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# A Late-Stage Company With a Global Oncology Pipeline

PACC Update

June 23, 2025

# Forward Looking Statements

This presentation contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 and other federal securities laws. These statements include, but are not limited to, implied and express statements about our strategy, business plans and objectives for our programs; plans and timelines for the preclinical and clinical development of our product candidates, including the therapeutic potential, clinical benefits and safety profiles of such product candidates; expectations regarding timing, success and data announcements of ongoing and planned preclinical studies and clinical trials, statements regarding our future results of operations or financial condition, business strategy and plans, cash runway, estimates of the commercial market for our current a future product candidates, including the potential market opportunity of firmonertinib as monotherapy or in combination, activity of firmonertinib compared to available therapies, anticipated timing and success of potential milestones, including an update of our study of firmonertinib in patients with NSCLC EGFR PACC mutations, top-line pivotal Phase 3 data for firmonertinib in previously untreated NSCLC patients whose tumors contain EGFR exon 20 insertion mutations, initiation of clinical studies for our ADC candidates; and the initiation of a Phase 1b dose expansion cohort in our study of firmonertinib in 2L+ NSCLC EGFR with classical mutations in combination with SHP2i ICP-189; our plans to develop and commercialize our current and any future product candidates and the implementation of our business model and strategic plans for our business, current and any future product candidates. All statements other than statements of historical facts contained in this presentation, including express or implied statements regarding our strategy, future financial condition, expected cash runway, future operations, projected costs, prospects, plans, objectives of management and expected market growth, are forward-looking statements. In some cases, you can identify forward-looking statements by terminology such as ‘‘anticipate,’’ ‘‘assume,’’ ‘‘believe,’’ ‘‘could,’’ ‘‘estimate,’’ ‘‘expect,’’ ‘‘goal,’’ ‘‘intend,’’ ‘‘may,’’ “milestones,” ‘‘objective,’’ ‘‘plan,’’ ‘‘predict,’’ ‘‘potential,’’ ‘‘seek,’’ ‘‘should,’’ ‘‘target,’’ ‘‘will,’’ ‘‘would’’ and other similar expressions that are predictions of or indicate future events and future trends, or the negative of these terms or other comparable terminology. Forward-looking statements are based on ArriVent’s current expectations and are subject to inherent uncertainties, risks and assumptions that are difficult to predict. Factors that could cause actual results to differ include, but are not limited to, risks and uncertainties that are described more fully in the section titled “Risk Factors” in our annual report on Form 10-K for the fiscal year ended December 31, 2024, filed with the Securities and Exchange Commission on March 3, 2025 and our other filings with the Securities and Exchange Commission. You should not rely upon forward-looking statements as predictions of future events. In addition, statements that “we believe” and similar statements reflect our beliefs and opinions on the relevant subject and are based on information available to us as of the date of this presentation. Although we believe such information forms a reasonable basis for the expectations reflected in the forward-looking statements, such information may be limited or incomplete, and we cannot guarantee that the future results, levels of activity, performance or events and circumstances reflected in the forward-looking statements will be achieved or occur. We undertake no obligation to update publicly any forward-looking statements for any reason after the date of this presentation to conform these statements to new information, actual results or to changes in our expectations, except as required by law.

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# Agenda

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| ArriVent Overview | Dr. Bing Yao<br>Co-Founder, Chairman and CEO,<br>ArriVent |
| Background on NSCLC EGFR PACC Mutations | Dr. Stuart Lutzker<br>Co-Founder, President of R&D<br>ArriVent |
| Firmonertinib Global Phase 1b PACC Data Update and Plans for Pivotal Study | Dr. Stuart Lutzker<br>Co-Founder, President of R&D<br>ArriVent |
| Next Steps and Upcoming Milestones | Dr. Bing Yao<br>Co-Founder, Chairman and CEO,<br>ArriVent |



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# **ArriVent BioPharma:** A Late-Stage Company With a Global Oncology Pipeline

- Accelerating a differentiated oncology pipeline built through strategic partnerships with innovative companies globally
- Lead program firmonertinib with Breakthrough Therapy Designation in 1L EGFR Exon 20 insertion mutant NSCLC
- Firmonertinib near-term catalysts include topline results in registrational 1L EGFR Exon 20 insertion mutant NSCLC study expected in 2025
- Further expansion of firmonertinib into a pivotal trial for 1L EGFR PACC mutant NSCLC reinforced by positive clinical data
- Next-generation ADC portfolio advancing with an IND filed this year with others expected starting in 2026

# Robust Pipeline to Maximize Impact Across Indications and Geographies

| Program | Target Indication | Discovery / Preclinical / Phase 1 / Phase 2 / Phase 3 | ArriVent Rights | Partner |
|---|---|---|---|---|
| **Firmonertinib** ***EGFR TKI*** | 1L NSCLC EGFR Exon 20 Insertion Mutations* BTD | *Monotherapy* | Global-Ex China | ALLIST |
| | 1L+ NSCLC EGFR PACC Mutations+ | *Monotherapy* | Global-Ex China | ALLIST |
| | *Adjuvant EGFR Uncommon Mutations* | *Monotherapy* | Global-Ex China | ALLIST |
| | 2L+ NSCLC EGFR Classical Mutations# | *Combination with SHP2* | Global-Ex China | INNOCARE |
| **ARR-217** ***CDH17 ADC*** | GI Tumors | | Global-Ex China | 乐普生物 LEPU BIOPHARMA |
| **ARR-002** ***ADC*** | Solid Tumors | | Global | AARVIK THERAPEUTICS |
| ***ARR-421*** ***ADC*** | Solid Tumors | | Global-Ex China | 康宁杰瑞 ALPHAMAB ONCOLOGY |
| **ARR-173** ***ADC*** | Solid Tumors | | Global-Ex China | 康宁杰瑞 ALPHAMAB ONCOLOGY |

NSCLC: non-small cell lung cancer; EGFR: epidermal growth factor receptor; PACC: P-loop and alpha-c helix compressing; Allist: Shanghai Allist Pharmaceuticals Company, Ltd.; InnoCare: Beijing InnoCare Pharma Tech Co., Ltd.; Aarvik: Aarvik Therapeutics, Inc.; Lepu Biopharma: Lepu Biopharma Co., Ltd.; Alphamab Oncology: Jiangsu Alphamab Biopharmaceuticals, Co., LTD; 1L: First-line therapy; 1L+: Treatment naïve and previously treated with non-TKI therapies; 2L+: Second-line or greater therapy; SHP2i: SHP2 inhibitor. BTD: FDA Breakthrough Therapy Designation; *The investigation of firmonertinib for the first-line treatment of NSCLC EGFR exon 20 insertion mutations is based on the ongoing FAVOUR Phase 1b study conducted by Allist and the ongoing FURVENT Phase 3 study. These studies are not yet complete, and no Phase 2 study has been conducted for this indication.+The ongoing FURTHER Phase 1b study investigating firmonertinib for the treatment of EGFRm NSCLC includes cohorts with PACC mutations (first-line or greater) and exon 20 insertion mutations (second-line or greater). # The evaluation of firmonertinib in combination with SHP2i for the second-line or greater treatment of EGFRm NSCLC is based on the ongoing Phase 1b study in collaboration with InnoCare.



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# Background on NSCLC EGFR PACC Mutations

Dr. Stuart Lutzker

# Firmonertinib: A Broadly Active Phase 3 EGFR Inhibitor Advancing Globally

**Attractive Properties with Therapeutic Potential**

- Active across both classical and uncommon EGFR mutations at drug levels obtainable in patients
- Highly brain penetrant, unlike many currently available therapies
- Orally bioavailable with pharmacokinetics to support once a day dosing

**Well-characterized Clinically**

- Approved in China for EGFR classical mutations
- Proof of concept in EGFR Exon 20 insertion mutations with FDA Breakthrough Therapy Designation
- Proof of concept in EGFR PACC mutations
- Anti-tumor activity against brain metastases
- Generally well-tolerated in 1,000+ patients in clinical trials across multiple dose levels

**Broad Global Clinical Development**

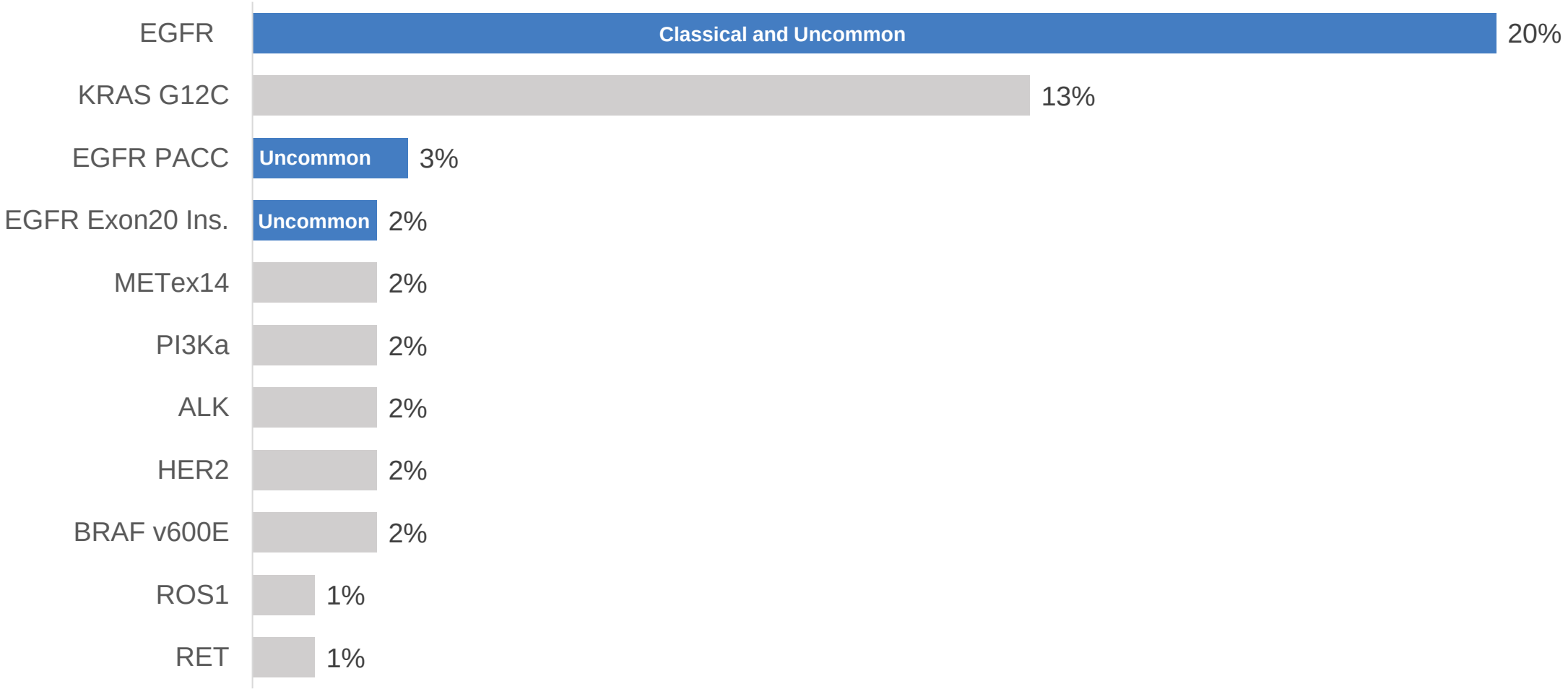
- Completed enrollment of global pivotal Phase 3 in 1L NSCLC Exon 20 insertion mutation as a chemo-free monotherapy
- Initiating global pivotal Phase 3 in 1L NSCLC PACC mutations
- Clinical combination study with SHP2i in classical mutations ongoing
- Global adjuvant study in EGFR uncommon mutations initiated in China, which we intend to join based on results obtained from currently ongoing clinical trials



Note: only approved in China for NSCLC EGFR classical mutations based on FURLONG study conducted by Allist

# EGFR Mutations Are the Most Prevalent Actionable Oncogenic Driver in NSCLC

## Prevalence of Oncogenic Drivers in Non-Squamous NSCLC




PACC = P-loop and αC-helix compressing mutations. Patient numbers in the graph represent global populations excluding China. Source: Values in graph based on approximate molecular alteration frequencies in non-squamous NSCLC from the AACR genie version 12.0 dataset (N=19,777) as of December 1, 2022. Participating institutions include academic centers in Western countries. This graph only includes alterations predictive of response to an FDA-approved drug in locally advanced or metastatic NSCLC. Adapted from Robichaux et al, Nature, 2021.



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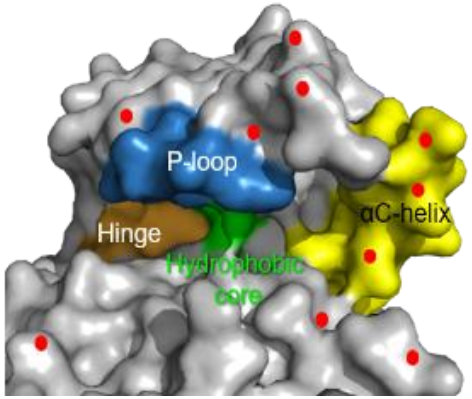
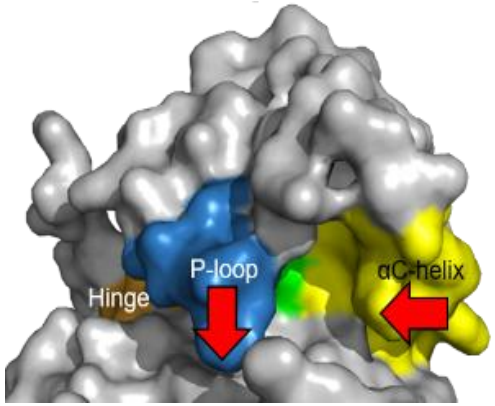
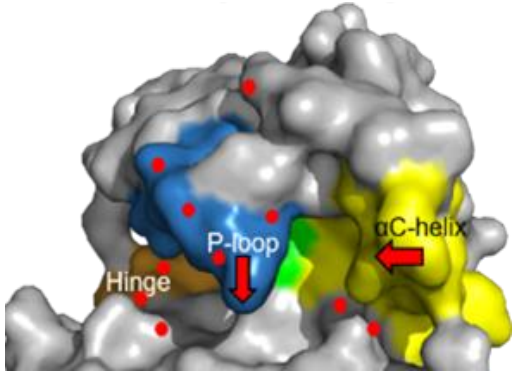
# Firmonertinib is Broadly Active Across EGFR Mutations

| | **Classical / Classical-like** (e.g., L861Q) | **Exon 20 Insertions** | **P-loop and αC-helix Compressing** (PACC) |
|---|---|---|---|
| |  |  |  |
| | **Drug binding pocket not impacted** | **Indirect and substantial impact on drug binding pocket** | **Direct and indirect impact on drug binding pocket** |
| **Firmonertinib activity** | ✓ | ✓ | ✓ |

**Firmonertinib has a unique structure that improves binding across EGFR mutations versus EGFR WT**

**Firmonertinib's major metabolite (AST5902) has similar selectivity and potency as firmonertinib**



EGFR mutant subgroups adapted from Robichaux et al., 2021; Checkmarks represent firmonertinib activity demonstrated both preclinically and clinically

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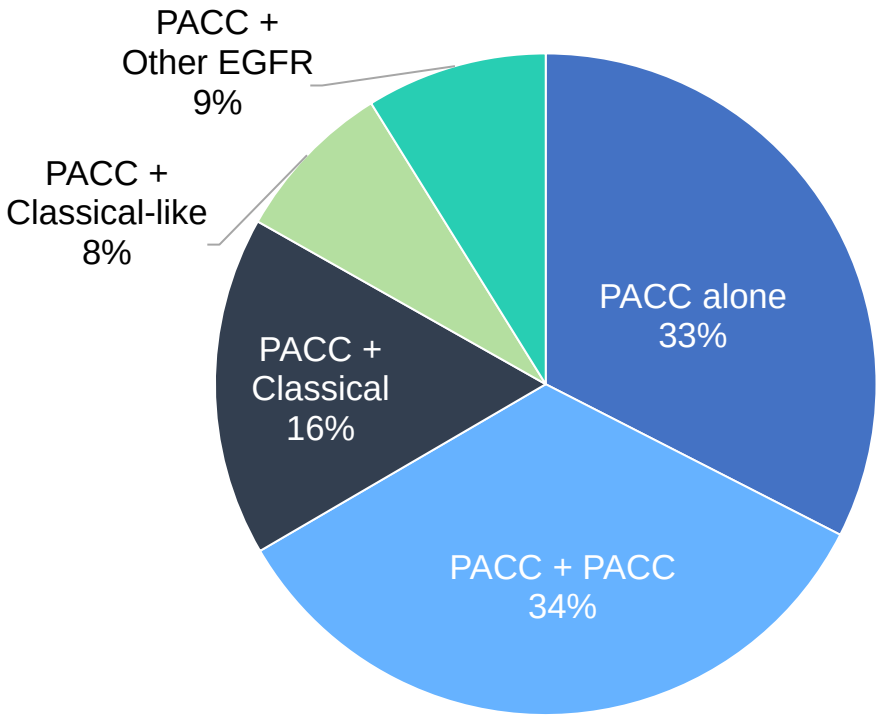
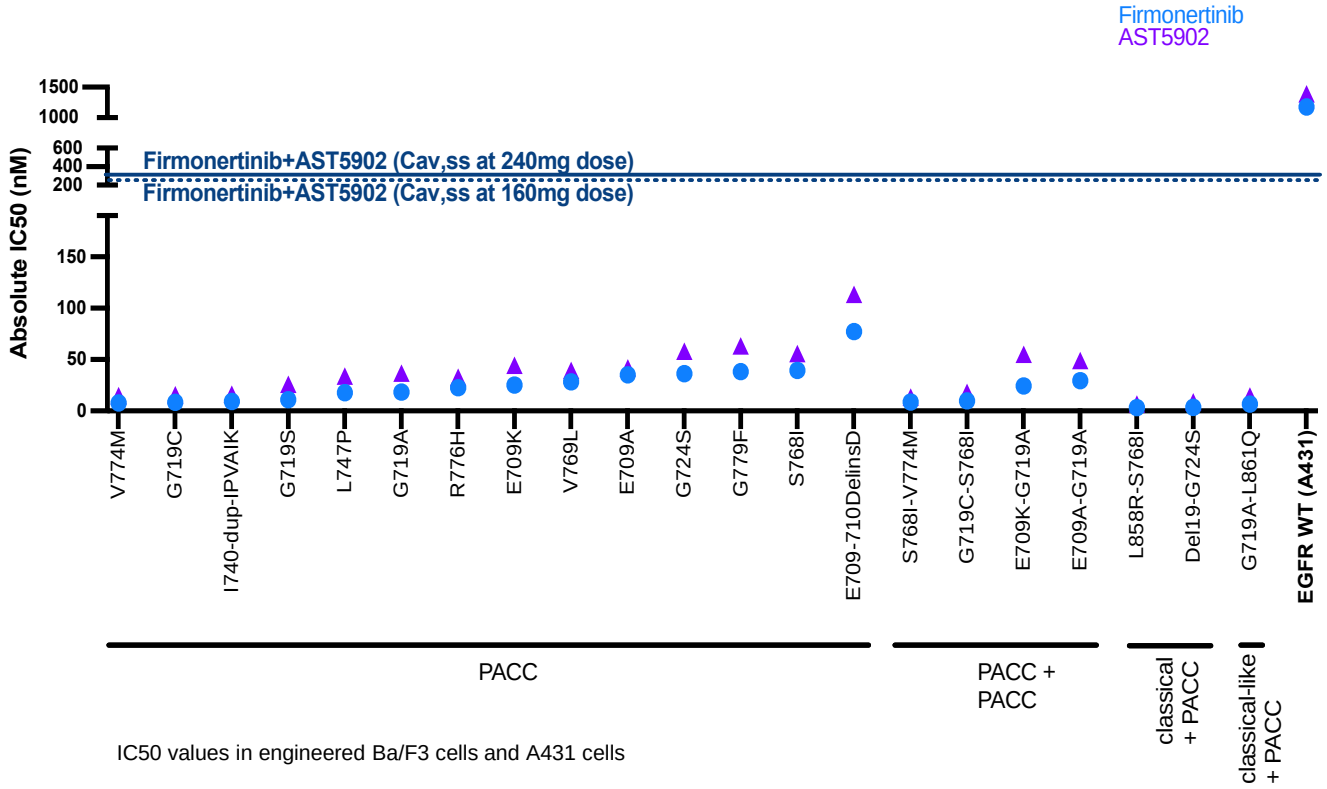
# Firmonertinib is Active Against Both Single and Compound PACC Mutations

## PACC mutations can be single or co-exist with other EGFR mutations (compound mutations)




Excludes C797S mutations.
*Classical* includes (exon 19 deletions, L858R).
*Classical-like* includes L861Q, L833V, T725M, and other mutations.
*Other* includes other EGFR mutations, including those in the extracellular and transmembrane domain, as well as in exons 22–31.
Analysis based on PACC mutation data from AACR GENIE v13 in patients with NSCLC (N = 470).

## Patient drug levels exceed IC50 values across representative PACC mutations




IC50 values in engineered Ba/F3 cells and A431 cells



EGFR mutant subgroups based on Robichaux et al., 2021

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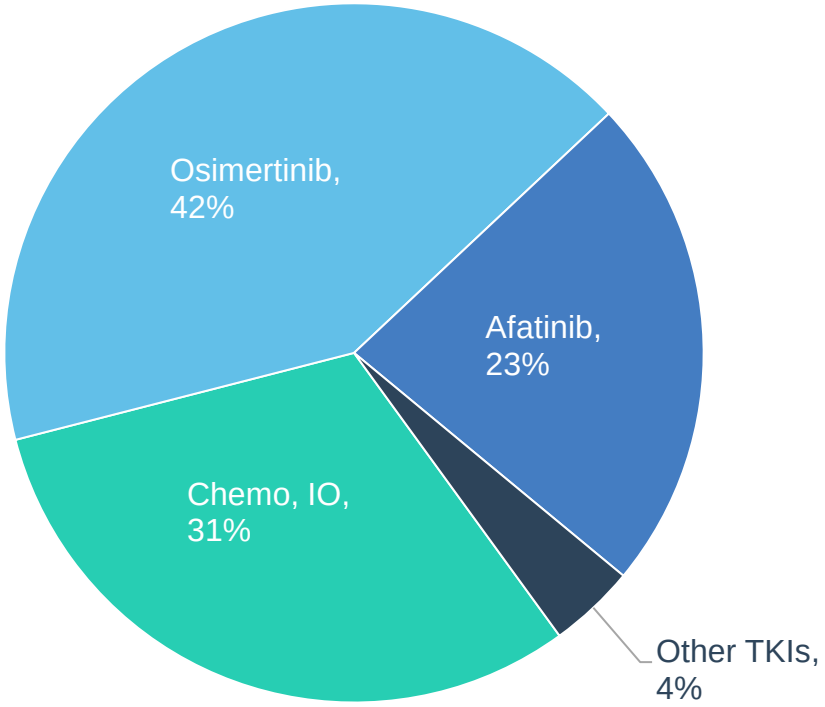
# PACC Mutant NSCLC Patients Have Relatively Poor Treatment Outcomes

## Treatment patterns for 1L PACC Mutant Patients in the US




## Prospective Clinical Trial Benchmarks for EGFR-TKI

| Agent | Study | # of Patients | Mutations[1] | mPFS (months) |
|---|---|---|---|---|
| Osimertinib | UNICORN (2023) | 40 | includes 20% (8/40) single L861Q | 9.4[2] |
| Afatinib | ACHILLES (2023) | 73 (afatinib arm) | includes 18.3% (20/109) single L861Q | 10.6 |

[1]UNICORN and ACHILLES studies enrolled patients with L861Q (classical-like) single mutations which are non-PACC mutations
[2]In UNICORN study L861Q single mutation patients had longer mPFS (mPFS 22.7 months) than the overall population

Osimertinib is preferred over afatinib nearly 2:1 in the US potentially due to poor afatinib tolerability[1]

mPFS for PACC population in US is potentially 7.5-10 months with available EGFR-TKI



[1]ArriVent data on file. Based on analysis of Tempus RWE US database

UNICORN: Okuma et al, JAMA Oncology 2023; ACHILLES: Miura et al, JCO 2025

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# Firmonertinib Global Phase 1b PACC Data Update and Plans for Pivotal Study

Dr. Stuart Lutzker

# FURTHER: A Global Phase 1b Study Evaluating Firmonertinib Monotherapy in NSCLC EGFR PACC Mutations (NCT05364073)

## Stage 2 Cohort 4  Dose Expansion

### Key Eligibility Criteria:

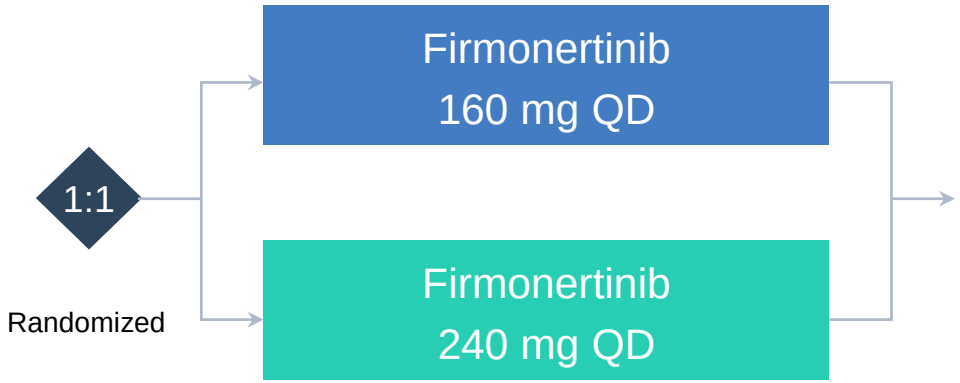
- Locally advanced or metastatic NSCLC with *EGFR PACC* mutations
- No prior EGFR TKI treatment
- Asymptomatic brain metastases without prior radiation therapy allowed

**Stratification:**

Prior Treatment (Y/N)

Contains G719X or S768I (Y/N)

**N=60**




### Endpoints

**Primary endpoints:**

Overall Response Rate
ORR (by BICR)

**Key secondary endpoints:**

Duration of response, CNS ORR, PFS, OS



Global study in 40 sites in **10 countries:** Australia, Canada, China, France, Japan, Korea, Netherlands, Spain, UK, USA

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# FURTHER Study PACC Cohort was Typical of EGFR Mutant NSCLC and Primarily 1L Patients

| | All PACC Patients | | 1L PACC Patients | |
|---|---|---|---|---|
| | 160 mg QD N=31 | 240 mg QD N=29 | 160 mg QD N=25 | 240 mg QD N=22 |
| Age (years), median (range) | 65.0 (48-86) | 68.0 (50-83) | 67 (48-86) | 67.5 (50-83) |
| Male / Female, % | 32.3 / 67.7 | 34.5 / 65.5 | 40.0 / 60.0 | 36.4 / 63.6 |
| ECOG 0 / 1, % | 29.0 / 71.0 | 27.6 / 72.4 | 32.0 / 68.0 | 27.3 / 72.7 |
| Brain Metastases*, % | 32.3 | 34.5 | 28.0 | 31.8 |
| Non-smoker / Former or Current Smoker, % | 64.5 / 35.5 | 79.3 / 20.7 | 76.0 / 24.0 | 86.4 / 13.6 |
| Race: Asian / White / Other, % | 71.0 / 22.6 / 6.5 | 72.4 / 20.7 / 6.9 | 80.0 / 20.0 / 0 | 77.3 / 13.6 / 9.1 |
| Prior Treatment Type, %<br>Chemotherapy / Immunotherapy | 16.1% / 3.2% | 17.2% / 13.8% | 4.0% / 0 | 0/ 4.5%** |

High incidence of brain metastases typical of EGFR mutant NSCLC

Data as of Mar 24, 2025



*History or presence of brain metastases
**one patient had prior Recombinant Mutant Human Tumor Necrosis Factor(adjuvant therapy)
ECOG = Eastern Cooperative Oncology Group

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# Firmonertinib Showed Strong Confirmed Overall Responses (BICR) for 1L PACC

| | Blinded, Independent Central Review (BICR)[1] | | Investigator (INV)[1] | |
|---|---|---|---|---|
| | 160 mg QD N = 23 | 240 mg QD N = 22 | 160 mg QD N = 25 | 240 mg QD N = 22 |
| Best ORR, % (95% CI)[2] | **52.2** (30.6 – 73.2) | **81.8 (**59.7 – 94.8) | 56.0 (34.9 – 75.6) | 86.4 (65.1 – 97.1) |
| Confirmed ORR, % (95% CI) | **43.5** (23.2 – 65.5) | **68.2*** (45.1 – 86.1) | 56.0 (34.9 – 75.6) | 68.2 (45.1 – 86.1) |
| DCR (CR+PR+SD), % (95% CI) | **91.3** (72.0 – 98.9) | **100** (84.6 – 100) | 92.0 (74.0 – 99.0) | 100 (84.6 – 100) |
| mDoR, % (95% CI) | **NA** (9.9, NA) | **14.6** (8.3, NA) | **NA** (11.2, NA) | **NA** (NA, NA) |

*Confirmed ORR at 240 mg (BICR): 60% (6/10) single PACC and 75% (9/12) compound PACC

[1] Received ≥ 1 dose; have at least 1 measurable lesion at baseline as assessed by BICR or INV using RECIST v1.1
[2] includes confirmed and unconfirmed responses
Data as of Mar 24, 2025 for INV
Data as of Mar 3, 2025 for BICR



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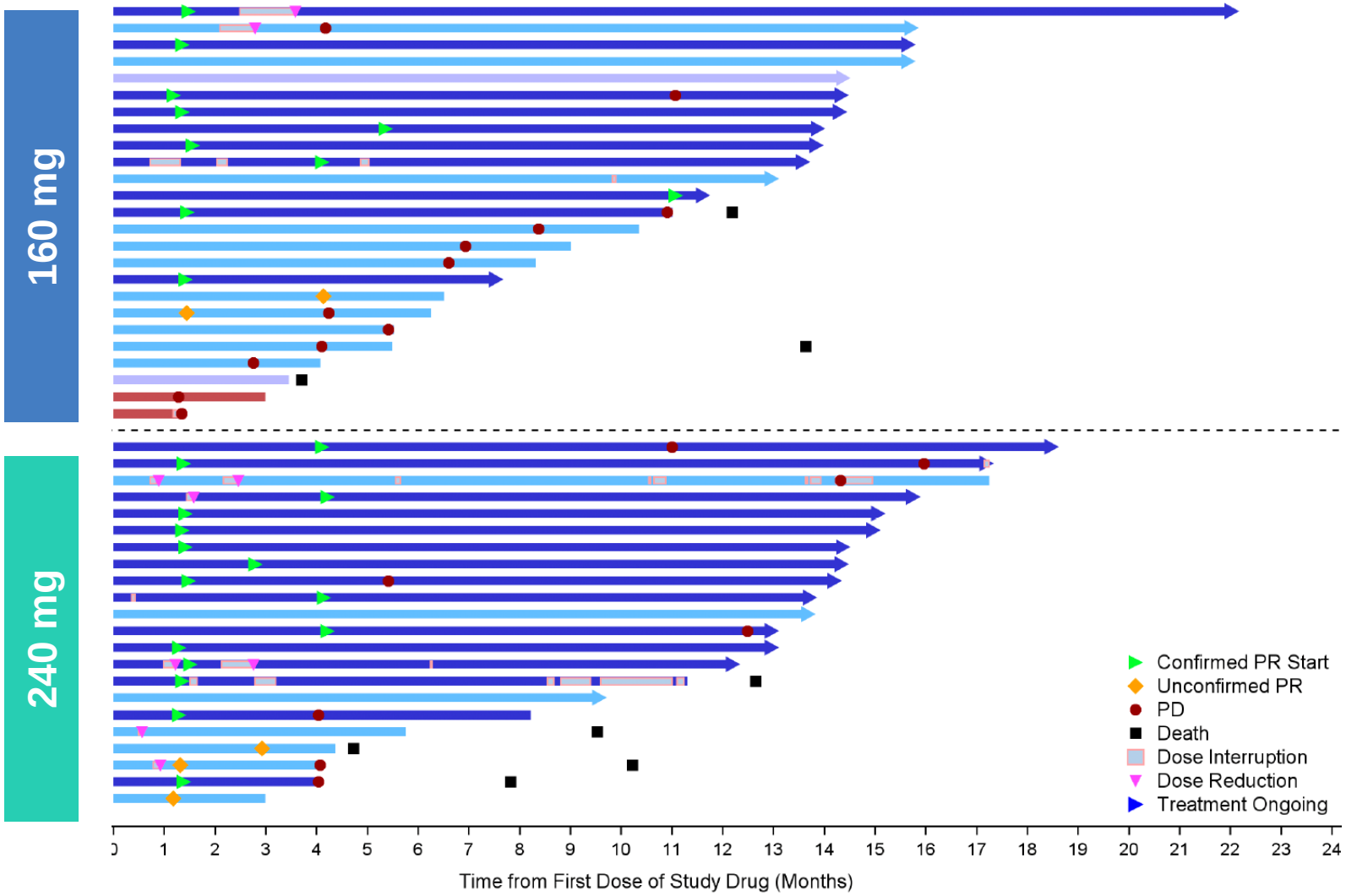
# Majority of Patients Treated at 240 mg Remain on Study After 1 Year




Dose interruptions are brief

Dose reductions are infrequent and occur early facilitating patient management

Confirmed Best Overall Response PR SD NON-CR/NON-PD PD

Data as of Mar 3, 2025 for BICR



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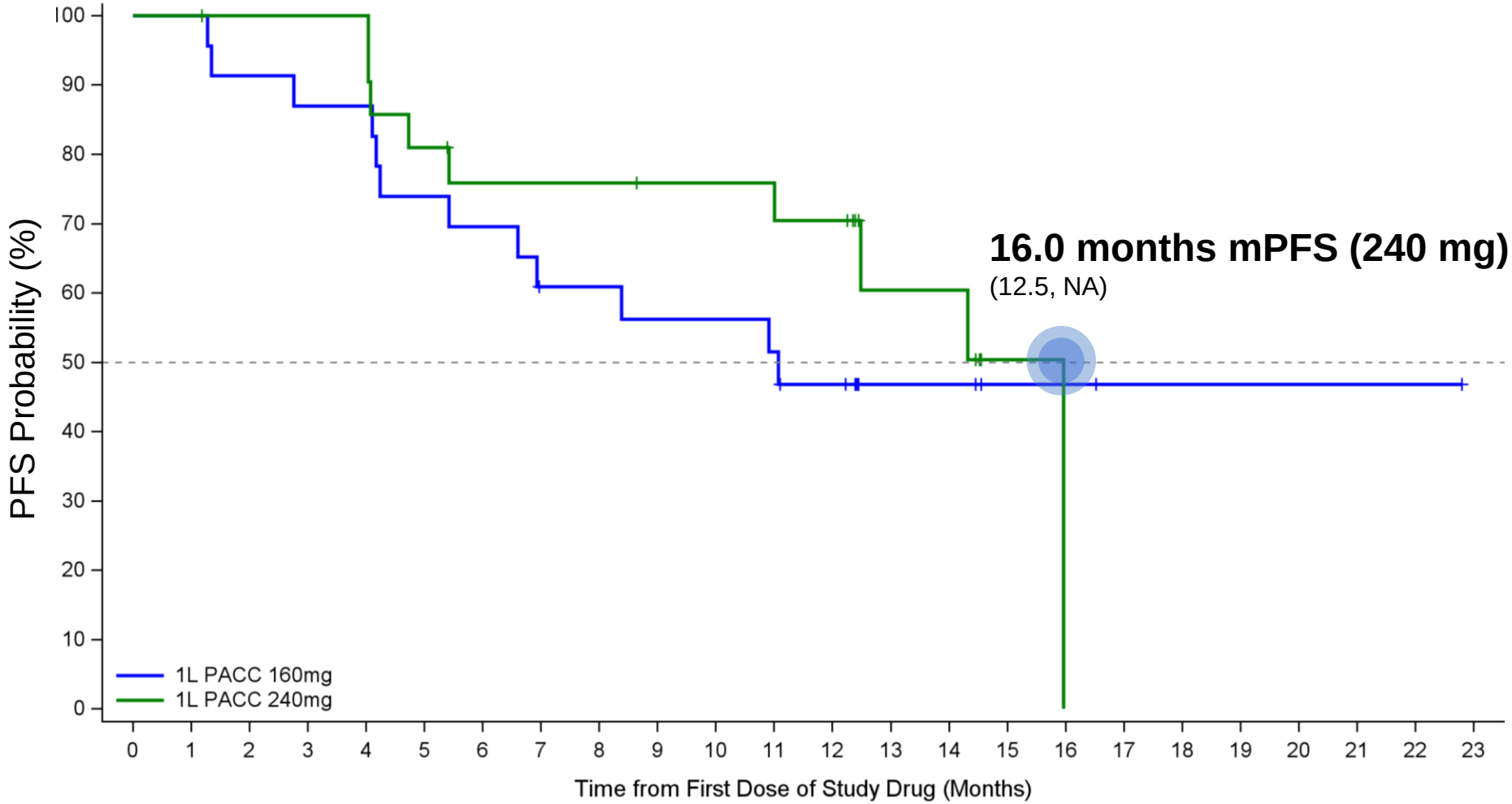
# Median PFS Exceeds Clinical Trial Benchmarks for 1L EGFR PACC Mutant NSCLC

## PFS HR favors 240 mg as the optimal dose for Phase 3




| 160 mg QD | 240 mg QD | HR (95% CI) |
|---|---|---|
| 11.1 (5.5, NA) | 16.0 (12.5, NA) | 0.728 (0.305 – 1.736), *p* = 0.4672 |



Data as of Mar 3, 2025 for BICR
Median duration of follow up 12.5 months (95% CI 12.4, 14.5 months)

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# Firmonertinib: CNS Activity Including Complete CNS Responses in PACC Cohort

## CNS activity may be beneficial in delaying need for brain radiation

| CNS ORR | CNS CR |
|---|---|
| 53% (9/17) | 41% (7/17) |

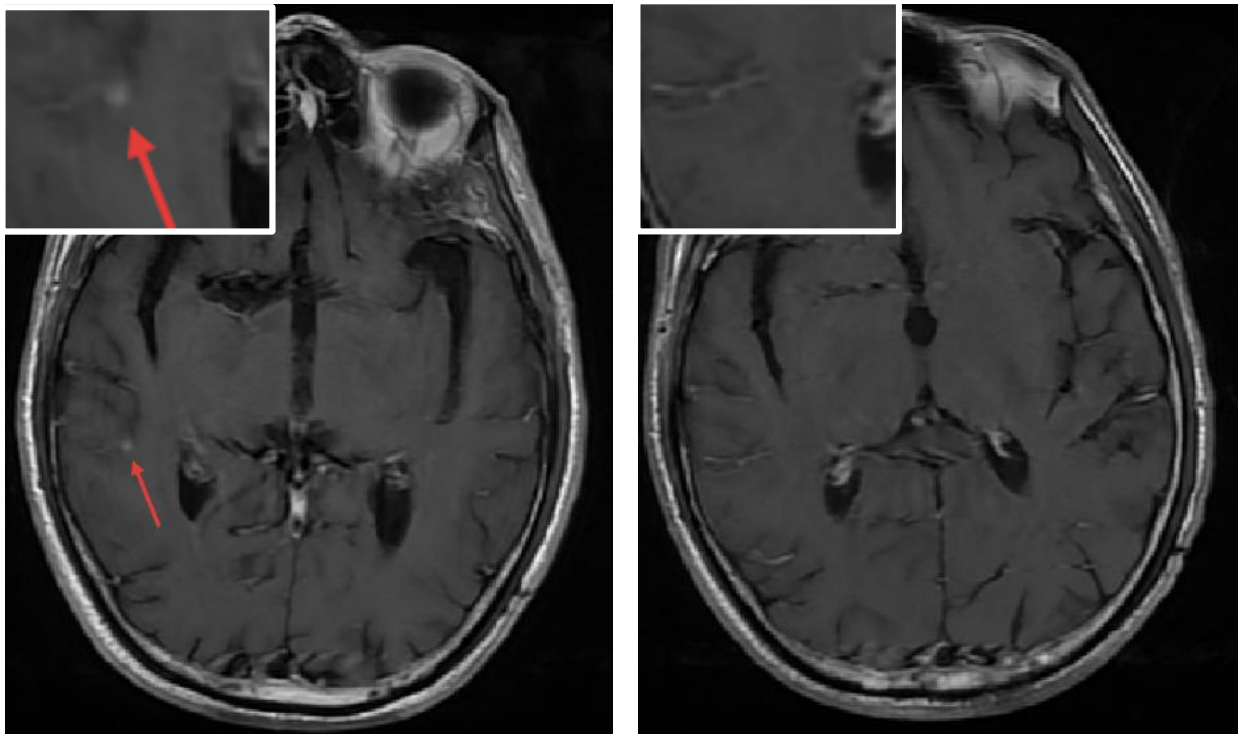
In CNS evaluable disease patients from PACC cohort[1]

### Case Study

- 68 yo male with newly diagnosed EGFR PACC mutant[2] metastatic NSCLC
- Multiple asymptomatic non-target (<1 cm) CNS metastases detected on baseline MRI
- Randomized to firmonertinib 240 mg QD
- Achieved a CNS CR by BICR at cycle 4
- Remains on study at cycle 18 (54 weeks) without CNS progression[3]

Baseline MRI
Non-Target CNS Lesion

Week 12 MRI
CNS lesion not detected



[1]BICR data; includes 1L and 2L at 160 mg and 240 doses
[2]V774M + H773L
[3]Data as of Apr 22, 2025



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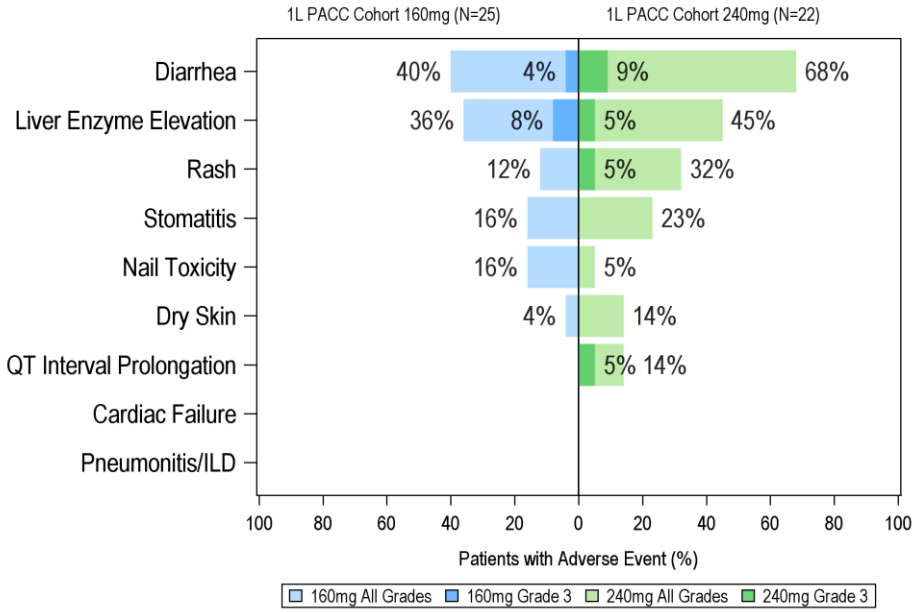
# Firmonertinib Continues to Show a Manageable Safety Profile in PACC Patients After Longer Follow Up

| Number of Patients (%) | All PACC Patients | | 1L PACC | |
|---|---|---|---|---|
| | 160 mg (N=31) | 240 mg (N=29) | 160 mg (N=25) | 240 mg (N= 22) |
| TRAEs any grades | 28(90.3) | 27(93.1) | 22(88.0) | 20(90.9) |
| TRAEs Grade ≥3 | 7(22.6) | 6(20.7) | 5(20.0) | 5(22.7) |
| Treatment-related SAEs | 1(3.2) | 1(3.4) | 0 | 1(4.5) |
| TRAEs leading to fatal outcome | 0 | 0 | 0 | 0 |
| TRAEs leading to dose interruption | 9(29.0) | 11(37.9) | 6(24.0) | 8(36.4) |
| TRAEs leading to dose reduction | 5(16.1) | 7(24.1) | 3(12.0) | 5(22.7) |
| TRAEs leading to dose discontinuation | 1(3.2) | 0 | 1(4.0) | 0 |
| Duration of treatment (months) Mean (SD) | 9.96 (5.22) | 11.05 (4.58) | 10.47 (5.18) | 11.80 (4.81) |
| Relative Dose Intensity (%) Mean (SD) | 92.0 (17.87) | 89.6 (29.13) | 93.9 (15.94) | 91.2 (30.39) |

Data as of Mar 24, 2025

**TRAE of Clinical Interest[1] for 1L PACC Patients**




- Includes all patients who have received ≥1 dose
- No Grades 4-5 TRAEs observed

[1]Based on group search terms

With longer treatment duration, overall safety profile remains consistent with EGFR-TKI class and previous data



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# Global Phase 1b PACC Study Results Support Advancing into Pivotal Study

Robust and durable responses in patients with EGFR PACC mutant NSCLC

Compelling CNS activity observed, including durable complete responses in brain metastases

Manageable safety profile consistent with previous studies

Advancing firmonertinib into a global pivotal registration study as an oral, chemo-free monotherapy



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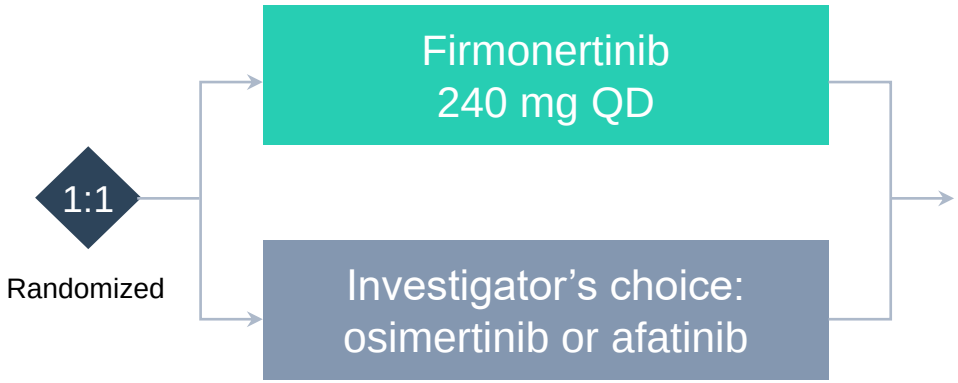
# ALPACCA (FURMO-006): First Randomized Global Phase 3 Study in 1L PACC Mutations

**Key Eligibility Criteria:**

- PACC mutation*
- No prior therapy for metastatic disease and no prior EGFR-TKI
- Allows untreated brain metastases if clinically stable
- N=480

*Excludes Classical-like (ex. L861Q) unless compound with PACC




**Endpoints:**

**Primary endpoints:**

ORR (Interim Analysis) and PFS (Final Analysis) by BICR with RECIST v1.1

- Enrolls PACC mutant patients as a distinct patient group
- Control arm based on real-world EGFR-TKI usage
- FDA Project FrontRunner design provides an opportunity for accelerated approval



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# Next Steps and Upcoming Milestones

Dr. Bing Yao

# Firmonertinib is an Attractive Opportunity in Uncommon EGFR Mutations

## Advancing Treatment for Patients with Uncommon EGFR Mutations

| | **Metastatic** 1L | **Adjuvant** Stage I-III |
|---|---|---|
| | **FURVENT** Exon 20 Insertions | **FIRMOST** Uncommon Mutations (exon 20 insertions, PACC, and classical-like) |
| | **ALPACCA** PACC | |
| Estimated Global Patients (excl China) | ~51K | ~22K |
| Estimated Treatment Duration | ~9 to15 months | Up to 3 years |

### Unmet Need

CNS-effective therapies that are better tolerated with more convenient administration

### Firmonertinib Opportunity

Potential to be the first oral, chemo-free 1L therapy for Exon 20 insertion and PACC

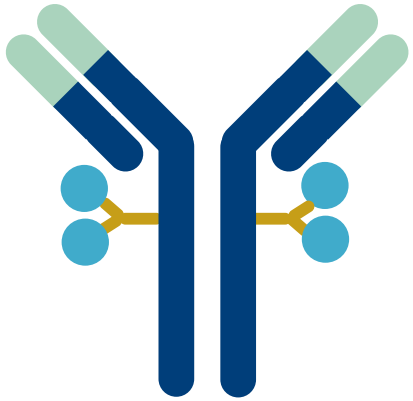
- CNS penetration, tolerability profile, and oral form, we believe, are competitively advantageous to approved therapies
- Strong profile in 1L Exon 20 insertion and 1L PACC creates significant revenue potential in each indication, if approved
- Adjuvant uncommon EGFR-mutated NSCLC represents an attractive lifecycle option



Sources: SEER.gov; Globocan 2020; Su et al. JAMA Network Open, 2023; Adapted from Robichaux et al., Nature, 2021; Zhang et al, Oncotarget, 2016. Arrivent data on file.

# Our Next-Generation ADC Pipeline Advancing Toward Clinical Development

**ARR-217 (MRG007)**



Novel glyco-engineered exatecan ADC

Zeng et al., AACR 2025; Abstract #2877

## Improved linker-drug and conjugation technology

- ARR-217 targets CDH17 which is broadly over-expressed in GI malignancies (i.e., colorectal, gastric, pancreatic)
- Superior preclinical activity over conventional CDH17-DXd ADC
- IND approved in China[1]
- US IND[2] planned in 2H 2025

## Improved antibody platform

- IND for ARR-002 (tetravalent dual-target ADC[3]) planned for 2026
- Other novel ADC programs (ARR-421[4], ARR-173[4]) continue to advance

[1]IND filed by Lepu Biopharma who discovered MRG007
[2]IND to be filed by ArriVent BioPharma
[3]Discovered through collaboration with Aarvik
[4]Discovery program with Alphamab



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# Upcoming Anticipated Milestones

| | |
|---|---|
| **2025** | **Topline Pivotal Global Phase 3 FURVENT Data** in 1L EGFR **Exon 20** Insertion Mutant NSCLC |
| **2H 2025** | **First Patient Enrolled in Global Phase 3 Registration Study** in 1L EGFR **PACC** Mutant NSCLC |
| **2025** | **Participate in Global Phase 3 Registration Study** in Adjuvant **Uncommon** Mutant NSCLC |
| **2H 2025** | **First Patient Enrolled in Phase 1 Study for ARR-217 (MRG007)** in GI Tumors |



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