (RANO), **three** had a **partial** response, and **two** achieved prolonged **stable** disease
- Median time to achieve a response was **10.5 weeks**, with most common side effects being skin rash and hair color changes. Most patients treated up to **two years** at 420 mg/m²/week
- US FDA has **granted DAY101 Breakthrough Therapy designation** for the treatment of pediatric patients with advanced low-grade glioma harboring RAF alteration and **Orphan Drug Designation** for the treatment of malignant glioma





- RANO: Response assessment for neuro-oncology (FDA standard)
- Volumetric image analysis (exploratory)
- RAPNO: Response assessment for pediatric neuro-oncology (exploratory)

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



Drug-related Adverse Events Observed for DAY101 (tovorafenib) 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 monotherapy required dose reductions)

Drug-related AEs for DAY101 (tovorafenib)

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%)		





Trial Design

- Single arm, open-label, global registrational phase 2 study
- n = 60 patients (approximately)
- Eligibility: patients aged 6 months – 25 years with LGG harboring a KIAA1549:BRAF wild-type fusion or BRAF V600 mutation

Endpoints

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



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)

Our Pipeline



Product Candidate	Indication	Preclinical	Phase 1	Phase 2	Phase 3	Anticipated Milestones
DAY101 (tovorafenib) Type II Pan-RAF Inhibitor ✓ FDA Breakthrough Therapy Designation ✓ FDA Rare Pediatric Disease Designation (PRV Eligible) ✓ FDA Orphan Drug Designation ✓ EC Orphan Designation	Relapsed pLGG	FIREFLY-1 ¹ (pivotal)				Target enrollment achieved: Mar 2022 Initial data: Jun 2022 Topline data: 1Q 2023
	Frontline pLGG	FIREFLY-2 (planned)				Phase 3 initiation: 2Q 2022
	RAF-altered solid tumors ² (monotherapy)	FIRELIGHT-1*				First patient dosed: Nov 2021
Pimasertib MEK 1/2 Inhibitor	MAPK-altered solid tumors ³ (Combo w/DAY101)	FIRELIGHT-1*				Phase 1b/2 initiation: Mar 2022

¹Pivotal Phase 2 trial expected to support registration

²DAY101 adult monotherapy Phase 1 dose escalation and expansion trial previously completed

³Pimasertib Phase 1 dose escalation and expansion trial previously completed

^{*}Includes patients ≥12 years of age

pLGG = pediatric low-grade glioma

DAY101 (tovorafenib) is Active as a Monotherapy in Patients with RAF-altered Adult Solid Tumors and Has Shown Strong Synergy Preclinically in Combination



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 DAY101 (tovorafenib) may be active in tumors currently unaddressed by approved Type I BRAF inhibitors



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

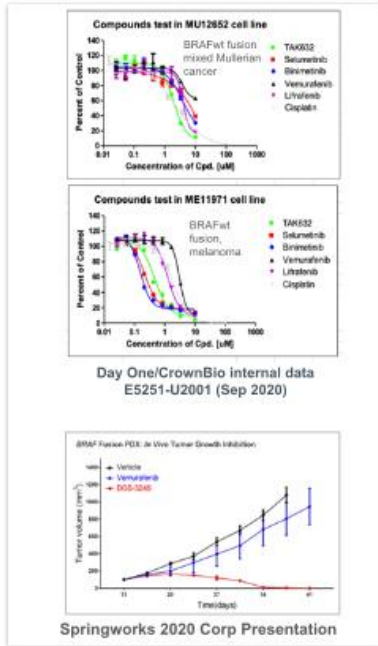
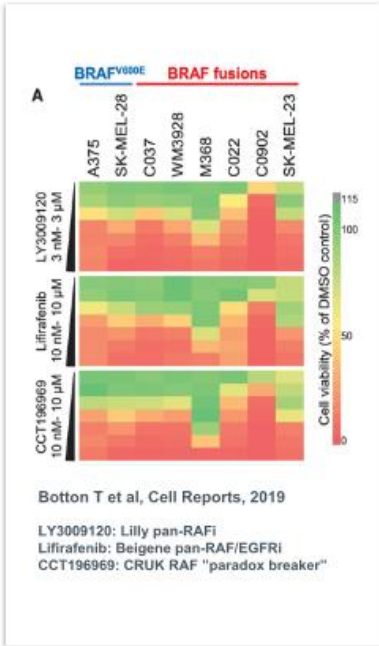
- Less frequent and less severe acneiform rash
- No observed ophthalmologic liabilities (RVO/CSR)
- No observed CV liabilities (changes in LVEF)
- No type I BRAF SAEs: SCCs/KAs, pyrexia, arthralgia



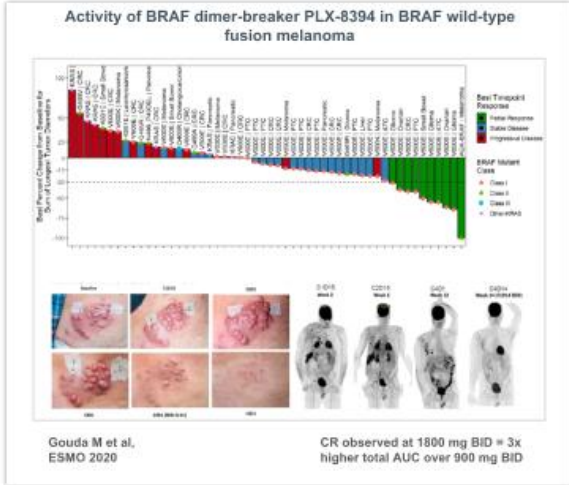
We **initiated** an adult solid tumor **study** to further evaluate monotherapy DAY101 (tovorafenib) in patients with RAF altered tumors for which there are no currently approved therapies

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

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



Only DAY101 has demonstrated *monotherapy clinical activity* in KIAA1549: BRAF and SRGAP3: CRAF wild-type fusions in pLGG



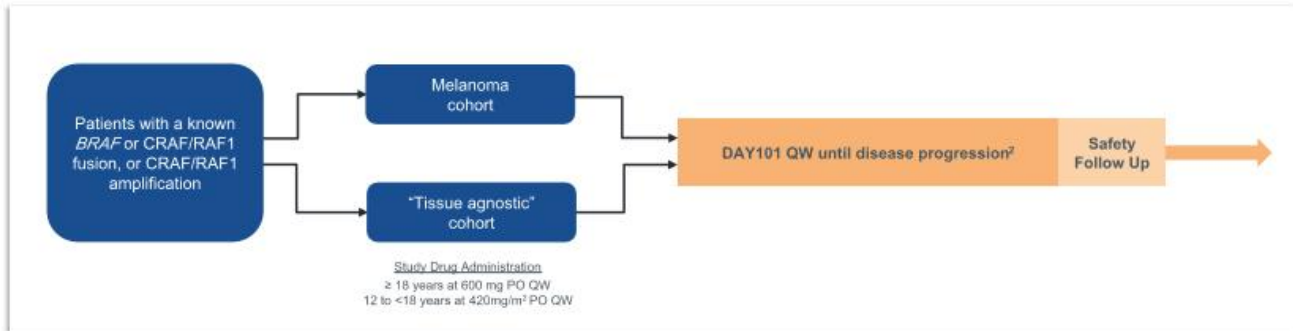


Trial Design¹

- Single arm, open-label, global phase 1b/2a study
- n = 40 patients (approximately)
- Eligibility: patients aged 12 years and older with non-hematologic 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.
¹Umbrella master study – DAY101-102 (main protocol) DAY101 and MAPK pathway aberration, Sub-study 1 monotherapy (DAY101-102a), Sub-study 2 MEK combo (DAY101-102b), ²DAY101 QW until disease progression, intolerable toxicity, withdrawal of consent, or death

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



	BRAF non-V600	BRAF or CRAF WT fusion	KRAS or NRAS mutant	NF1 LOF
Signaling pathways	<p>Proliferation, survival</p>	<p>Proliferation, survival</p>	<p>Proliferation, survival</p>	<p>Proliferation, survival</p>
Potential combinations	Type II RAFi + MEKi or SHP2i	Type II RAFi + MEKi	Type II RAFi + KRAS-G12Ci or MEKi or SHP2i	Type II RAFi + SHP2i
Rationale	<ul style="list-style-type: none"> Non V600 BRAF dimers are effectively inhibited by type II, but not type I, RAFi 	<ul style="list-style-type: none"> BRAF fusion dimers are effectively inhibited by type II, but not type I RAFi 	<ul style="list-style-type: none"> Targeting multiple nodes of MAPK pathway will drive deeper and more durable response 	<ul style="list-style-type: none"> Targeting multiple pathways will drive deeper response

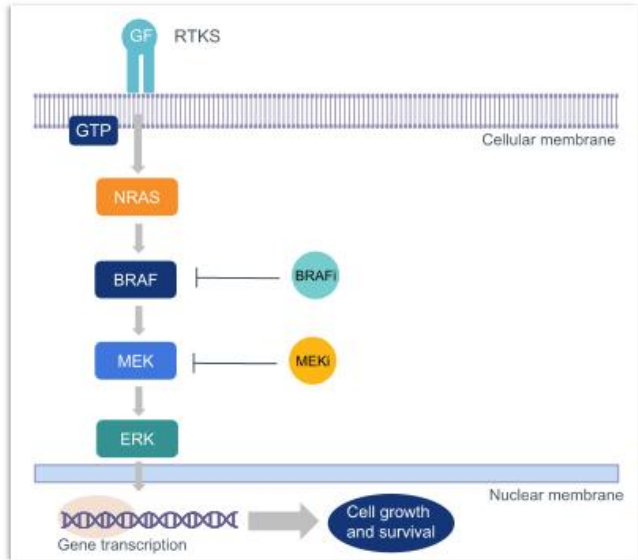


Pimasertib
MEK1/2 Inhibitor

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 DAY101 (tovorafenib) and other targeted therapies may unlock the full value of pimasertib in advanced solid tumors

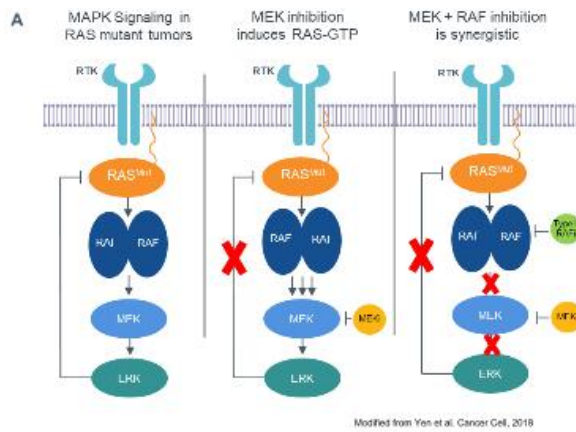


Source: Hepner, Salgues, Anjos, et al. 2017.

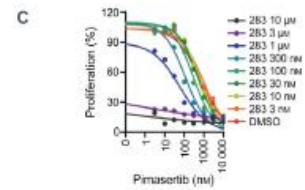
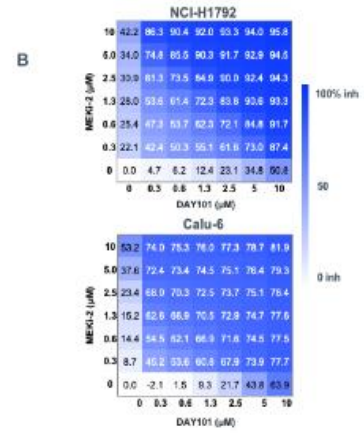
Vertical MAPK Pathway Inhibition with DAY101 (tovorafenib) and Pimasertib Unlocks Potential Synergy for Adult Solid Tumors



- 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).
 C. 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)



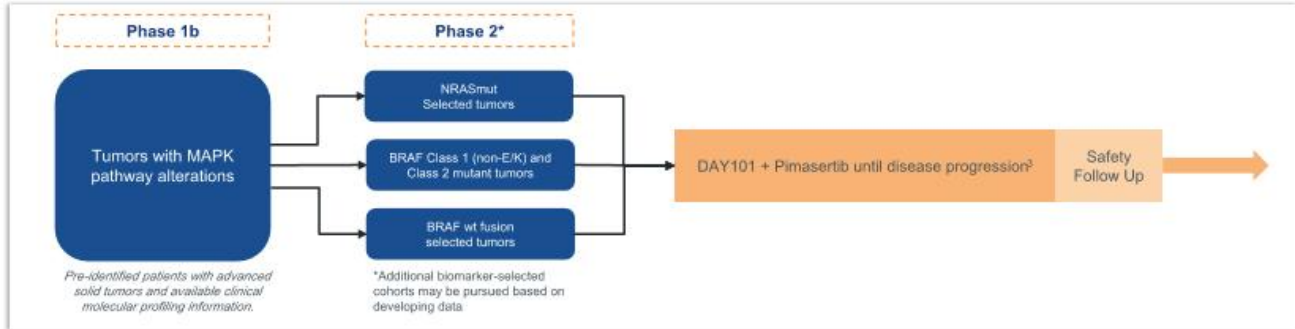


Trial Design¹

- Combination dose escalation, global phase 1b/2 study²
- 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)





Summary



- Cash and cash equivalents as of December 31, 2021: \$284.3 million (no debt)
- IPO in May 2021: \$184 million in gross proceeds, includes full exercise of underwriter's option
- 62.0 million shares of common stock outstanding

\$ Millions	Three Months Ended 12/31/21	Twelve Months Ended 12/30/21
R&D Expense	\$11.2	\$43.6
G&A Expense	\$10.8	\$29.2
Net Loss	\$21.9	\$72.8

Projected cash runway
into 2024

FIREFLY-1: Pivotal Phase 2 clinical trial of DAY101 (tovorafenib)

- Initial clinical data expected in June 2022
- Target enrollment achieved; full topline results expected in 1Q 2023
- Anticipated NDA filing in 2023, if data from FIREFLY-1 are supportive

FIRELIGHT-1: DAY101 (tovorafenib) and pimasertib combination

- Trial expected to initiate in March 2022



DAY101 (tovorafenib)

Oral, CNS-penetrant, pan-RAF

- pLGG: most common brain tumor in children, with no approved therapies
- Rapid and durable responses demonstrated in heavily pre-treated pLGG patients
- Well-tolerated as monotherapy; no Grade 4 AEs
- Worldwide rights to all indications
- IP: composition of matter to mid-2030s with PTE, potential exclusivity to late 2030s / early 2040s via broad patent portfolio

First Patient Dosed in Pivotal FIREFLY-1 May 2021, Initial Data June 2022

First Patient Dosed in Adult Solid Tumor Trial November 2021

Target Enrollment Achieved in Pivotal FIREFLY-1 (Mar 2022), Topline Data 1Q 2023

PIMASERTIB

Oral, allosteric MEK inhibitor

- Combination with DAY101 (tovorafenib) in MAPK-altered solid tumors
- Clinical experience in over 800 patients
- Clear rationale for combo for pan-RAFi and MEKi
- Worldwide rights to all indications

Plan to Initiate Combination Trial with DAY101 (tovorafenib) March 2022

SPECIALIZED TEAM

- Deep experience in the space and corporate development
- Strategy to aggressively pursue other assets and indications

Pursuing Fast-to-Market Pediatric and Adult Targeted Therapy Opportunities

Day One

BIOPHARMACEUTICALS



Thank you