VERASTEM ONCOLOGY

Delivering Novel Therapies in RAS/MAPK Pathway Driven Cancers

July 2024

Corporate Presentation

Disclaimers

Forward-Looking Statements

This presentation includes forward-looking statements about, among other things, Verastem Oncology's (the "Company") programs and product candidates, strategy, future plans and prospects, including statements related to the timing, scope and progress of the rolling New Drug Application (NDA) submission for the avutometinib and defactinib combination in low-grade serous ovarian cancer (LGSOC); the expected outcome and benefits of collaborations, including with GenFleet Therapeutics (Shanghai), Inc. (GenFleet), the potential clinical value of various of the Company's clinical trials, including the RAMP 201, RAMP 205 and RAMP 301 trials, the timing of commencing and completing trials, including topline data reports, interactions with regulators, the potential for and timing of commercialization of product candidates and potential for additional development programs involving the Company's lead compound and the potential market opportunities of, and estimated addressable markets for, our drug candidates. The words "anticipate," "believe," "estimate," "expect," "intend," "may," "plan," "predict," "project," "target," "potential," "will," "would," "could," "should," "continue," "can," "promising" and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. Each forward-looking statement is subject to risks and uncertainties that could cause actual results to differ materially from those expressed or implied in such statement.

Applicable risks and uncertainties include the risks and uncertainties, among other things, regarding: the success in the development and potential commercialization of our product candidates, including avutometinib in combination with other compounds, including defactinib, LUMAKRAS™ and others; the uncertainties inherent in research and development, such as negative or unexpected results of clinical trials, the occurrence or timing of applications for our product candidates that may be filed with regulatory authorities in any jurisdictions; whether and when regulatory authorities in any jurisdictions may approve any such applications that may be filed for our product candidates, and, if approved, whether our product candidates will be commercially successful in such jurisdictions; our ability to obtain, maintain and enforce patent and other intellectual property protection for our product candidates; the scope, timing, and outcome of any legal proceedings; decisions by regulatory authorities regarding trial design, labeling and other matters that could affect the timing, availability or commercial potential of our product candidates; whether preclinical testing of our product candidates and preliminary or interim data from clinical trials will be predictive of the results or success of ongoing or later clinical trials; that the timing, scope and rate of reimbursement for our product candidates is uncertain; the market opportunities of our drug candidates are based on internal and third-party estimates which may prove to be incorrect; that third-party payors (including government agencies) may not reimburse; that there may be competitive developments affecting our product candidates; that data may not be available when expected; that enrollment of clinical trials may take longer than expected, which may delay our development programs, including delays in submission or review by the FDA of our NDA submission in recurrent KRAS mutant LGSOC if enrollment in our confirmatory trial is not well underway at the time of submission; that our product candidates will cause adverse safety events and/or unexpected concerns may arise from additional data or analysis, or result in unmanageable safety profiles as compared to their levels of efficacy; that we may be unable to successfully validate, develop and obtain regulatory approval for companion diagnostic tests for our product candidates that require or would commercially benefit from such tests, or experience significant delays in doing so; that the mature RAMP 201 data and associated discussions with the FDA may not support the scope of our rolling NDA submission for the avutometinib and defactinib combination in LGSOC, including with respect to KRAS wild type LGSOC; that our product candidates may experience manufacturing or supply interruptions or failures; that any of our third-party contract research organizations, contract manufacturing organizations, clinical sites, or contractors, among others, who we rely on fail to fully perform; that we face substantial competition, which may result in others developing or commercializing products before or more successfully than we do which could result in reduced market share or market potential for our product candidates; that we will be unable to successfully initiate or complete the clinical development and eventual commercialization of our product candidates; that the development and commercialization of our product candidates will take longer or cost more than planned, including as a result of conducting additional studies or our decisions regarding execution of such commercialization; that we may not have sufficient cash to fund our contemplated operations, including certain of our product development programs; that we may not attract and retain high quality personnel; that we or Chugai Pharmaceutical Co., Ltd. will fail to fully perform under the avutometinib license agreement; that our total addressable and target markets for our product candidates might be smaller than we are presently estimating; that Secura Bio, Inc. will fail to fully perform under the asset purchase agreement with Secura Bio, Inc., including in relation to milestone payments; that we will not see a return on investment on the payments we have and may continue to make pursuant to the collaboration and option agreement with GenFleet or that GenFleet will fail to fully perform under the agreement; that we may not be able to establish new or expand on existing collaborations or partnerships, including with respect to in-licensing of our product candidates, on favorable terms, or at all; that we may be unable to obtain adequate financing in the future through product licensing, co-promotional arrangements, public or private equity, debt financing or otherwise; that we will not pursue or submit regulatory filings for our product candidates; and that our product candidates will not receive regulatory approval, become commercially successful products, or result in new treatment options being offered to patients.

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Verastem Oncology: Preparing to Commercialize First Novel RAS/MAPK Combo Asset with Billion-Dollar Addressable Market Opportunity

Transition to commercial-stage company focused on RAS/MAPK-driven cancers

Avutometinib and defactinib combo has the potential to become the first and only FDA approved treatment for recurrent **LGSOC** as soon as 2025

Market expansion with avutometinib + defactinib **in first-line metastatic pancreatic cancer and advanced lung cancer**

Partnership with GenFleet Therapeutics on novel, potential best-in-class RAS pathway programs for **additional value creation**

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RAS: Rat Sarcoma; MAPK: Mitogen-activated protein kinases; FDA: Food and Drug Administration; LGSOC: Low-grade Serous Ovarian Cancer

Pipeline Assets Have the Potential to Provide Significant Market Opportunity in Both Short- and Long-Term

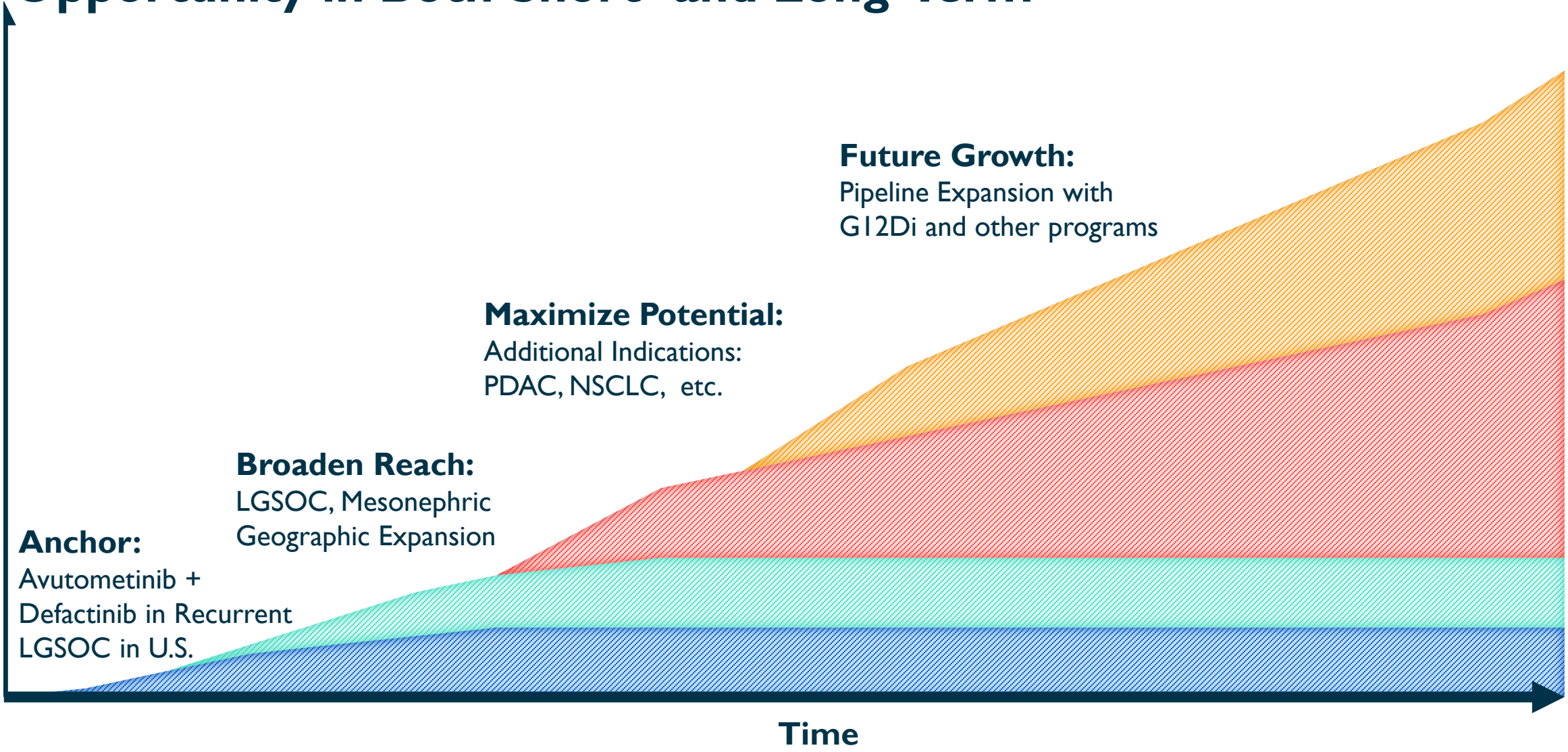

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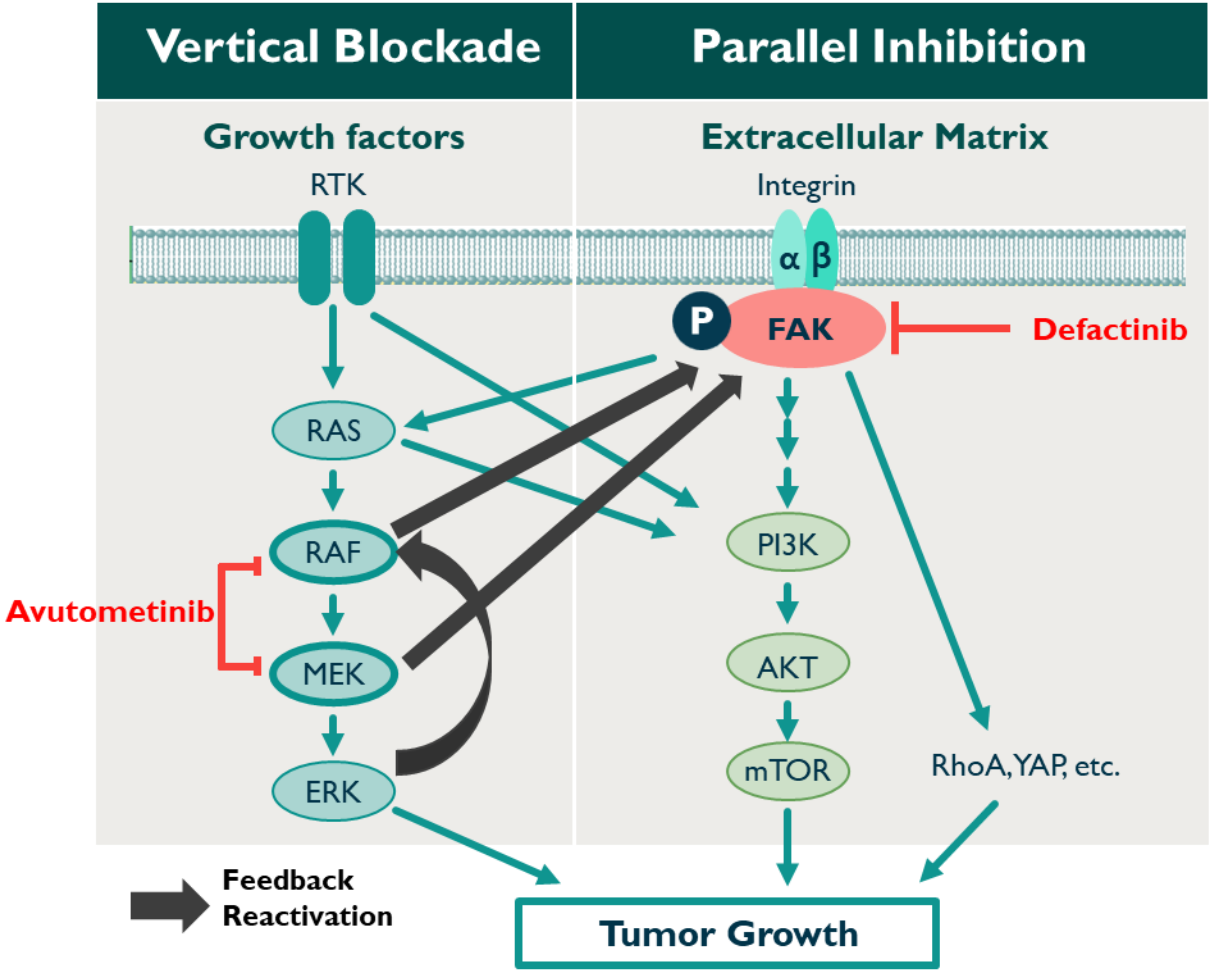
Image for illustrative purposes only.

PDAC: pancreatic ductal adenocarcinoma cancer; NSCLC: non-small cell lung cancer

Lead Program: Avutometinib + Defactinib Aims to Inhibit Multiple Resistance Mechanisms in the RAS/MAPK Pathway to Improve Patient Outcomes

- Novel combination of avutometinib, a RAF/MEK clamp, and defactinib, a FAK inhibitor, offers a complementary MOA not achievable with previous MEK-only inhibitors
- Clinical activity in various RAS pathway-driven cancers, including in patients whose tumors previously progressed on other MEK inhibitors[3-5]
- Clinical data demonstrate potential best-in-class safety & tolerability profile relative to marketed MEK-only inhibitors and standard of care therapies for LGSOC[1-4]



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[1]Gershenson et al., Lancet 2022 (Study GOG 281); [2]Monk et al., J Clin Oncol 2020 (MILO Study); [3]Banerjee et al., ESMO Sept 2021 (Study FRAME); [4]Banerjee et al., ASCO June 2023 (Study RAMP 201); [5]Awad et al., EORTC-NCI – AACR Conference Oct 2023 (Study RAMP 203); MOA: mechanism of action;

Clinical Program Designed to Address LGSOC and Beyond

Trial/Regimen	IND-Enabling/ Preclinical	Phase 1	Phase 2	Phase 3	Anticipated Milestones	Collaboration
Avutometinib + Defactinib: Recurrent LGSOC						
RAMP 301 RAF/MEK Clamp + FAKi vs ICT					RAMP 301 Ongoing Enrollment	
RAMP 201 RAF/MEK Clamp + FAKi					Plan to announce RAMP 201 mature dataset in H2 2024; Expect to complete rolling NDA Submission in Recurrent LGSOC: H2 2024	
Avutometinib ± Defactinib + KRAS G12C Inhibitors: mKRAS G12C NSCLC						
RAMP 203 RAF/MEK Clamp ± FAKi + KRAS G12Ci (sotorasib)					RAMP 203 Updated Interim Data: H2 2024	Amgen
RAMP 204 RAF/MEK Clamp + KRAS G12Ci (adagrasib)					RAMP 204 Initial Interim Data: H2 2024	Mirati (BMS)
Avutometinib + Defactinib + Chemotherapy: 1L Metastatic Pancreatic Cancer						
RAMP 205 RAF/MEK Clamp + FAKi + gemcitabine, nab-paclitaxel					RAMP 205 Updated Safety & Efficacy Data: Q1 2025	PanCAN
GFH375/VS-7375						
KRAS G12D (ON/OFF) inhibitor					IND cleared and first patient dosed in Phase 1/2 trial in China	GenFleet

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RAF: Rapidly Accelerated Fibrosarcoma; MEK: Mitogen-activated extracellular signal-regulated kinase FAKi: focal adhesion kinase inhibitor; KRAS: Kirsten Rat Sarcoma virus ICT: investigator choice of treatment; NSCLC: non-small cell lung cancer; NDA: New Drug Application

Avutometinib + Defactinib

Potential Approval in 2025 for Recurrent Low-Grade Serous Ovarian Cancer

Potential to Bring a New Treatment Option for Recurrent LGSOC with Substantially Improved Outcomes on an Accelerated Timeline

Avutometinib + Defactinib combo has the potential to be first and only FDA approved treatment specifically for recurrent LGSOC

- **Initiated rolling NDA submission** based on the strength of the preliminary RAMP 201 data with minimum of 5 months follow up in KRAS mt population[1]

- **Anticipate patients in U.S. achieving broad and rapid access to therapy regardless of KRAS status** (either through label or NCCN)

- **Seeking broadest label possible** with mature RAMP 201 data to inform final indication
- Recent **SoC LGSOC studies provide best data to benchmark** against

- **Substantial Opportunity with Total Addressable Market[2]:**
  - Initial focus on prevalence population: KRAS mt $1.7B+, KRAS wt $1.1B+
  - Annual opportunity of $570M

- **Efficacy and safety data package has potential to show advantage across subgroups** and favorable benefit/risk profile

- **If approved, expect rapid adoption and high market penetration** given no FDA approved therapies and based on oncologist survey[3]

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1. RAMP 201 Feb. 2024 data cutoff; 2. Refer to breakdown of market opportunity on slide 15. 3. VSTM DOF, ATU 2024 (n=96, Fielded December 2023 – January 2024); SoC: Standard of Care; mt: mutant; wt: wild-type; NCCN: National Comprehensive Cancer Network

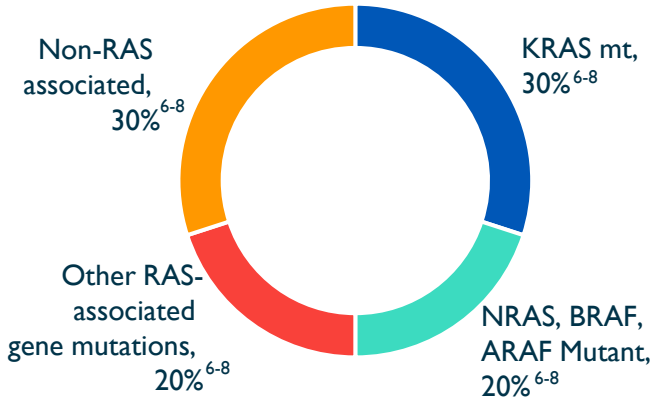
High Unmet Need for an Effective Therapy in Recurrent LGSOC That is Also Tolerable and Offers Better Outcomes

LGSOC is a rare ovarian cancer that is insidious, persistent and ultimately fatal with no FDA approved treatments[1-4]

U.S. Incidence: 1k-2k[12]

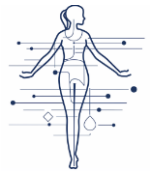
U.S. Prevalence: 6k-8k[13]

Worldwide: 80,000



20-30s

Affects **younger population** and disproportionately **impacts health, fertility, and long-term quality of life**[9,10]



Nonspecific signs and symptoms include bloating, pelvic or abdominal pain, back pain, fatigue, upset stomach and more[15]

6-13%

Current SoC treatments (hormone/chemotherapy) **offer poor to moderate response rates** and patients will cycle through therapy[5,9,14]

80%+ of patients will experience a recurrence[1]

Median OS of ~10 years from time of diagnosis[11]

- KRAS mt – 12 years[16]
- KRAS wt – 7 years[16]

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1. Babaier 2022/p1/para1/ln6,7; 2. Gadducci 2020/p4/para2/ln16,7; 3. Gershenson Lancet 2022/p545/col2/para2/ln6-9; 4. Gershenson 2015/p2681/Fig1; 5. Gershenson Gynecol Oncol 2022; 6. Manning-Geist Clin Cancer Res 2022; 7. El Naggar Gynecol Oncol 2022; 8. AACR GENIE v9.0 VSTM unpublished analysis (data on file); 9. Slomovitz *Gynecol Oncol* 2020; 10. Manning-Geist B et al. Clin Cancer Res 2022;28(20):4456-4465.;11. Banerjee SN). J Clin Oncol. 41. No 16_suppl (June 1, 2023) 5515-5515;12. Verastem DOF; 13. US Cancer Statistics. Accessed 2024. 14. Monk 2020/p3758/table2/footnote-b. 15. Ferrell B, et al. Symptom concerns of women with ovarian cancer. J Pain Symptom Manage. 2003;25(6):528-538.; SoC: Standard of Care; OS: Overall Survival. 16. Calculated using figures in Gershenson Gynecol Oncol 2022.

Avutometinib + Defactinib Combo Has the Potential to Address Key Treatment Needs

- To date, avutometinib + defactinib combination data in recurrent LGSOC show:
  - Clinically meaningful response rates and durable benefit[1]
  - Strong Clinical Benefit Rate in patients with KRAS mutant or wild-type tumors,[2] which supports treatment decisions
  - Long progression-free survival (PFS) and duration of response (DoR) are achievable in patients who have received multiple lines of therapy, including prior MEK inhibitor[1]
  - Low discontinuation rates due to adverse events[2]
  - Novel intermittent dosing schedule, with oral treatments, supports favorable tolerability profile[3]

When treating recurrent LGSOC, doctors place most importance on efficacy and safety, while adhering to NCCN guidelines:[4]

- **Improves outcomes: PFS, ORR**
- **Has meaningful disease control rate**
- **Has tolerable side effect profile**
- **Has good access coverage**

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1. Data from RAMP 201 study Feb. 2024 cutoff 2. Data from FRAME study; 3. Chenard-Poirier, *et al.* ASCO 2017; References: Banerji, Q4 2020 report; ; 4. VSTM DOF, ATU 2024 (n=96, Fielded December 2023 – January 2024); ORR: Objective Response Rates

Start of Rolling NDA Submission Supported by RAMP 201 Initial Topline Results with Minimum of 5 Months Follow Up

RAMP 201 Shows Robust Early Responses, May Continue to Deepen with Mature Follow Up

Data cutoff: Feb. 2024, minimum of 5 months of follow up. Avutometinib 3.2 mg + Defactinib 200 mg

ORR Overall Population (Confirmed ORR by BICR)	**27%** (29/109)[1]
95% CI	(19%, 36%)
KRAS mt	37% (21/57)
KRAS wt	15% (8/52)

Clinical Benefit Rate Is a Key Driver of Treatment Decisions Among Physicians[2]

Clinical Benefit Rate (CR+PR+SD≥6 months):	**60%** (65/109)
Clinical Benefit Rate KRAS mt:	68% (39/57)
Clinical Benefit Rate KRAS wt:	50% (26/52)

Discontinuation Rates Due to Adverse Events Remain Low[2]

Discontinuations Due to AEs No new safety signals	**9%** (10/115)

In RAMP 201, 14 Patients with Stable Disease or Unconfirmed Partial Response Remain on Treatment[2]

Potential responding patients:	29-43 (27%-39%)
Potential responding KRAS mt patients:	21-30 (37%-53%)
Potential responding KRAS wt patients:	8-13 (15%-25%)

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1. 6 patients with no baseline measurable disease per IRC; 2. All information based on data cutoff of Feb. 2024. Minimum of 5 months follow up, Avutometinib 3.2 mg + Defactinib 200 mg; BICR: Blinded independent central review

Recent LGSOC Trials with Standard of Care Highlight High Unmet Need

Trial	Image Assessment	Median Number of Prior lines of Therapy	Prior MEK Allowed	Therapy	Response Rate ORR	Discontinuation Rate Due to AEs
GOG 281[1]	INV	2 (1-10)	No	Standard of Care**	**6% ^** 95% CI: (3%, 12%)	30%
MILO[2]	BICR	2* (1-8)	No	Standard of Care**	**13%** 95% CI: (7%, 21%)	17%

** MILO: no more than 3 lines of prior chemotherapy*

***Standard of Care*
GOG 281: *(chemotherapy / endocrine therapy) PLD (liposomal doxorubicin), paclitaxel, topotecan, letrozole or tamoxifen*
MILO: *(chemotherapy only) PLD (liposomal doxorubicin), paclitaxel or topotecan*

Opportunity to Improve Upon Standard of Care

Trial	Image Assessment	Median Number of Prior lines of Therapy	Prior MEK Allowed	Therapy	Response Rate ORR	Discontinuation Rate Due to AEs
RAMP 201[3]	BICR	4	Yes	Avutometinib + Defactinib	**27%** 95% CI: (19%, 36%)	9%
FRAME[4]	BICR	3.5	Yes	Avutometinib + Defactinib	**42%** 95% CI: (23%, 63%)	4%

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No head-to-head clinical trials have been conducted between avutometinib and defactinib combination and SoC. Comparisons are made from different clinical trials at different points in time, with different trial design and patient populations. As a result, cross-trial comparison cannot be made.

[1]Study GOG 281 trial Gershenson et al., Lancet 2022; [2]MILO Study Monk et al., J Clin Oncol 2020; [3] Data cutoff: Feb. 2024, minimum of 5 months of follow up. [4] Banerjee et al., ESMO Sept 202; Avutometinib 3.2 mg + Defactinib 200 mg; SoC = Standard of Care (endocrine / chemotherapy). INV = Investigator, BICR = Blinded independent central review, PFS = Progression free survival; CI = confidence interval, NR = Not reached

KOL Feedback on Avutometinib + Defactinib in Recurrent LGSOC Reinforces Opportunity to Address Unmet Treatment Needs

'Current RAMP 201 ORR in heavily pretreated patients is better than any treatment options available'

"We are very excited about the recent data reported for the RAMP 201 study and initiation of the rolling submission. An overall response rate of close to 30% in heavily pretreated patients is better than any treatment options we have available for LGSOC patients today and line of therapy matters as we've learned from other studies in LGSOC. Response rates are higher in KRAS-mutated patients compared to KRAS wild-type disease and this is what we would expect since KRAS wild-type has a less favorable prognosis."

'Response rates with SoC are disappointing and tolerability with MEK inhibitors was an issue'

"What is important here is how this compares to what we currently have available for patients with standard-of-care treatments where response rates are disappointing. We continue to use chemotherapy and hormonal therapy in spite of low response rates of 6-13%. In terms of the MEK inhibitors, binimetinib had a response rate of 16% and did not beat standard of care, and for trametinib response rates were 26% but not independently reviewed and tolerability was an issue. In the end, the MEK inhibitors did not get reviewed by the FDA and there are still no FDA approved treatments for LGSOC."

'If approved, [Avutometinib + Defactinib] will change the Standard of Care'

"Overall, the RAMP 201 update is good news for patients and seeing this now under review by the FDA is an important milestone. If approved, this will change the standard of care."

Bradley J. Monk, MD, FACS, FACOG
Florida Cancer Specialists and Research Institute, Medical Director Late-Phase Clinical Research
Vice President and Member Board of Directors GOG-Foundation, Director GOG-Partners
RAMP 201, RAMP 301 investigator

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Potential for Avutometinib + Defactinib to Rapidly Penetrate the Current Prevalent Patient Population, if Approved

STAGE II-IV DISEASE[1] → **MOS: ~10 YEARS[2]**

FRONTLINE TREATMENT → **INITIAL RECURRENCE** → **SUBSEQUENT RECURRENCE**

± Neoadjuvant platinum/taxane

Debulking surgery

± Platinum/taxane chemotherapy

± Hormone therapy (Mx)

or

± Endocrine therapy

Target Product Profile (TPP) Based on Avutometinib + Defactinib Combination

- **70%** of Oncologists surveyed indicate they **will initially plan to treat with prevalent patients at their next recurrence**[3]
- **49%** of Oncologists surveyed **indicate that initial recurrence is the ideal point** in the patient journey **to initiate treatment** with the combination[3]

85% of treaters surveyed say they **would adopt within 6 months of receiving FDA approval**, suggesting swift uptake of the treatment for eligible patients[3]

28% of treaters surveyed say they **would proactively reach out to switch** half of their current LGSOC patients, if approved[3]

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1. NCCN: National Comprehensive Cancer Network; NCCN guidelines v1.2023; 2. Gershenson Gynecol Oncol 2022/p1/Abstract/Results/ln1-2 ; 3. VSTM DOF, ATU 2024 (n=96, Fielded December 2023 – January 2024): Mx: maintenance

LGSOC Indication Represents Significant Market Opportunity

Total Addressable Market Opportunity	KRAS mutant	+	KRAS wild-type
Estimated Annual **Incident** Addressable Opportunity[1]	**$300M+**		**$270M+**
Incident Population[2]	**~500**		**~1,000**
Avg. Duration of Therapy[3]	**18 months**		**8 months**
Estimated **Prevalent** Addressable Opportunity[1] *(Target to Address in First 3-5 Years)*	**$1.7B+**		**$1.1B+**
Prevalent Population[2]	**~2,800**		**~4,200**
Avg. Duration of Therapy[3]	**18 months**		**8 months**

Anticipate high market penetration in LGSOC KRAS mt population given:

- No FDA approved therapies for LGSOC
- High adoption rate based on Survey of Oncologists[4]

Plan to address prevalent population over 3-5 years from launch:

- Patients cycle through therapies
  - Median of 4 prior therapies in RAMP 201
- Long overall survival in LGSOC patients at ~10 years
  - KRAS mt – 12 years
  - KRAS wt – 7 years

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1. Estimated total addressable market opportunity based on incident / prevalent populations, average duration of therapy (as observed in VSTM clinical trials) and cost of therapy of $34,000 per month, consistent with other recent oncology drug launches (e.g. OJEMDA - $33,916 OGSIVEO - $29,000; www.dayonebio.com/wp-content/uploads/Ojemda-Connecticut_VF.pdf; www.hhs.texas.gov/sites/default/files/documents/apr-2024-durb-agenda-item8d.pdf) 2. Verastem DOF – Based on 30% KRAS mt and 70% KRAS wt in incident population assumed of 1,500 annually and 40% KRAS mt and 60% KRAS wt (calculation on file based on weighted average longer overall survival in KRAS mt compared to KRAS wt) initial prevalent population of 7,000; 3. RAMP 201 Part A data cutoff 23FEB2024; 4. Based on VSTM DOF, ATU 2024 (n=96, Fielded December 2023 – January 2024) 70% of Oncologists surveyed would treat with A&D at next recurrence; kept 70% for KRAS mt, and assumed 50% discount for KRAS wt.

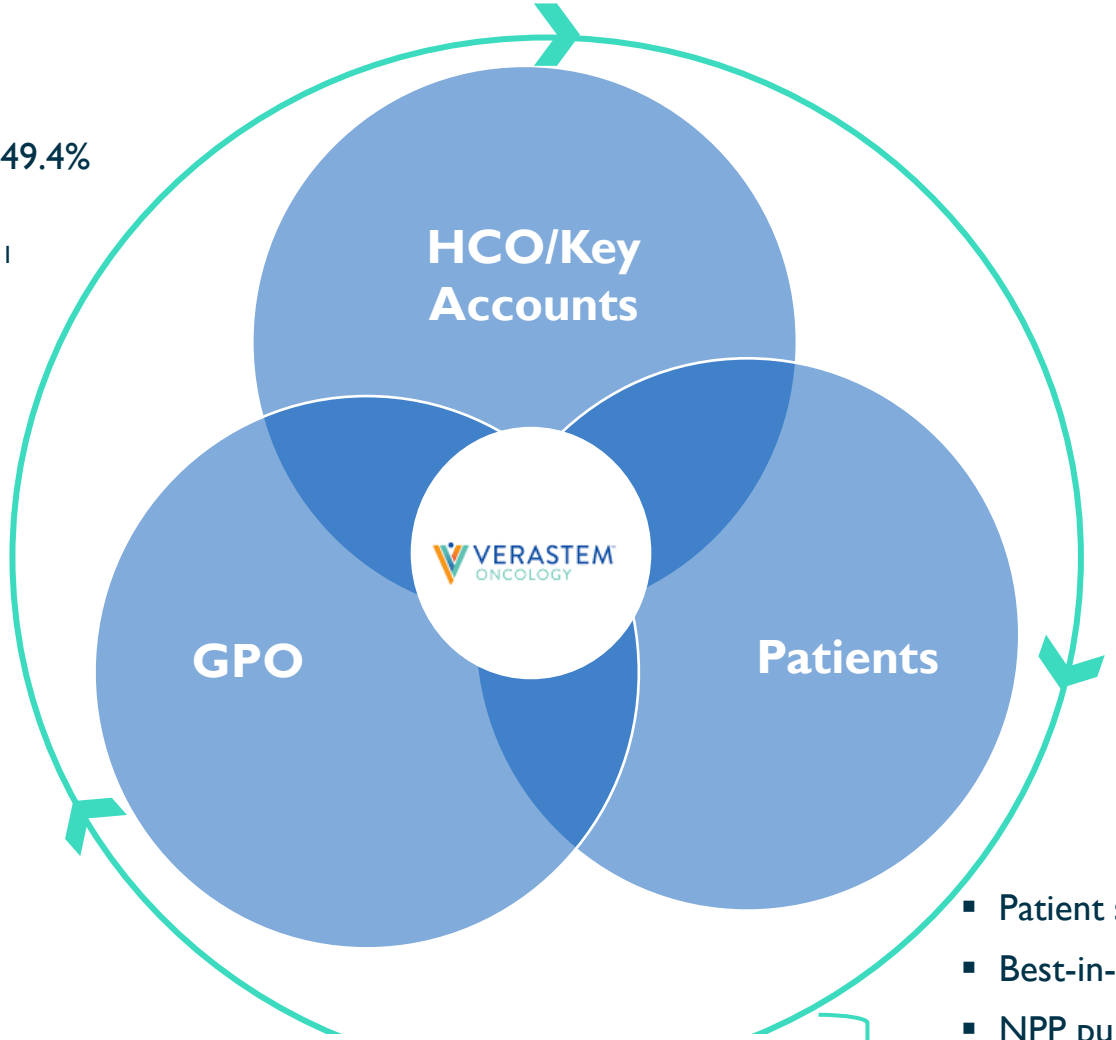
Efficiently Scaled Commercial Model to Deliver Best-In-Class Launch

HCO/Key Account Focus

Top 100 commercial HCOs contribute 49.4% of patient claims[1]

~400 HCPs manage these patients[1]

Deploy lean, focused field team (14-18 reps)



Patient Focused

YTD more than 2,100+ patients have registered on DSE website, which represents 35% of the population[2]

Robust program for ongoing education and resources

GPO/Large Affiliated Practices

Ensuring inclusion in all relevant pathways and EMR systems

Access is based on group provided programs and/or opportunities

Surround Sound Support Programs

- Patient support and access programs
- Best-in-class multichannel marketing
- NPP pull through and reinforcement to targeted customers and white space territories
- Inside Sales Reps will bolster Field Force efforts

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1. VSTM DOF – Claims LGSOC Proxy; 2. VSTM DOF. Self-identified patients with LGSOC registered via DSE (disease) website; YTD: Year-to-date; NPP: Non-personal promotion

Pursuing Broadest Label Possible with Mature Data from RAMP 201

Expect to Complete Rolling NDA Submission in H2 2024

Regulatory Approach

- Seeking Accelerated Approval, ORR and DoR are main efficacy outcomes
- No FDA approved treatments
- Current SoC therapy is associated with low response rates and high discontinuation rate due to toxicity

SoC[1]: ORR: 6-13%
D/C Due to AE: 17-30%

- Avutometinib + Defactinib clinical data shows advantage over available therapy

Avutometinib + Defactinib:
ORR: 27%*
KRAS mt: 37%, KRAS wt: 15%
D/C Due to AE: 9%

Upcoming Milestones

- Submit final NDA module to include efficacy & safety from mature RAMP 201 to complete rolling submission and data from overall population to inform final indication
- Expect to complete rolling submission in H2 2024, priority review request
- Target to complete full enrollment by end of 2025 for ongoing Phase 3 (RAMP 301) confirmatory study
- Plans to discuss regulatory path with CHMP and PMDA (EU and Japan)

Potential for FDA accelerated approval in 2025

*RAMP 201 Parts A,B, C. Feb. 2024 cutoff – minimum of 5 months follow up

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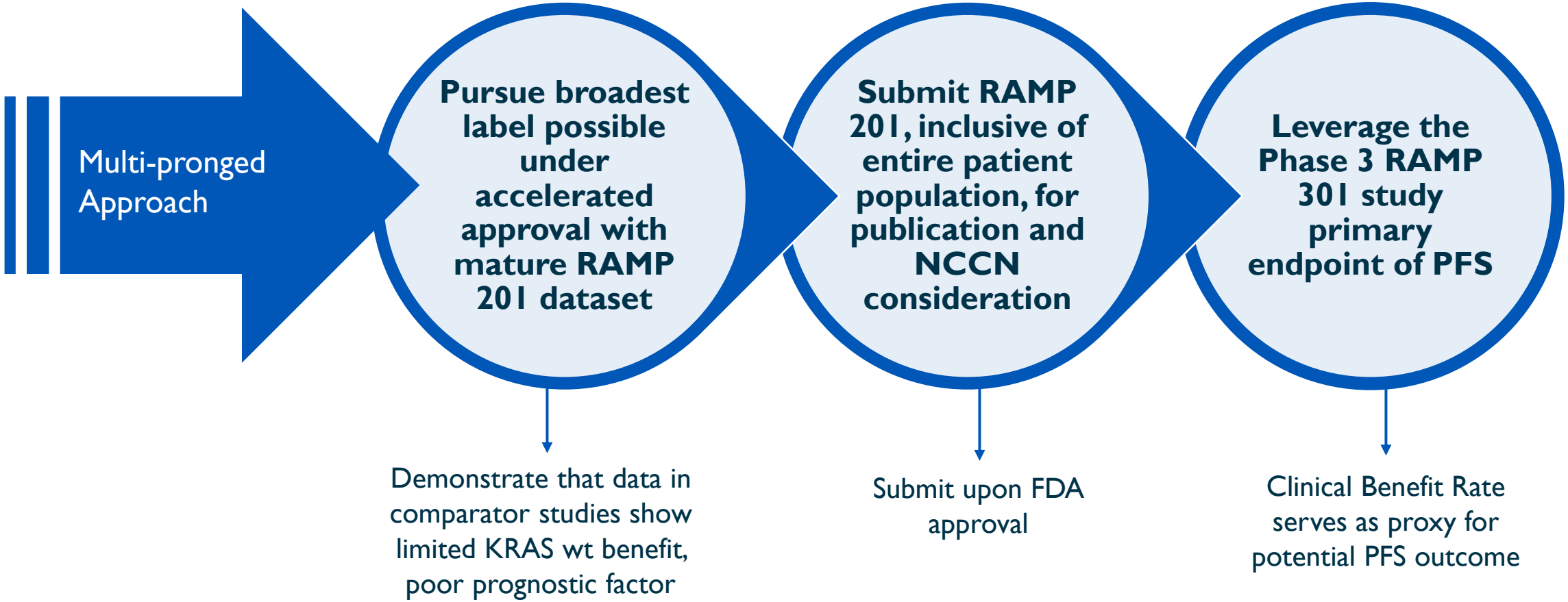
These data are derived from different clinical trials at different points in time, with differences in trial design and patient populations, cross-trial comparison cannot be made, and no head-to-head clinical trials have been conducted.

Breakthrough Therapy Designation for combination of avutometinib and defactinib for treatment of recurrent LGSOC after one or more prior lines of therapy including platinum-based chemotherapy; 1. Gershenson et al, Lancet 2022; Monk et al, JCO 2020; CHMP: Committee for Medicinal Products for Human Use; PMDA: Pharmaceutical and Medical Devices Agency; EU: European Union; D/C: discontinuation

Multi-Pronged Approach to Ensure Patients with Recurrent KRAS Wild-Type LGSOC Will Have Access to Avutometinib + Defactinib, if Approved



Leverage RAMP 301 to Support Regulatory Path in the U.S., ROW

RAMP 201:
Phase 2 Registration-Directed Trial
Target Enrollment Completed

- Patients enrolled with recurrent KRAS mt and KRAS wt LGSOC; prior chemo and MEKi use allowed
  - Primary Endpoint: ORR
- Determined avutometinib 3.2 mg BIW + defactinib 200 mg BID combination as go forward regimen based on greater antitumor activity and tolerability profile vs avutometinib 4.0 mg BIW monotherapy
- Expansion phase of combo includes 115 patients at RP2D
- Low-dose evaluation of avutometinib of 1.6 mg BIW and defactinib 200 mg BID to be submitted to FDA as part of Project Optimus
- Mature data expected in H2 2024

RAMP 301:
Phase 3 International Confirmatory Trial
Enrollment Ongoing

- Patients enrolling is similar to patient population in RAMP 201, with recurrent KRAS mt and KRAS wt LGSOC; prior MEKi and bevacizumab use allowed and post one line of platinum chemotherapy
  - Primary Endpoint: PFS
- Stratification Factors: KRAS mutation status (wt vs. mt)
- Investigator choice of treatment
  - May crossover to avutometinib + defactinib arm upon BICR-confirmed progressive disease (PD)
- Study sites include the U.S., Australia, UK, Canada, Europe, and South Korea
  - Targeting full enrollment by end of 2025

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BIW: twice a week; BID: twice a day

Next Steps in LGSOC Clinical Program and NDA

- Plan to announce mature data from RAMP 201 in H2 2024
- Expect to engage with FDA upon mature RAMP 201 dataset to discuss KRAS wt data and potential inclusion in NDA indication
- Expect to complete NDA submission in H2 2024
- Expect to submit mature RAMP 201 data for all patients for publication and then NCCN consideration
- Continue to enroll patients in RAMP 301 Phase 3 confirmatory study

VERASTEM ONCOLOGY

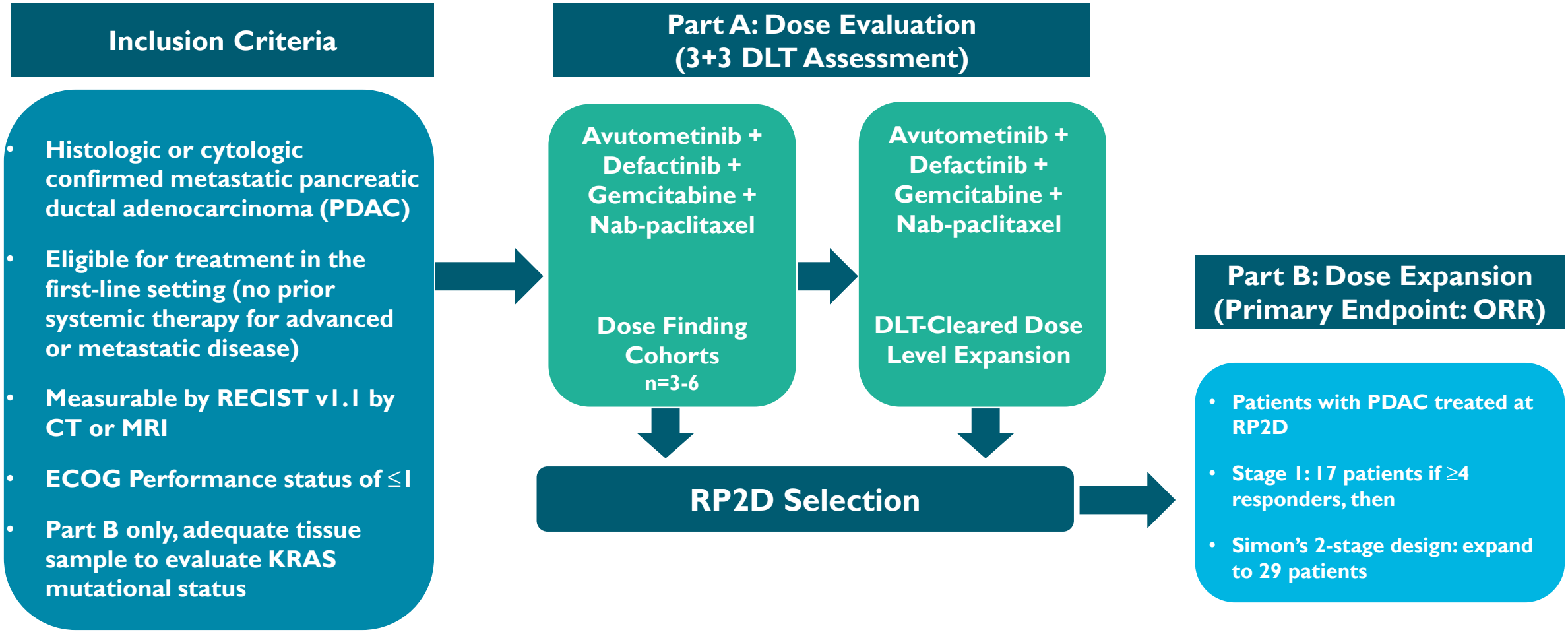
Avutometinib ± Defactinib

Potential Market Expansion Opportunities in First-line Metastatic Pancreatic Cancer and Advanced Lung Cancer

Topline Data from RAMP 205: Avutometinib + Defactinib + SOC in First-Line Metastatic Pancreatic Cancer

RAMP 205: Designed to Identify and Evaluate RP2D in Combination with Chemotherapy for Treatment of Newly Diagnosed mPDAC

RAMP 205: Ongoing Phase 1/2 Evaluating Avutometinib + Defactinib with Gemcitabine and Nab-paclitaxel



VERASTEM ONCOLOGY

Collaboration with PanCAN, NCT05669482

DLT: dose-limiting toxicity; n: number of patients; ORR: overall response rate; RP2D: recommended phase 2 dose; CT: computed tomography; ECOG: European Cooperative Oncology Group; MRI: magnetic resonance imaging

RAMP 205: Initial Interim Safety and Efficacy Results

- Encouraging early interim data from ongoing Phase 1/2 RAMP 205 study evaluating avutometinib + defactinib + gemcitabine + Nab-paclitaxel in first-line metastatic pancreatic cancer
  - As of data cutoff of May 14, 2024, Dose Level 1 mature with more than 6 months follow up
    - Confirmed ORR = 83% (5/6)
    - Cohort was DLT cleared, one DLT observed (neutropenic fever)
- Evaluating additional dose/schedule combinations to optimize the dose for safety/tolerability and define RP2D for expansion cohort
- 11 top academic sites currently enrolling and highly engaged
- Presented RAMP 205 initial interim data at ASCO on June 1, 2024

Dose Level	Avuto	Defactinib	Gem	Nab-Pac
Day 1, 8, 15 chemo dosing:				
-1	2.4 mg BIW	200 mg BID	800 mg/m^2	100 mg/m^2
1	2.4 mg BIW	200 mg BID	800 mg/m^2	125 mg/m^2
Day 1 and 15 chemo dosing:				
1a	3.2 mg BIW	200 mg BID	800 mg/m^2	125 mg/m^2
2a	3.2 mg BIW	200 mg BID	1000 mg/m^2	125 mg/m^2

VERASTEM ONCOLOGY

DLT: dose-limiting toxicity; ASCO: American Society of Clinical Oncology

Landmark Trials in First-Line Metastatic Pancreatic Cancer

SOC Treatment Landscape:

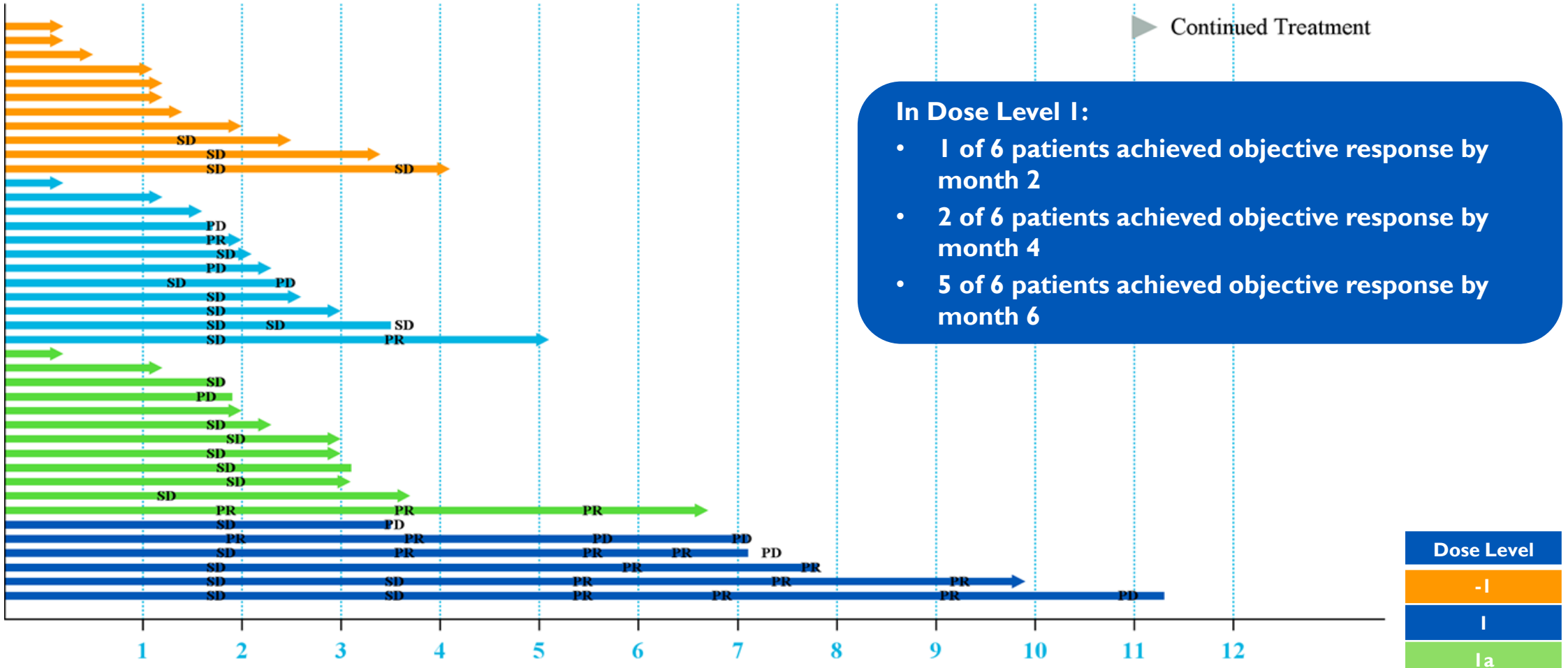
- ORR is between 23% - 36% for Gem/NabP
- Median overall survival reported between 8.5 – 9.2 months

Trial/PI/Reported (# Patients)	Intervention	Comparator	ORR by Investigator (95% CI)	mPFS (95% CI)	mOS (95% CI)
MPACT Von Hoff 2013 (N=861)	**Gem/NabP*** (n=431)	Gem (n=430)	**Gem/NabP**: **29%** (25-34); **23%** (19-17) IRR**	**5.5** months (4.5-5.9)	**8.5** months (7.89-9.53)
NAPOLI 3 O'Reilly 2023 (N=770)	**Nalirifox** (n=383)	**Gem/NabP*** (n=387)	**Gem/NabP** **36.2%** (31.4-41.2)	**5.6** Months (5.3-5.8)	**9.2** months (8.3-10.6)
			Nalirifox **41.8%** (36.8-46.9)	**7.4** months (6.0-7.7)	**11.1** months (10-12.1)
PRODIGE Conroy 2011 (N=342)	**Folfirinox** (n=171)	Gem (n=171)	**Folfirinox** **31.6%** (24.7-39.1)	**6.4** months	**11.1** months

For Reference only: No cross-trial comparison made.*Dosing schedule in Gem/NabP arms above= 1000/125(mg/m^2) D1,8,15 q 4w, **Secondary endpoint of ORR based on IRR (Independent Radiology Review),

RAMP 205: Evaluating Multiple Regimens in Parallel to Efficiently Identify RP2D in First-Line mPC

Duration of Treatment for All Patients; Safety Population (n=41)



In Dose Level 1:

- 1 of 6 patients achieved objective response by month 2
- 2 of 6 patients achieved objective response by month 4
- 5 of 6 patients achieved objective response by month 6

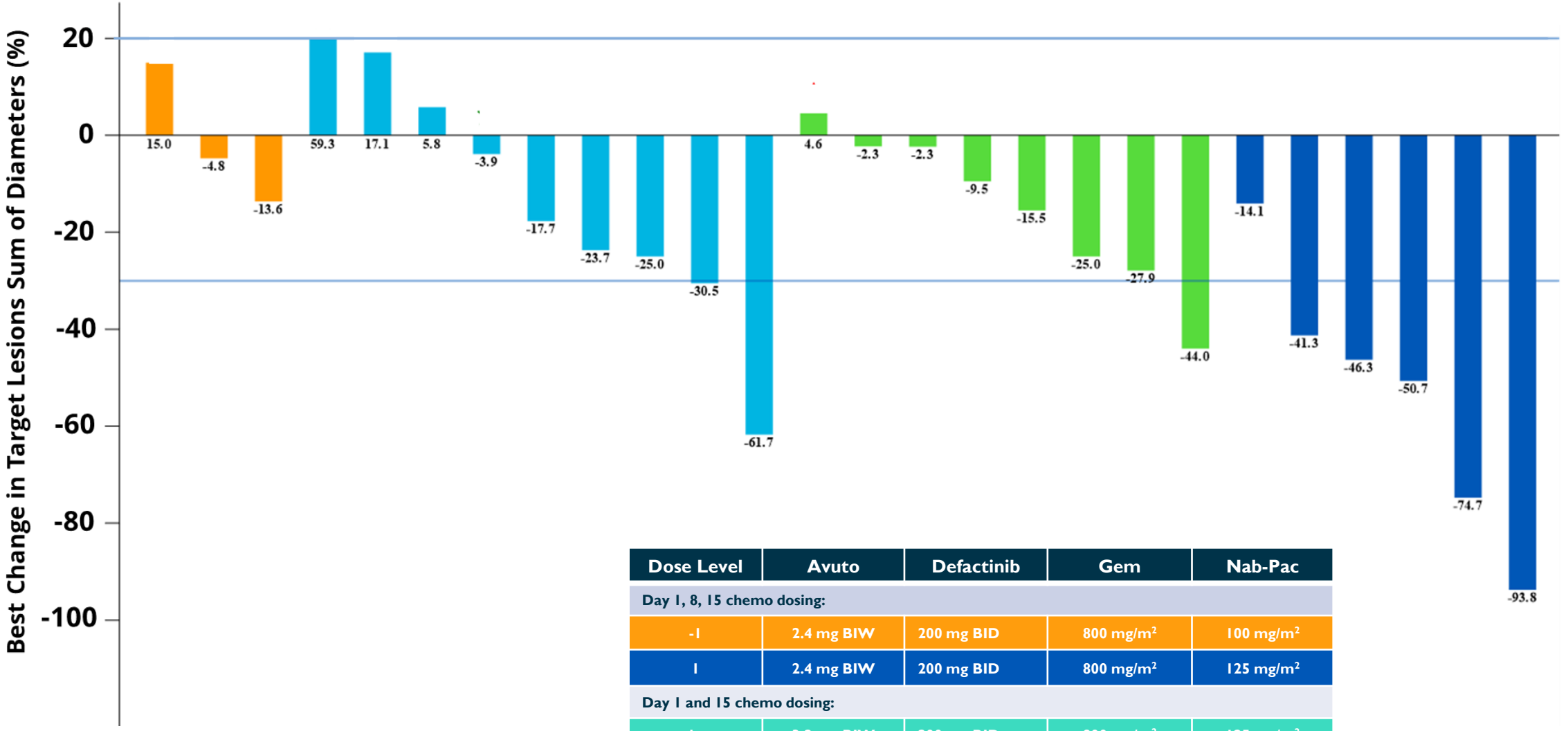
VERASTEM ONCOLOGY

Data Cutoff Date:14 MAY 2024

Source: Program: F_TR_SWIMMER.sas

RAMP 205: Best Percent Change in Target Lesion Sum of Diameters

Includes Patients Who Have Had At Least First Scan (n=26)



Dose Level	Avuto	Defactinib	Gem	Nab-Pac
Day 1, 8, 15 chemo dosing:				
-1	2.4 mg BIW	200 mg BID	800 mg/m^2	100 mg/m^2
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Day 1 and 15 chemo dosing:				
1a	3.2 mg BIW	200 mg BID	800 mg/m^2	125 mg/m^2
2a	3.2 mg BIW	200 mg BID	1000 mg/m^2	125 mg/m^2

VERASTEM ONCOLOGY

Data Cutoff Date:14 MAY 2024

Source: Program: F_TR_WATERFALL_BYDOSE2

RAMP 205: AE Profile Generally Comparable with Gem/Nab-P

- Any grade TEAEs occurring in ≥20% or grade ≥3 occurring in ≥5% of patients[1]

	DL-1 (n=11)		DL1 (n=6)		DL1a (n=12)		DL2a (n=12)		Total (N=41)	
	Any Grade, n (%)	Grade ≥3, n (%)	Any Grade, n (%)	Grade ≥3, n (%)	Any Grade, n (%)	Grade ≥3, n (%)	Any Grade, n (%)	Grade ≥3, n (%)	**Any Grade, n (%)**	**Grade ≥3, n (%)**
Nausea	6 (54.5)	0 (0)	5 (83.3)	0 (0)	7 (58.3)	0 (0)	6 (50.0)	0 (0)	**24 (58.5)**	**0 (0)**
Fatigue	5 (45.5)	0 (0)	5 (83.3)	0 (0)	5 (41.7)	1 (8.3)	7 (58.3)	0 (0)	**22 (53.7)**	**1 (2.4)**
Constipation	4 (36.4)	0 (0)	5 (83.3)	0 (0)	7 (58.3)	0 (0)	4 (33.3)	0 (0)	**20 (48.8)**	**0 (0)**
Diarrhoea	1 (9.1)	0 (0)	4 (66.7)	0 (0)	6 (50.0)	0 (0)	6 (50.0)	0 (0)	**17 (41.5)**	**0 (0)**
Alopecia	3 (27.3)	0 (0)	6 (100.0)	0 (0)	3 (25.0)	0 (0)	2 (16.7)	0 (0)	**14 (34.1)**	**0 (0)**
Neutrophil count decreased	2 (18.2)	2 (18.2)	4 (66.7)	4 (66.7)	4 (33.3)	3 (25.0)	3 (25)	2 (16.7)	**13 (31.7)**	**11 (26.8)**
Rash maculo-papular	4 (36.4)	0 (0)	5 (83.3)	0 (0)	3 (25.0)	0 (0)	1 (8.3)	0 (0)	**13 (31.7)**	**0 (0)**
Vomiting	3 (27.3)	0 (0)	4 (66.7)	0 (0)	4 (33.3)	1 (8.3)	2 (16.7)	0 (0)	**13 (31.7)**	**1 (2.4)**
Anaemia	2 (18.2)	1 (9.1)	2 (33.3)	2 (33.3)	2 (16.7)	2 (16.7)	3 (25.0)	1 (8.3)	**9 (22.0)**	**6 (14.6)**
Decreased appetite	2 (18.2)	0 (0)	3 (50.0)	0 (0)	3 (50.0)	0 (0)	1 (8.3)	0 (0)	**9 (22.0)**	**0 (0)**
Alanine aminotransferase increased	1 (9.1)	1 (9.1)	2 (33.3)	2 (33.3)	3 (25.0)	1 (8.3)	1 (8.3)	0 (0)	**7 (17.1)**	**4 (9.8)**

- Inclusion of avutometinib plus defactinib may increase rates of neutropenia and rash

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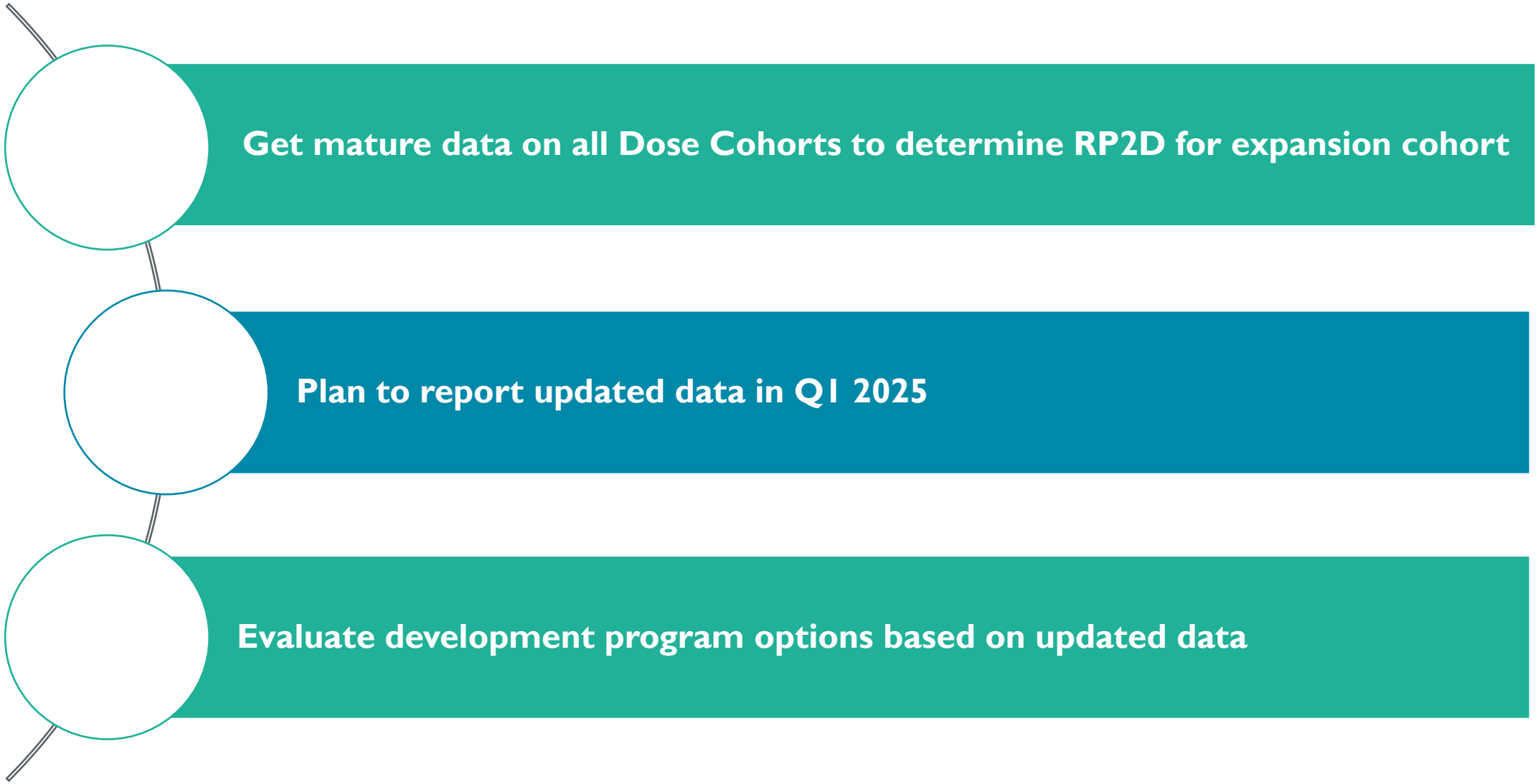
No head-to-head clinical trials have been conducted between avutometinib and defactinib combination and gemcitabine and Nab-paclitaxel.

1. Lim et al. ASCO 2024 Abstract #4140; Data Cutoff: May 14, 2024, TEAEs were graded based on guidelines provided in CTCAE v5.0. CTCAE v5.0, Common Terminology Criteria for Adverse Events version 5.0; DL, dose level; TEAE, treatment emergent adverse event.

Next Steps for RAMP 205



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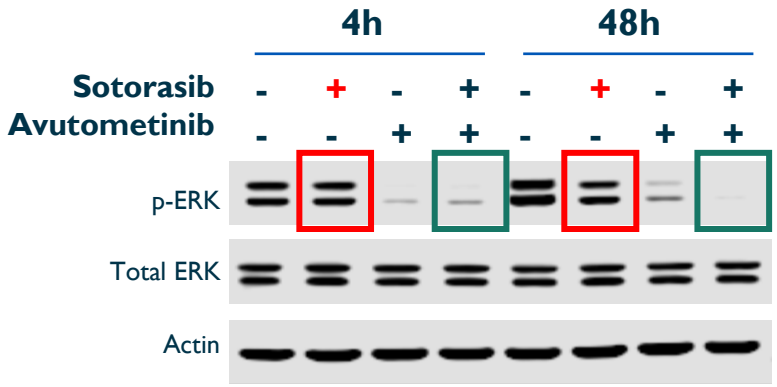
Avutometinib with KRAS G12C Inhibitors in Non-Small Cell Lung Cancer

Preclinical Synergy of Avutometinib + G12C Inhibitors in KRAS G12C Models

Synergy of avutometinib + G12C inhibitors across G12C mutant NSCLC, CRC & Pancreatic cancer cell lines

Cell line	Indication	Sensitivity to G12C inhibitors	Combined Synergy Score: Avutometinib + sotorasib	Combined Synergy Score: Avutometinib + adagrasib
H2122	NSCLC	Moderately sensitive	44.7	44.6
H1373	NSCLC	Sensitive	10.0	3.4
SW1573	NSCLC	Insensitive	8.6	12.0
H358	NSCLC	Sensitive	6.9	5.4
H2030	NSCLC	Moderately sensitive	5.1	ND
SW837	CRC	Sensitive	16.1	18.5
MIAPACA2	Panc	Sensitive	2.3	5.3

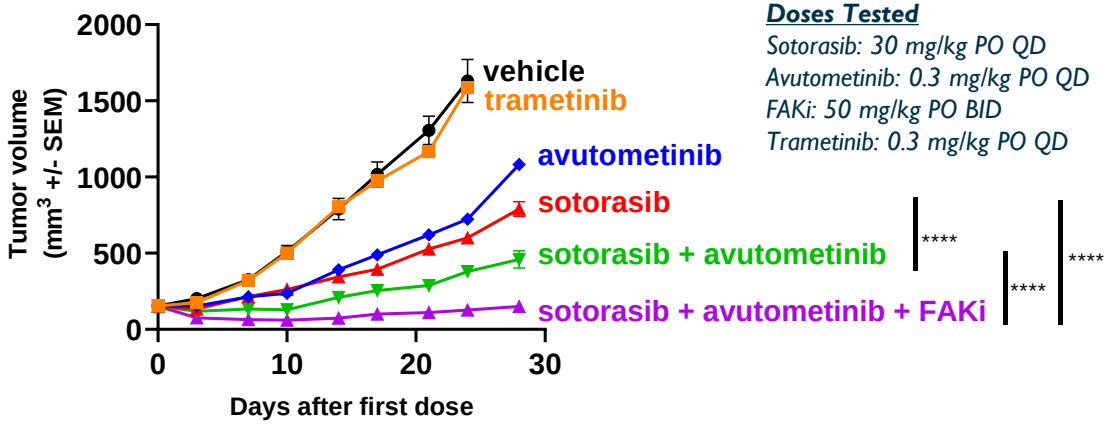
Avutometinib + sotorasib yields deeper and more sustained inhibition of ERK signaling pathway



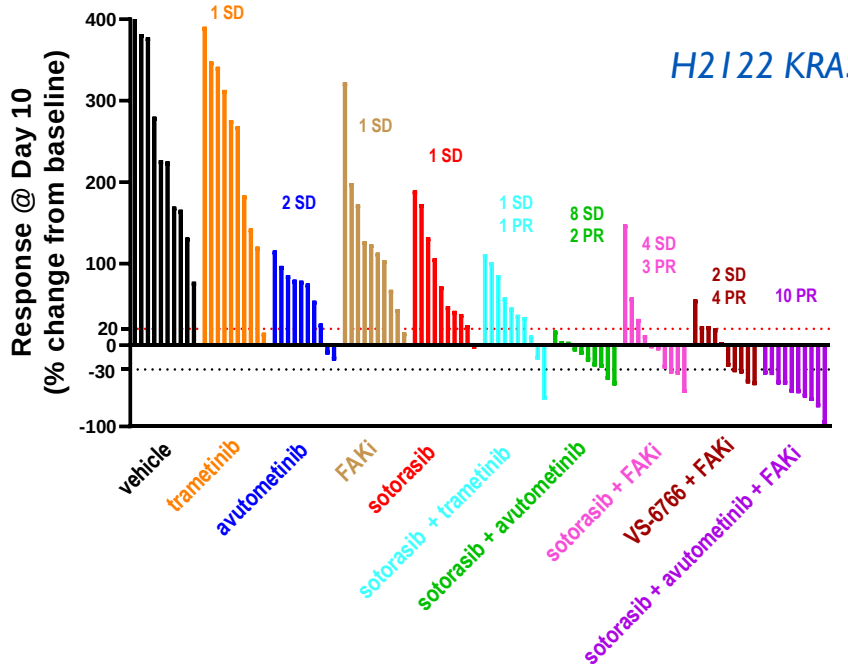
H2122 KRAS G12C NSCLC

Concentrations Tested
Sotorasib: 100 nM
Avutometinib: 100 nM

Avutometinib & FAKi potentiate sotorasib efficacy in KRAS G12C NSCLC in vivo; Tumor regression in all mice with triple combination



Doses Tested
Sotorasib: 30 mg/kg PO QD
Avutometinib: 0.3 mg/kg PO QD
FAKi: 50 mg/kg PO BID
Trametinib: 0.3 mg/kg PO QD



H2122 KRAS G12C NSCLC

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Coma et al., AACR 2021; ND: not determined

Avutometinib ± FAKi Restores Anti-Tumor Activity of Sotorasib in G12Ci-Resistant KRAS G12C Models

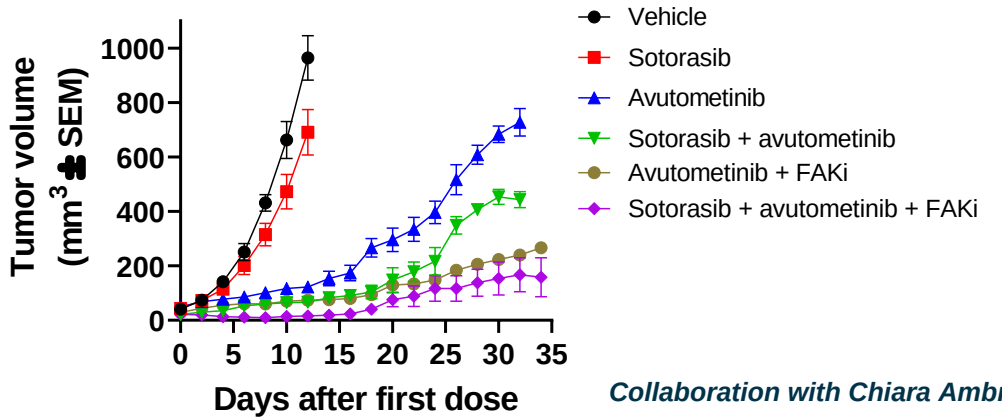
Avutometinib inhibits proliferation of cells harboring acquired KRAS mutations that occur clinically upon progression on G12C inhibitors

	IC50 (nM)		
Cell Line	Sotorasib	Adagrasib	Avutometinib
G12C	29	3	14
G12D	435	382	7
G12C/R68S	157	85	13
G12C/H95D	11	235	10
G12C/Y96C	438	216	4
G12C/Y96D	>5000	578	17

<30 nM	30 - 150 nM	>150 nM

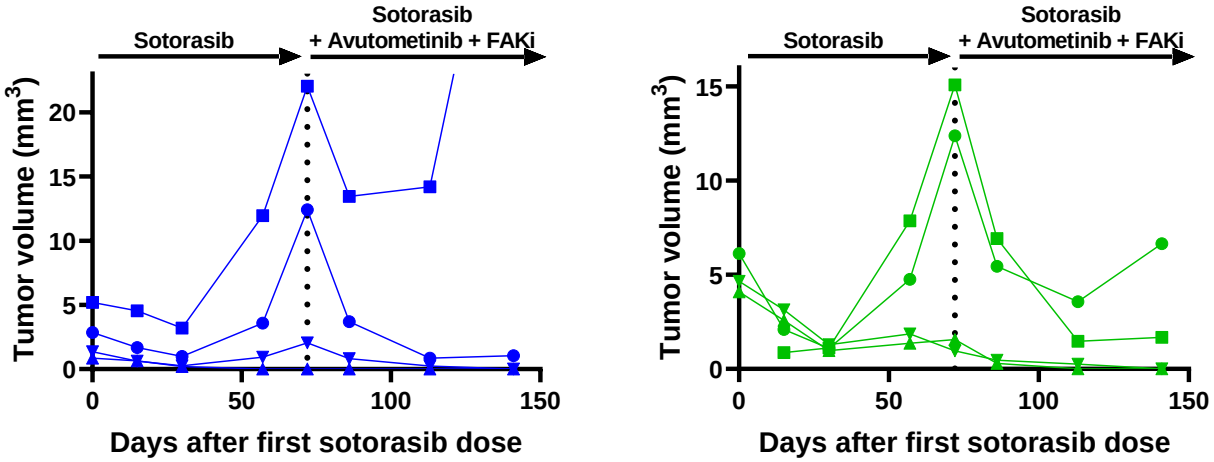
Collaboration with Andy Aguirre, DFCI

Addition of avutometinib + FAK inhibitor to sotorasib increases tumor growth inhibition in a sotorasib-resistant KRAS G12C/Y96D model



Collaboration with Chiara Ambrogio, U Turin (Italy)

Addition of avutometinib + FAKi restores anti-tumor activity after progression on sotorasib monotherapy in a KRAS G12C NSCLC GEMM model



Collaboration with Mariano Barbacid, CNIO (Spain)

VERASTEM ONCOLOGY

Coma et al., AACR RAS meeting 2023

RAMP 203: Phase 1/2 Trial of Avutometinib + LUMAKRAS™ (Sotorasib) ± Defactinib in KRAS G12C Advanced NSCLC

Inclusion Criteria

- Documented *KRAS* G12C mutation determined using validated test
- Treatment with 1 but no more than 3 prior systemic regimens for Stage 3B-C or 4 NSCLC*
- May have received adjuvant chemotherapy for earlier-stage disease
- Measurable disease per RECIST v1.1
- ECOG performance status ≤ 1

*may include patients with or without prior G12C therapy

Part A: Dose Evaluation
(3+3 DLT Assessment)

KRAS G12C inhibitor-naive → **Avutometinib + Sotorasib** Dose Finding Cohort → **RP2D Selected:** 4 mg avutometinib / 960 mg sotorasib

Progressed on KRAS G12C inhibitor → *Now enrolling* **Avutometinib + Sotorasib + Defactinib** Dose Finding Cohort → **Alt-RP2D Selection**

Part B: Dose Expansion
(Primary endpoint: ORR)

Treatment with RP2D and/or Alt-RP2D

Enrollment Complete for Stage 1

Cohort 1
Patients without Prior KRAS G12C Inhibitor Treatment
Stage 1: ~20 patients
Stage 2: expand to 54

Now enrolling

Cohort 2
Patients who Progressed on Prior KRAS G12C Inhibitor Treatment
Stage 1: ~19 patients
Stage 2: expand to 55

Cohort 1
Patients without Prior KRAS G12C Inhibitor Treatment
Stage 1: ~20 patients
Stage 2: expand to 54

Cohort 2
Patients who Progressed on Prior KRAS G12C Inhibitor Treatment
Stage 1: ~19 patients
Stage 2: expand to 55

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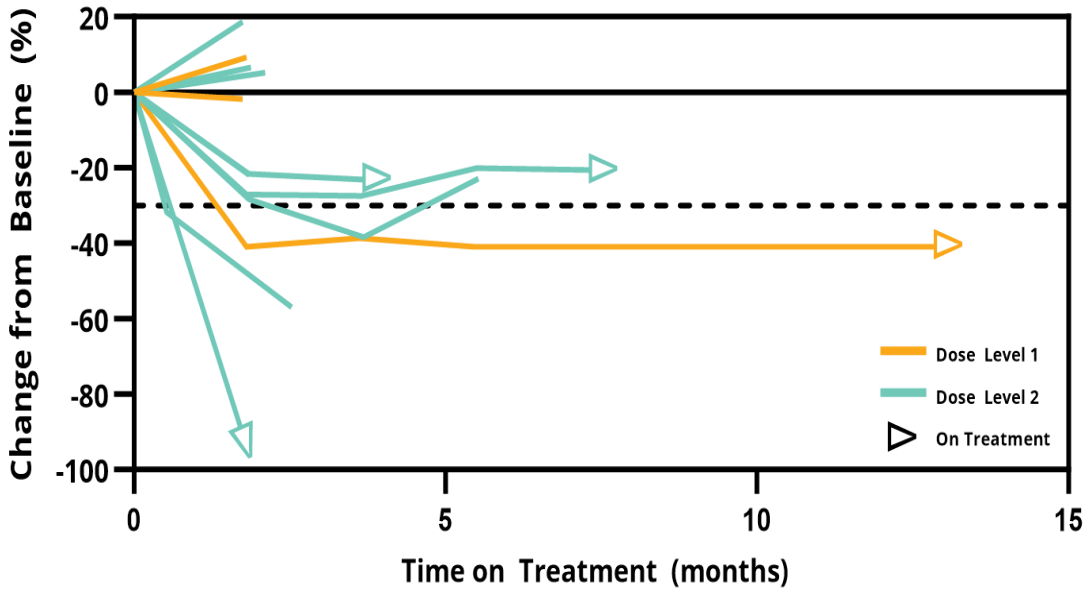
Collaboration with Amgen, NCT05074810

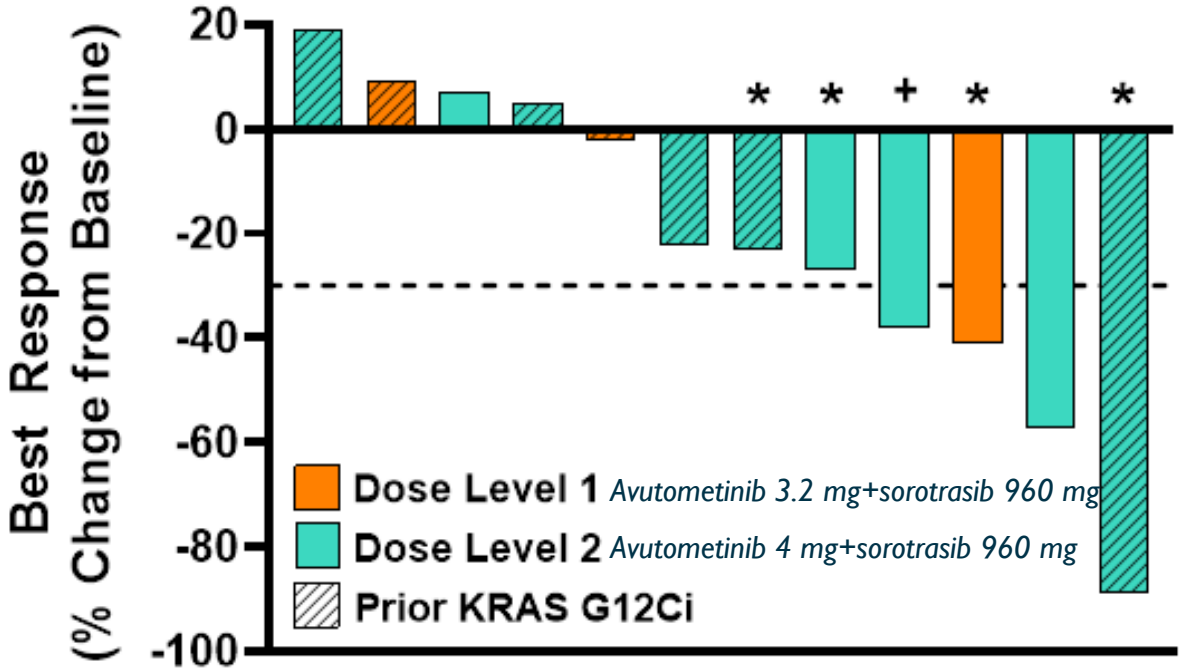
DLT, dose-limiting toxicity; KRAS, kristen rat sarcoma virus; NSCLC, non-small cell lung cancer; ORR, objective response rate; RECIST v1.1, response evaluation criteria in solid tumours version 1.1; RP2D, recommended phase 2 dose.

RAMP 203: Objective Responses in KRAS G12C NSCLC Sotorasib + Avutometinib Combination

Avutometinib + Sotorasib

Percentage Change in Target Lesion Sum with time on treatment





*On treatment at time of data cutoff; **+** Patient with -38.4% tumor reduction classified as SD due to disease progression prior to confirmatory scan.

VERASTEM ONCOLOGY

Awad et al., EORTC- NCI – AACR Conference Oct 2023

RAMP 204: Phase 1/2 Trial of Avutometinib + KRAZATI™ (Adagrasib) in KRAS G12C Advanced NSCLC

Inclusion Criteria

- Documented *KRAS* G12C mutation determined using validated test
- Treatment with >1 but no more than 3 prior systemic regimens, for Stage 3B-C or 4 NSCLC
- Must have received prior therapy with a KRAS G12C inhibitor and experienced progressive disease
- Measurable disease per RECIST v1.1
- ECOG performance status ≤ 1

Part A: Dose Evaluation (DLT Assessment)

Avutometinib + Adagrasib

Dose Finding Cohorts (n=3-6)

RP2D Selection

Part B: Dose Expansion (Primary endpoint: ORR)

Stage 1: 19 patients (including Part A patients) treated with RP2D

Stage 2: expand to 55 patients

VERASTEM ONCOLOGY Collaboration with Mirati (BMS) NCT05375994

DLT, dose-limiting toxicity; RECIST v1.1, response evaluation criteria in solid tumors version 1.1; RP2D, recommended phase 2 dose.

Next Steps for RAMP 203 and RAMP 204

- Continue study follow up on patients in both RAMP 203 and RAMP 204
- Continue to add defactinib to RAMP 203
- Expect to report updated interim data in H2 2024 from RAMP 203
- Expect to report initial interim data in H2 2024 from RAMP 204

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Ongoing Investigator-Sponsored Studies to Expand Avutometinib Indications and Combinations

Investigator-Sponsored Trials Provide Cost-Efficient Approach to Identify Future Development Directions

	Indication	Incidence/ Prevalence	Biomarker %	Regimen	Setting	Phase	Institution
Gynecologic Cancers	LGSOC	Prevalence 6k[1]	70%	Avutometinib + defactinib + letrozole	Low-grade serous ovarian cancer without prior systemic treatment	Phase 1/2	Memorial Sloan Kettering Cancer Center
	Gynecologic Basket	Incidence[4-8]: 85K	25%	Avutometinib + defactinib	Recurrent RAS Pathway-driven (RAS/RAF/NF1) endometrioid cancer, mucinous ovarian cancer, high-grade serous ovarian cancer or cervical cancer	Phase 2	University of Oklahoma
	Mesonephric	Incidence:[9] ~680	96%	Avutometinib + defactinib	Advanced or recurrent mesonephric gynecologic cancer	Phase 2	Memorial Sloan Kettering Cancer Center
CRC	KRAS mt	Incidence[2]: 148K	45%	Avutometinib + cetuximab	Recurrent metastatic KRAS mt	Phase 1/2	University of Chicago
	RAS/RAF wt CRC	Incidence[2]: 148K	50%[12]	Avutometinib + defactinib + cetuximab	Unresectable, Anti-EGFR-Refractory Advanced Colorectal Cancer	Phase 1/2	M.D. Anderson Cancer Center
Breast Cancer	ER+/Her2-	Incidence[2]: 279K	22.5%	Avutometinib + abemaciclib + fulvestrant	Recurrent ER+/HER2- breast cancer following progression on CDK4/6i + aromatase inhibitor	Phase 1/2	Dana-Farber Cancer Institute
Melanoma	MAPK alterations or wt	Incidence[2]: 100K	100%	Avutometinib + defactinib ± encorafenib	Patients with brain metastases from cutaneous melanoma with RAS, RAF or NF1 alterations or RAS/RAF/NF1 wt	Phase 1/2	University of Utah
Thyroid	MAPK alterations[+]	Incidence[3]: 44K	35%	Avutometinib + defactinib	Differentiated & anaplastic thyroid cancer	Phase 2	Memorial Sloan Kettering Cancer Center

[+]excluding BRAFV600E

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[1] Monk, Randall, Grisham, The Evolving Landscape of Chemotherapy in Newly Diagnosed Advanced Epithelial Ovarian Cancer, Am Soc Clin Oncol Educ Book; 2019; Slomovitz, Gourley, Carey, Malpica, Shih, Huntsman, Fader., Grisham et al, Low-Grade serous ovarian cancer: State of the Science; Gynecol Oncol; 2020. Grisham, Iyer, Low-Grade Serous Ovarian Cancer: Current Treatment Paradigms and Future Directions; Curr Treat Options Oncology; 2018; Globocan 2020; [2]Cancer Statistics 2020, Siegel et. al. *CA Cancer J Clin* 2020;70:7-30; [3]Cancer Statistics 2020, Siegel et. al. *CA Cancer J Clin* 2020;70:7-30 [4]Uterine cancer is one of the leading gynecologic neoplastic disorders in the US, of which over 80% are endometrioid adenocarcinomas (EA); [5]Endometrioid OC (EnOC) accounts for approximately 10% of all OC, with the majority of cases diagnosed as low grade, early stage disease with excellent clinical; [6]ucinous ovarian cancer: 3-11% of ovarian cancer (Hada et al., 2021); [7]90% of Ovarian Cancer is Epithelial Ovarian Cancer (https://www.cancer.org/content/dam/cancer-org/research/cancer-facts-and-statistics/annual-cancer-facts-and-figures/2018/cancer-facts-and-figures-2018.pdf); [8]HGSOC the most common type of ovarian cancer, accounting for approximately 75% of epithelial ovarian cancers. (https://ocrahope.org/news/high-grade-serous-carcinoma/) [9]Ji Son (David Hong) ASCO 2023

Partnership with GenFleet Therapeutics on Novel, Potential Best-in-Class RAS Pathway Programs

Discovery and Development Collaboration with GenFleet Strengthens Pipeline Targeting RAS Pathway-Driven Cancers

- Increases the breadth of Verastem's oncology pipeline with strategically-aligned RAS pathway focus
  - Exclusive options to license up to 3 programs with development and commercialization rights outside of the GenFleet markets of mainland China, Hong Kong, Macau, and Taiwan
  - Potential development in combination with Verastem's pipeline
  - Selected GFH375 (VS-7375), an oral KRAS G12D (ON/OFF) inhibitor is the first program; programs 2 & 3 in discovery phase
  - Small molecule programs focused on anti-cancer targets related to the RAS/MAPK pathway or surrounding cancer cell signaling
- Strategic collaboration builds on Verastem Oncology and GenFleet's experience in RAS pathway-driven cancers
  - Collective worldwide strengths in RAS pathway discovery and development
  - Established network of collaborators, including leading scientific and clinical experts
  - Leverages experience from GenFleet's KRAS G12C inhibitor program and Verastem's avutometinib/defactinib program
- Risk-sharing structure of the collaboration with milestone-based options provides capital efficient approach
  - At execution, Verastem paid GenFleet an upfront payment for options to obtain exclusive right to 3 programs
  - Combined with the upfront amount, payments for future annual R&D support, development milestones and option payment for first program through completion of Phase I trial could equal up to $11.5 million
  - Potential total deal size across all 3 programs up to $625.5 million excluding royalties
  - Includes exclusive rights for Verastem to obtain a license to each of the compounds after successful completion of pre-determined milestones in Phase I trials

GFH375 (VS-7375) is an Oral KRAS G12D (ON/OFF) Inhibitor

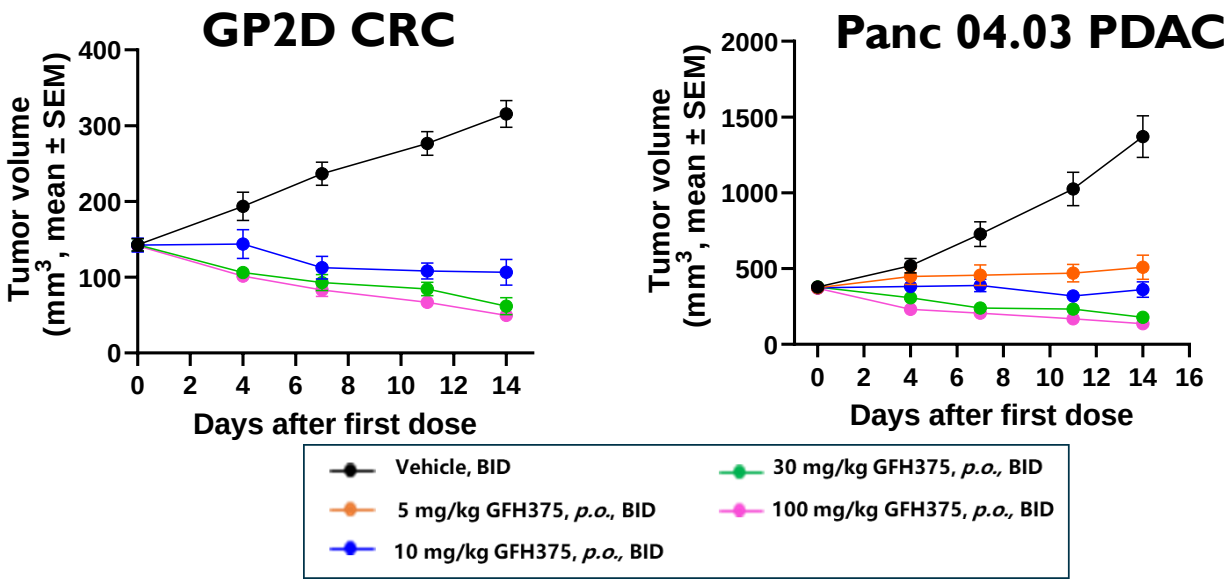
First program from the GenFleet collaboration

- GFH375 (VS-7375) is a potent and selective orally bioavailable inhibitor of KRAS G12D (ON/OFF) with potent anti-tumor activity demonstrated across preclinical models
- Dual inhibitor of ON (GTP) and OFF (GDP) states of KRAS G12D
- Orally bioavailable across preclinical species
- Potent against intracranial tumor models suggesting potential to treat brain metastases
- Avutometinib enhances anti-tumor activity of GFH375 (VS-7375) in preclinical models
- IND-enabling GLP toxicology studies complete
- IND cleared and first patient dosed in Phase 1/2 trial in China in an open-label, multi-center study of patients with KRAS G12D-mutant advanced solid tumors

Dual inhibitor of ON (GTP) and OFF (GDP) states of KRAS G12D

KRAS G12D State	GFH375 IC50 (nM) (KRAS G12D binding)
GppNp-bound (ON/active)	2 ± 1
GDP-bound (OFF/inactive)	6 ± 1

Potent anti-tumor activity demonstrated across preclinical models

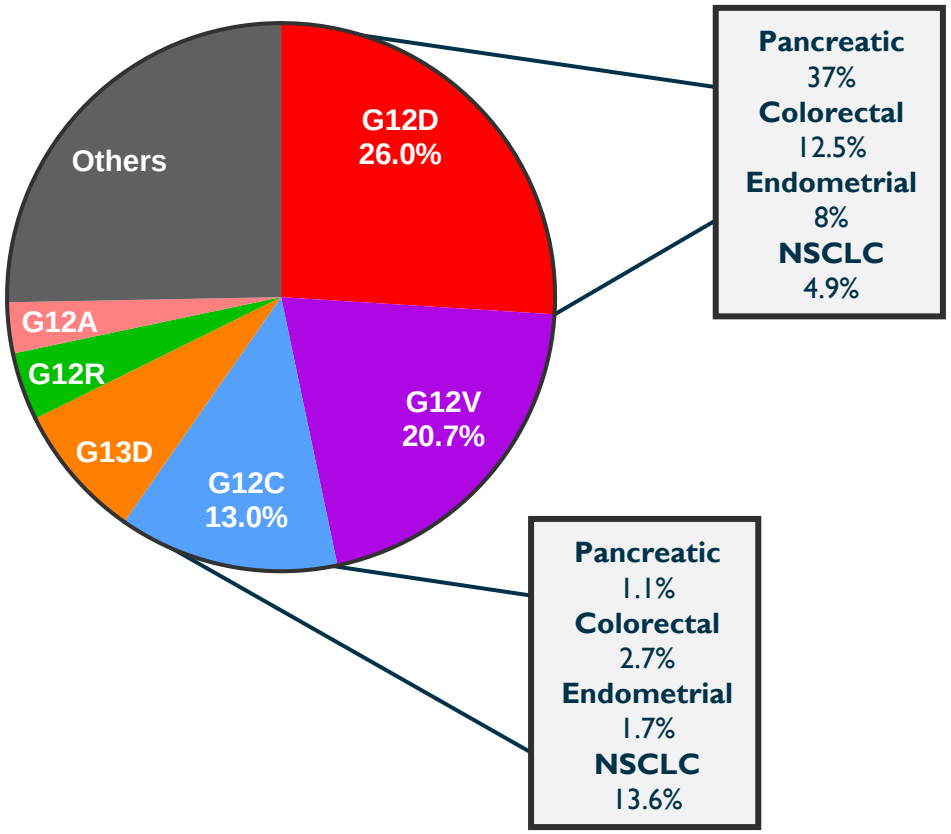


VERASTEM ONCOLOGY

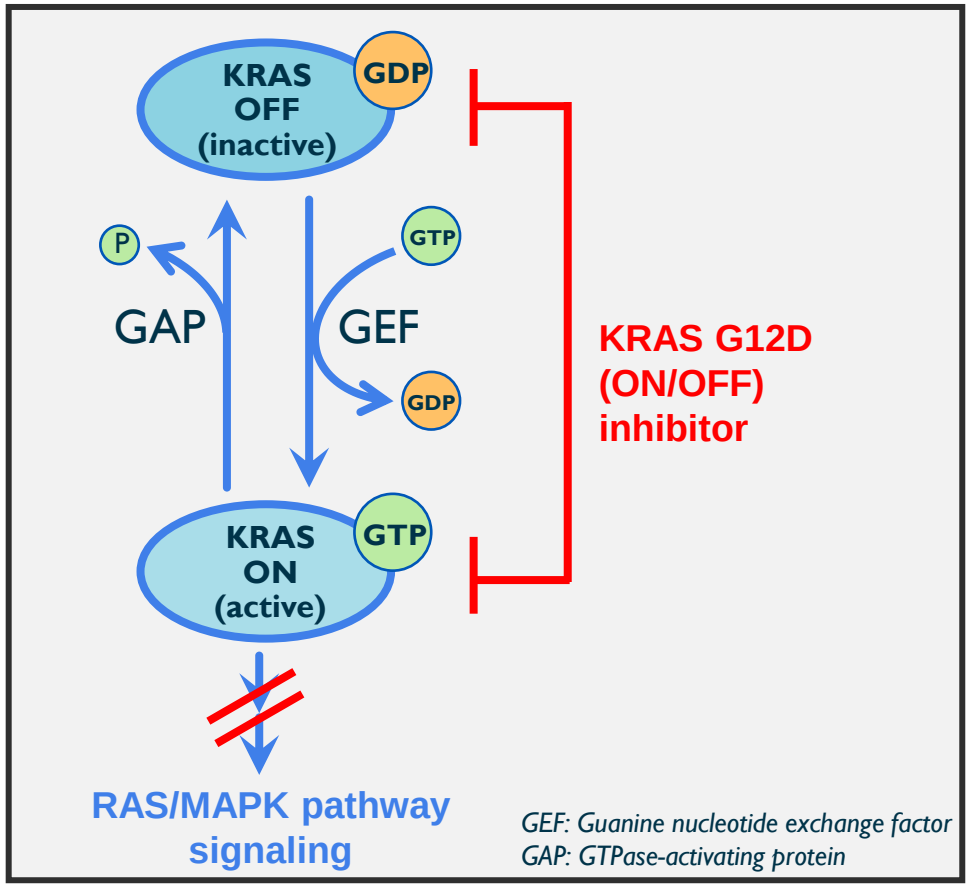
Zhou et al., AACR 2024

Potent, Selective, Orally Bioavailable Inhibitor of KRAS G12D (ON/OFF) Provides Multiple Options for Clinical Development

KRAS G12D is the most frequent KRAS mutation in human cancer



Ideal to inhibit both the active (ON) & inactive (OFF) states of KRAS for deep and durable inhibition of tumor growth



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Reference: Adapted from Hofmann et al., Cancer Discovery 2022

Next Steps for GFH375/VS-7375 & GenFleet Collaboration

- GenFleet plans to continue to enroll patients into Phase 1/2 trial for GFH375/VS-7375 in China in patients with KRAS G12D-mutated advanced solid tumors
- Expect to leverage the data in China study to accelerate a path forward in the U.S. and rest of world
- Ongoing discovery/lead optimization for 2nd and 3rd programs

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Achievements, Anticipated Milestones & Financials

Verastem Oncology: Preparing to Commercialize First Novel RAS/MAPK Combo Asset with Billion-Dollar Addressable Market Opportunity

Pipeline assets have the potential to provide significant market opportunity in both short- and long-term

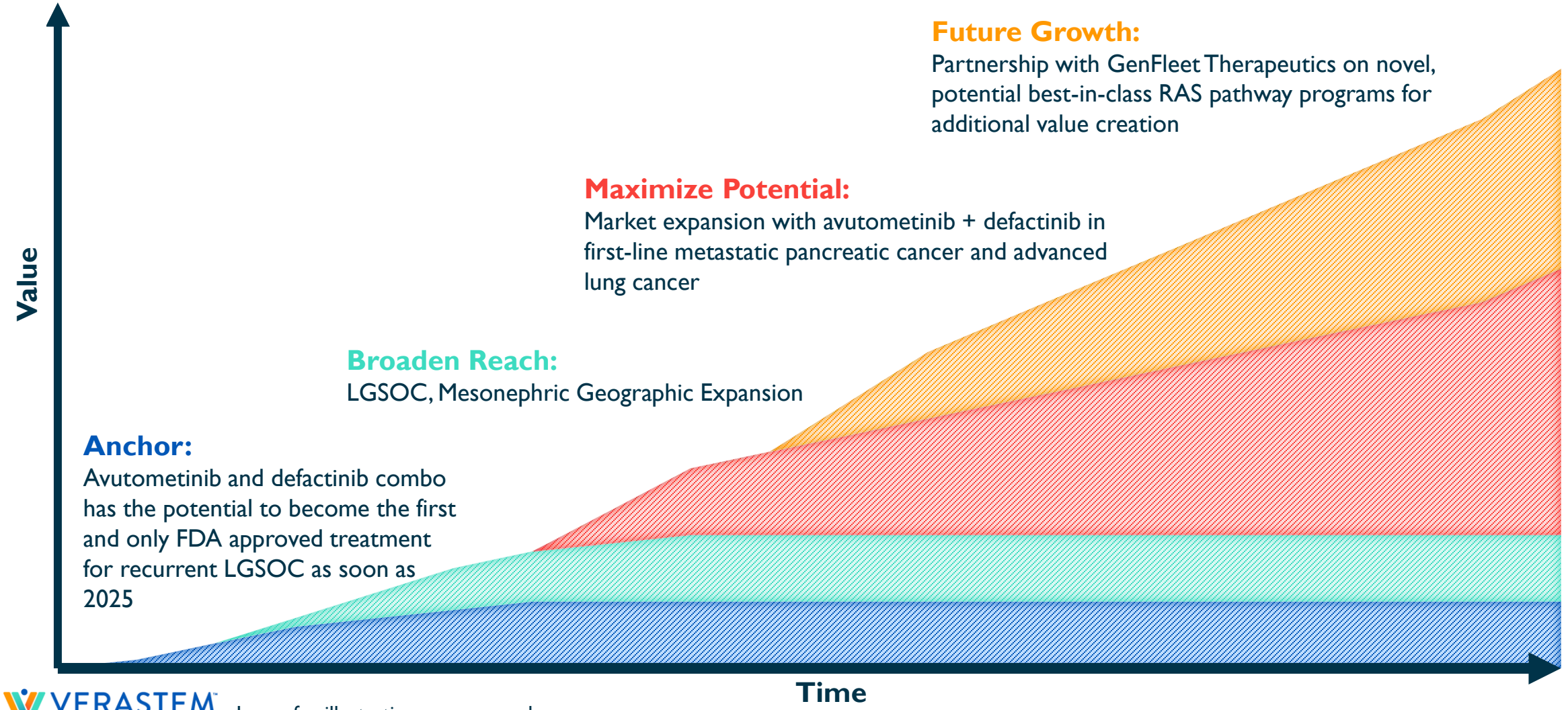

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Image for illustrative purposes only.

PDAC: pancreatic ductal adenocarcinoma cancer; NSCLC: non-small cell lung cancer

Recent Corporate Achievements

Avutometinib + Defactinib: Recurrent LGSOC

- ✓ Received FDA Orphan Drug Designation
- ✓ Initiated Phase 3 confirmatory study in Q4'23
- ✓ Presented planned subgroup analysis of Part A RAMP 201 trial
- ✓ Initiated rolling NDA submission in recurrent KRAS mt LGSOC in May 2024

Avutometinib + Defactinib: Metastatic Pancreatic Cancer

- ✓ Initial interim safety and efficacy results from RAMP 205 presented at ASCO 2024
- ✓ Initiated RAMP 205 combo avutometinib + gemcitabine/nab-paclitaxel + defactinib

Avutometinib + KRAS G12C Inhibitors: NSCLC

- ✓ Received FDA Fast Track Designation for avutometinib in combination with Mirati's (BMS) G12C inhibitor adagrasib
- ✓ Received FDA Fast Track Designation and for avutometinib plus defactinib with Amgen's G12C inhibitor sotorasib
- ✓ Received FDA Fast Track Designation for avutometinib in combo with Amgen's G12C inhibitor sotorasib
- ✓ Presented initial interim results from Phase 1/2 RAMP 203 trial of avutometinib + sotorasib

GFH375/VS-7375: Oral G12D (ON/OFF) Inhibitor

- ✓ Established discovery and development collaboration with GenFleet
- ✓ Presented preclinical data of GFH375/VS-7375, a potential best-in-class oral KRAS G12D (ON/OFF) inhibitor, at AACR 2024
- ✓ IND application was filed in China and accepted for review in Q1'24
- ✓ IND cleared in China in June 2024, GenFleet dosed first patient in Phase 1/2 trial in China in patients with KRAS G12D-mutated advanced solid tumors in July 2024

Anticipated Milestones and Activities

Program	Anticipated Milestones & Activities
Avutometinib + Defactinib in Recurrent Low-grade Serous Ovarian Cancer (LGSOC)	❑ Plan to complete rolling NDA in H2 2024 ❑ Plan to announce mature data from RAMP 201 in H2 2024 • Continue site activations and patient enrollment in international Phase 3 confirmatory study in US, Australia, and UK and enrollment planned in Canada, Europe, and South Korea
Avutometinib + Defactinib + SOC in First-Line Metastatic Pancreatic Cancer	• Continue RAMP 205 study follow up on all dose cohort levels to determine RP2D go forward regimen ❑ Plan to present updated results from RAMP 205 in Q1 2025
Avutometinib ± Defactinib + KRAS G12C Inhibitors: mKRAS G12C Non-small Cell Lung Cancer (NSCLC)	❑ Expect to report updated interim data in H2 2024 from RAMP 203 NSCLC trial evaluating avutometinib plus defactinib with Amgen's KRAS G12C inhibitor, sotorasib ❑ Expect to report initial interim data in H2 2024 from RAMP 204 NSCLC trial evaluating avutometinib with Mirati Therapeutics (Bristol Myers Squibb (BMS)) KRAS G12C inhibitor, adagrasib
GenFleet's GFH375/VS-7375, KRAS G12D (ON/OFF) Inhibitor	• GenFleet plans to continue to enroll patients into Phase 1/2 trial for GFH375/VS-7375 in China in patients with KRAS G12D-mutated advanced solid tumors • Ongoing discovery/lead optimization for second and third programs

Company ended Q1 2024 with $110.1M in cash and investments and $28.1M GAAP operating expenses ($26.6M non-GAAP operating expenses*)

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*Q1 2024 GAAP operating expenses of $28.06M less Q1 2024 stock-based compensation expense of $1.48M = $26.58M Q1 2024 non-GAAP operating expenses;

Key Financial Statistics

As of and for the quarter ended March 31, 2024

Cash, cash equivalents & investments	$110.1M
GAAP Operating Expenses	$28.1M
Non-GAAP Operating Expenses*	$26.6M
Shares Outstanding	25.3M**

Sources of Non-Dilutive Capital

- **Oxford Finance LLC Credit Facility**
  - Up to $150M available in a series of term loans
    - $40M term loans outstanding
    - Remaining $110M available upon achievement of pre-defined milestones or at lender's discretion
      - $25M tranche available upon FDA approval of avutometinib for treatment of LGSOC
  - Floating interest rate, subject to a floor and a cap; 5% final payment charge, and loan subject to 1-3% early payment fee
  - Interest only payments through April 2025
  - No financial covenants

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* Q1 2024 GAAP operating expenses of $28.06M less Q1 2024 stock-based compensation expense of $1.48M = $26.58M Q1 2024 non-GAAP operating expenses

**Excludes Series A Preferred (0.8M Shares on as-converted basis), Series B Preferred (4.2M Shares on as-converted basis), and outstanding unexercised pre-funded warrants (1.5M Shares).

THANK YOU

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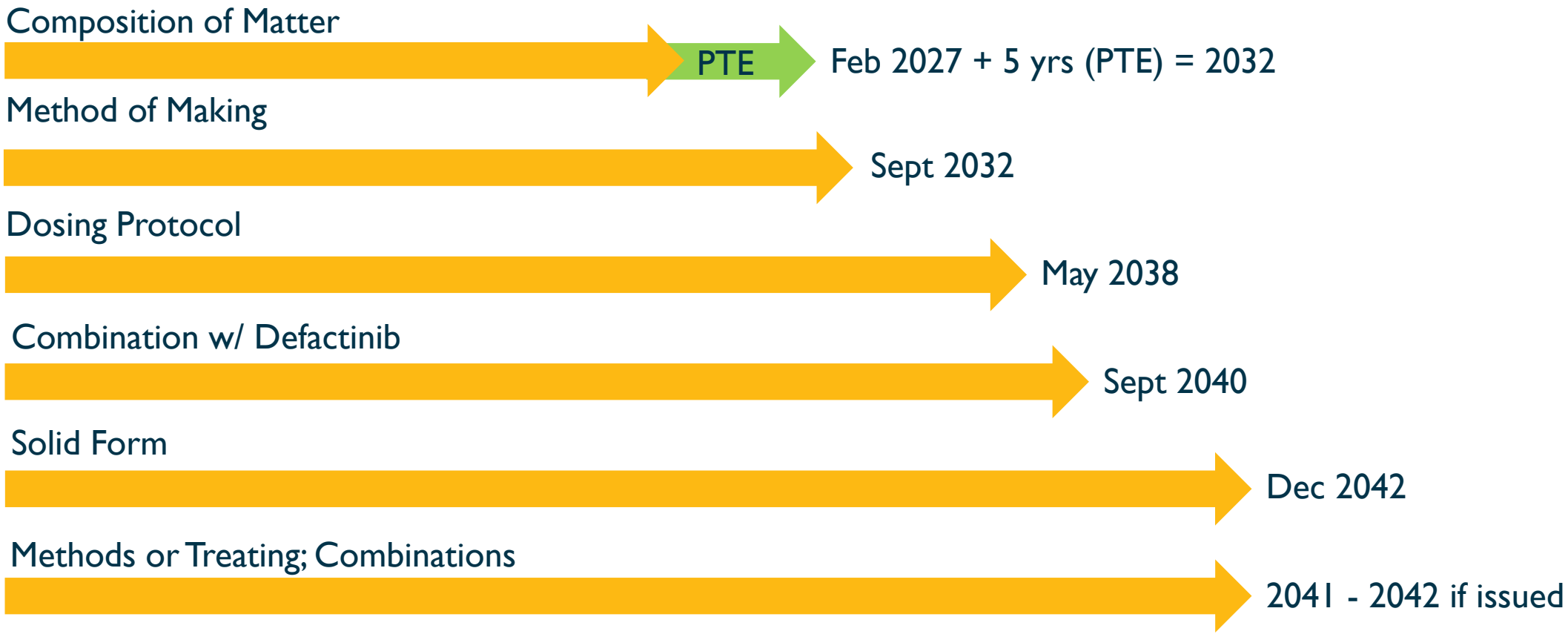
Addendum

Avutometinib Patent Exclusivity



Experienced Senior Management Team

Daniel Paterson
President and Chief Executive Officer

Previous experience:
- CEO, The DNA Repair Co. (now On-Q-ity)
- PharMetrics (now IMS)
- Axion

John Hayslip, M.D.
Chief Medical Officer

Previous experience:
- CMO, I-MAB
- Nektar Therapeutics, AbbVie
- Director of clinical research and data management, University of Kentucky's Markey Cancer Center

Dan Calkins
Chief Financial Officer

Previous experience:
- Technical Accounting Consultant- CFGI
- PwC LLP

Colleen Mockbee
Global Head of Regulatory Affairs and Development

Previous experience:
- Chief Development Officer & SVP of Regulatory, OncXerna
- Head of Global Regulatory, Lilly Oncology

Cathy Carew
Chief Organizational Effectiveness Officer

Previous experience:
- Principal – HR Collaborative
- Ironwood
- ActiveBiotics
- Dynogen
- Tufts Health Plan

Jonathan Pachter, Ph.D.
Chief Scientific Officer

Previous experience:
- Head of Cancer Biology – OSI (now Astellas)
- Schering-Plough

Mike Crowther
Chief Commercial and Strategy Officer

Previous experience:
- CBO, Minerva Biotechnologies
- Interim US lead and VP of US Marketing, Kite Pharma
- Celgene

Nate Sanburn
Chief Business Officer

Previous experience:
- Associate VP, Head of Collaborations & Late Phase BD, Lilly Oncology
- National Gene Vector Lab, Indiana University

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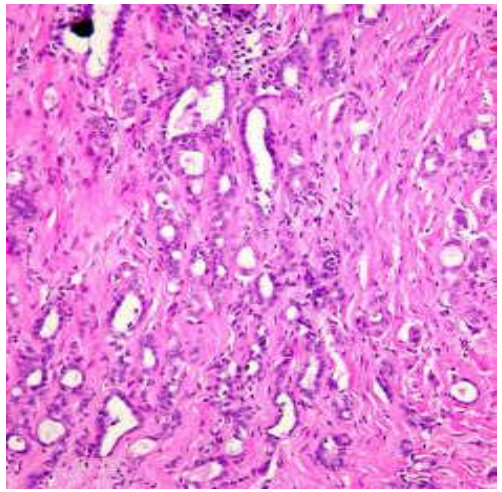
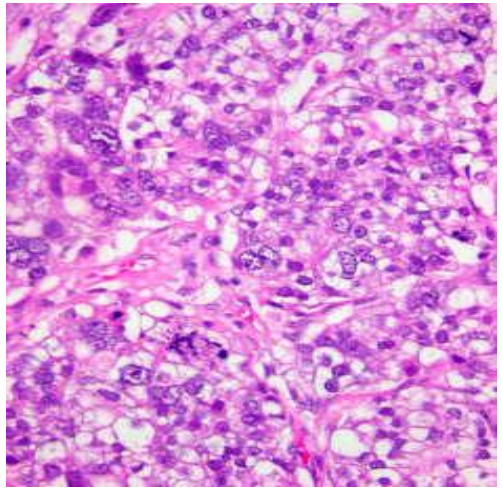
Low-Grade and High-Grade Serous Ovarian Cancer Are Different Diseases

	LGSOC	HGSOC
Nuclear atypia	Uniform round to oval with little variation	+++ Marked variation
Mitotic Index	<12 mitoses per 10 hpf	>12 mitoses per 10 hpf
Chromatin and variation in size of nucleus	Little	Marked (nuclear size ratio ≥3)
Mutation	KRAS ++ BRAF + ER/PR +++	P53 +++ BRCA1/2 +
Precursor	Serous borderline tumor	Tubal intraepithelial neoplasia



LGSOC



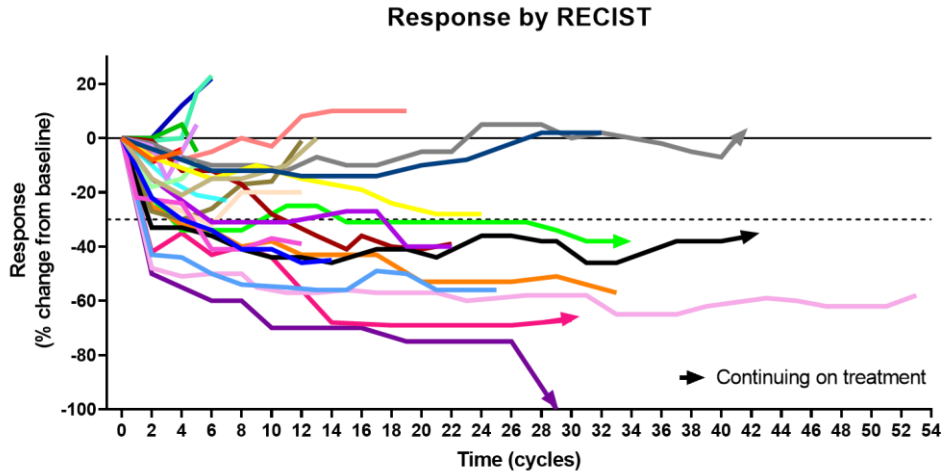
HGSOC

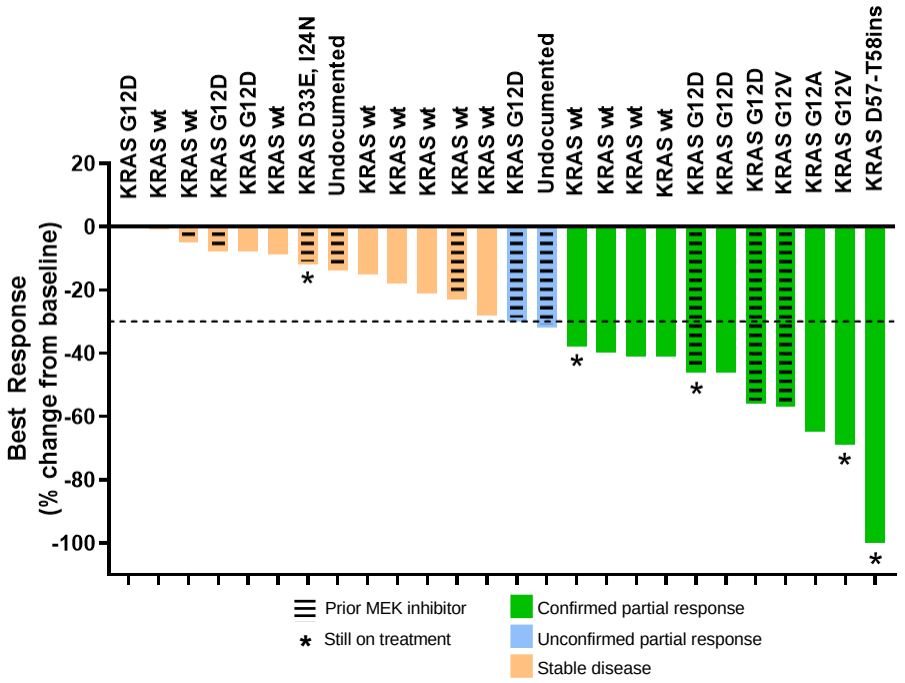
Malpica et al., Am J. Surg Pathol 2007

FDA Breakthrough Designation Based on FRAME Data

FRAME*

ORR Overall Population (Confirmed ORR by BICR)	**42%** (11 confirmed PRs/26)
95% CI	(19%, 36%)
KRAS mt	**58%** (7 confirmed PRs/12)
KRAS wt	**33%** (4 confirmed PRs/12)
Median Duration of Response (DoR) (95% CI 8.5-47.3) across all LGSOC patients	**26.9 months**
Median Progression Free Survival (PFS) (95% CI 11.1 – 31.2) across all LGSOC per RECIST 1.1	**20.0 months**
Median number of prior lines of therapy	**3.5 lines**
Responses observed in patients previously treated with MEK inhibitor	
No new safety findings with continued follow-up	
One (1) patient discontinued for adverse events as of July 2023 (skin AE)	



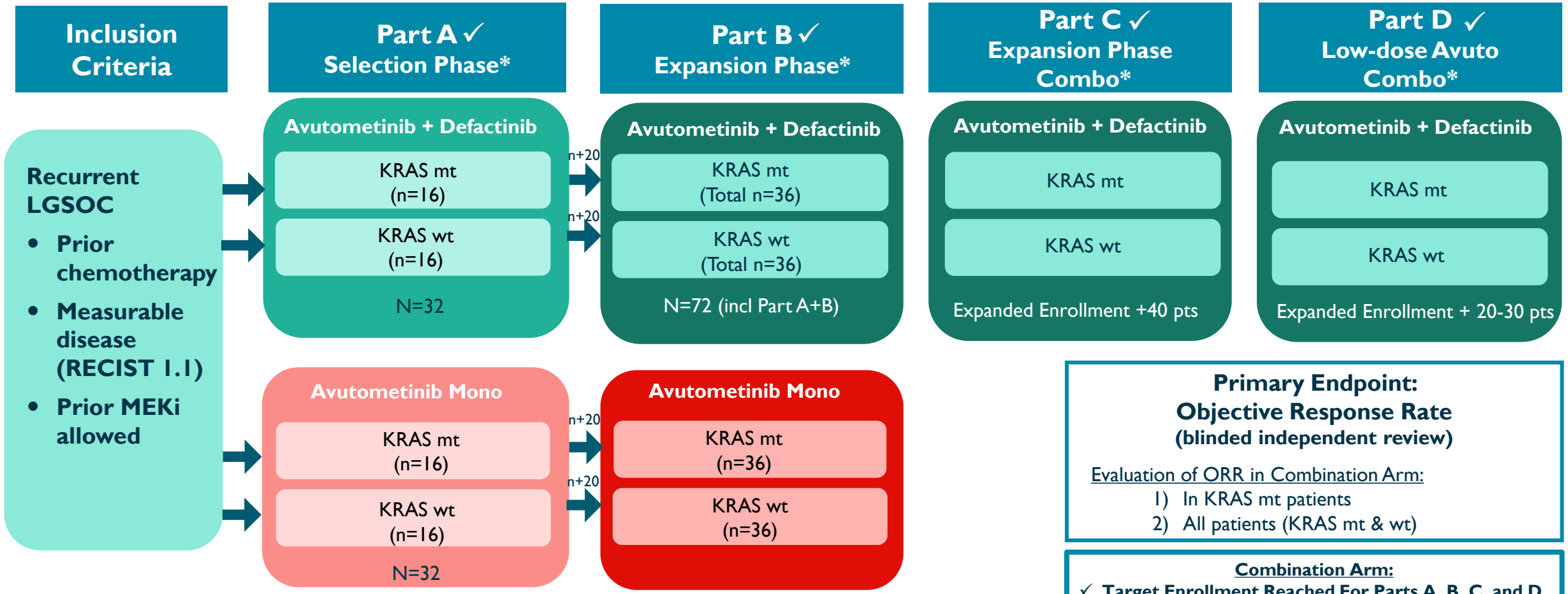


Breakthrough Through Therapy Designation for combination of avutometinib and defactinib for treatment of recurrent LGSOC after one or more prior lines of therapy including platinum-based chemotherapy

*Denis, 5th Annual RAS-Targeted Drug Development Sept 2023; (Data cut off July 2023: Data on file); BICR: Blinded independent central review

RAMP 201: Ongoing Registration-Directed Phase 2 Trial of Avutometinib ± Defactinib in Patients with Recurrent LGSOC

RAMP 201 (ENGOTov60/GOG3052)



Primary Endpoint:
Objective Response Rate
(blinded independent review)

Evaluation of ORR in Combination Arm:
1) In KRAS mt patients
2) All patients (KRAS mt & wt)

Combination Arm:
- ✓ **Target Enrollment Reached For Parts A, B, C, and D**
- ✓ **Actual Enrollment at RP2D: 115 treated patients**

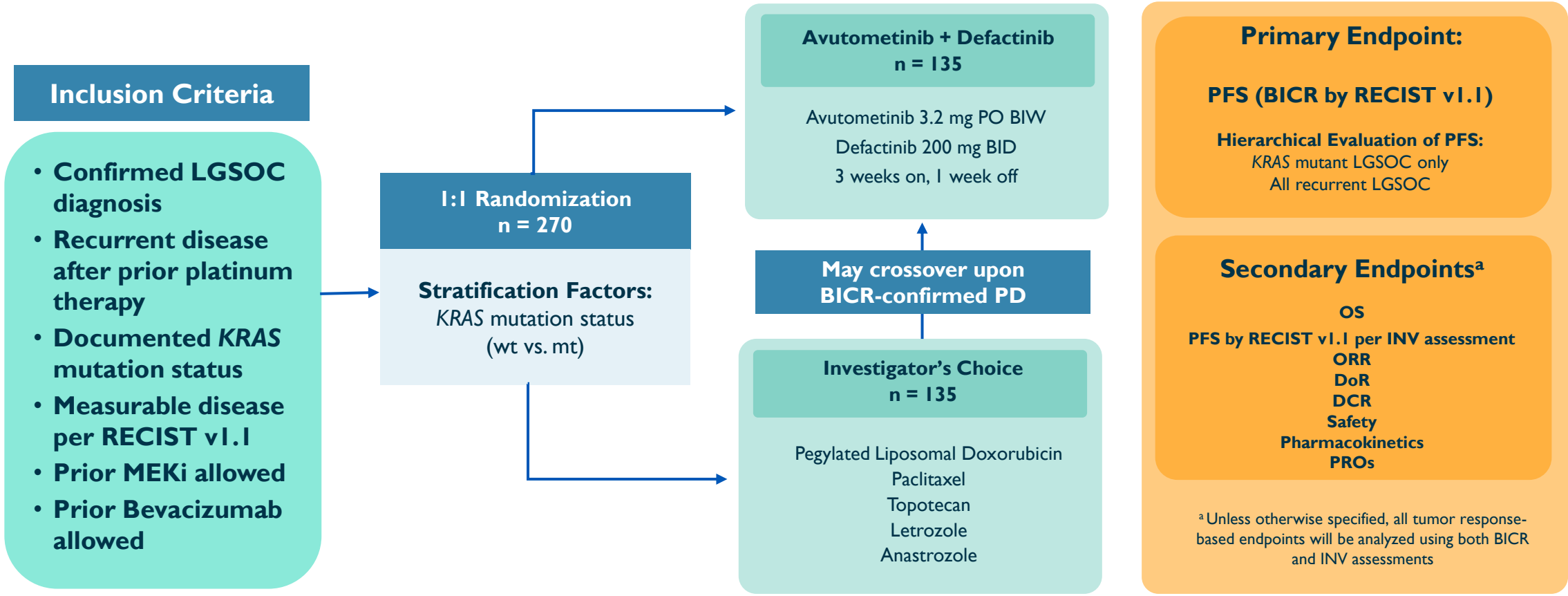
* Dosing: Avutometinib + Defactinib combo: Avutometinib 3.2 mg PO 2x/wk 21/28 days + Defactinib 200 mg PO BID: 21/28 days; Avutometinib monotherapy: Avutometinib 4.0 mg PO 2x/wk 21/28 days

** Lower Dose: Avutometinib + Defactinib combo: Avutometinib 1.6 mg PO 2x/wk 21/28 days + Defactinib 200 mg PO BID: 21/28 days;

RECIST: Response Evaluation Criteria in Solid Tumors; PO: per oral; BID: twice daily: MEKi: Mitogen-activated extracellular signal-regulated kinase inhibitor;

RAMP 301: International Phase 3 Confirmatory Trial Evaluating Avutometinib + Defactinib in Recurrent LGSOC

RAMP 301 (GOG-3907/ENGOT-ov81/NCRI): Ongoing Randomized Controlled Trial (RCT)



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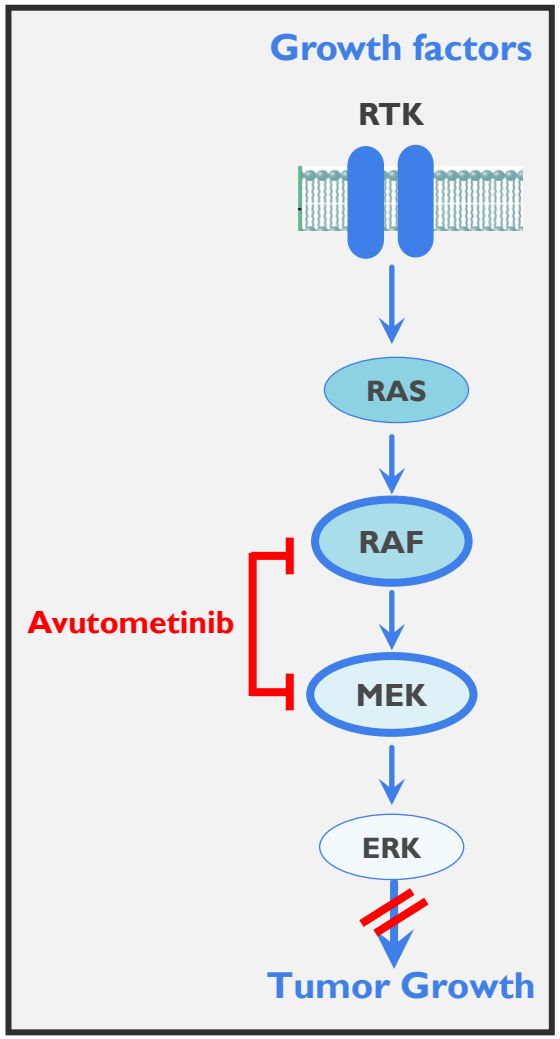
NCT06072781

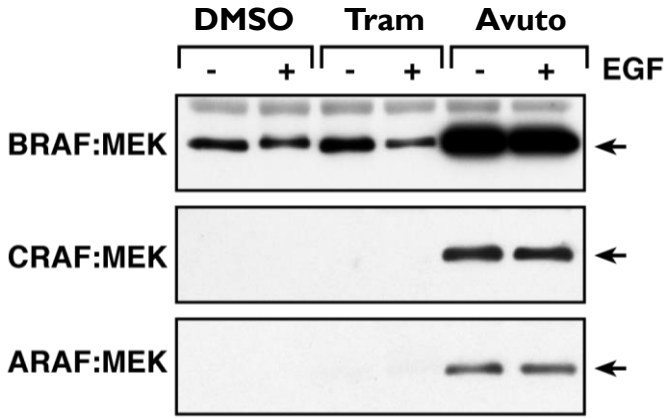
BICR: blinded independent central review; BID: twice a day; BIW: twice a week; DCR: disease control rate; DoR: duration of response; INV: investigator; KRAS: kirsten rat sarcoma virus; MEKi: MEK inhibitor; mt: mutant; PO: per oral; pts, patients; ORR: objective response rate; OS: overall survival; PD: progressive disease; PFS: progression-free survival; PROs: patient-reported outcomes; RECIST: response evaluation criteria in solid tumors; wt: wild type.

Avutometinib is a Differentiated Small Molecule RAF/MEK Clamp

Contrasting Mechanism of Action vs. MEK-Only Inhibitors



Avutometinib induces dominant negative RAF/MEK complexes



Collaboration with Deborah Morrison, NCI

Avutometinib inhibits both RAF and MEK activities

MEK1

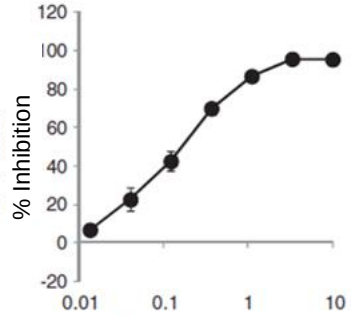
IC_{50}: 0.16 ± 0.043 µmol/L

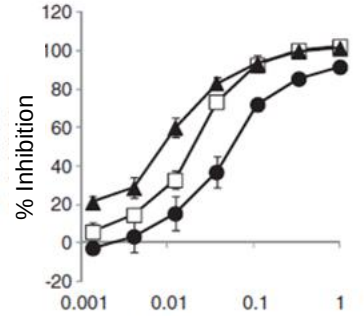
RAF family

IC_{50}(CRAF●): 0.056 ± 0.016 µmol/L

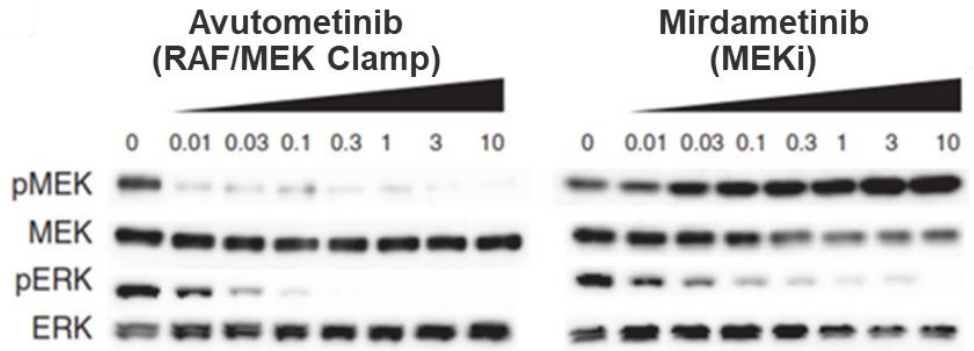
IC_{50}(BRAF □): 0.019 ± 0.0030 µmol/L

IC_{50}(BRAF V600E▲): 0.0082 ± 0.0015 µmol/L





The RAF/MEK clamp mechanism avoids the compensatory activation of pMEK enabling more complete pERK inhibition



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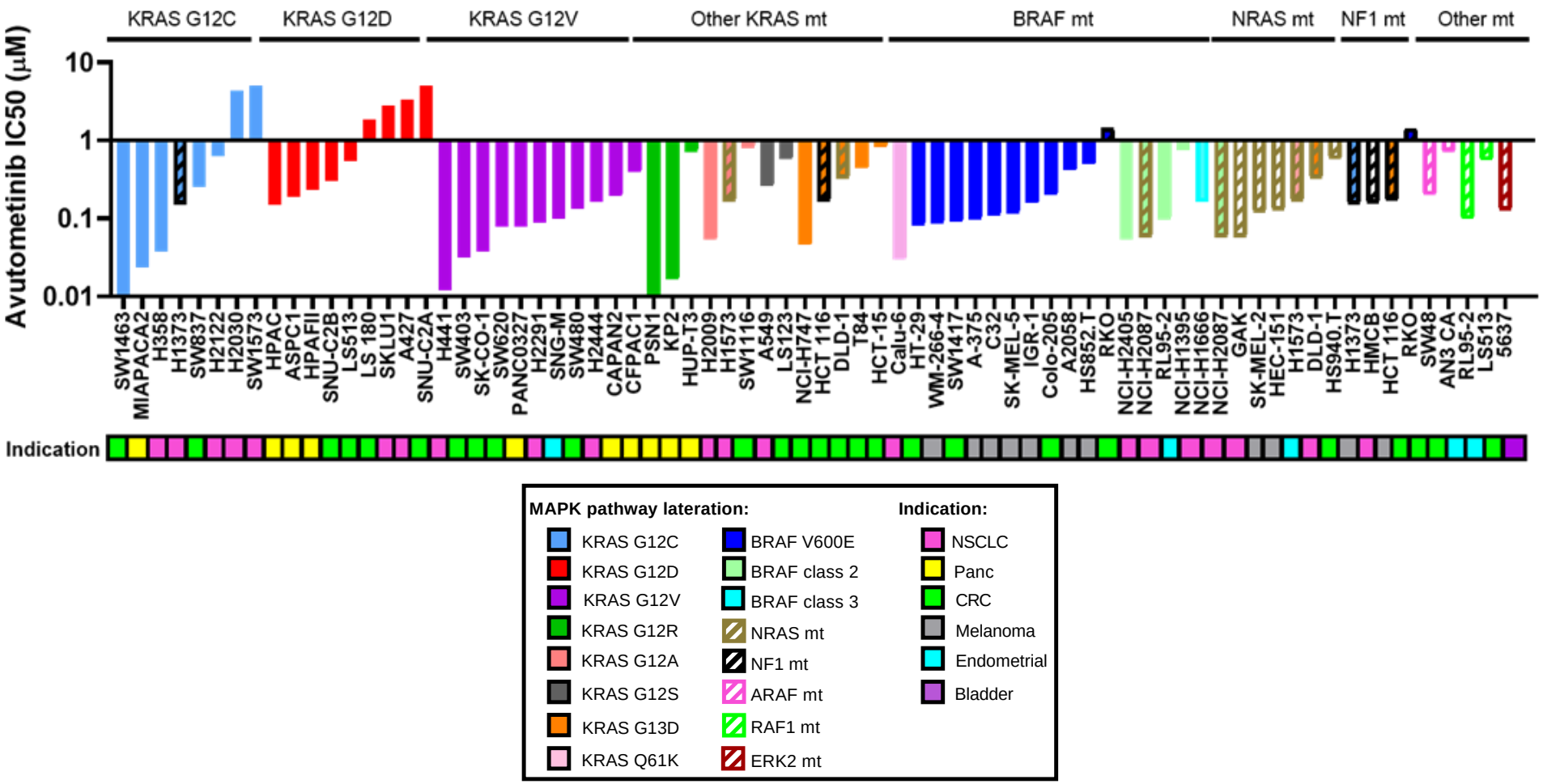
Coma et al., AACR 2022; Ishii et al., *Cancer Res*, 2013; Lito et al., *Cancer Cell*, 2014

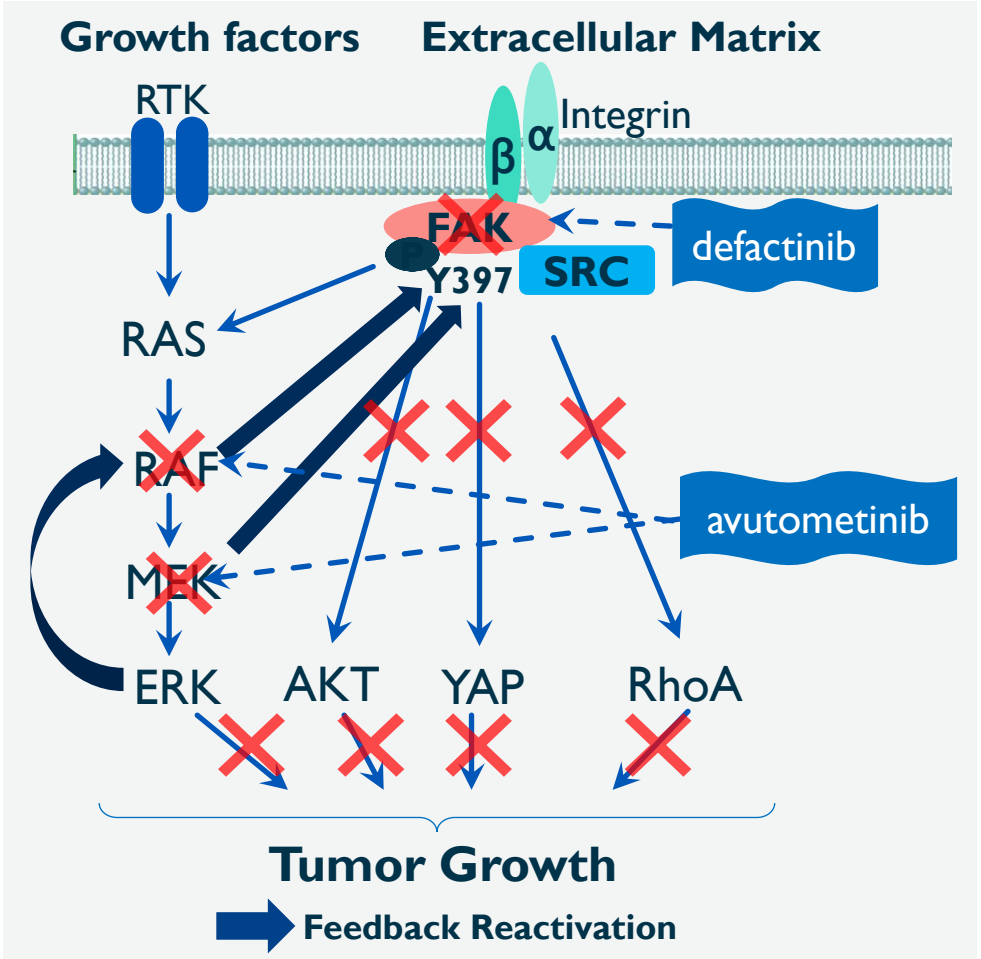
Avutometinib Inhibits Cell Proliferation Across Multiple RAS/MAPK Pathway Alterations and Multiple Solid Tumor Histologies

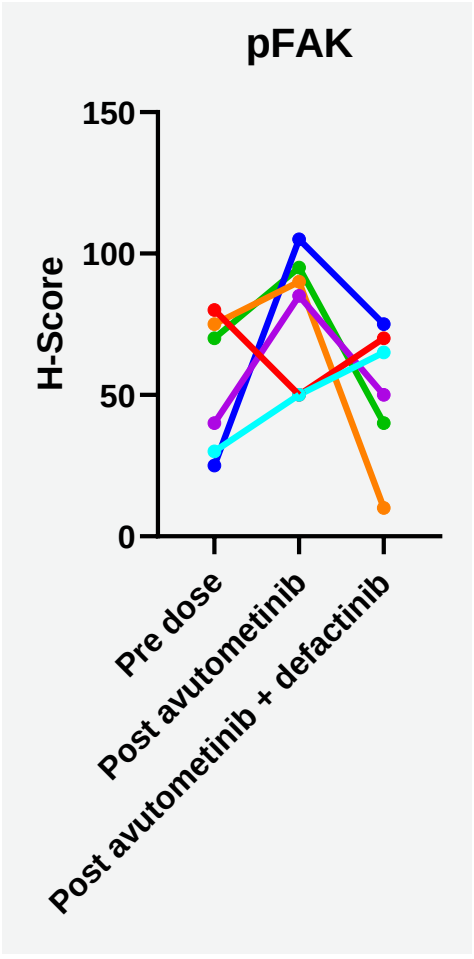


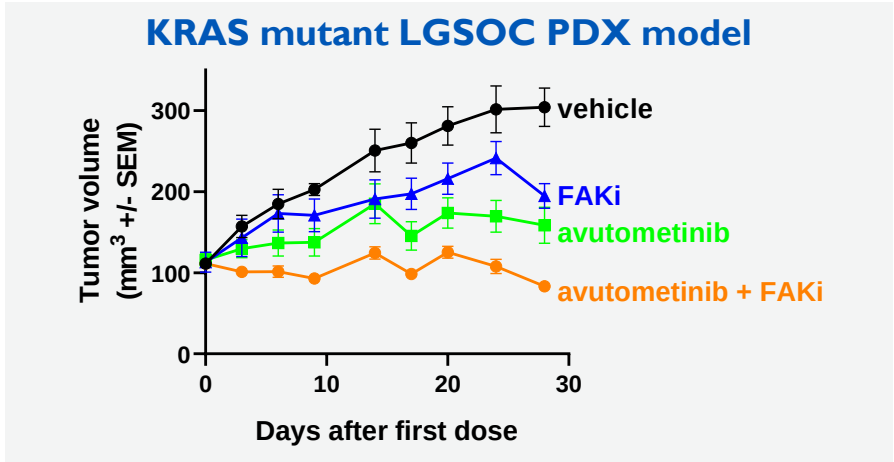
Verastem, unpublished data

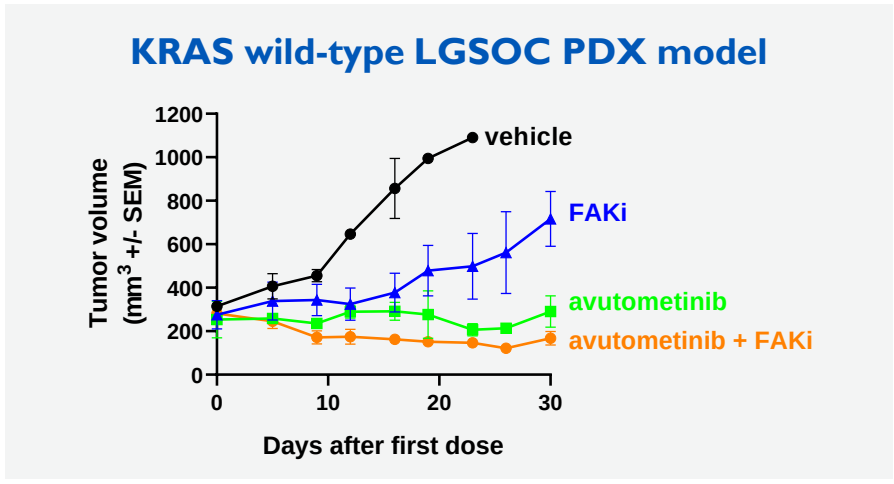
Scientific Rationale for Avutometinib and FAK Inhibitor Combination

Anti-Tumor Activity in KRAS Mutant and KRAS Wild-Type LGSOC models









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Banerji, BTOG Dublin, Jan 23, 2019; Banerji, AACR VM 1, April 27, 2020, CT143; Banerji, unpublished; Santin, unpublished

Optimized Dosing Schedule Defined: Favorable Tolerability Profile with Novel Intermittent Dosing Regimen

Summary of Adverse Events Grade ≥ 3 Occurring in ≥ 5% of patients

	Avutometinib monotherapy Daily at MTD N=6 28-day cycle	RP2D Avutometinib monotherapy 4mg twice weekly N=26 28-day cycle	RP2D (Avutometinib 3.2mg twice weekly + defactinib 200mg twice daily) N=38 21 days of 28-day cycle
Treatment Related Adverse Event	**Grade ≥3**	**Grade ≥3**	**Grade ≥3**
Rash	3 (50%)	5 (19%)	2 (5%)
CK elevation (Creatine phosphokinase)	1 (17%)	2 (8%)	2 (5%)

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[1] Chenard-Poirier, *et al.* ASCO 2017; References: Banerji, Q4 2020 report; Data on file; RP2D: recommended phase 2 dosing

Plan to Seek Comparable, If Not Better, Coverage as SoC at Time of Approval

- Available treatments for recurrent LGSOC offer low response rates and frequent discontinuations due to toxicity
- There are no FDA-approved treatments and no standard sequencing of drugs for recurrent disease

	NCCN Category 1	NCCN Category 2a	NCCN Category 2b	NCCN Category 3
General % Commercial Payer Coverage				
Recurrent LGSOC Treatment NCCN Recommendations and Contemporary Clinical Data in LGSOC	**No category 1 recommendation**	**Hormonal therapy (e.g., Anastrozole, Letrozole) & chemotherapy** • 6-13% ORR and 17-30% discontinuation rate due to AEs • Based on GOG 281 and MILO studies **Trametinib** (2-4% U.S, utilization rate[6]) • 13 months PFS, 95% CI: (9.9-15.0) vs SoC • 26% ORR based on INV assessment of comparator arm of all patients not BICR • 36% discontinuation rate due to AEs • Based on GOG 281[4]	**Binimetinib** • Study stopped due to futility • PFS 12.5 vs 11.6 (HR 0.87) • 16% ORR based on BICR of comparator arm and 31% discontinuation rate due to AEs • Based on MILO study[5]	

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General source: NCCN; McGivney Global Advisory research and analysis; L.E.K. research and analysis

1) NCCN categories of preference: Preferred intervention, Other recommended intervention, Useful in certain circumstances. 2) High-level of evidence generally means large randomized controlled Phased 3 trials; 3) Coverage by all major commercial players; 4) GOG 281 trial Gershenson et al., Lancet 2022 5) MILO Study Monk et al., J Clin Oncol 2020; 6) Data on File.