Company Overview
The Onvansertib Opportunity

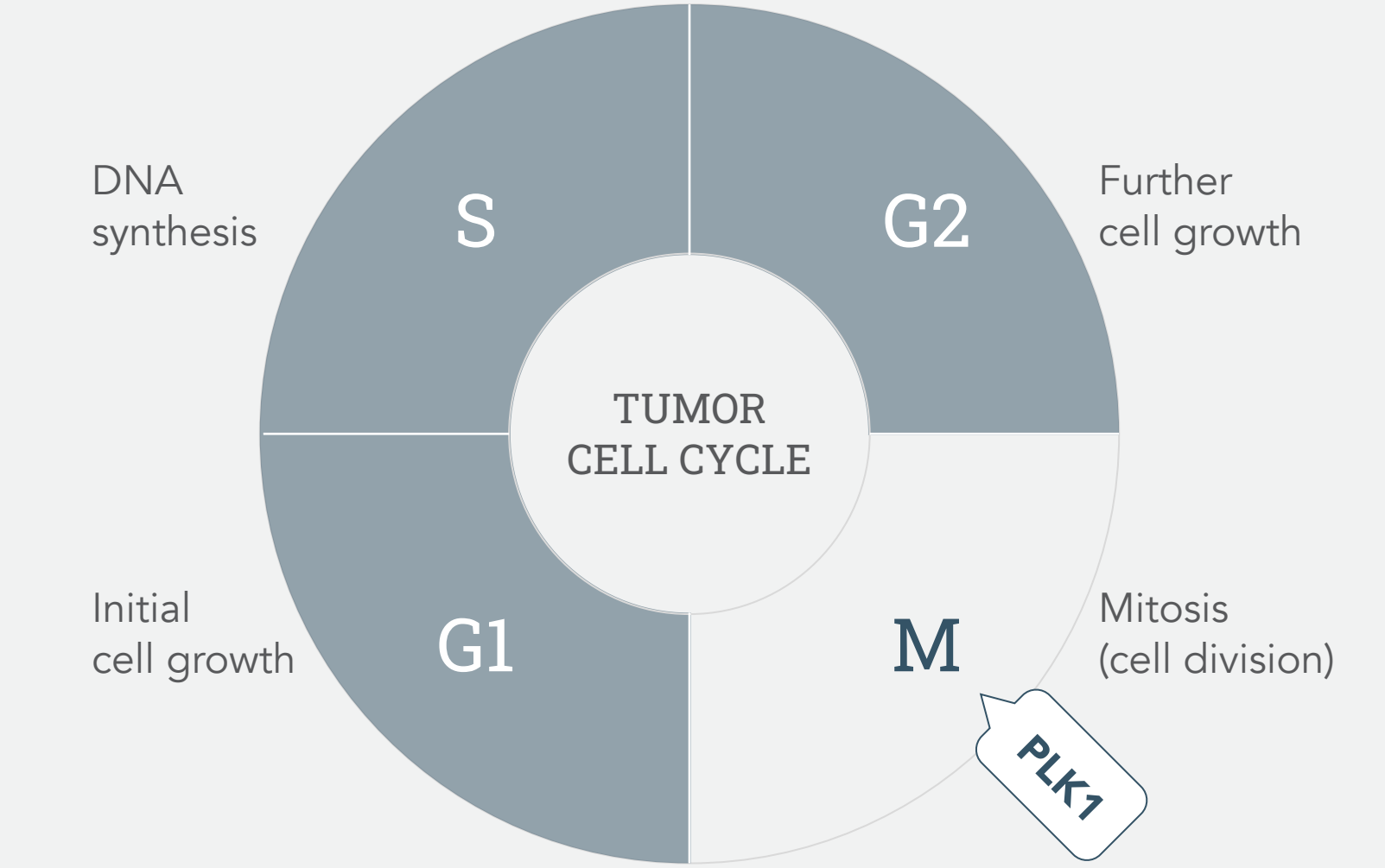
TURNING THE TIDE ON CANCER

NOVEMBER 2021

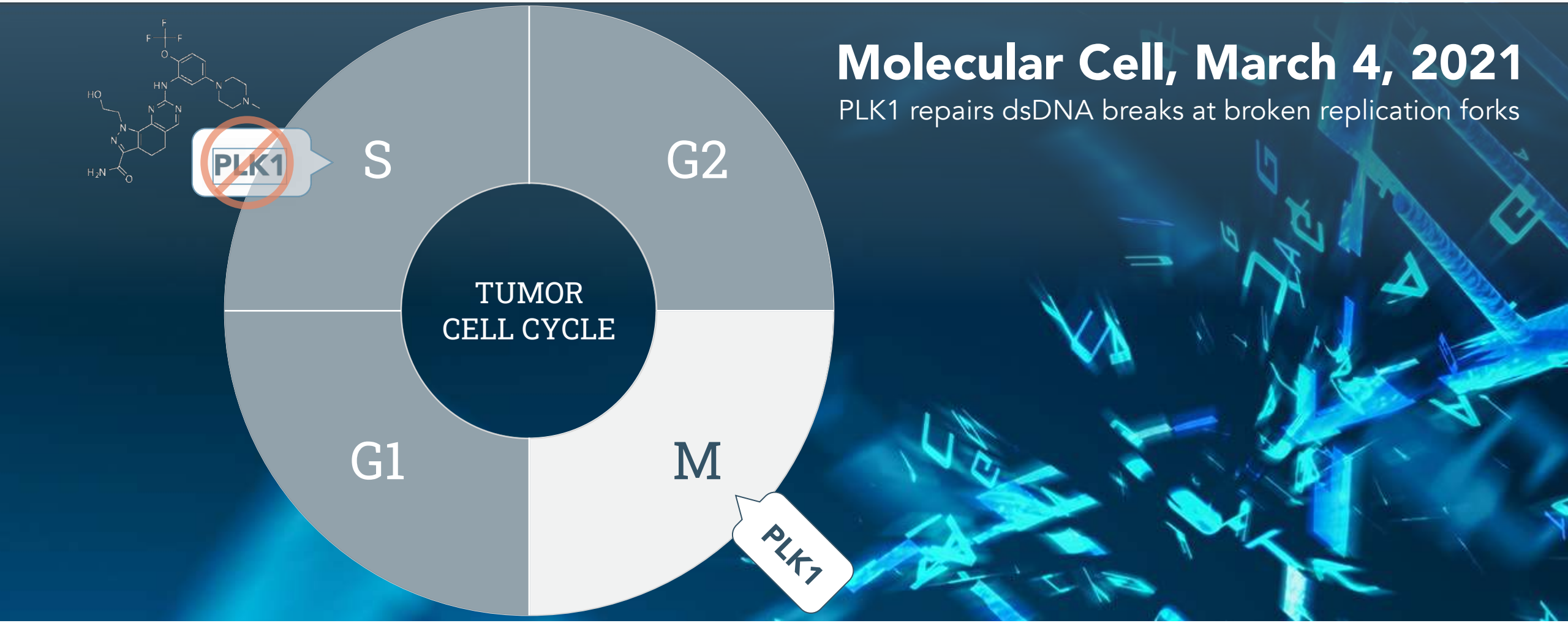
Forward-Looking Statements

CERTAIN STATEMENTS IN THIS PRESENTATION ARE FORWARD-LOOKING within the meaning of the Private Securities Litigation Reform Act of 1995. These statements may be identified by the use of words such as "anticipate," "believe," "forecast," "estimated" and "intend" or other similar terms or expressions that concern our expectations, strategy, plans or intentions. These forward-looking statements are based on our current expectations and actual results could differ materially. There are a number of factors that could cause actual events to differ materially from those indicated by such forward-looking statements. These factors include, but are not limited to, our need for additional financing; our ability to continue as a going concern; clinical trials involve a lengthy and expensive process with an uncertain outcome, and results of earlier studies and trials may not be predictive of future trial results; our clinical trials may be suspended or discontinued due to unexpected side effects or other safety risks that could preclude approval of our product candidates; risks related to business interruptions, including the outbreak of COVID-19 coronavirus, which could seriously harm our financial condition and increase our costs and expenses; uncertainties of government or third party payer reimbursement; dependence on key personnel; limited experience in marketing and sales; substantial competition; uncertainties of patent protection and litigation; dependence upon third parties; regulatory, and risks related to failure to obtain FDA clearances or approvals and noncompliance with FDA regulations. There are no guarantees that any of our technology or products will be utilized or prove to be commercially successful. Additionally, there are no guarantees that future clinical trials will be completed or successful or that any precision medicine therapeutics will receive regulatory approval for any indication or prove to be commercially successful. Investors should read the risk factors set forth in our Form 10-K for the year ended December 31, 2020, and other periodic reports filed with the Securities and Exchange Commission. While the list of factors presented here is considered representative, no such list should be considered to be a complete statement of all potential risks and uncertainties. Unlisted factors may present significant additional obstacles to the realization of forward-looking statements. Forward-looking statements included herein are made as of the date hereof, and we do not undertake any obligation to update publicly such statements to reflect subsequent events or circumstances.

PLK1 is hijacked by tumor cells, allowing uncontrolled growth



PLK1 repairs damaged DNA, enabling tumor cells to proliferate



Onvansertib positions Cardiff Oncology to effectively target PLK1

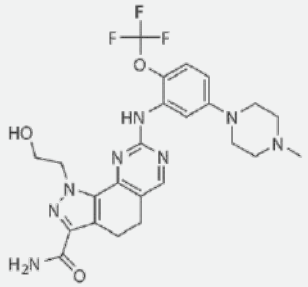
SPECIFICITY

Exquisitely specific for PLK1

ENZYME	IC_{50} (μM)
PLK1	**0.002**
PLK2	>10
PLK3	>10
CK2	0.4
FLT3	0.4
CDK1/CycB	>10
42 other kinases and >140 in the Millipore panel	>10

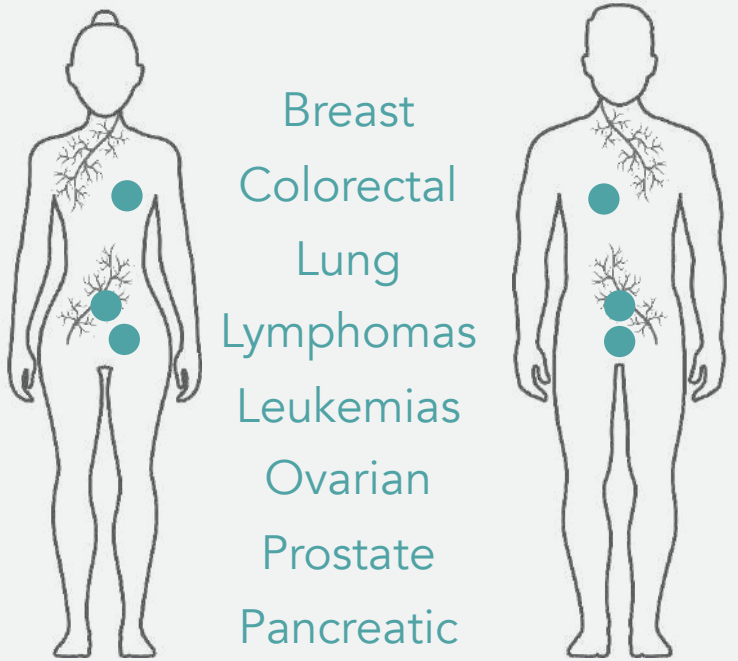
PROPERTIES

- Small molecule
- Oral dosing
- 24-hour half-life



OPPORTUNITY

PLK1 is over-expressed in many cancer types[1]



Breast
Colorectal
Lung
Lymphomas
Leukemias
Ovarian
Prostate
Pancreatic

1. Renner Blood 2009; Mito Leukemia and Lymphoma 2005; 2005; Takai et al., Oncogene (2005) 24, 287–291

We believe Pfizer relationship validates onvansertib as platform molecule

Pfizer BREAKTHROUGH GROWTH INITIATIVE

- Onvansertib program validation
- Scientific Advisory Board expertise: Adam Schayowitz, PhD
- Financial investment

SUMMARY TERMS

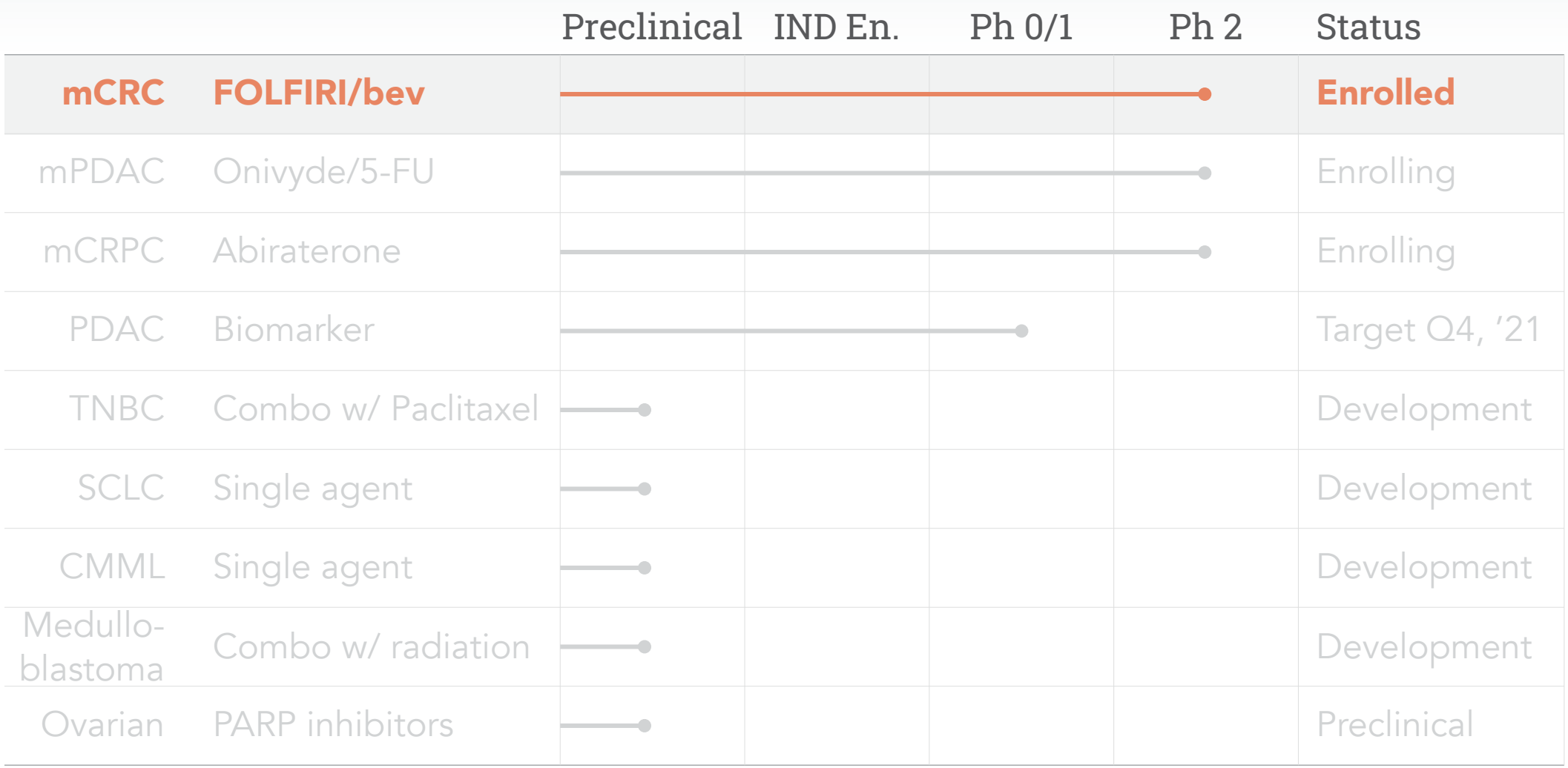
Announced November 18, 2021

- Pfizer will invest a total of $15M at $6.22 per share (a 19% premium over prior closing price) with a 180-day lockup
- Right of First Access:
  Pfizer sees onvansertib data 2 days before release

WHAT	Onvansertib has achieved
WHY	Onvansertib works
WHERE	Cardiff Oncology can go

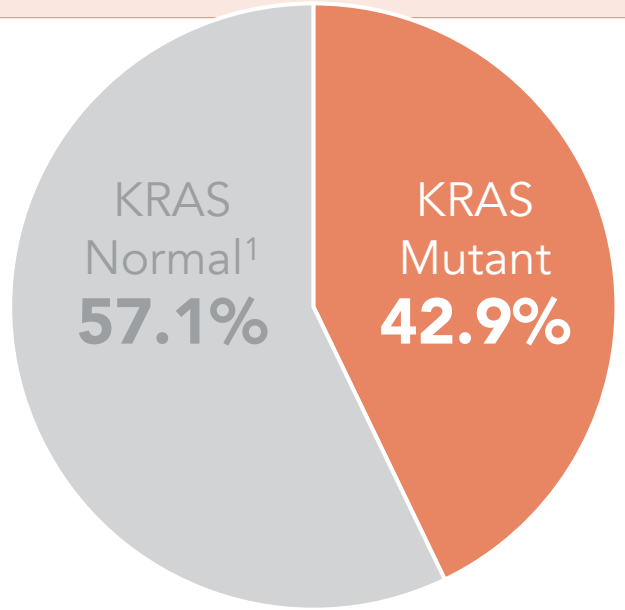
WHAT	Onvansertib has achieved
WHY	Onvansertib works
WHERE	Cardiff Oncology can go

Our lead program is in KRAS-metastatic colorectal cancer (mCRC)



Gaps in current mCRC therapies leave a significant unmet need

	1st LINE	2nd LINE
KRAS Wild Type	FOLFOX (chemo) + bevacizumab + EGFR inhibitor	FOLFIRI (chemo) + bevacizumab
KRAS Mutant	FOLFOX (chemo) + bevacizumab	



1. Jones R et al. Br J Cancer. 2017 Mar 28;116(7):923-929

The prognosis for second-line mCRC therapies is poor

2nd LINE

FOLFIRI (chemo) + bevacizumab

5-year survival: 10%

Drugs in development do not address most prevalent KRAS mutations

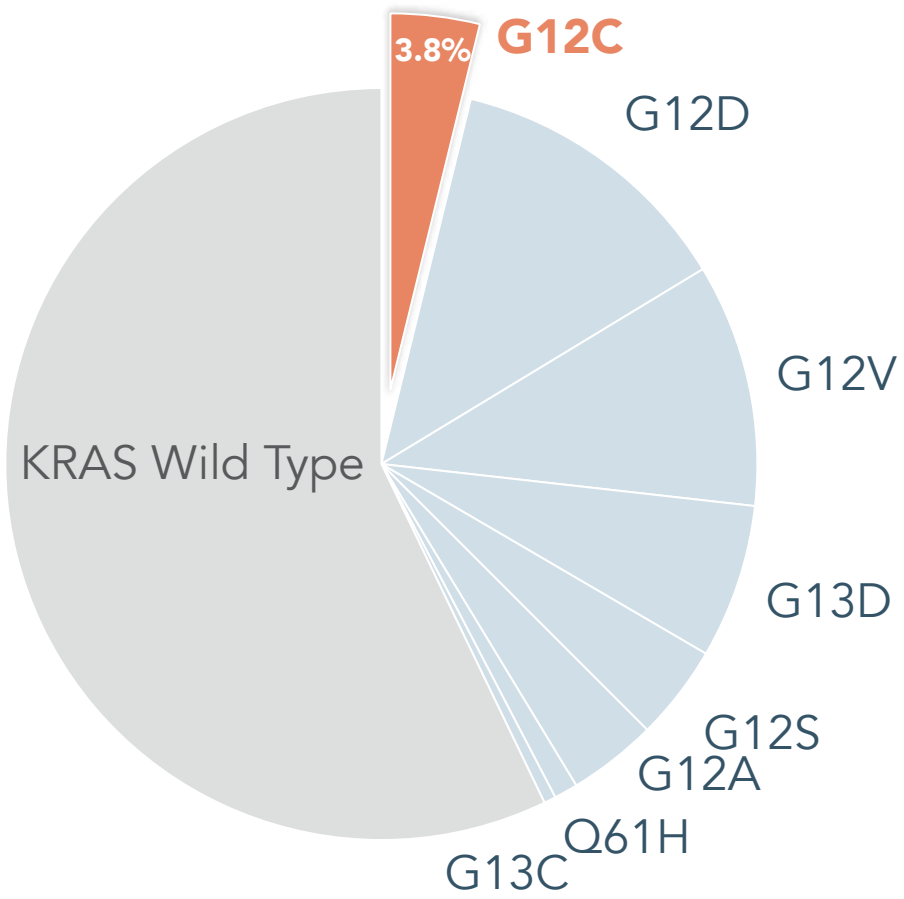
HISTORICAL ORR

5%	2006 – 2008	ML18147 Phase 3 Registrational Trial FOLFIRI + bev in second-line[1]
11.4%	2000 – 2013	Systematic Literature-Based Analysis of 23 Randomized Trials (10,800 Patients) in Second-Line mCRC[2]
13%	2015 – 2017	TRIBE2 Randomized Phase 3 Trial: SOC arm FOLFIRI + bev in Second-line following FOLFOX + bev First-line[3,4]

1. Bennouna et al., Lancet Oncol 2013; 14: 29–37; 2. Giessen et al., Acta Oncologica, 2015, 54: 187-193; 3. Cremolini et al., Lancet Oncol 2020, 21: 497–507; 4, Antoniotti et al., Correspondence Lancet Oncol June 2020. mCRC: metastatic colorectal cancer

Gaps in KRAS-mutated mCRC therapies leave a significant unmet need

KRAS Mutations in mCRC[1]

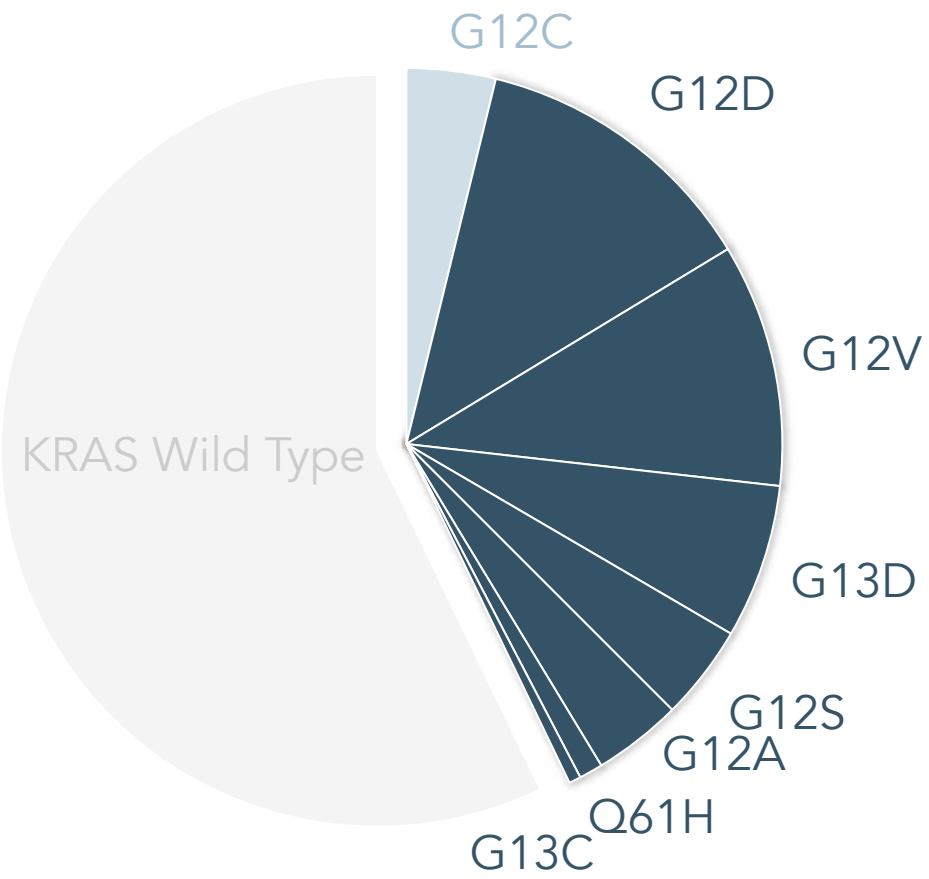


Current therapies (Amgen; Mirati) address the G12C KRAS mutation ***only***

1. Jones R et al. Br J Cancer. 2017 Mar 28;116(7):923-929

Gaps in KRAS-mutated mCRC therapies leave a significant unmet need

KRAS Mutations in mCRC[1]



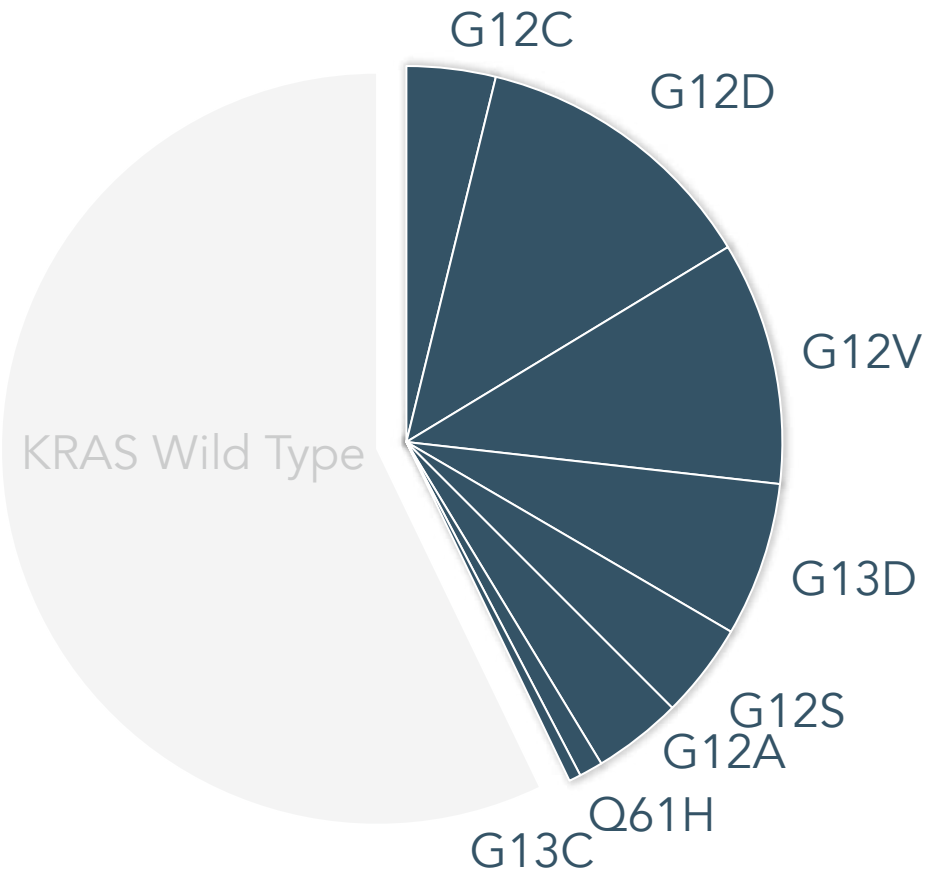
91.1%

of patients with KRAS mutations miss out on targeted therapy

1. Jones R et al. Br J Cancer. 2017 Mar 28;116(7):923-929

Gaps in KRAS-mutated mCRC therapies leave a significant unmet need

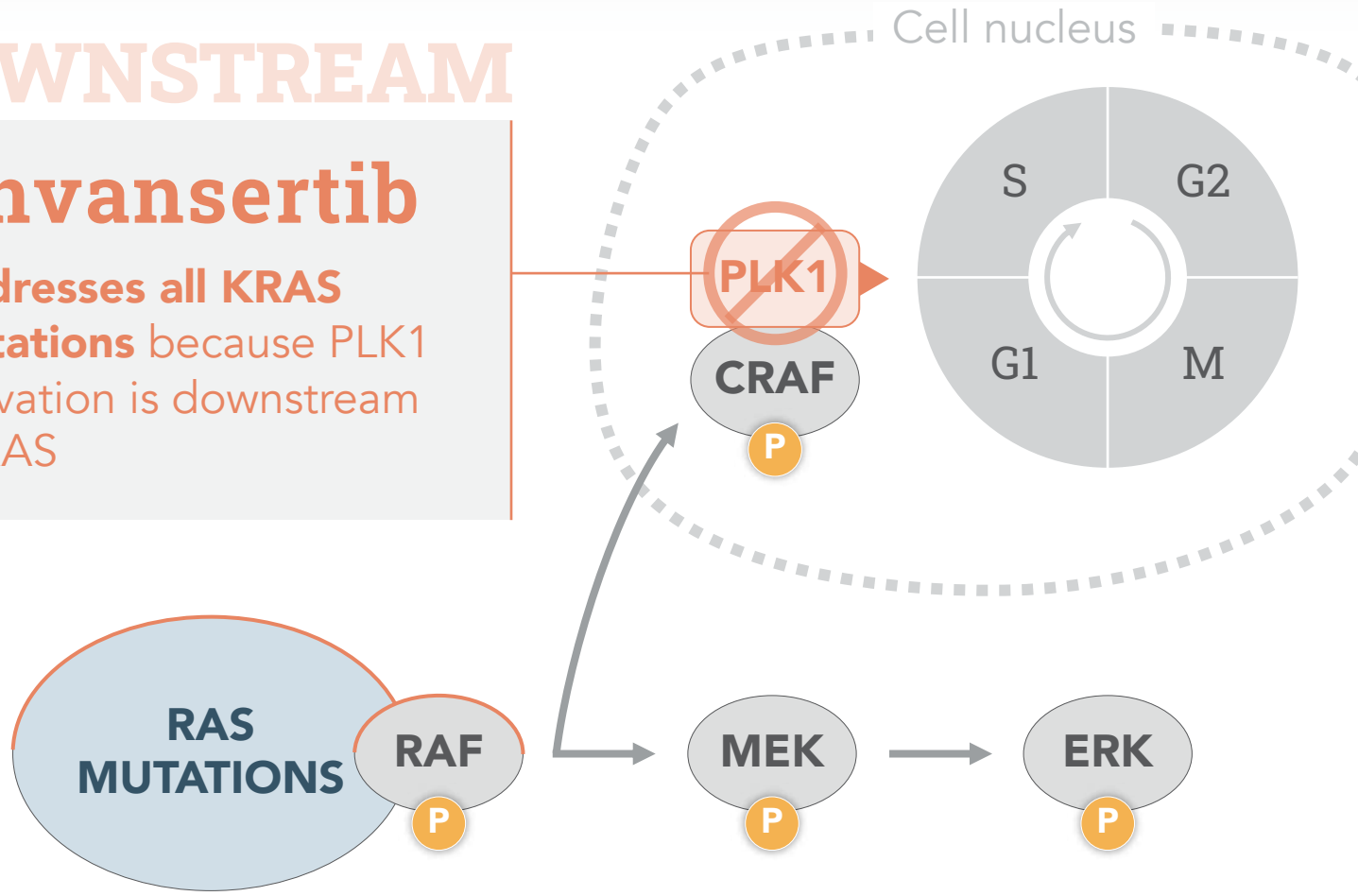
KRAS Mutations in mCRC[1]



DOWNSTREAM

Onvansertib

Addresses all KRAS mutations because PLK1 activation is downstream of RAS

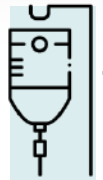


1. Jones R et al. Br J Cancer. 2017 Mar 28;116(7):923-929

Our Ph 1b/2 trial in KRAS-mutated mCRC combines onvansertib w/ SoC

One Cycle = 28 Days

WEEKS 1–2

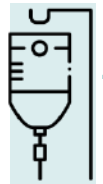


2nd-Line SoC: FOLFIRI
+ bevacizumab

6	7	8	9	10	11	12	13	14

ONVANSERTIB

WEEKS 3–4



2nd-Line SoC: FOLFIRI
+ bevacizumab

20	21	22	23	24	25	26	27	28

ONVANSERTIB

End-points measured tumor response and KRAS mutations

EFFICACY END POINTS

1. Objective Response Rate (ORR) in patients who receive ≥1 cycle of treatment
2. Progression-Free Survival (PFS) and Duration of Response (DoR)
3. Decreases in KRAS mutational burden and response to treatment

End-points measured tumor response and KRAS mutations

One Cycle = 28 Days

WEEKS 1–2

2nd-Line SoC: FOLFIRI
+ bevacizumab

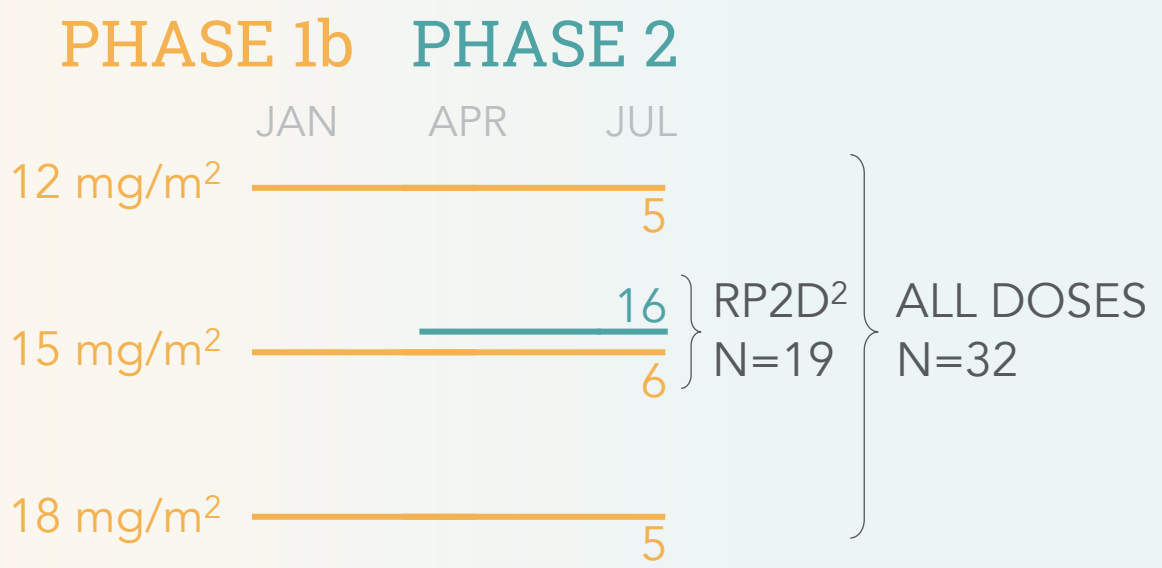
ONVANSERTIB

WEEKS 3–4

2nd-Line SoC: FOLF
+ bevacizumab

ONVANSERTIB

SUMMARY AT JULY 2, 2021[1]



1. Evaluable patients
2. Three patients were excluded from the RP2D (recommended phase 2 dose) efficacy evaluation because they received onvansertib 12 mg/m^2 instead of the assigned per protocol dose of 15 mg/m^2

End-points measured tumor response and KRAS mutations

HISTORICAL ORR*

5%	2006 – 2008
11.4%	2000 – 2013
13%	2015 – 2017

HISTORICAL PFS*

4.5–5.7 mo

DETAIL

PROOF OF CONCEPT CRITERIA

20% ORR

≥6 mo PFS

* Bennouna et al., Lancet Oncol 2013; 14: 29–37; Giessen et al., Acta Oncologica, 2015, 54: 187-193; Cremol
Correspondence Lancet Oncol June 2020; ORR: Objective Response Rate; PFS: Progression-Free Survival

End-points measured tumor response and KRAS mutations

HISTORICAL ORR*

5%	2006 – 2008
11.4%	2000 – 2013
13%	2015 – 2017

HISTORICAL PFS*

4.5–5.7 mo

DETAIL

RESULTS AT JULY 2, 2021

20% **31%** ALL **37%** RP2D ORR

≥6 mo **9.4mo** ALL PFS

* Bennouna et al., Lancet Oncol 2013; 14: 29–37; Giessen et al., Acta Oncologica, 2015, 54: 187-193; Cremol
Correspondence Lancet Oncol June 2020; ORR: Objective Response Rate; PFS: Progression-Free Survival

Our clinical data indicates that onvansertib is well tolerated

No unexpected toxicities

- Of all TEAEs, only 10% (49/490) were G3/G4
- Only 2/16 had neutropenia after elimination of 5-FU bolus *view detail*

DETAIL

8 patients had a total of 10 G4 adverse events:
Neutropenia (n=6); Decreased WBC (n=2); Neutropenic fever (n=1); Hyperphosphatemia (n=1)

Combination regimen was well tolerated:
The only G3/G4 AEs reported in ≥2 patients were Neutropenia (n=17 events); Fatigue (n=13); WBC decease (n=3); Nausea (n=2); Abd pain (n=2); Diarrhea (n=2); Mucositis (n=2); and HTN (n=2).

		GRADE			
TEAEs*	All	1	2	3	4
Fatigue	28	12	3	13	0
Neutropenia	25	1	11	8	5
Nausea	22	15	5	2	0
Abdominal pain	16	9	5	2	0
Diarrhea	16	8	6	2	0
Mucositis	15	8	5	2	0
Alopecia	14	12	2	0	0
WBC Decreased	13	4	7	1	1
Anemia	11	7	4	0	0
Decreased platelets	10	6	4	0	0

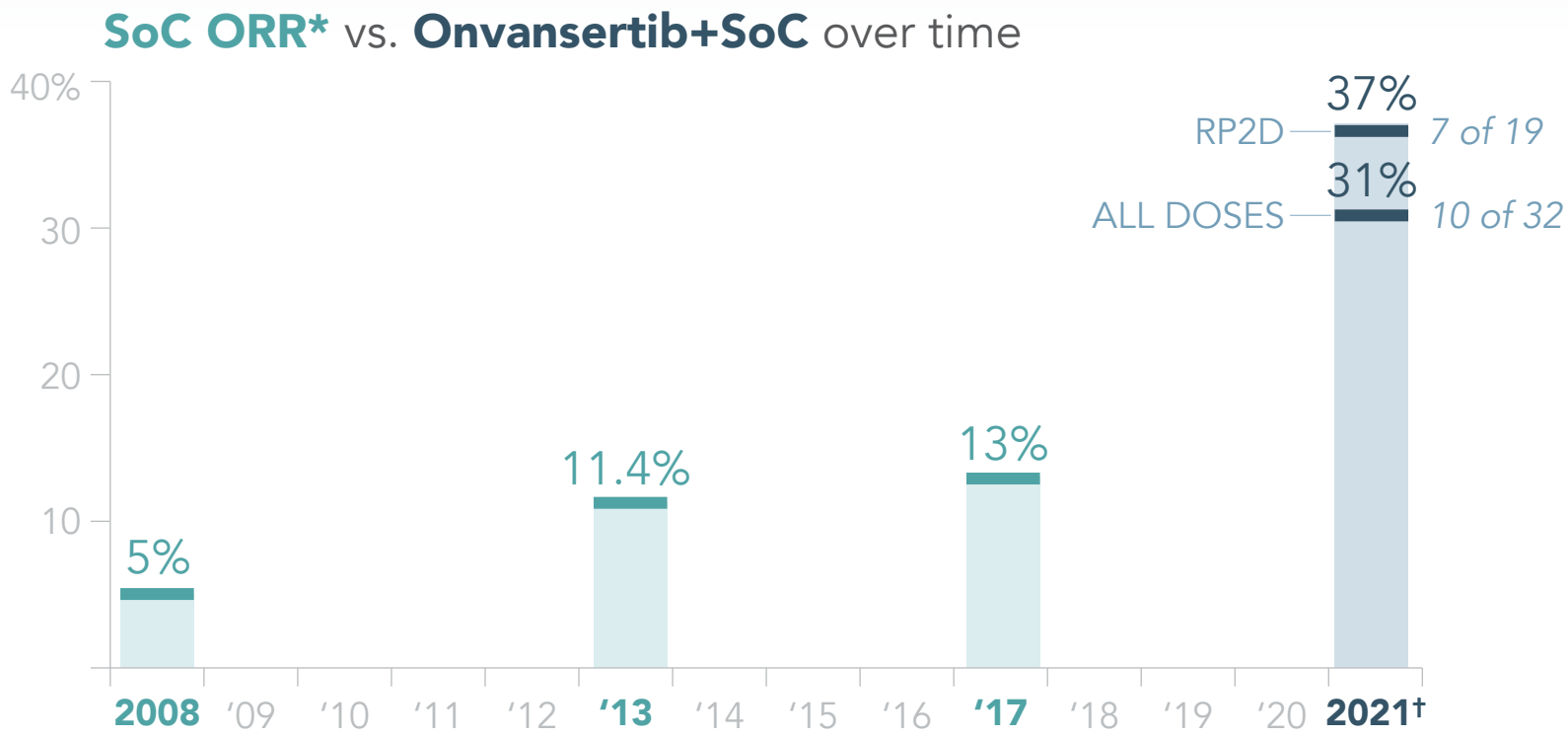
		GRADE			
TEAEs*	All	1	2	3	4
Hypertension	8	2	4	2	0
Vomiting	8	4	3	1	0
Headache	6	6	0	0	0
Neuropathy	6	5	1	0	0
ALT increase	4	3	0	1	0
AST Increase	3	1	1	1	0
Palmar-Plantar Dysesthesia	3	0	0	3	0
Dehydration	3	0	2	1	0
GERD	3	3	0	0	0

*N: number of patients (total N=45); TEAEs: Treatment Emergent Adverse Events; Data at 02-Jul-2021

In the clinic, onvansertib safely and effectively raised response rates

HISTORICAL ORR

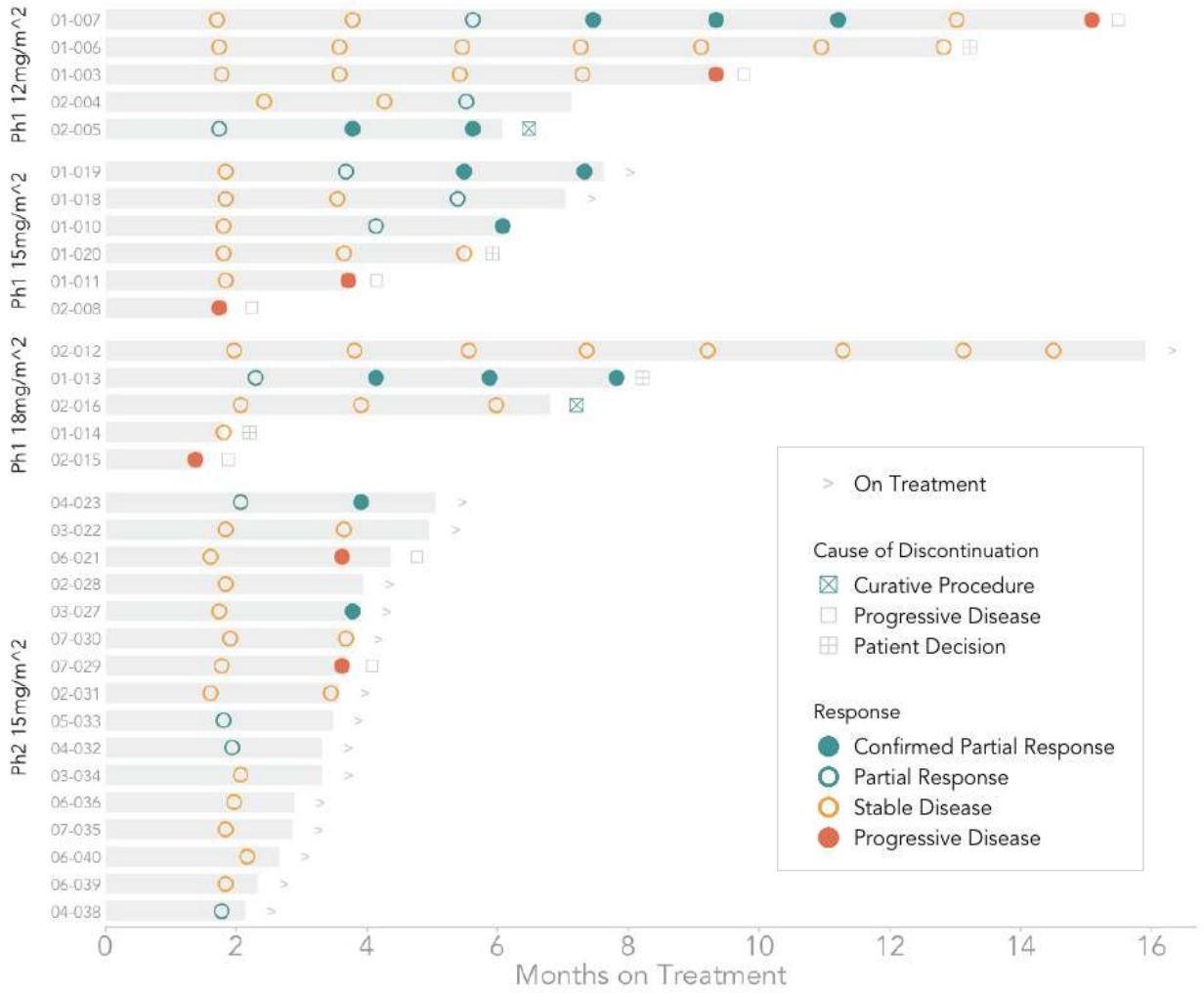
5%	2006 – 2008
11.4%	2000 – 2013
13%	2015 – 2017

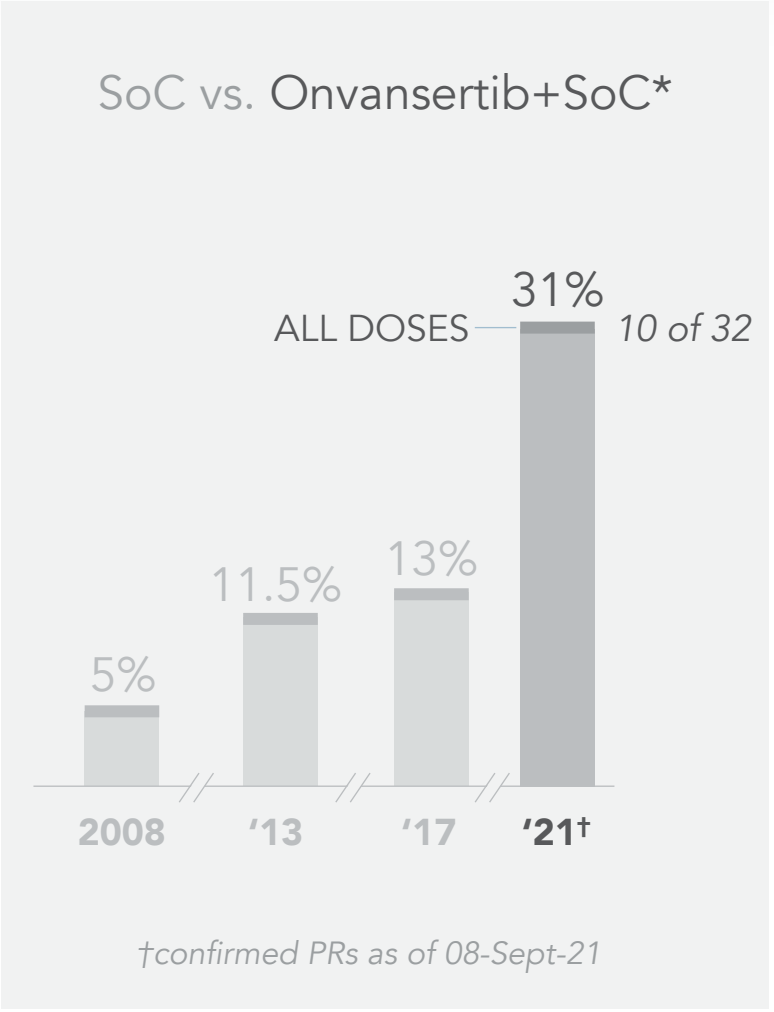


†confirmed PRs as of 08-Sept-21

* 2008: Bennouna et al., Lancet Oncol 2013; 14: 29–37; 2013: Giessen et al., Acta Oncologica, 2015, 54: 187-193; 2017: Cremolini et al., Lancet Oncol 2020, 21: 497–507; and Antoniotti et al., Correspondence Lancet Oncol June 2020. SOC: Standard-of-care

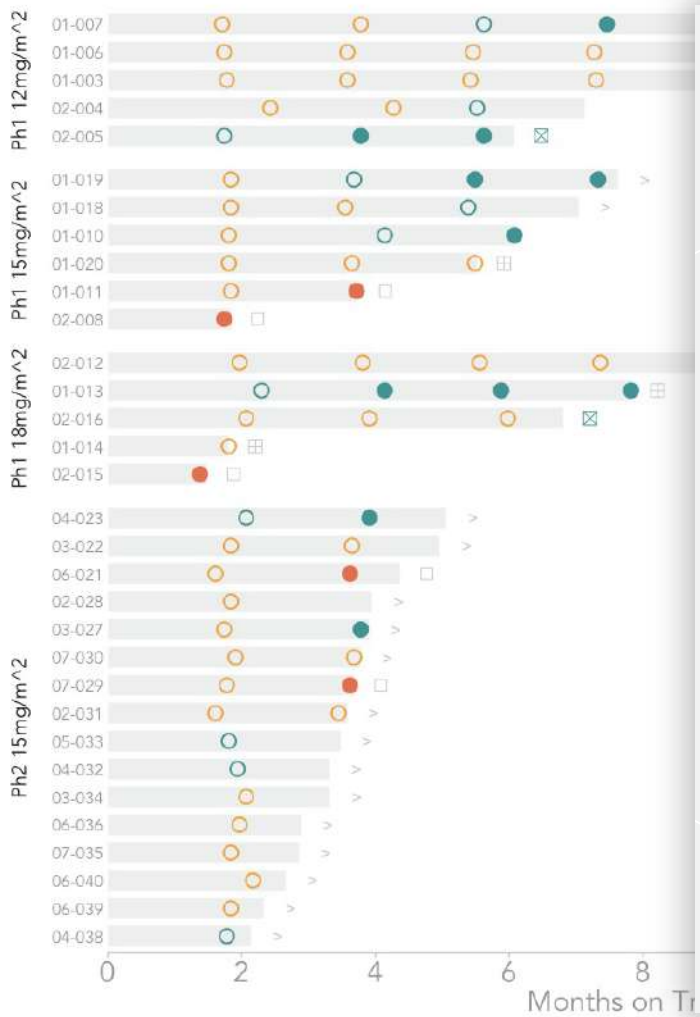
Across all doses we observe initial PRs up to six months on treatment



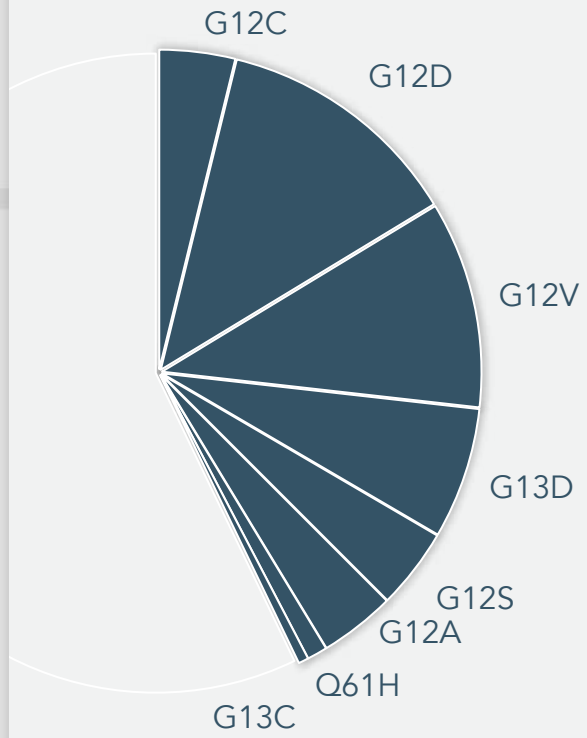


* 2008: Bennouna et al., Lancet Oncol 2013; 14: 29–37; 2013: Giessen et al., Acta Oncologica, 2015, 54: 187-193; 2017: Cremolini et al., Lancet Oncol 2020, 21: 497–507; and Antoniotti et al., Correspondence Lancet Oncol June 2020. SOC: Standard-of-care

Across all doses we observe initial PRs up to six months on treatment



KRAS Mutations in mCRC[1]

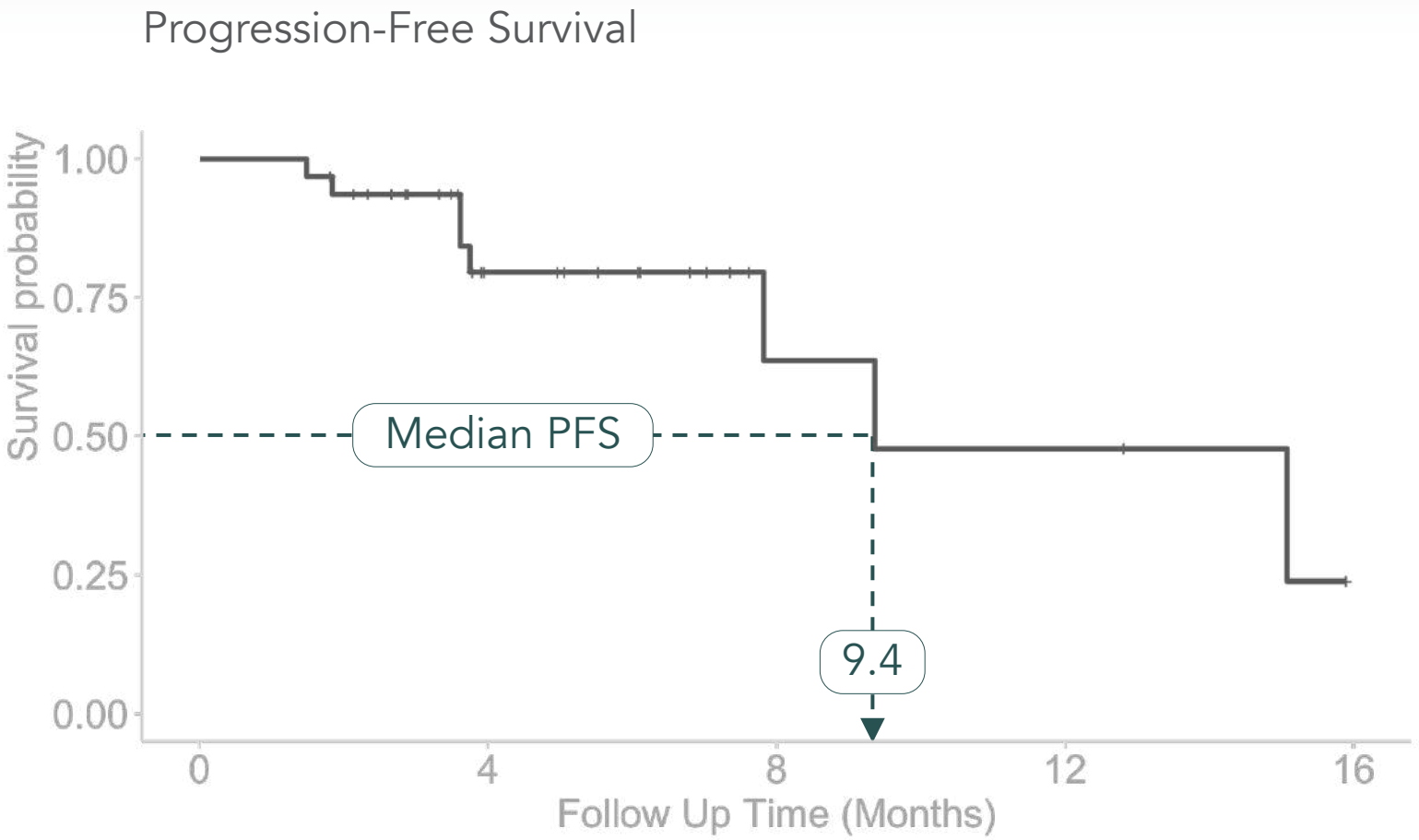


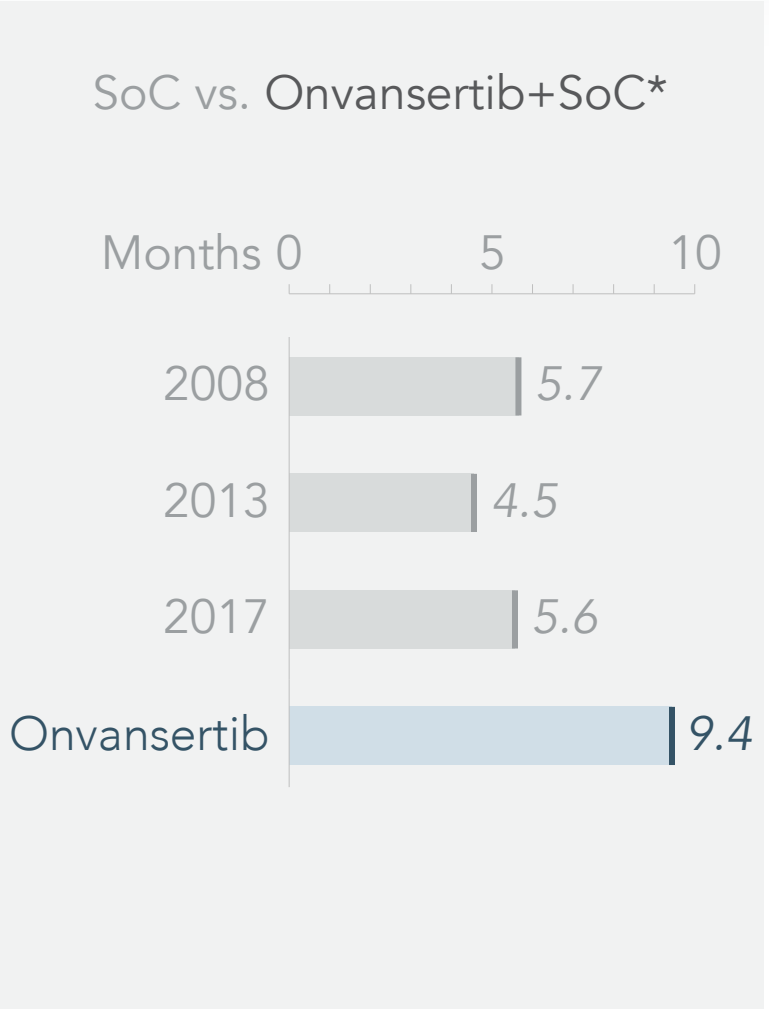
Onvansertib responses across KRAS mutations

KRAS Variant	PR	SD	PD	Total
G12D	3	4	1	8
G12V	1	5		6
G13D	2	2		4
G12A	3	1		4
A146T	2	2		4
G12S		3		3
G12C	1		1	2
Q61H		1		1
Total	12	18	2	32

1. Jones R et al. Br J Cancer. 2017 Mar 28;116(7):923-929

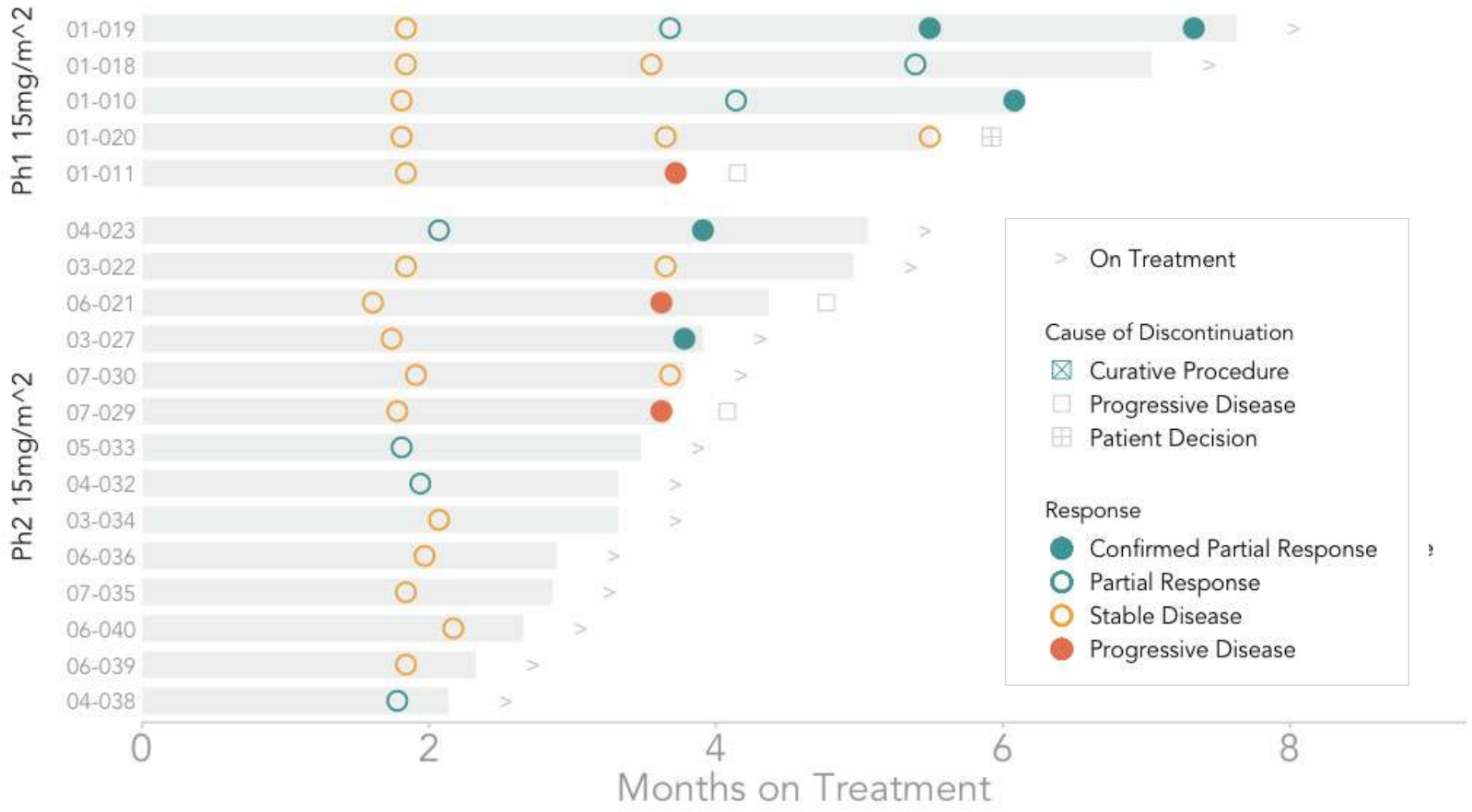
Onvansertib's median PFS nearly doubles historical SoC

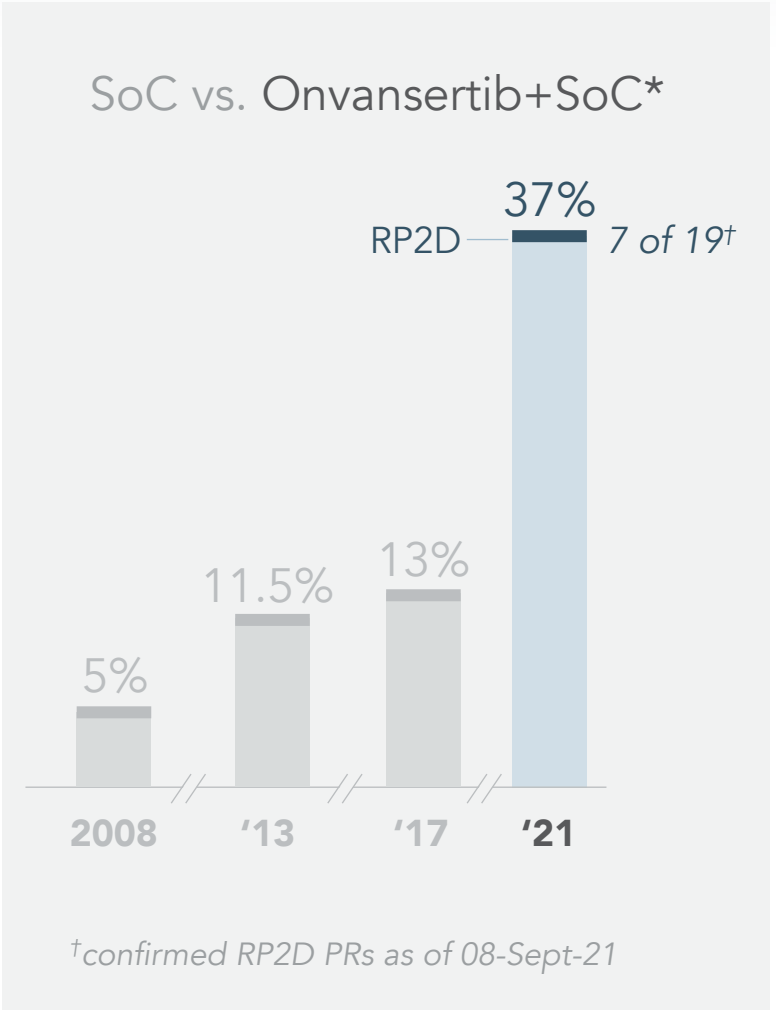




* 2008: Bennouna et al., Lancet Oncol 2013; 14: 29–37; 2013: Giessen et al., Acta Oncologica, 2015, 54: 187-193; 2017: Cremolini et al., Lancet Oncol 2020, 21: 497–507; and Antoniotti et al., Correspondence Lancet Oncol June 2020. SOC: Standard-of-care

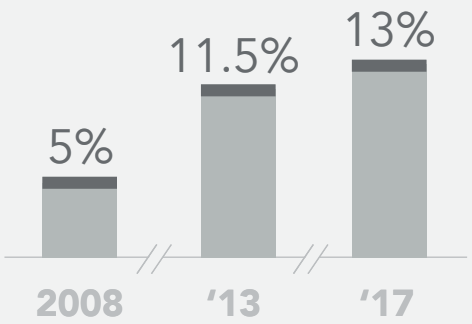
At RP2D we observe initial responses up to six months on treatment

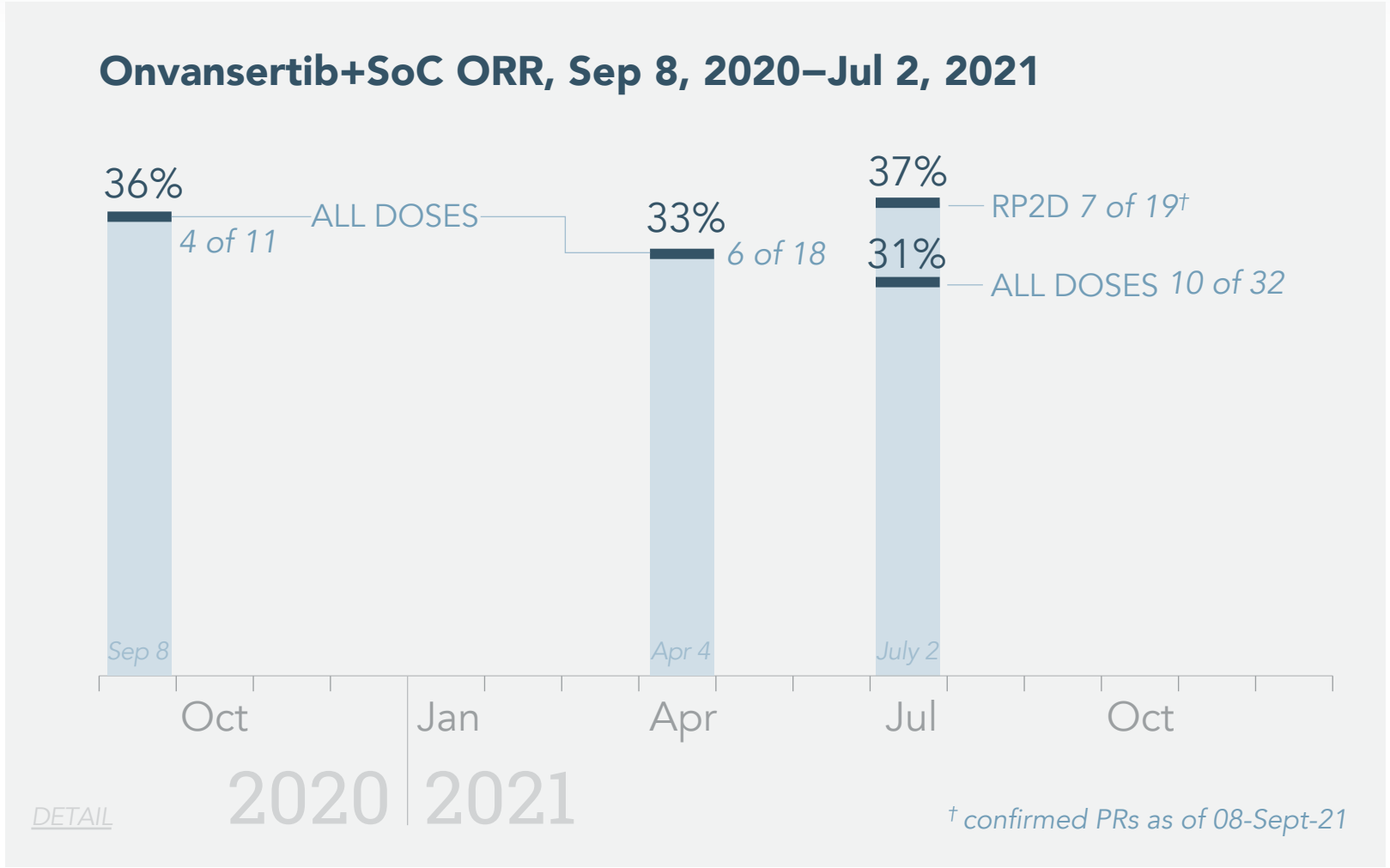




* 2008: Bennouna et al., Lancet Oncol 2013; 14: 29–37; 2013: Giessen et al., Acta Oncologica, 2015, 54: 187-193; 2017: Cremolini et al., Lancet Oncol 2020, 21: 497–507; and Antoniotti et al., Correspondence Lancet Oncol June 2020. SOC: Standard-of-care

Onvansertib's response rate has been consistent over time





* 2008: Bennouna et al., Lancet Oncol 2013; 14: 29–37; 2013: Giessen et al., Acta Oncologica, 2015, 54: 187-193; 2017: Cremolini et al., Lancet Oncol 2020, 21: 497–507; and Antoniotti et al., Correspondence Lancet Oncol June 2020. SOC: Standard-of-care

WHAT	Onvansertib has achieved
WHY	Onvansertib works
WHERE	Cardiff Oncology can go

To date, toxicity has prevented regulatory approval of PLK1 inhibitors

Onvansertib's safety profile

eclipses that of its most promising predecessor

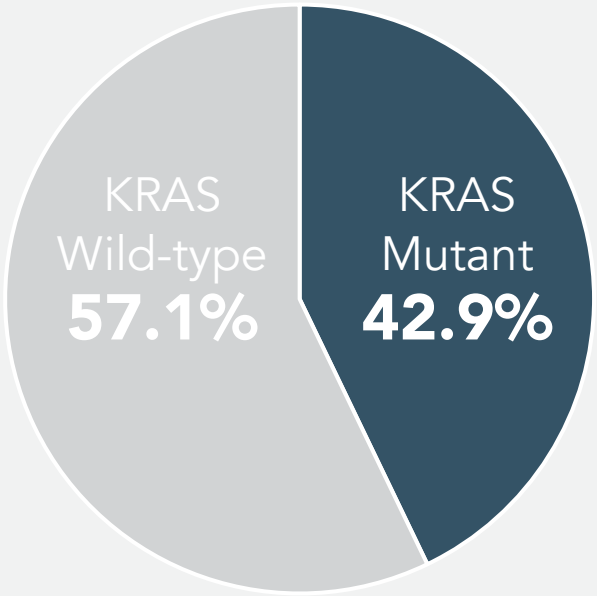
	Onvansertib	Volasertib[1]
Selectivity for PLK1	Exclusive	Pan-inhibitor for PLK1, 2, and 3
Dosing	Oral	IV
Half-life	1 day	~5 days
Safety and tolerability	Well tolerated in ~200 patients	Pivotal trial suspended at 371 patients: toxicity

1. Schoffski et al; European Journal of Cancer 48(2012); 179-186

Onvansertib's PLK1 inhibition is a two-pronged attack of tumor cells

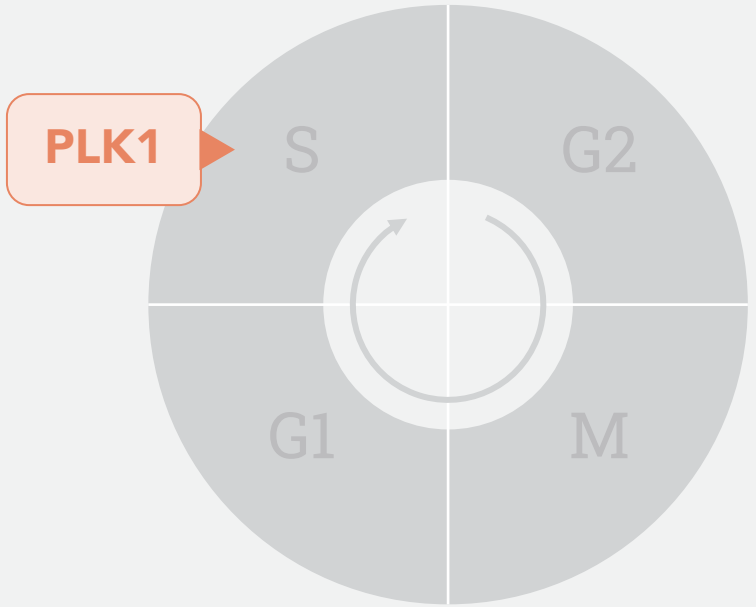
KRAS HYPERSENSITIVITY[1]

Cells with KRAS mutation are hypersensitive to inhibition of PLK1



SYNERGY WITH CHEMO

Inhibiting PLK1 increases the efficacy of chemotherapy drugs

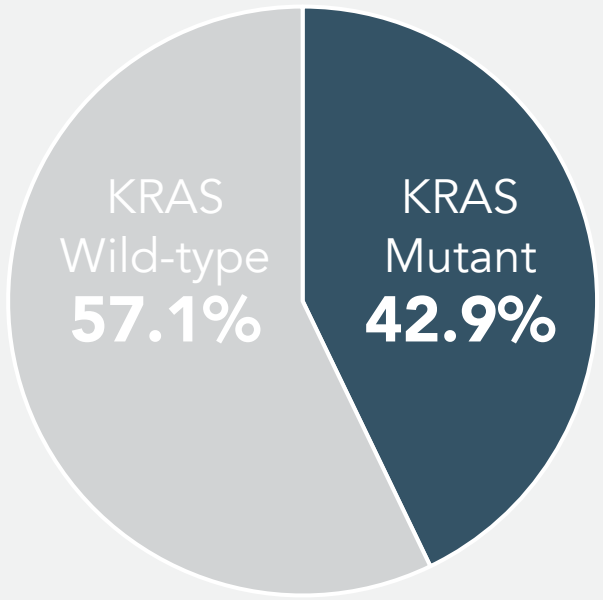


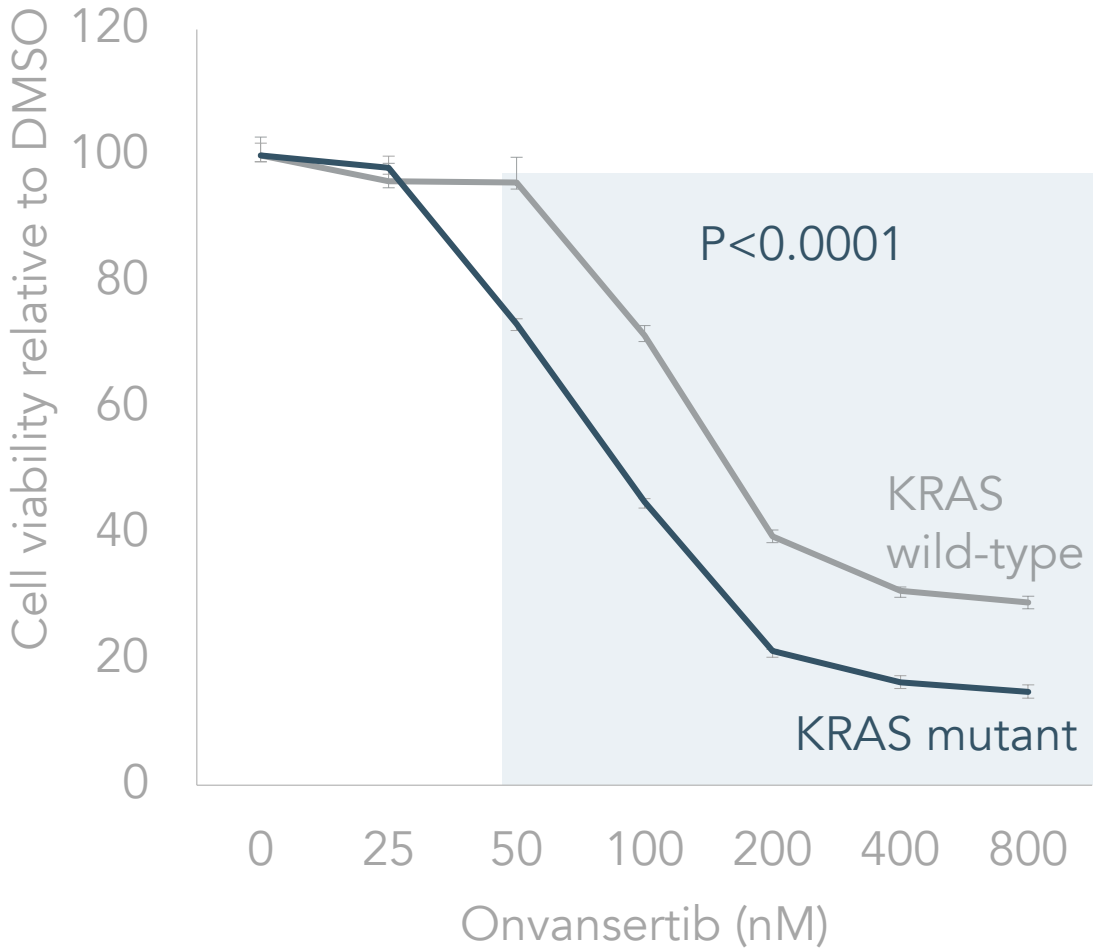
1. Jones R et al. Br J Cancer. 2017 Mar 28;116(7):923-929

Onvansertib's PLK1 inhibition is a two-pronged attack of tumor cells

KRAS HYPERSENSITIVITY[1]

Cells with KRAS mutation are hypersensitive to inhibition of PLK1





1. Jones R et al. Br J Cancer. 2017 Mar 28;116(7):923-929

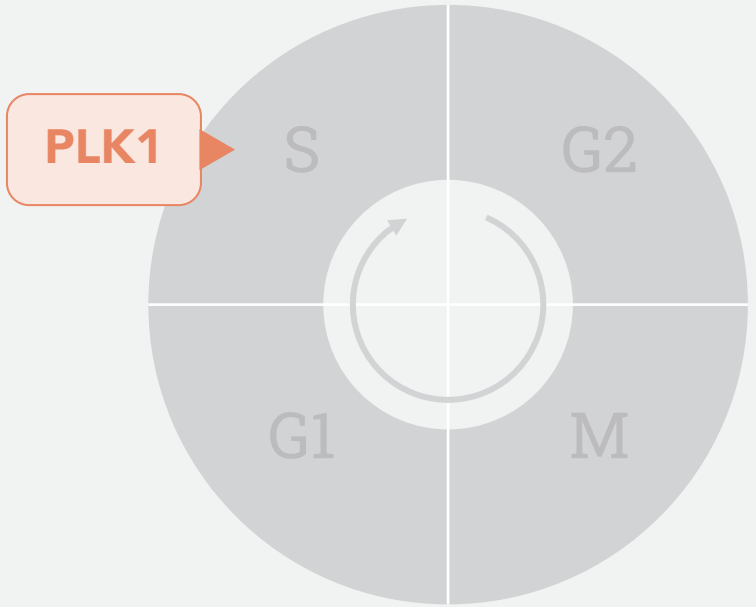
Onvansertib's PLK1 inhibition is a two-pronged attack of tumor cells

KRAS HYPERSENSITIVITY[1]

Cells with KRAS mutation are hypersensitive to inhibition of PLK1

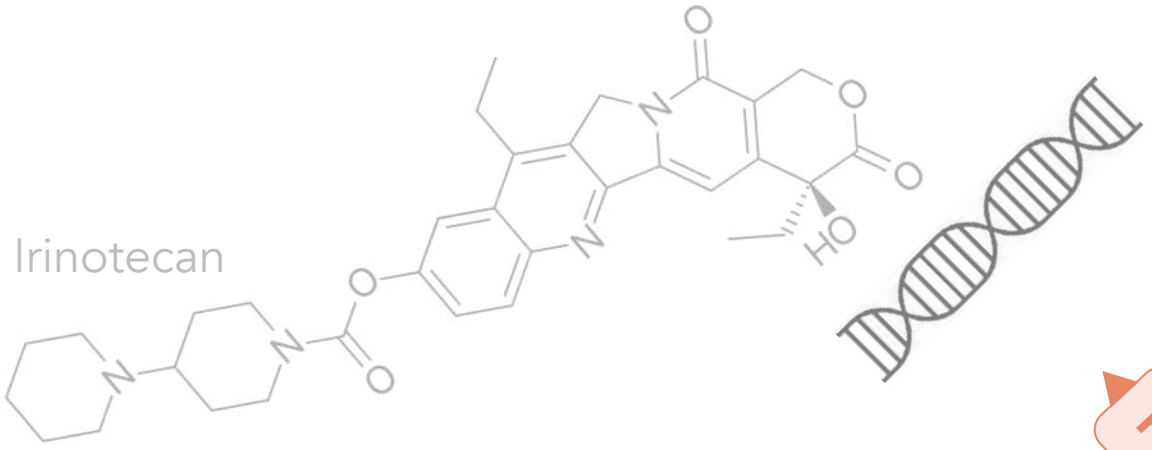
SYNERGY WITH CHEMO

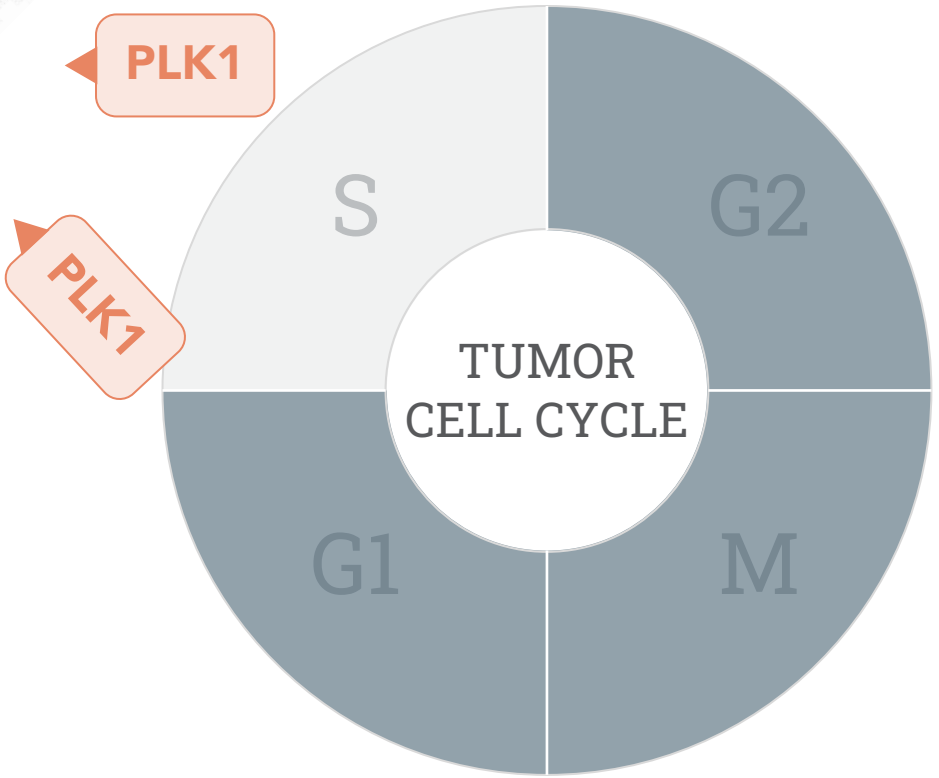
Inhibiting PLK1 increases the efficacy of chemotherapy drugs



Chemotherapy drugs damage tumor DNA to prevent cell proliferation

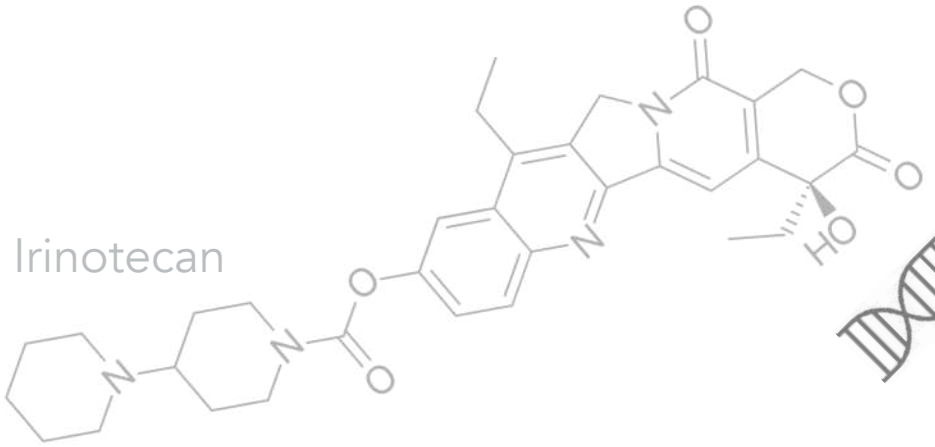
FOLFIRI induces DNA damage

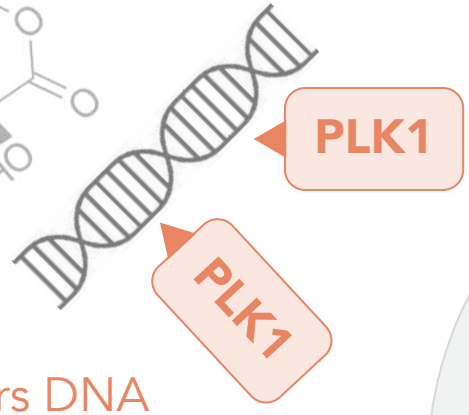




PLK1's "virtuous" repair of DNA interferes with chemotherapy drugs

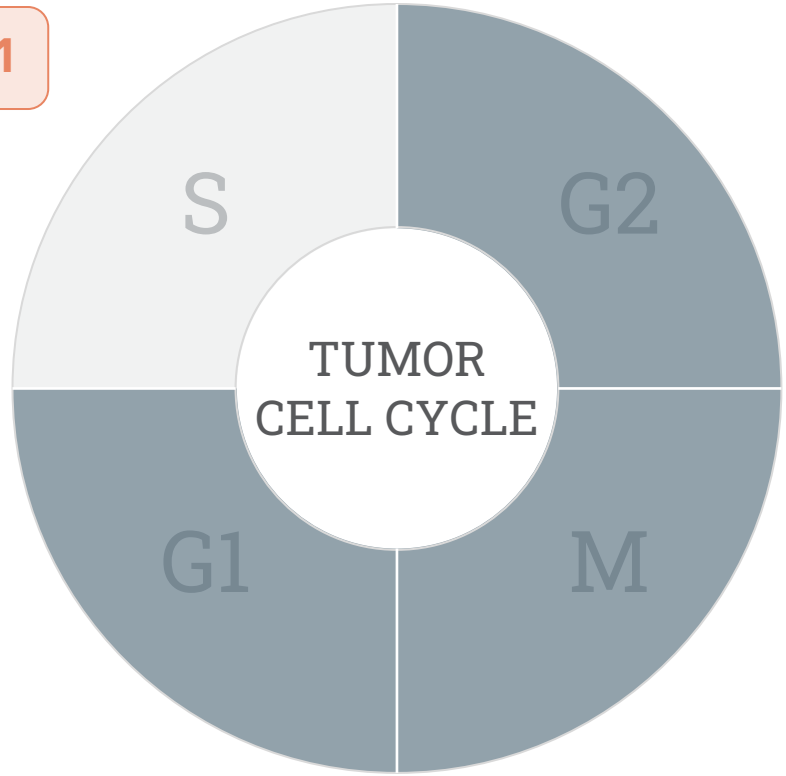
FOLFIRI induces DNA damage





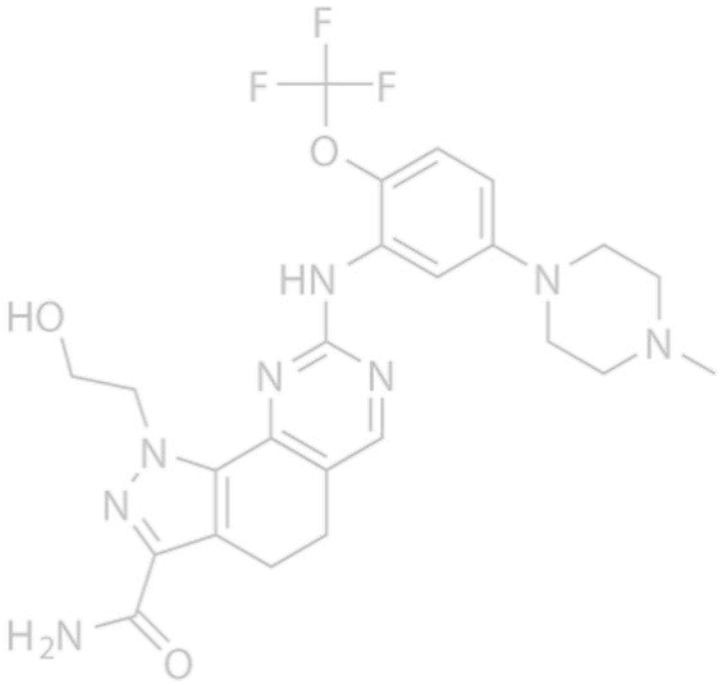
PLK1 repairs DNA
enabling progression to G2

DNA REPLICATION PHASE CELL GROWTH PHASE

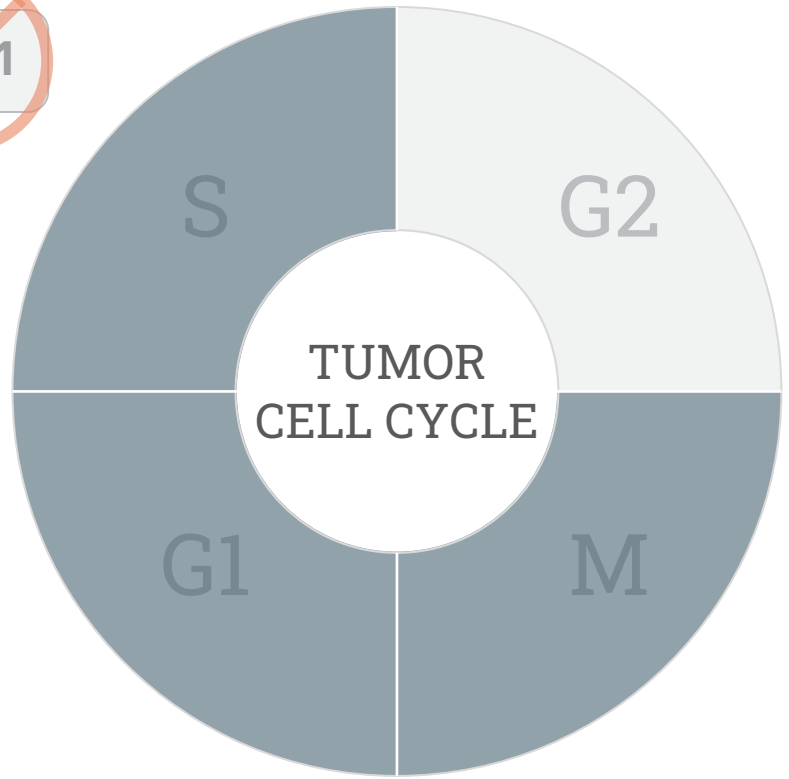


Inhibiting PLK1 prevents DNA repair and halts the cell cycle

Onvansertib inhibits PLK1 preventing DNA repair

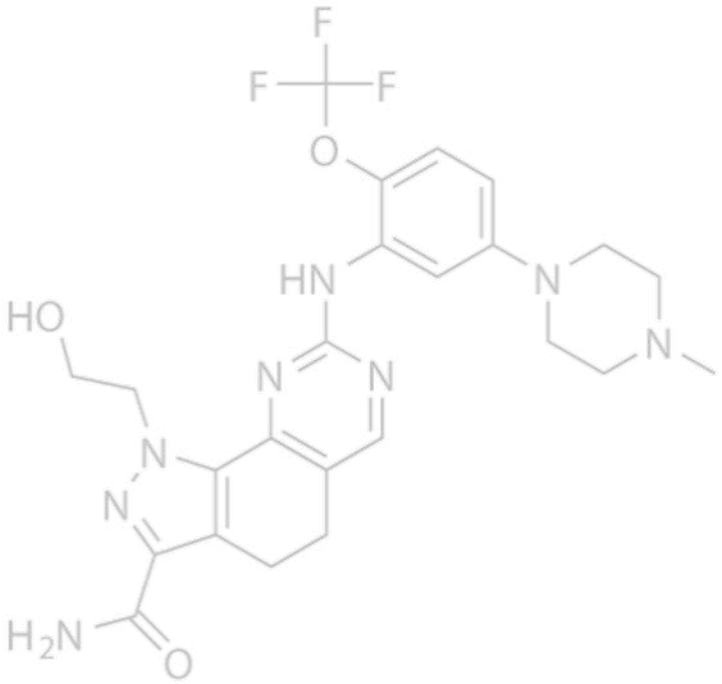


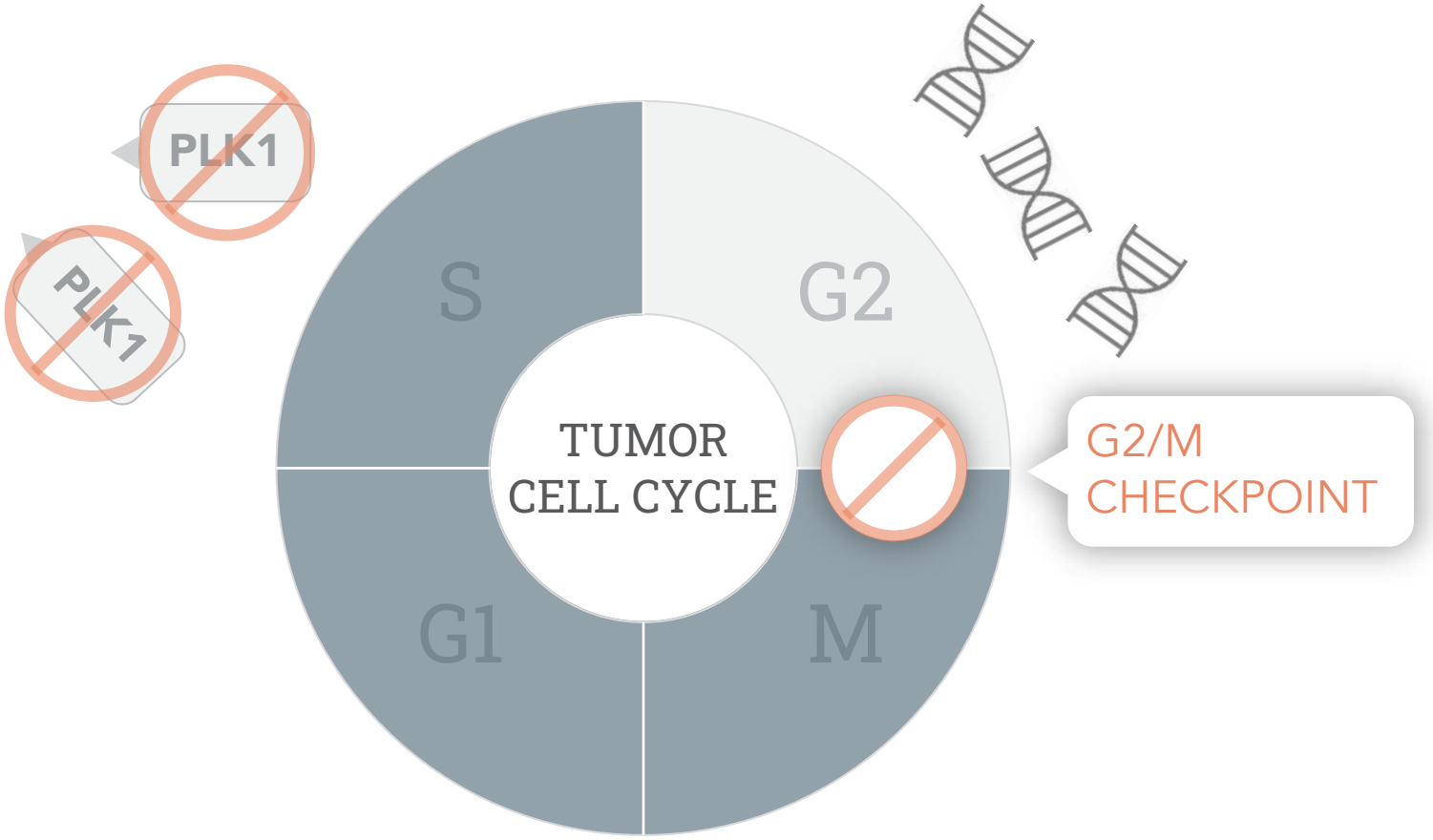
CELL GROWTH PHASE



Inhibiting PLK1 prevents DNA repair and halts the cell cycle

Onvansertib inhibits PLK1 preventing DNA repair and progression from G2 to M

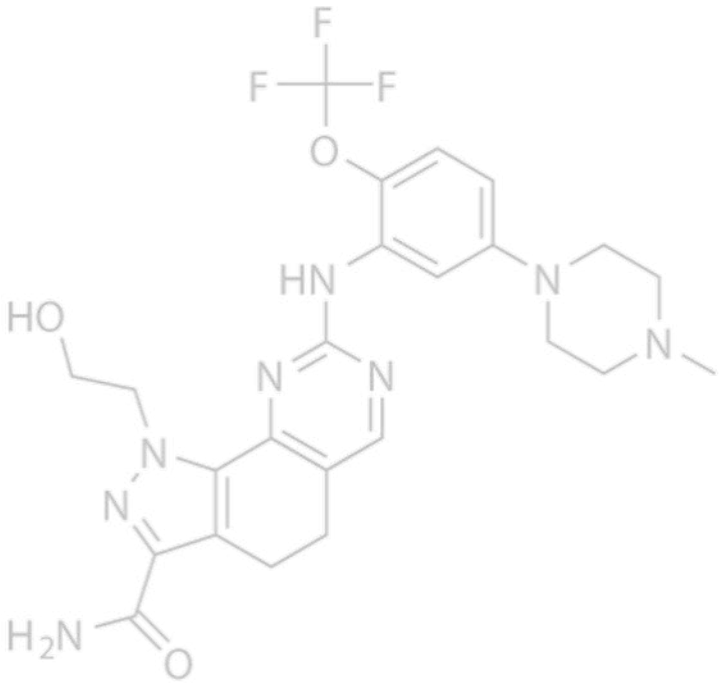


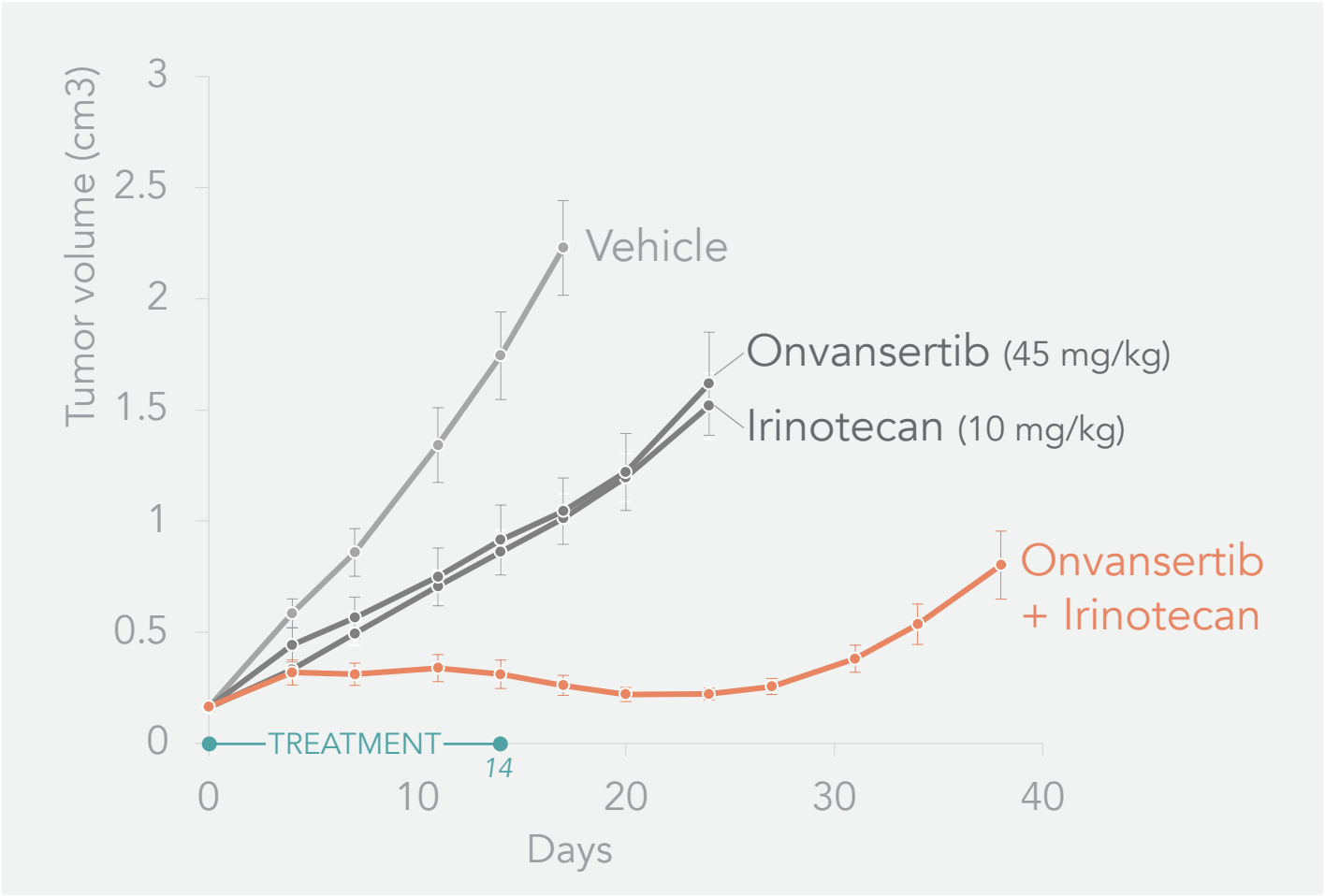


Combined, onvansertib and irinotecan are profoundly more effective

Onvansertib + Irinotecan

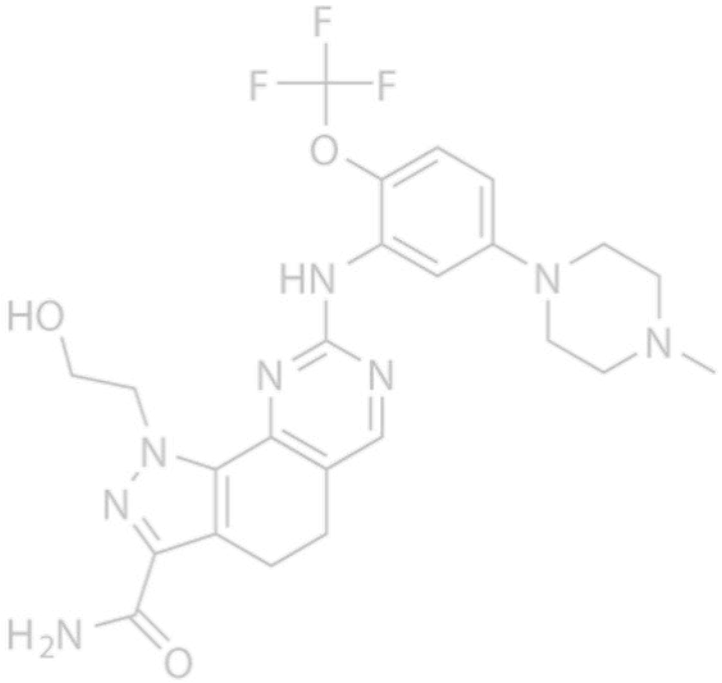
in HCT116 model

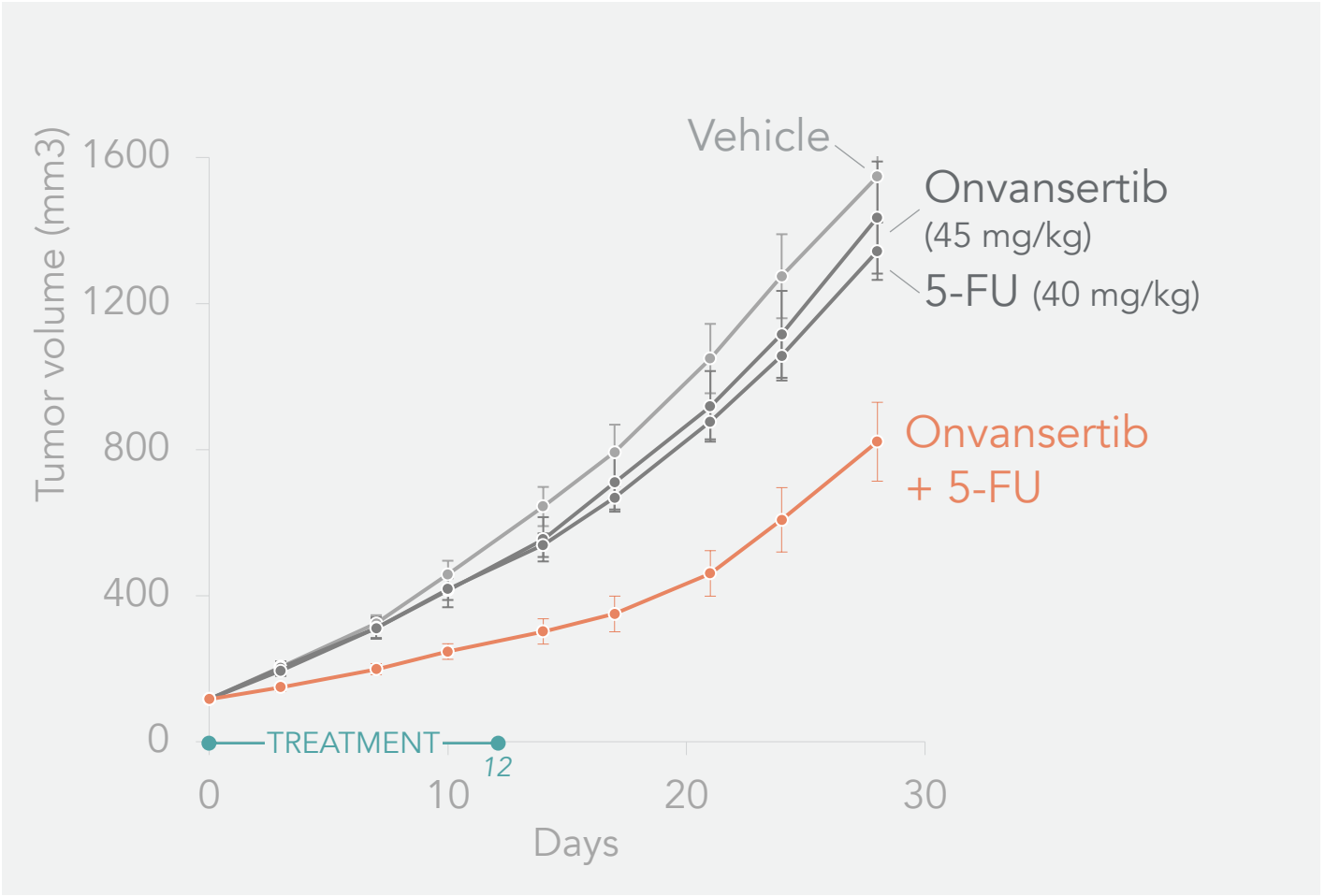




Combined, onvansertib and 5-FU are profoundly more effective

Onvansertib + 5-FU
in HCT116 model





WHAT	Onvansertib has achieved
WHY	Onvansertib works
WHERE	Cardiff Oncology can go

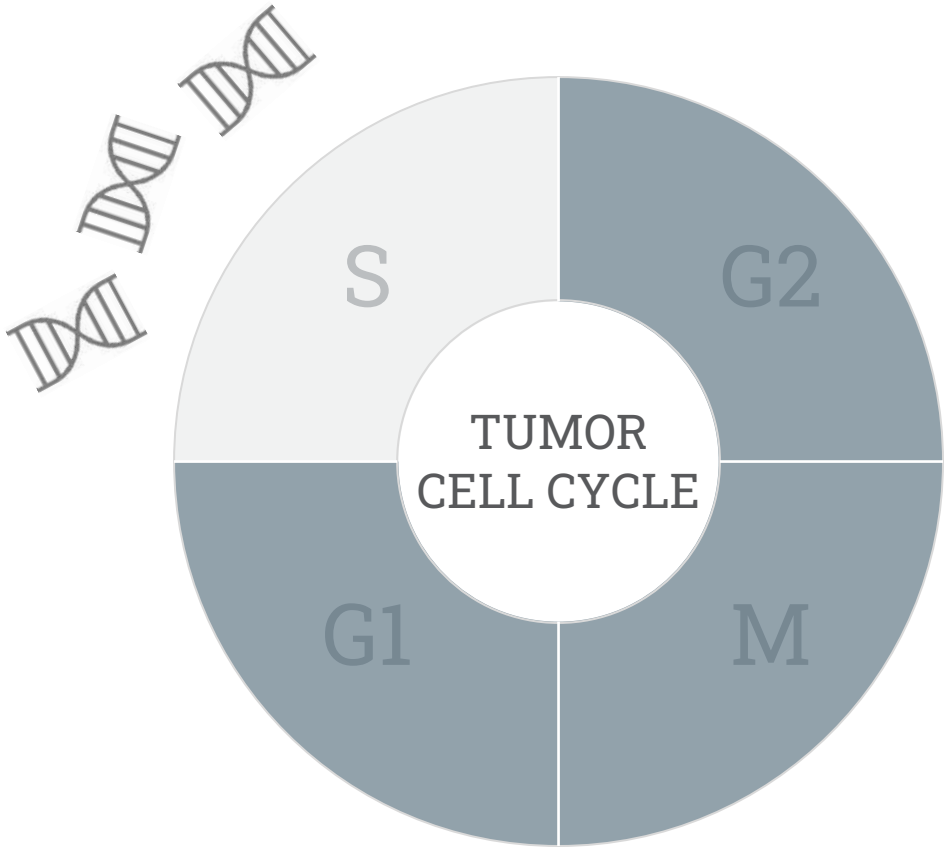
Onvansertib's MOA allows combinations with current therapies

DNA DAMAGING AGENTS

Inhibit the ability of PLK1 to repair DNA

	CHEMOTHERAPY	PARP INHIBITORS
mCRC	Phase 1b/2 Trial	
mPDAC	Phase 2 Trial	⬡⬡⬡
mCRPC	⬡⬡⬡	⬡⬡⬡
Ovarian		⬡⬡⬡
Breast		⬡⬡⬡
SCLC	⬡⬡⬡	⬡⬡⬡
Medulloblastoma		

⬡⬡⬡ = Cardiff Oncology potential



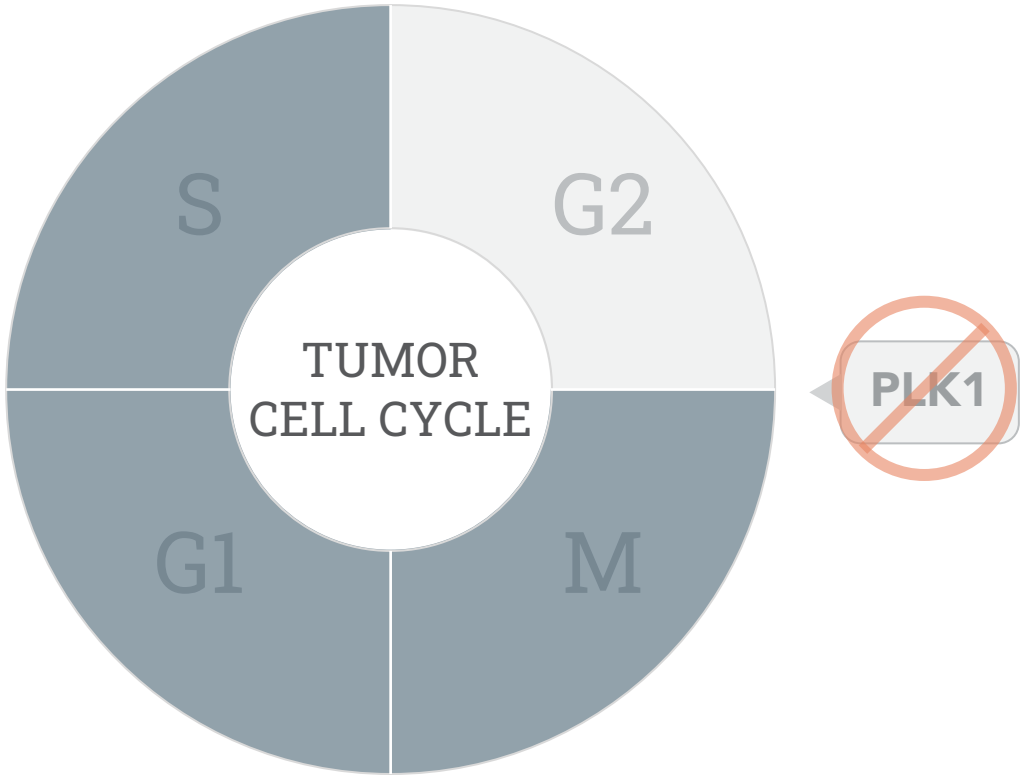
Onvansertib's MOA allows combinations with current therapies

DNA DAMAGING AGENTS

Inhibit the ability of PLK1 to promote progression to M phase

	RADIATION
mCRC	
mPDAC	
mCRPC	
Ovarian	
Breast	
SCLC	
Medulloblastoma	⬡⬡⬡

⬡⬡⬡ = Cardiff Oncology potential



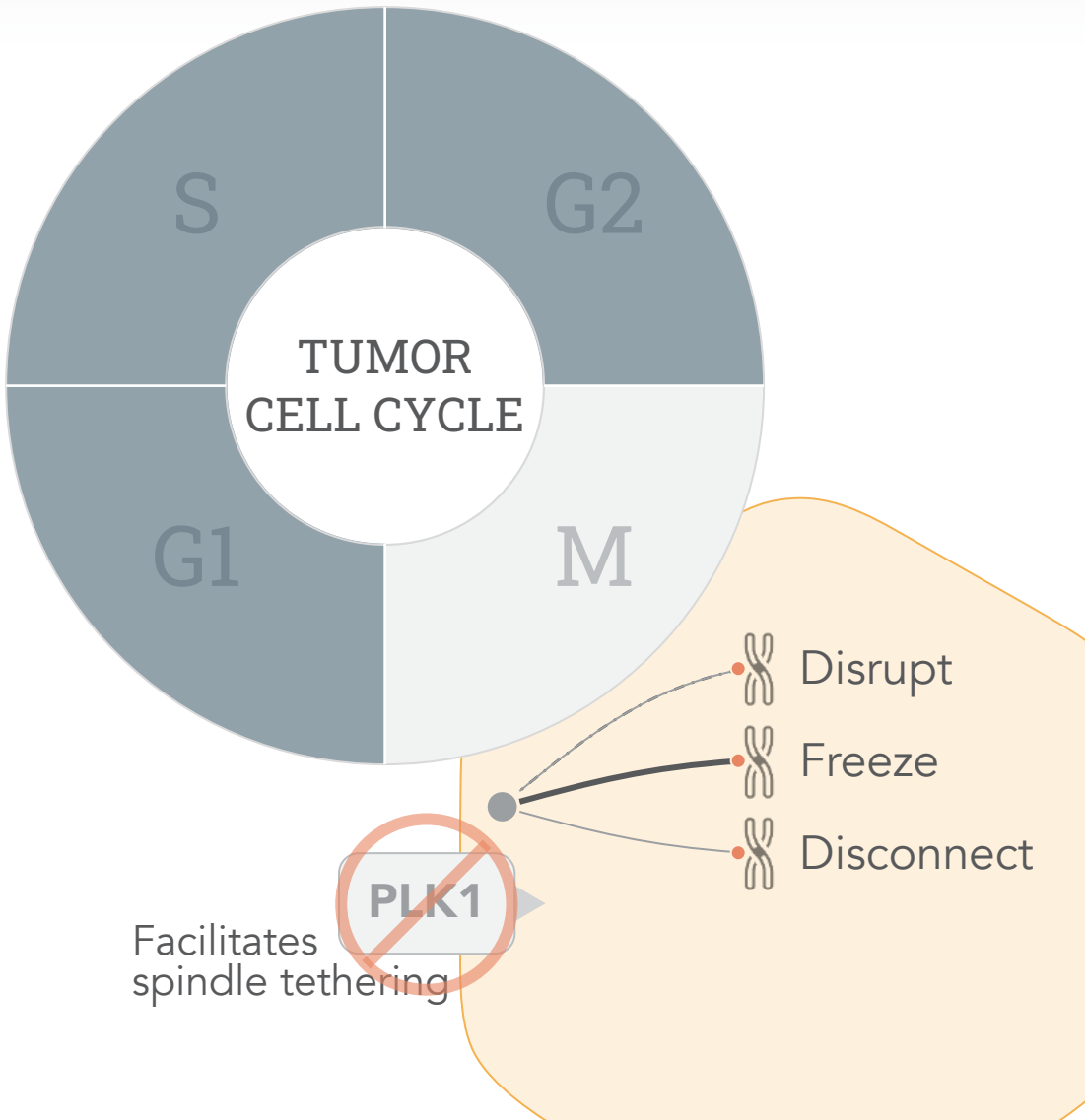
Onvansertib's MOA allows combinations with current therapies

MICROTUBULE TARGETING AGENTS

Inhibit the ability of PLK1 to promote cell division

	DISRUPT	FREEZE	DISCONNECT
mCRC			
mPDAC		⬡⬡⬡	
mCRPC			Phase 2 Trial
Ovarian	⬡⬡⬡	⬡⬡⬡	
Breast		⬡⬡⬡	
SCLC		⬡⬡⬡	
Medulloblastoma			

⬡⬡⬡ = Cardiff Oncology potential



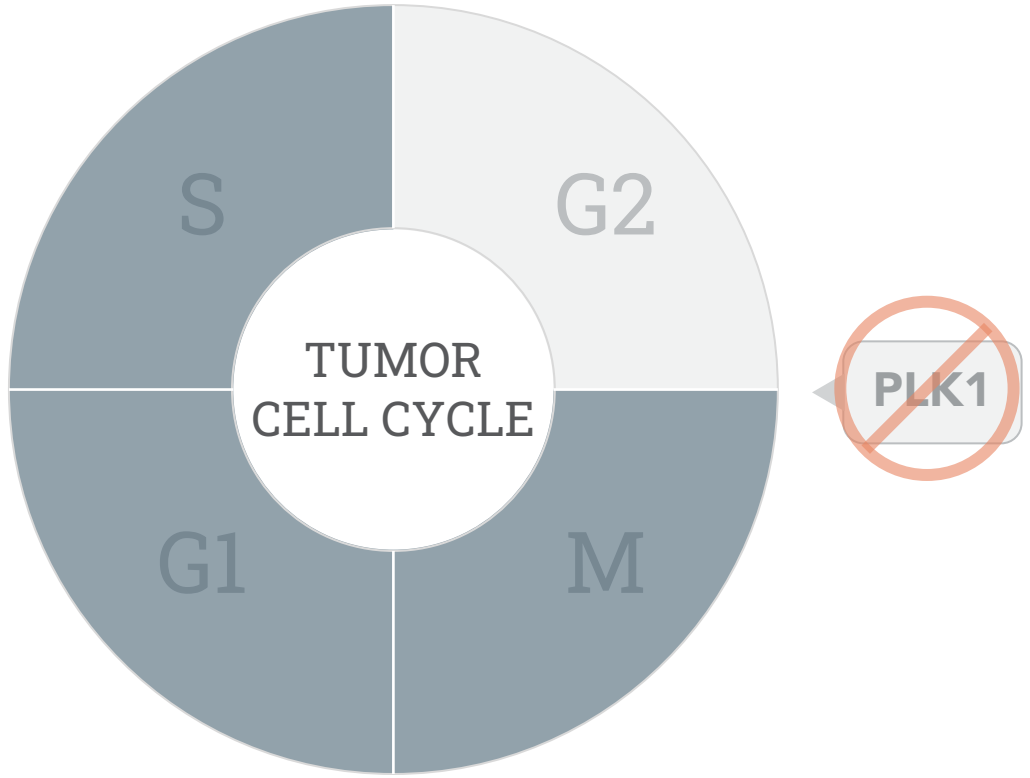
Onvansertib's MOA allows combinations with current therapies

EPIGENETICS

Inhibit PLK1's promotion to M and increase tumor cell's vulnerability to G2/M arrest

	LSD1 INHIBITORS
mCRC	
mPDAC	
mCRPC	⬡⬡⬡
Ovarian	
Breast	
SCLC	⬡⬡⬡
Medulloblastoma	

⬡⬡⬡ = Cardiff Oncology potential



Collectively, Cardiff Oncology has many attractive options

	DNA DAMAGING AGENTS			MICROTUBULE TARGETING			EPIGENETICS
	CHEMOTHERAPY	PARP INHIBITORS	RADIAT'N	DISRUPT	FREEZE	DISCONNECT	LSD1 INHIBITORS
mCRC	Phase 1b/2 Trial						
mPDAC	Phase 2 Trial	⬡⬡⬡			⬡⬡⬡		
mCRPC	⬡⬡⬡	⬡⬡⬡				Phase 2 Trial	⬡⬡⬡
Ovarian		⬡⬡⬡		⬡⬡⬡	⬡⬡⬡		
Breast		⬡⬡⬡			⬡⬡⬡		
SCLC	⬡⬡⬡	⬡⬡⬡			⬡⬡⬡		⬡⬡⬡
Medullo-blastoma			⬡⬡⬡				

⬡⬡⬡ = Cardiff Oncology potential

Our pipeline opens many attractive opportunities for onvansertib

		Preclinical	IND En.	Ph 0/1	Ph 2	Status	Partners
mCRC	FOLFIRI/bev					Enrolled	
mPDAC	Onivyde/5-FU					Enrolling	
mCRPC	Abiraterone					Enrolling	
PDAC	Biomarker					Target Q4, '21	
TNBC	Combo w/ Paclitaxel					Development	
SCLC	Single agent					Development	
CMML	Single agent					Development	
Medullo-blastoma	Combo w/ radiation					Development	
Ovarian	PARP inhibitors					Preclinical	

Catalysts over the next twelve months

2022

CLINICAL PROGRAMS

Early 2022

mCRC	Phase 2 data release

Mid 2022

mCRC	Launch pivotal trial
PDAC	Phase 2 data release
mCRPC	Phase 2 data release

OTHER COMBINATIONS

- **Ovarian** cancer with PARPi
- **Breast** cancer with paclitaxel
- **Medulloblastoma** with radiation (pediatric)

Cardiff Oncology at a glance

Clinical-stage biotech company developing onvansertib, an oral, highly-selective Polo-Like Kinase 1 (PLK1) inhibitor, to treat cancers with the greatest medical needs for new treatment options

Exchange	Nasdaq: CRDF
Cash, Cash Equivalents and Investments[1]	$134.0M
Cash used in Operating Activities[1] (9/30/21 YTD)	$15.7M
Headquarters	San Diego, CA

1. as of 9/30/21. The above financial information is derived from our unaudited financials in Form 10Q filed on 11/04/21.

APPENDIX

Most common Treatment-Emergent Adverse Events (TEAEs)

		GRADE			
TEAEs*	All	1	2	3	4
Fatigue	28	12	3	13	0
Neutropenia	25	1	11	8	5
Nausea	22	15	5	2	0
Abdominal pain	16	9	5	2	0
Diarrhea	16	8	6	2	0
Mucositis	15	8	5	2	0
Alopecia	14	12	2	0	0
WBC Decreased	13	4	7	1	1
Anemia	11	7	4	0	0
Decreased platelets	10	6	4	0	0

		GRADE			
TEAEs*	All	1	2	3	4
Hypertension	8	2	4	2	0
Vomiting	8	4	3	1	0
Headache	6	6	0	0	0
Neuropathy	6	5	1	0	0
ALT increase	4	3	0	1	0
AST Increase	3	1	1	1	0
Palmar-Plantar Dysesthesia	3	0	0	3	0
Dehydration	3	0	2	1	0
GERD	3	3	0	0	0

Progression-Free- and Overall-Survival has ranged from 4.5–5.7 mo.

HISTORICAL REFERENCE

PFS	OS	
5.7	11.2	ML18147 Phase 3 Registrational T + bev in second-line[1]
4.5	11.5	Systematic Literature-Based An Randomized Trials (10,800 Patie Second-Line mCRC[2]
5.6	— Not reported for 2nd line	TRIBE2 Randomized Phase 3 Tr FOLFIRI + bev in Second-line fo FOLFOX + bev First-line[3,4]

view detail

PROOF OF CONCEPT CRITERIA

20% ORR

≥6 mo PFS

1. Bennouna et al., Lancet Oncol 2013; 14: 29–37; 2. Giessen et al., Acta Oncologica, 2015, 54: 187-193; 3. C. Antoniotti et al., Correspondence Lancet Oncol June 2020. mCRC: metastatic colorectal cancer

Progression-Free- and Overall-Survival has ranged from 4.5–5.7 mo.

HISTORICAL REFERENCE

PFS	OS	
5.7	11.2	ML18147 Phase 3 Registrational T + bev in second-line[1]
4.5	11.5	Systematic Literature-Based An Randomized Trials (10,800 Patie Second-Line mCRC[2]
5.6	— Not reported for 2nd line	TRIBE2 Randomized Phase 3 Tr FOLFIRI + bev in Second-line fo FOLFOX + bev First-line[3,4]

view detail

RESULTS AT JULY 2, 2021

20% **31%** ALL **37%** RP2D ORR

≥6 mo **9.4mo** ALL PFS

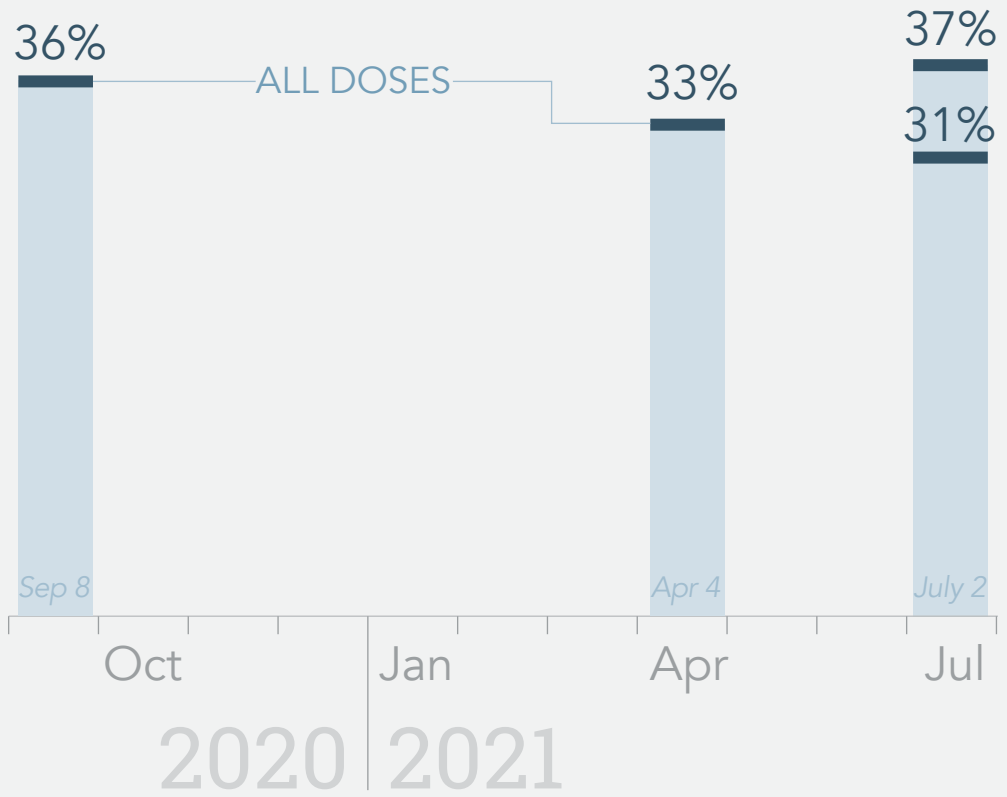
1. Bennouna et al., Lancet Oncol 2013; 14: 29–37; 2. Giessen et al., Acta Oncologica, 2015, 54: 187-193; 3. C. Antoniotti et al., Correspondence Lancet Oncol June 2020. mCRC: metastatic colorectal cancer

Onvansertib's response rate has been consistent over time

PRs at and after Cutoff Dates

	2020	2021		
	Sep 8	Apr 4	Jul 2	Jul 2
	All Doses	All Doses	All Doses	P2RD
Initial	5 of 11 45%	7 of 18 39%	12 of 32 38%	8 of 19[1] 42%
At cutoff	4 of 11 36%	4 of 18 22%	6 of 32 19%	3 of 19[2] 16%
After cutoff*	4 of 11 **36%**	6 of 18 **33%**	10 of 32 **31%**	7 of 19 **37%**

Onvansertib ORR, Sep 8, 2020–Jul 2, 2021



* Reflects the number of the initial PRs as of the data cutoff date that subsequently confirmed, either before the data cutoff date or by Sept 8, 2021.