
Supplementary information

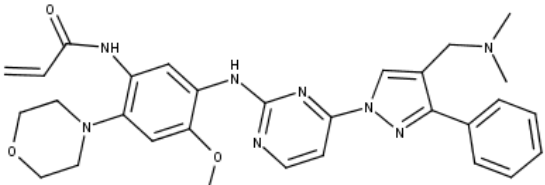
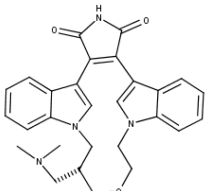
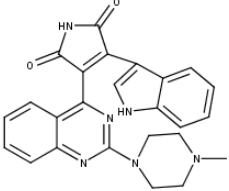
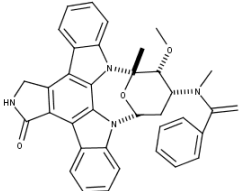
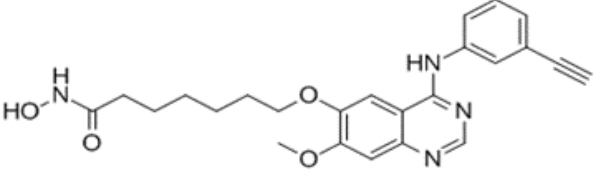
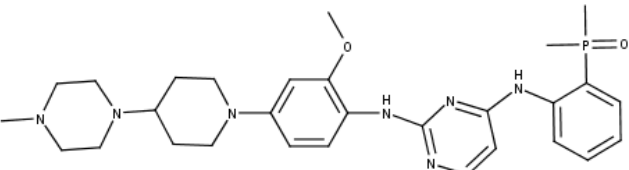
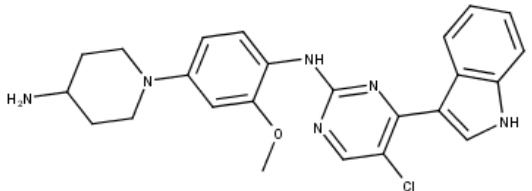
Structure-based classification predicts drug response in *EGFR*-mutant NSCLC

In the format provided by the authors and unedited

Supplemental Table 1. Summary of compounds

| EGFR TKI | Class | Primary Target | Binding | Structure |
|-------------|-------------------|----------------|--------------|-----------|
| Erlotinib | first-generation | EGFR | non-covalent | |
| Gefitinib | first-generation | EGFR | non-covalent | |
| AZD3759 | first-generation | EGFR | non-covalent | |
| Sapatinib | first-generation | EGFR | non-covalent | |
| Afatinib | second-generation | EGFR | covalent | |
| Dacomitinib | second-generation | EGFR | covalent | |
| Neratinib | second-generation | EGFR | covalent | |
| Pozotinib | second-generation | EGFR | covalent | |

| | | | | |
|--------------|-------------------|------|----------|--|
| Tarlox-TKI | second-generation | EGFR | covalent | |
| CLN-081 | Ex20ins Active | EGFR | covalent | |
| AZ5104 | Ex20ins Active | EGFR | covalent | |
| Mobocertinib | Ex20ins Active | EGFR | covalent | |
| Osimertinib | third-generation | EGFR | covalent | |
| Nazartinib | third-generation | EGFR | covalent | |
| Olmutinib | third-generation | EGFR | covalent | |
| Rociletinib | third-generation | EGFR | covalent | |
| Naquotinib | third-generation | EGFR | covalent | |

| | | | | |
|---------------|------------------|-----------|--------------|--------------------------------------------------------------------------------------|
| Lazertinib | third-generation | EGFR | covalent |  |
| Ruboxistaurin | PKC | PKC | non-covalent |  |
| Sotrastaurin | PKC | PKC | non-covalent |  |
| Midostaurin | PKC | PKC | non-covalent |  |
| CUDC-101 | EGFR/HDAC | EGFR/HDAC | non-covalent |  |
| Brigatinib | ALK | ALK | non-covalent |  |
| AZD3463 | ALK | ALK | non-covalent |  |

Supplemental Table 2. Summary of variable importance determined by CART including T790M-like mutations

| Summary of variable importance | | |
|---------------------------------------|---------------------------------|-------------------------|
| Drug | Structure function group | Exon-based group |
| Erlotinib | 78 | 22 |
| Gefitinib | 90 | 11 |
| AZD3759 | 77 | 23 |
| Sapatinib | 77 | 23 |
| Afatinib | 75 | 25 |
| Dacomitinib | 75 | 25 |
| Neratinib | 66 | 34 |
| Pozotinib | 94 | 6 |
| Tarlox-TKI | 79 | 21 |
| CLN-081 | 91 | 9 |
| AZ5104 | 91 | 9 |
| Mobocertinib | 90 | 10 |
| Osimertinib | 87 | 14 |
| Nazartinib | 82 | 18 |
| Olmutinib | 89 | 11 |
| Rociletinib | 85 | 15 |
| Naquotinib | 78 | 22 |
| Lazertinib | 91 | 9 |

Supplemental Table 3. Summary of variable importance determined by CART without T790M-like mutations

| Summary of variable importance | | |
|---------------------------------------|---------------------------------|-------------------------|
| Drug | Structure function group | Exon-based group |
| Erlotinib | 85 | 3.75 |
| Gefitinib | 90 | 2.5 |
| AZD3759 | 83 | 4.25 |
| Sapatinib | 77 | 5.5 |
| Afatinib | 80 | 5.25 |
| Dacomitinib | 83 | 4.25 |
| Neratinib | 51 | 12.25 |
| Poziotinib | 23 | 19.25 |
| Tarlox-TKI | 82 | 4.5 |
| CLN-081 | 84 | 4.25 |
| AZ5104 | 73 | 6.75 |
| Mobocertinib | 73 | 6.75 |
| Osimertinib | 88 | 5.5 |
| Nazartinib | 83 | 4.5 |
| Olmutinib | 85 | 3.75 |
| Rociletinib | 75 | 6.5 |
| Naquotinib | 82 | 4.5 |
| Lazertinib | 73 | 6.75 |

Supplemental Table 4: List of EGFR mutations and assigned subgroups used in manuscript

| Classical-Like Mutations | PACC Mutations | | Ex20 Loop Insertions | | T790M-like Mutations | |
|--------------------------|----------------------------|---------------------------|----------------------------|---------------------|--------------------------|----------------------------|
| | | | Near-loop | Far-loop | T790M-like-3S | T790M-like-3R |
| A702T | A750_I759del insPN | K757M L858R | | | | |
| A763insFQEA | E709_T710del insD | K757R | A767_V769dup ASV | H773_V774 insNPH | Ex19del T790M | Ex19del T790M C797S |
| A763insLQEA | E709A | L718Q | A767_S768ins TLA | H773_V774 insAH | Ex19del T790M L718V | Ex19del T790M L792H |
| D761N | E709A G719A | L718Q Ex19del | S768_D770dup SVD | H773dupH | Ex19del T790M G724S | G724S T790M |
| E709A L858R | E709A G719S | L718Q L858R | S768_D770dup SVD L858Q | V774_C775 insHV | G719A T790M | L718Q T790M L858R T790M |
| E709K L858R | E709K | L718V | S768_D770dup SVD R958H | V774_C775 insPR | G719S T790M | C797S L858R T790M |
| E746_A750del A647T | E709K G719S | L718V Ex19del | S768_D770dup SVD V769M | | H773R T790M | L718Q L858R T790M |
| E746_A750del L41W | E736K | L718V L858R | V769_D770ins ASV | | I744_E749del insMKK | L718V |
| E746_A750del R451H | E746_A750del A647T | L747_S752del A755D | V769_D770ins GSV | | L747_K754 delinsATSPE | |
| Ex19del E746_A750del | E746_A750del R675W | L747P | V769_D770ins GVV | | L858R T790M L792H | |
| K754E | E746_T751del insV S768C | L747S | V769_D770ins MASVD | | L858R T790M V843I | |
| L747_E749del A750P | Ex19del C797S | L747S L858R | D770_N771ins NPG | | L858R T790M | |
| L747_T751del L861Q | Ex19del G796S | L747S V774M | D770_N771ins SVD | | S768I T790M | |
| L833F | Ex19del L792H | L858R C797S | D770del insGY D770_N771 | | T790M | |
| L833V | Ex19del T854I | L858R L792H | insG D770_N771 | | | |
| L858R | G719A | L858R T854S | insY H773Y | | | |
| L858R A289V | G719A D761Y | N771G | N771dupN N771dupN | | | |
| L858R E709V | G719A L861Q | R776C | G724S N771_P772ins | | | |
| L858R L833F | G719A R776C | R776H | HH N771_P772ins | | | |
| L858R P100T | G719A S768I | E709_T710del insD S22R | SVDNR | | | |
| L858R P848L | G719A S768I | S752_I759del V769M | P772_H773ins DNP | | | |
| L858R R108K | G719C S768I | S768I | | | | |
| L858R R324H | G719S | S768I L858R | | | | |
| L858R R324L | G719S L861Q | S768I L861Q | | | | |
| L858R S784F | G719S S768I | S768I V769L | | | | |
| L858R S784Y | G724S | S768I V774M T751_I759 | | | | |
| L858R T725M | G724S Ex19del | delinsN | | | | |
| L858R V834L | G724S L858R | V769L | | | | |
| L861Q | G779F | V769M | | | | |
| L861R | I740dupIPVAK | V774M | | | | |
| S720P | | | | | | |
| S784F | | | | | | |
| S811F | | | | | | |
| T725M | | | | | | |

Supplemental Table 5: Patient Characteristics

| Mutation Type | Exon | EGFR Mutation | Age (years) | Sex | Tobacco Use (Y/N) | Pack Years | Histo Pathology | Previous Chemo (Y/N) | TKI | Stage at diagnosis |
|----------------|------|--------------------|-------------|-----|-------------------|------------|-------------------------|----------------------|-------------|--------------------|
| Classical Like | 19 | E746_A750 A750E | 73 | M | Y | Unknown | Adenocarcinoma | N | Erlotinib | IV |
| Classical Like | 21 | L747_T751del L861Q | 59 | F | Y | 5 | Adenocarcinoma | N | Afatinib | IV |
| Classical Like | 21 | L861Q | 70 | F | N | N/A | Adenocarcinoma | N | Afatinib | II |
| Classical Like | 21 | L858R E709K | 59 | F | Y | 10 | Adenocarcinoma | N | Afatinib | IV |
| Classical Like | 21 | L858R P848L | 74 | M | N | N/A | Adenocarcinoma | N | Osimertinib | IV |
| Classical Like | 18 | L858R T725M | 52 | F | N | N/A | Adenocarcinoma | N | Osimertinib | IV |
| Classical Like | 21 | L861Q | 77 | M | N | N/A | Adenocarcinoma | N | Osimertinib | IV |
| Classical Like | 21 | L861Q | 78 | M | N | N/A | Adenocarcinoma | Y | Erlotinib | IV |
| Classical Like | 18 | T725M | 75 | F | N | N/a | Adenocarcinoma | Y | Gefitinib | IV |
| Classical Like | 18 | A702T | 62 | M | Y | 47 | Adenocarcinoma | Y | Afatinib | IV |
| Classical Like | 21 | S811F | 84 | F | Y | 37 | Adenocarcinoma | Y | erlotinib | IV |
| Classical Like | 19 | L747_E749del A750P | 81 | F | Y | 8 | Adenocarcinoma | N | Erlotinib | I |
| Classical Like | 21 | L861Q | 70 | M | Y | 24 | Adenocarcinoma | N | Erlotinib | IV |
| Classical Like | 21 | L861Q | 73 | F | N | N/A | Adenocarcinoma | N | Erlotinib | I |
| Classical Like | 21 | L858R L833F | 82 | M | Y | 51 | Adenocarcinoma | Y | Erlotinib | IV |
| Classical Like | 18 | L858R E709V | 60 | M | N | N/A | Adenocarcinoma | Y | Rociletinib | IV |
| Classical Like | 19 | E746_A750del A647T | 56 | M | N | N/A | Adenocarcinoma | Y | Erlotinib | IV |
| Classical Like | 21 | E709K L858R | 70 | M | Y | 5 | Adenocarcinoma | Y | Erlotinib | IV |
| Classical Like | 21 | L861Q | 82 | F | Y | Unknown | Adenocarcinoma | N | Erlotinib | IV |
| Classical Like | 18 | E709K L858R | 45 | M | N | N/A | Adenocarcinoma | N | Rociletinib | IV |
| Classical Like | 21 | L861Q | 60 | M | Y | 90 | Adenocarcinoma | N | Gefitinib | IV |
| Classical Like | 21 | E709K/L858R | 83 | F | N | N/A | Adenocarcinoma | N | Afatinib | IV |
| Classical Like | 19 | L747_E749del A750P | 45 | M | Y | 5 | Adenocarcinoma | Y | Osimertinib | III |
| Classical Like | 21 | L861Q | 77 | F | Y | 10 | Adenocarcinoma | N | Erlotinib | IV |
| Classical Like | 19 | D761Y | 74 | M | Y | 35 | Squamous cell carcinoma | Y | Afatinib | IV |
| Classical Like | 21 | L858R S784F | 71 | F | N | N/A | Adenocarcinoma | N | Osimertinib | IV |
| Classical Like | 21 | L858R V834L | 75 | F | Y | 20 | Adenocarcinoma | Y | Osimertinib | III |
| Classical Like | 21 | L858R L833V | 60 | F | N | N/A | Adenocarcinoma | Y | Osimertinib | IV |
| Classical Like | 21 | L861Q | 71 | F | N | N/A | Adenocarcinoma | N | Osimertinib | IV |
| Classical Like | 18 | E709A L858R | 69 | M | N | N/A | Adenocarcinoma | Y | Osimertinib | IV |
| Classical Like | 21 | L861Q | 79 | M | N | N/A | Adenocarcinoma | N | Osimertinib | IV |

| | | | | | | | | | | |
|----------------|----|--------------------------|----|---|---------|---------|----------------|---|-------------|-----|
| Classical Like | 21 | L858R S784Y | 53 | M | Y | 15 | Adenocarcinoma | N | Osimertinib | IV |
| Classical Like | 6 | L858R R324L | 71 | F | Y | 32 | Adenocarcinoma | Y | Erlotinib | IV |
| Classical Like | 5 | L858R A289V | 57 | M | N | N/A | Adenocarcinoma | N | Erlotinib | IV |
| Classical Like | 6 | L858R R324H | 70 | F | N | N/A | Adenocarcinoma | Y | Erlotinib | IV |
| Classical Like | 1 | L858R R108K | 73 | F | N | N/A | Adenocarcinoma | N | Erlotinib | IV |
| Classical Like | 1 | E746_A750del L41W | 59 | F | N | N/A | Adenocarcinoma | N | Gefitinib | IV |
| Classical Like | 1 | L858R P100T | 65 | M | Y | 43 | Adenocarcinoma | N | Gefitinib | IV |
| Classical Like | 9 | E746_A750del R451H | 57 | F | N | N/A | Adenocarcinoma | N | Erlotinib | IV |
| Ex20LoopIns | 20 | S768_D770dupSVD R958H | 69 | F | Unknown | 1 | Adenocarcinoma | Y | Poziotinib | I |
| Ex20LoopIns | 20 | S768_D770dupSVD V769M | 63 | M | N | N/A | Adenocarcinoma | Y | Poziotinib | IV |
| Ex20LoopIns | 20 | S768_D770dupSVD L858Q | 50 | M | N | N/A | Adenocarcinoma | Y | Poziotinib | IV |
| Ex20LoopIns | 20 | Exon 20 insertion | 63 | F | N | N/A | Adenocarcinoma | N | Osimertinib | IV |
| Ex20LoopIns | 20 | H773_V774insH | 60 | M | N | NA | Adenocarcinoma | Y | Erlotinib | IV |
| Ex20LoopIns | 20 | A767_v769dupASV | 61 | F | N | NA | Adenocarcinoma | Y | Erlotinib | IV |
| Ex20LoopIns | 20 | D770_N771insG | 49 | F | N | NA | Adenocarcinoma | Y | Afatinib | IV |
| Ex20LoopIns | 20 | N771delinsGY | 79 | M | N | NA | Adenocarcinoma | Y | Erlotinib | IV |
| Ex20LoopIns | 20 | S768_D770dupSVD | 47 | F | N | NA | Adenocarcinoma | N | Erlotinib | IV |
| Ex20LoopIns | 20 | A767_V769dupASV | 69 | M | Y | 35 | Adenocarcinoma | Y | Afatinib | IV |
| Ex20LoopIns | 20 | S768_D770dupSVD | 65 | M | Y | 0.75 | Adenocarcinoma | N | Erlotinib | IV |
| Ex20LoopIns | 20 | S768_V769delinsIL | 57 | F | Y | <5 | Adenocarcinoma | Y | Afatinib | IV |
| Ex20LoopIns | 20 | S768_D770dupSVD | 56 | F | N | NA | Adenocarcinoma | N | Erlotinib | IV |
| PACC | 18 | G719S | 65 | F | Y | 60 | Adenocarcinoma | N | Osimertinib | III |
| PACC | 18 | G719A S768I | 47 | M | N | N/A | Adenocarcinoma | N | Erlotinib | IV |
| PACC | 18 | G719S S768I | 43 | F | Y | 2 | Adenocarcinoma | N | Afatinib | I |
| PACC | 19 | L858R K757M | 60 | F | Y | 5 | Adenocarcinoma | N | Erlotinib | I |
| PACC | 18 | G719S L861Q | 55 | F | Y | 10 | Adenocarcinoma | Y | Gefitinib | III |
| PACC | 18 | G719A | 85 | M | Y | 50 | Adenocarcinoma | N | Afatinib | IV |
| PACC | 18 | G719A | 66 | F | Y | 12 | Adenocarcinoma | N | Osimertinib | IV |
| PACC | 19 | L747_S752del A755D | 62 | F | Y | 25 | Adenocarcinoma | N | Osimertinib | IV |
| PACC | 20 | V769M | 89 | M | Y | 45 | Adenosquamous | N | Osimertinib | IV |
| PACC | 18 | E709_T719del insD | 78 | F | N | N/A | Adenocarcinoma | N | Afatinib | IV |
| PACC | 18 | G719A | 62 | M | Y | 10 | Adenocarcinoma | Y | Erlotinib | IV |
| PACC | 21 | L858R T854S | 71 | F | Y | Unknown | Adenosquamous | N | Afatinib | IV |

| | | | | | | | | | | |
|------|----|------------------------|----|---|---|-----------------|----------------|---|-------------|-----|
| PACC | 18 | G719C S768I | 70 | F | Y | 15 | Adenocarcinoma | N | Erlotinib | IV |
| PACC | 20 | L858R S768I | 82 | M | Y | 45 | Adenocarcinoma | Y | Afatinib | III |
| PACC | 20 | L858R S768I | 85 | F | N | N/A | Adenocarcinoma | N | Osimertinib | IV |
| PACC | 18 | G719A | 78 | M | Y | 24 | Adenocarcinoma | N | Afatinib | IV |
| PACC | 18 | G719S S768I | 74 | M | N | N/A | Adenocarcinoma | N | Erlotinib | IV |
| PACC | 19 | L858R L747S | 69 | M | N | N/A | Adenocarcinoma | N | Erlotinib | IV |
| PACC | 20 | E746_T751delinsV S768C | 74 | F | N | N/A | Adenocarcinoma | N | Erlotinib | IV |
| PACC | 18 | E709A G719A | 74 | M | Y | chewing tobacco | Adenocarcinoma | Y | Afatinib | IV |
| PACC | 20 | S752_I759del V769M | 64 | M | N | N/A | Adenocarcinoma | Y | Erlotinib | IV |
| PACC | 18 | G719S S768I | 75 | F | N | N/A | Adenocarcinoma | N | Erlotinib | IV |
| PACC | 18 | G719A S768I | 60 | M | Y | 90 | Adenocarcinoma | Y | Erlotinib | IV |
| PACC | 18 | G719A S768I | 66 | M | N | N/A | Adenocarcinoma | Y | Pozotinib | IV |
| PACC | 18 | G719A S768I | 66 | M | N | N/A | Adenocarcinoma | Y | Avitinib | IV |
| PACC | 18 | E709_T710delinsD S22R | 80 | M | Y | 22 | Adenocarcinoma | Y | Afatinib | I |
| PACC | 19 | E746_A750del R675W | 66 | M | N | N/A | Adenocarcinoma | Y | Erlotinib | IV |
| PACC | 18 | G719A | 69 | F | N | N/A | Adenocarcinoma | N | Erlotinib | IV |
| PACC | 19 | E736K | 59 | F | Y | 14.5 | Adenocarcinoma | Y | Gefitinib | III |
| PACC | 18 | G719A S768I | 75 | F | Y | 17 | Adenocarcinoma | Y | Afatinib | III |
| PACC | 18 | E709_T710delinsD | 66 | M | N | N/A | Adenocarcinoma | Y | Afatinib | III |
| PACC | 18 | G719A | 66 | M | Y | 25 | Adenocarcinoma | Y | Afatinib | III |
| PACC | 18 | G719A | 68 | F | Y | 25 | Adenocarcinoma | N | Afatinib | III |
| PACC | 19 | T751_I759delinsN | 59 | F | N | N/A | Adenocarcinoma | Y | Gefitinib | IV |
| PACC | 20 | L861Q S768I | 56 | F | Y | 38 | Adenocarcinoma | Y | Afatinib | IV |
| PACC | 19 | L747S V774M | 49 | F | Y | 15 | Adenocarcinoma | N | Afatinib | IV |
| PACC | 20 | G719A R776C | 52 | F | N | N/A | Adenocarcinoma | N | Erlotinib | IV |
| PACC | 18 | E709K G719S | 62 | F | N | N/A | Adenocarcinoma | N | Afatinib | IV |
| PACC | 20 | N771G | 60 | F | N | N/A | Adenocarcinoma | N | Pozotinib | IV |
| PACC | 18 | G719A | 87 | F | Y | 17.5 | Adenocarcinoma | Y | Osimertinib | IV |
| PACC | 18 | E709K G719S | 84 | F | N | N/A | Adenocarcinoma | Y | Afatinib | IV |
| PACC | 18 | G719A | 67 | M | N | N/A | Adenosquamous | N | Afatinib | III |
| PACC | 20 | G779F | 71 | F | Y | 24 | Adenocarcinoma | Y | Afatinib | IV |
| PACC | 19 | T751_I759delinsN | 74 | F | Y | 1 | Adenocarcinoma | Y | Osimertinib | IV |
| PACC | 19 | L747P | 63 | F | N | N/A | Adenocarcinoma | N | Osimertinib | I |
| PACC | 18 | G719S S768I | 62 | M | N | N/A | Adenocarcinoma | Y | Afatinib | IV |

| | | | | | | | | | | |
|---------------|----|--------------------|----|---|---|-----|-------------------------|---|-------------|----|
| PACC | 19 | A750_I759delinsPN | 51 | F | Y | 13 | Squamous cell carcinoma | Y | Osimertinib | IV |
| PACC | 18 | G719A D761Y | 67 | F | Y | 32 | Adenocarcinoma | Y | Osimertinib | II |
| PACC | 20 | S768I | 64 | F | Y | 15 | Adenocarcinoma | N | Afatinib | IV |
| PACC | 18 | E709A G719S | 45 | F | N | N/A | Adenocarcinoma | N | Afatinib | IV |
| PACC | 18 | G719S L861Q | 66 | M | N | N/A | Adenocarcinoma | N | Afatinib | IV |
| PACC | 18 | G719A | 68 | F | N | N/A | Adenocarcinoma | Y | erlotinib | IV |
| PACC | 18 | G719A | 71 | F | N | N/A | Large Neuroendocrine | N | Afatinib | IV |
| T790M-like-3S | 18 | G719S T790M | 62 | F | N | N/A | Adenocarcinoma | N | Osimertinib | IV |
| T790M-like-3S | 20 | H773R T790M | 50 | F | N | N/A | Adenocarcinoma | Y | Osimertinib | IV |
| T790M-like-3S | 18 | G719A T790M | 60 | F | N | N/A | Adenocarcinoma | N | Osimertinib | IV |
| T790M-like-3S | 19 | I744_E749delinsMKK | 60 | F | N | N/A | Adenocarcinoma | N | Osimertinib | IV |

Supplemental Table 6: Patient Characteristics stratified by EGFR mutation type

| Clinical factors | Classical-Like | PACC | Ex20LoopIns | T790M-like | <i>P</i> ^a |
|------------------------------|----------------|------------|-------------|------------|-----------------------|
| Total n (%) | 39 (36) | 53 (49) | 13 (12) | 4 (3) | |
| Age, y, median (range) | 70 (45-84) | 66 (43-89) | 61(47-79) | 60 (50-62) | > 0.9999 |
| < 65 | 14 (36) | 20 (38) | 9 (69) | 4 | |
| >=65 | 25 (64) | 33 (62) | 4 (31) | 0 | |
| Sex n (%) | | | | | 0.3934 |
| Male | 19 (49) | 20 (38) | 6 (46) | 0 | |
| Female | 20 (51) | 33 (62) | 7 (54) | 4 | |
| Smoking status n (%) | | | | | 0.6733 |
| Smokers | 18 (46) | 28 (53) | 3 (23) | 0 | |
| Nonsmokers | 21 (54) | 25 (47) | 9 (69) | 4 | |
| Unknown | 0 | 0 | 1 (8) | 0 | |
| Stage n (%) | | | | | 0.1268 |
| I-III | 5 (13) | 14 (26) | 1 (8) | 0 | |
| IV | 34 (87) | 39 (74) | 12 (92) | 4 | |
| Histology n (%) ^b | | | | | > 0.9999 |
| ADC | 38 (97) | 48 (90) | 13 | 4 | |
| SCC | 1 (3) | 1 (2) | 0 | 0 | |
| ASC | 0 | 3 (6) | 0 | 0 | |
| LCNEC | 0 | 1 (2) | 0 | 0 | |

The associations of EGFR mutation type with clinical variables were evaluated by Fisher's exact test. Statistical significance was considered for $p < 0.05$ and all tests were two-tailed.

^aComparison between Classical Like and PACC

^bComparison between ADC and SCC

Supplemental Table 7: EGFR mutant vectors used to generate cell lines

| EGFR Mutation | Starting Vector | Genomic change | Manufacturer | Purchased / Created |
|---------------------------|------------------------|------------------------------------|---------------------|----------------------------|
| Ex19del (E746_A750del) | N/A | N/A | Addgene #32062 | Purchased |
| WT | N/A | N/A | Addgene #11011 | Purchased |
| L858R | N/A | N/A | Addgene #11012 | Purchased |
| G719S | N/A | N/A | Addgene #11013 | Purchased |
| D770insNPG | N/A | N/A | Addgene #11016 | Purchased |
| A767insASV | N/A | N/A | Addgene #32066 | Purchased |
| L861Q | N/A | N/A | Addgene #32068 | Purchased |
| T790M | N/A | N/A | Addgene #32070 | Purchased |
| Ex19del T790M | N/A | N/A | Addgene #32072 | Purchased |
| L858R/T790M | N/A | N/A | Addgene #32073 | Purchased |
| A763insFQEA | EGFR WT | c.2290_2291insTCCA GGAAGCCT | Bioinnovatise | Created |
| A767insTLA | EGFR WT | c.2302_2303insCGCT GGCCA | Bioinnovatise | Created |
| D770del insGY | EGFR WT | c.2308_2309insGTT | Bioinnovatise | Created |
| D770insG | EGFR WT | c.2310_2311insGGT | Bioinnovatise | Created |
| D770insY H773Y | EGFR WT | c.2310_2311insTAC and c.2317C>T | Bioinnovatise | Created |
| Ex19del C797S | EGFR Ex19del | c.2386, T>A | Bioinnovatise | Created |
| Ex19del L718Q | EGFR Ex19del | c.2153T>A | Bioinnovatise | Created |
| Ex19del L718V | EGFR Ex19del | c.2152C>G | Bioinnovatise | Created |
| Ex19del L792H | EGFR Ex19del | c.2375T>A | Bioinnovatise | Created |
| Ex19del T790M C797S | EGFR Ex19del T790M | c.2386, T>A | Bioinnovatise | Created |
| Ex19del T790M G724S | EGFR Ex19del T790M | c.2313_2314insAAC | Bioinnovatise | Created |
| Ex19del T790M L718V | EGFR Ex19del T790M | c.2152C>G | Bioinnovatise | Created |
| Ex19del T790M L792H | EGFR Ex19del T790M | c.2375T>A | Bioinnovatise | Created |
| G719A | EGFR WT | c.2156G>C | Bioinnovatise | Created |
| G719A L861Q | EGFR G719A | c.2582T>A | Bioinnovatise | Created |
| G719A T790M | EGFR T790M | c.2156G>C | Bioinnovatise | Created |
| H773insAH | EGFR WT | c.2320_2321insCCCA CG | Bioinnovatise | Created |
| H773insH | EGFR WT | c.2319_2320insCAC | Bioinnovatise | Created |
| H773insNPH | EGFR WT | c.2319_2320insAACC CCCAC | Bioinnovatise | Created |
| I740dupIPVAK | EGFR WT | c.2214_2231dup | Bioinnovatise | Created |
| L858R C797S | EGFR L858R | c.2386, T>A | Bioinnovatise | Created |
| L858R L792H | EGFR L858R | c.2375T>A | Bioinnovatise | Created |
| L858R T790M C797S | EGFR L858R T790M | c.2386, T>A | Bioinnovatise | Created |
| L858R T790M L792H | EGFR L858R T790M | c.2375T>A | Bioinnovatise | Created |
| L858R V834L | EGFR L858R | c.2500G>T | Bioinnovatise | Created |
| N771insHH | EGFR WT | c.2314_2315insACCA CC | Bioinnovatise | Created |
| N771insSVDNR | EGFR WT | c.2312_2315ACCC>gc gtggacaaccg | Bioinnovatise | Created |
| P772insDNP | EGFR WT | c.2316_2317ins gacaacccc | Bioinnovatise | Created |

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|--------------------------|------------------|------------------------------------|---------------|---------|
| S768dupSVD | EGFR WT | c.2303_2304dupAGCG TGGAC | Bioinnovatise | Created |
| S768I | EGFR WT | c.2303G>T | Bioinnovatise | Created |
| S768I T790M | EGFR S768I | c.2369C>T | Bioinnovatise | Created |
| V769insASV | EGFR WT | c.2308_2309insCCAG CGTGG | Bioinnovatise | Created |
| V769insGSV | EGFR WT | c.2308_2309insGCAG CGTGG | Bioinnovatise | Created |
| V769insGVV | EGFR WT | c.2308_2309insGGGT CGTGG | Bioinnovatise | Created |
| V769insMASVD | EGFR WT | c.2307_2308ins atgccagcgtggac | Bioinnovatise | Created |
| V769L | EGFR WT | c.2305G>T | Bioinnovatise | Created |
| V774insHV | EGFR WT | c.2321_2322insCCAC GT | Bioinnovatise | Created |
| V774insPR | EGFR WT | c.2322_2323insCCAC GT | Bioinnovatise | Created |
| A763insLQEA | EGFR WT | c.2289_2290insCTCC AGGAAGCC | GeneScript | Created |
| D761N | EGFR WT | c.2281G>A | GeneScript | Created |
| E709_T710del insD | EGFR WT | c.2127_2129del | GeneScript | Created |
| E709A | EGFR WT | c.2126A>C | GeneScript | Created |
| E709A G719S | EGFR G719S | c.2126A>C | GeneScript | Created |
| E709K | EGFR WT | c.2125G>A | GeneScript | Created |
| E709K G719S | EGFR G719S | c.2125G>A | GeneScript | Created |
| E709K L858R | EGFR L858R | c.2125G>A | GeneScript | Created |
| Ex19del G724S | EGFR Ex19del | c.2313_2314insAAC | GeneScript | Created |
| Ex19del G796S | EGFR Ex19del | c.2386G>A | GeneScript | Created |
| Ex19del T854I | EGFR Ex19del | c.2561C>T | GeneScript | Created |
| G719A/R776C | EGFR G719A | c.2326C>T | GeneScript | Created |
| G724S | EGFR WT | c.2170G>A | GeneScript | Created |
| G724S T790M | EGFR T790M | c.2313_2314insAAC | GeneScript | Created |
| K754E | EGFR WT | c.2260A>G | GeneScript | Created |
| K757R | EGFR WT | c.2270A>G | GeneScript | Created |
| L718Q | EGFR WT | c.2153T>A | GeneScript | Created |
| L718Q T790M | EGFR T790M | c.2153T>A | GeneScript | Created |
| L718V | EGFR WT | c.2152C>G | GeneScript | Created |
| L747_K754del insATSPE | EGFR WT | c.2239_2260delinsGC AACATCTCCGG | GeneScript | Created |
| L747P | EGFR WT | c.2239_2240TT>CC | GeneScript | Created |
| L747S | EGFR WT | c.2240T>C | GeneScript | Created |
| L833F | EGFR WT | c.2499G>T | GeneScript | Created |
| L833V | EGFR WT | c.2497T>G | GeneScript | Created |
| L858R G724S | EGFR L858R | c.2313_2314insAAC | GeneScript | Created |
| L858R G796S | EGFR L858R | c.2386G>A | GeneScript | Created |
| L858R L718Q | EGFR L858R | c.2153T>A | GeneScript | Created |
| L858R L718V | EGFR L858R | c.2152C>G | GeneScript | Created |
| L858R S784F | EGFR L858R | c.2351C>T | GeneScript | Created |
| L858R T790M L718Q | EGFR L858R T790M | c.2153T>A | GeneScript | Created |
| L858R T790M L718V | EGFR L858R T790M | c.2152C>G | GeneScript | Created |

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|-------------------|------------------|-------------------|------------|---------|
| L858R T790M V843I | EGFR L858R T790M | c.2527G>A | GeneScript | Created |
| L861R | EGFR WT | c.2582T>G | GeneScript | Created |
| N771dupN G724S | EGFR G724S | c.2313_2314insAAC | GeneScript | Created |
| R776C | EGFR WT | c.2326C>T | GeneScript | Created |
| R776H | EGFR WT | c.2327G>A | GeneScript | Created |
| S720P | EGFR WT | c.2158T>C | GeneScript | Created |
| S768dupSVD V769M | EGFR S768dupSVD | c.2305G>A | GeneScript | Created |
| S768I V769L | EGFR S768I | c.2305G>T | GeneScript | Created |
| S768I V774M | EGFR S768I | c.2320G>A | GeneScript | Created |
| S784F | EGFR WT | c.2351C>T | GeneScript | Created |
| S811F | EGFR WT | c.2432C>T | GeneScript | Created |
| T725M | EGFR WT | c.2174C>T | GeneScript | Created |
| V774M | EGFR WT | c.2320G>A | GeneScript | Created |