# Cancer Bronchique Non à Petites Cellules

# Les nouvelles stratégies thérapeutiques

# 2016-2020

**Cours du GOLF**

**Lyon – 21 Septembre 2016**

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# Disclosure slide

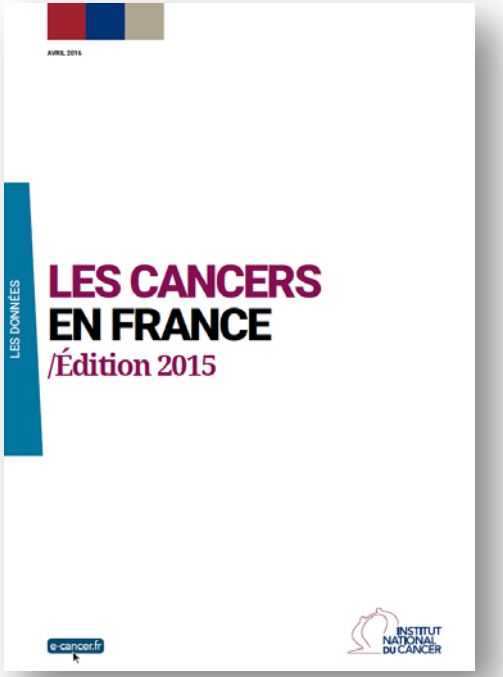
I provided consultations for Astra-Zeneca, Bristol-Myers Squibb, Boehringer–Ingelheim, Clovis Oncology, Eli Lilly Oncology, F. Hoffmann–La Roche Ltd, Novartis, Merck, MSD, Pierre Fabre and Pfizer.

# 2016-2020 …

# 2016-2020 …

- **Nouveauté(s) ?**
  - Connaissances scientifiques
  - Progrès technologiques
  - Classes thérapeutiques (Ph II ou III)
- **Aspects économiques**
  - Business
  - Contraintes économiques

# Le cancer du poumon




- **45,222** nouveaux cas (**3ème**)
  - 90% C. NAPC
  - 2/3 stades IV
- **30,555** décès (1er)
- **2 x C. colon** (17,833)
- **3 x C. sein** (11,913)

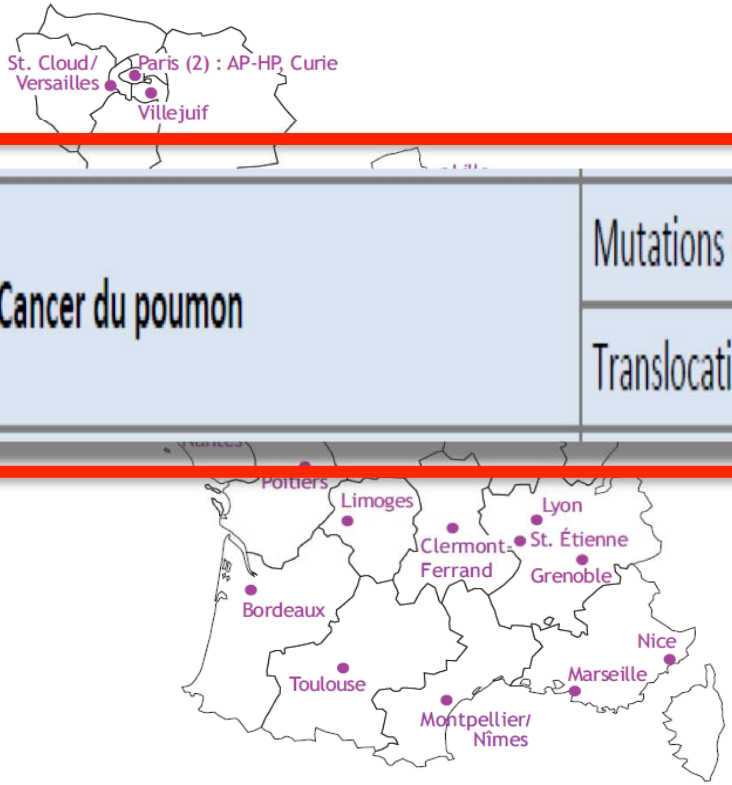
*Les cancers en France en 2015, INCa 2016*

# Agenda

- **Le whole genome pour tous ?**
- **L'immunothérapie, le graal ?**
- **Faire du neuf avec du vieux ?**

# LC genotyping program: France

- **28 platforms (2006)**
- **10 routine biomarkers (+ 6 emerging bm)**




| Tableau 1. Nombre de recherches de marqueurs prédictifs de la réponse à une thérapie ciblée en 2013 | | |
|---|---|---|
| Pathologie | Biomarqueur | Nombre de tests |
| | | 8 924 |
| | | 709 |
| | | 19 347 |
| | | 3 330 |
| | | 1 105 |
| GIST | Mutations de *PDGFRA* | 1 005 |
| Cancer du poumon | Mutations d'*EGFR* | 23 336 |
| | Translocation d'*ALK* | 18 861 |
| Mélanome | Mutation de *BRAF* V600 | 5 026 |
| Leucémies | Détection de *BCR-ABL* | 6 750 |
| | Mutations d'*ABL* | 861 |
| | TOTAL | 89 254 |

| | | |
|---|---|---|
| Cancer du poumon | Mutations d'*EGFR* | 23 336 |
| | Translocation d'*ALK* | 18 861 |

** i.e. Regional molecular genetics centers*

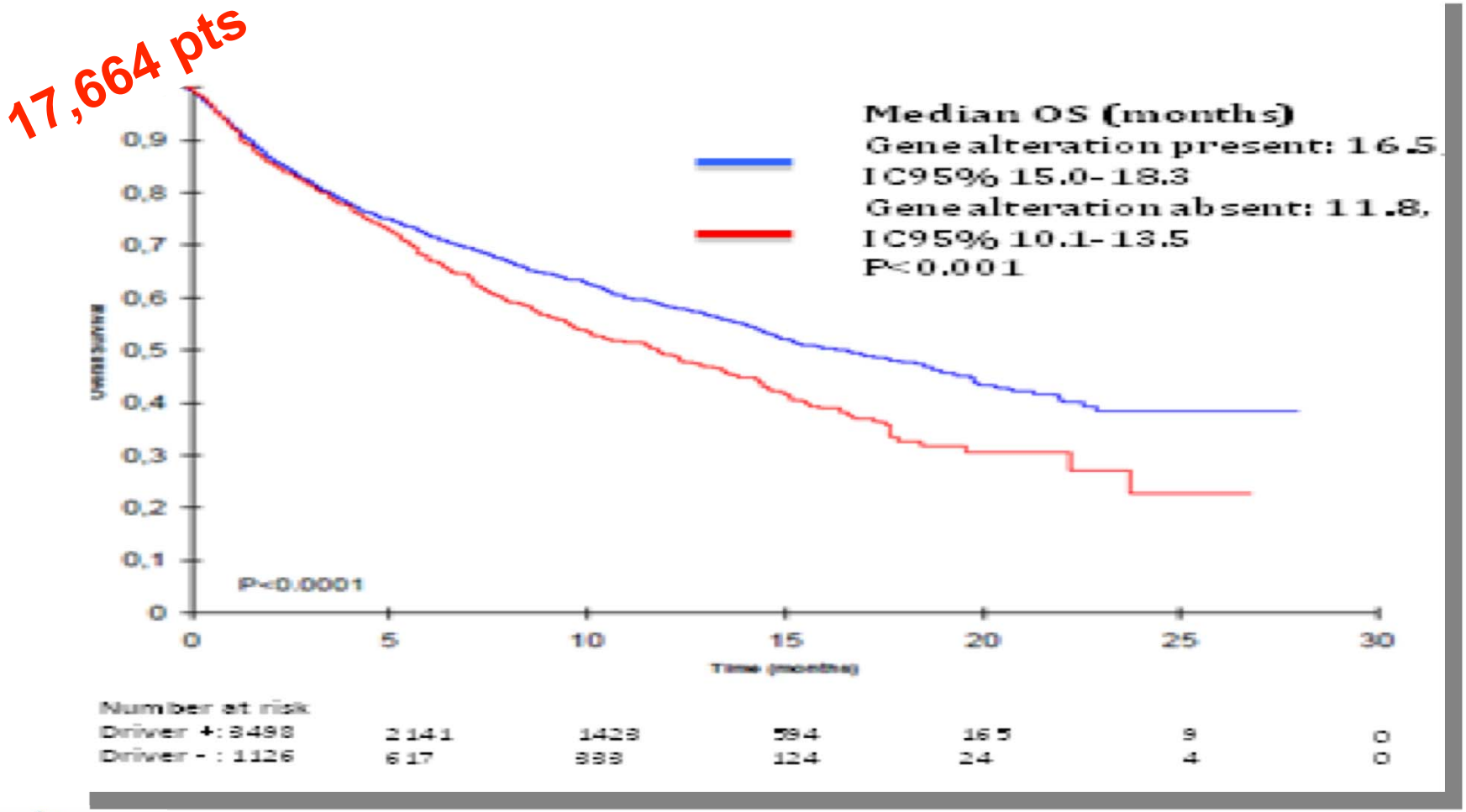
*Available at www.ecancer.fr*

# Back to the basics first?

| | | | |
|---|---|---|---|
| *EGFR* mutation – no. (%) | | | |
| Positive | 42 (9.9) | 43 (10.1) | 85 (10.0) |
| Negative | 318 (74.8) | 310 (72.9) | 628 (73.9) |
| Unknown | 65 (15.3) | 72 (16.9) | 137 (16.1) |
| *EMLA-ALK* translocation — no. (%) | | | |
| Positive | 2 (0.5) | 0 | 2 (0.2) |
| Negative | 223 (52.5) | 201 (47.3) | 424 (49.9) |
| Unknown | 200 (47.1) | 224 (52.7) | 424 (49.9) |
| *KRAS* mutation — no. (%) | | | |
| Positive | 26 (6.1) | 33 (7.8) | 59 (6.9) |
| Negative | 99 (23.3) | 104 (24.5) | 203 (23.9) |
| Unknown | 300 (70.6) | 288 (67.8) | 588 (69.2) |

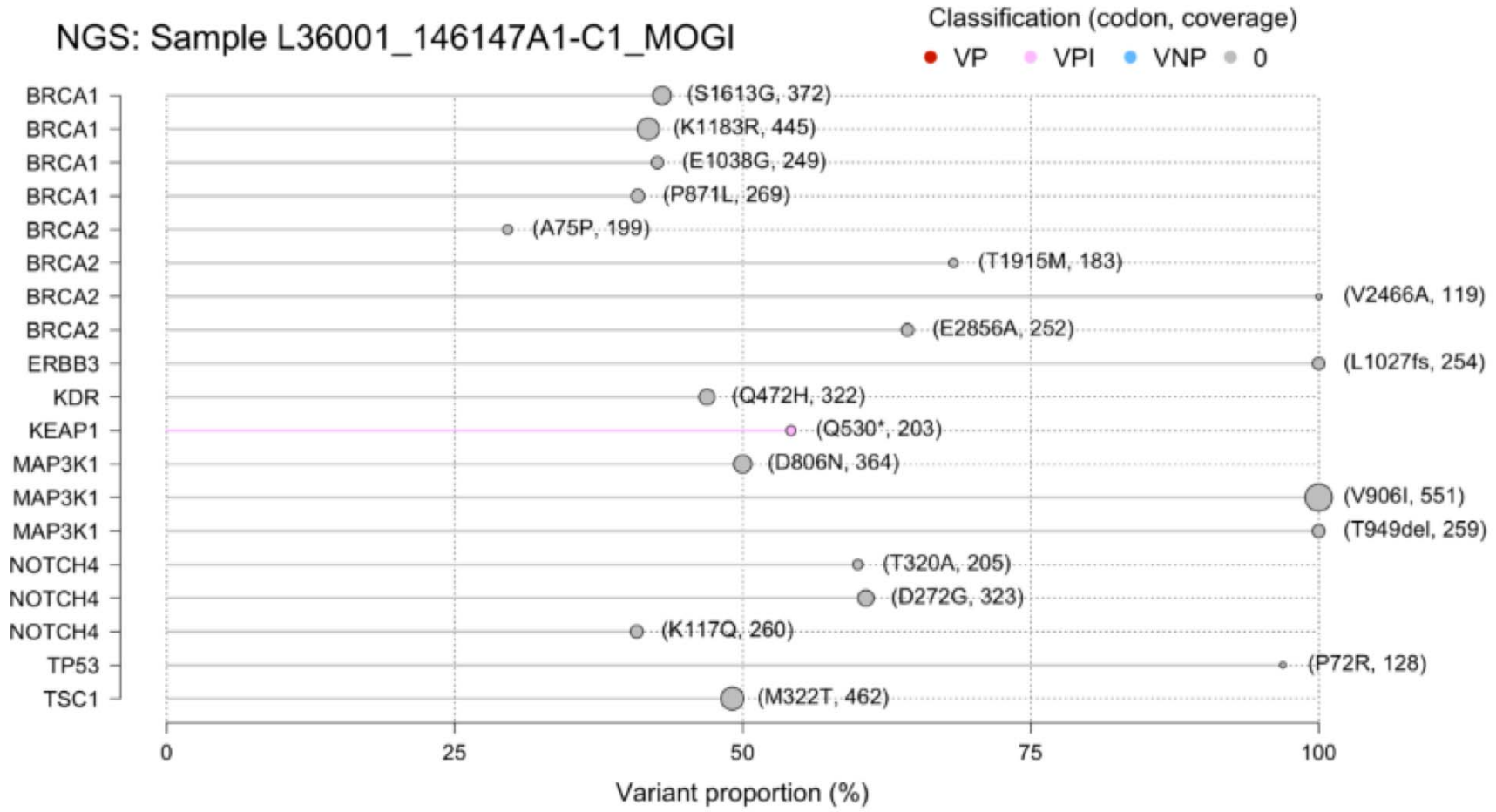
*Example from a large phase III trial in NSCLC*

# Impact of routine molecular profiling




*Barlesi et al, Biomarkers France, Lancet 2016*

# High througpout molecular genotyping




*Images: NGS analyses from the SAFIR lung Unicancer IFCT trial*

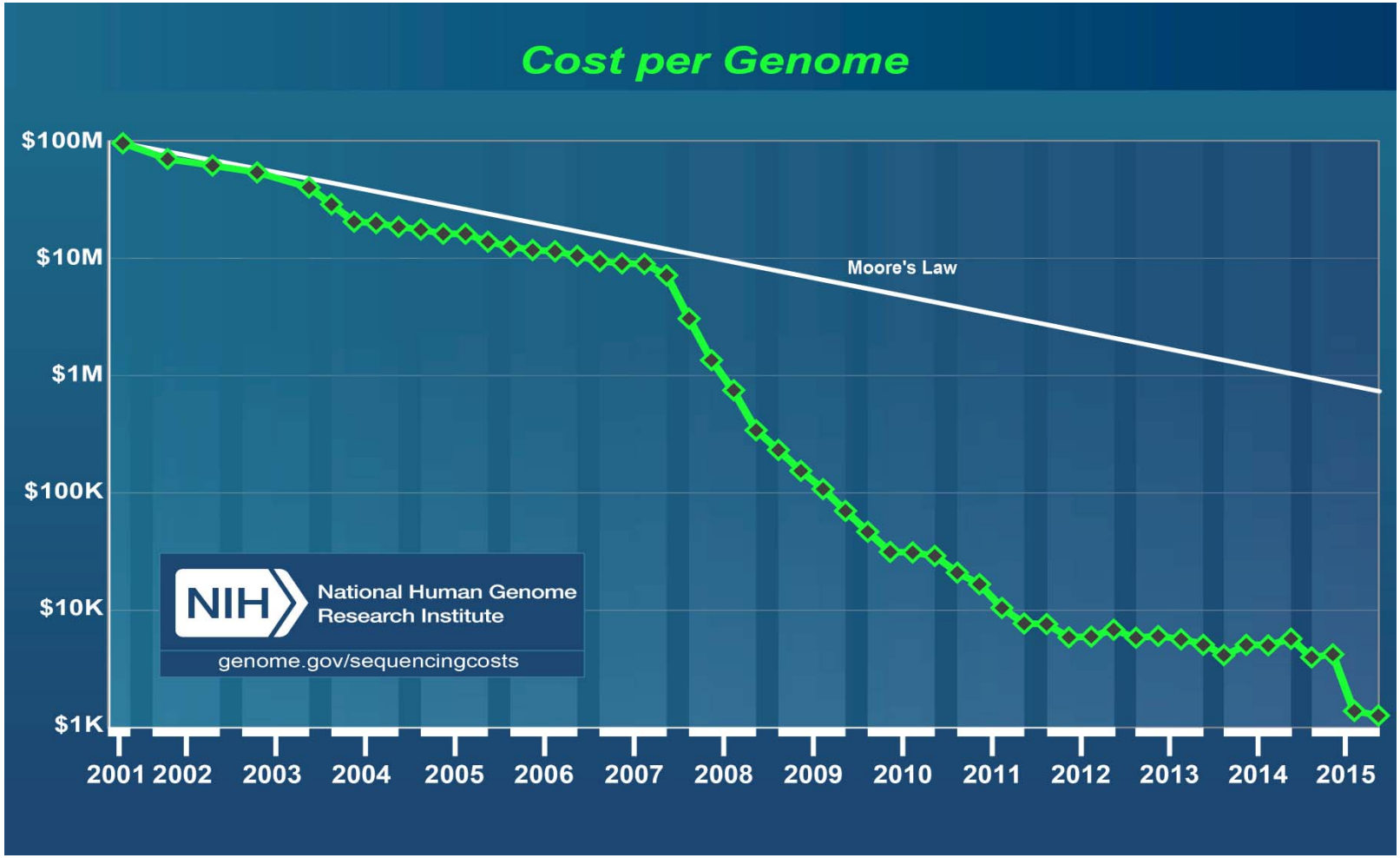
# Larger genomic profiling (NGS)

INSTITUT NATIONAL DU CANCER

| Panel tumeurs solides | | | |
|---|---|---|---|
| gène | Exons / hotspots | Molécule associée | utilité clinique |
| AKT1 | 3 | AKT inhibitors | essais cliniques |
| ALK | 23+24+25 | crizotinib, ALK inhibitors | AcSé, essais cliniques |
| BRAF | 11+15 | vemurafenib, dabrafenib | AMM |
| EGFR | 18+19+20+21 | anti EGFR | AMM |
| ERBB2 (HER2) | 20 | trastuzumab, neratinib | essais cliniques |
| ERBB4 | E452K et R393W | Afatinib | essais cliniques |
| FGFR2 | S252, N549, K659 | FGFR inhibitors | essais cliniques |
| FGFR3 | 7+9+14 (R248 àS249 et G370 à Y | FGFR inhibitors | essais cliniques |
| HRAS | 2+3+4 | inhibiteurs de MEK | essais cliniques |
| KIT | 8+9+11+13+17+18 | imatinib | AMM |
| KRAS | 2+3+4 | panitumumab et cetuximab | AMM |
| MAP2K1 (MEK1) | 2 | inhibiteurs de MEK | essais cliniques |
| MET | 2 + 14 à 20 | crizotinib | AcSé |
| NRAS | 2+3+4 | panitumumab, MEK inhibitors, BRAF inhibitors | pré-AMM, essais cliniques |
| PDGFRA | 12+14+18 | imatinib | AMM |
| PIK3CA | 9 + 20 | PI3K inhibitors | essais cliniques |

*Available www.ecancer.fr*

# High througpout molecular genotyping



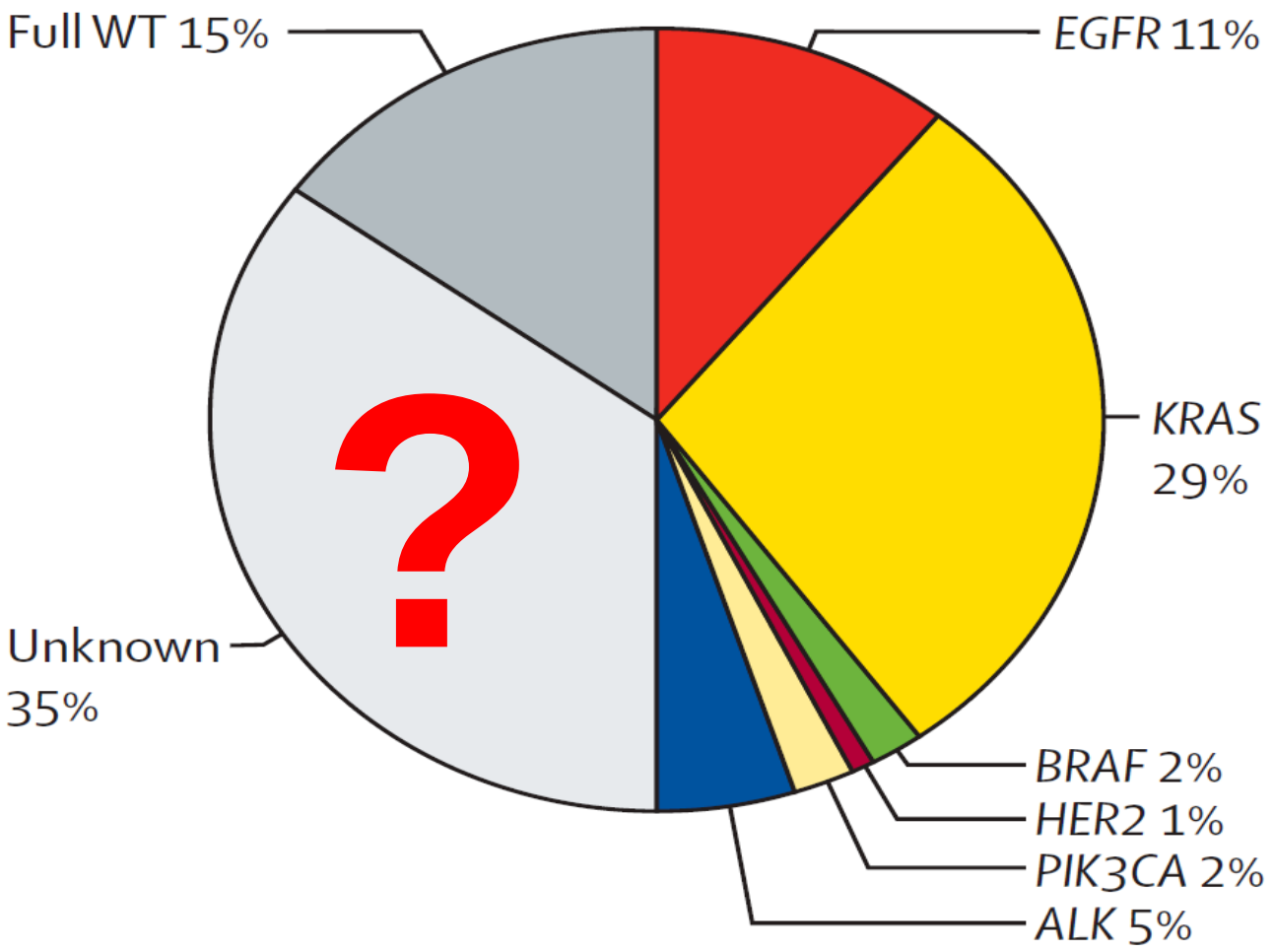

*Images: NGS analyses from the NIH website*

# Enjeux et perspectives

- **Evolutions**

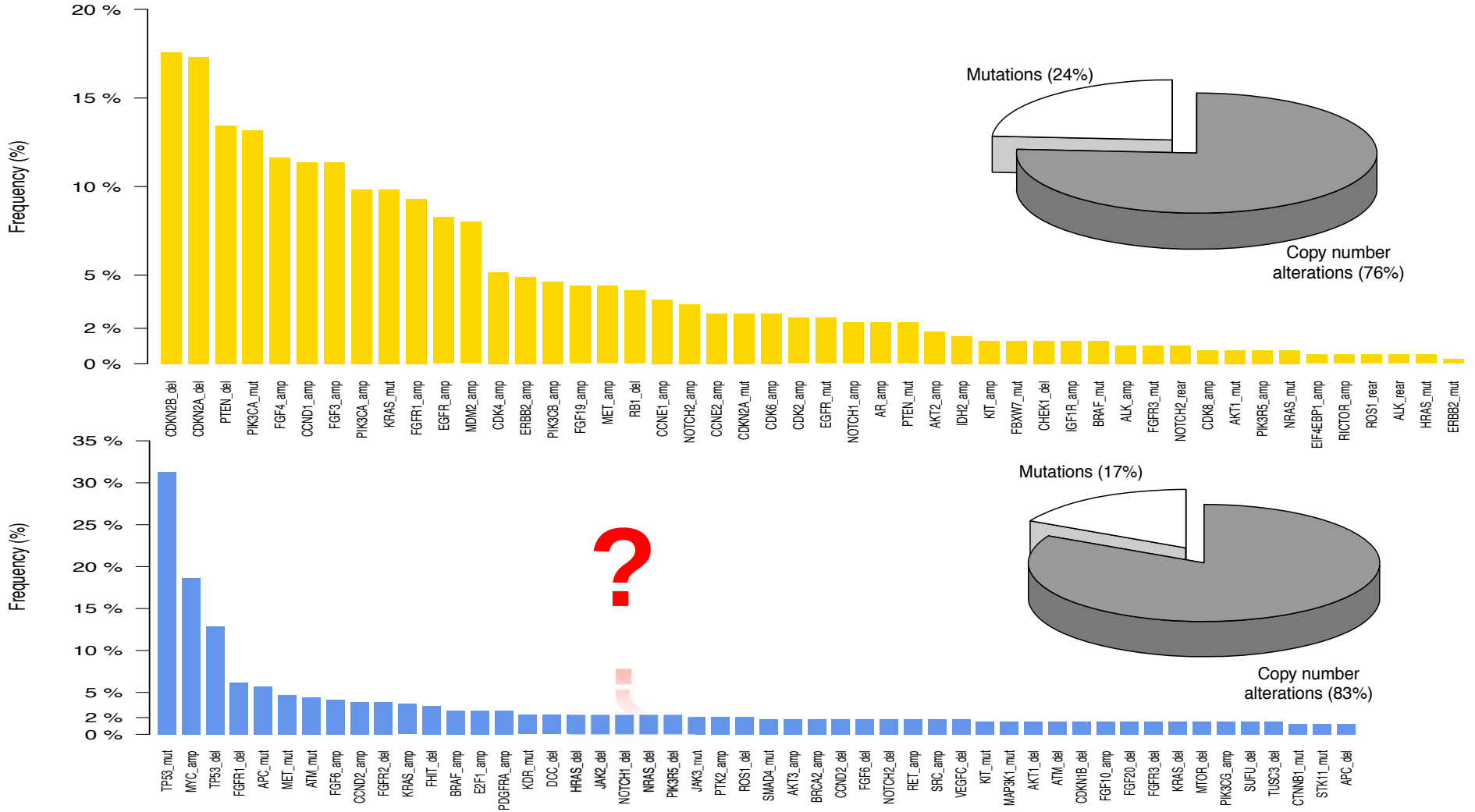
  **des plateformes**

# France (Biomarkers France)



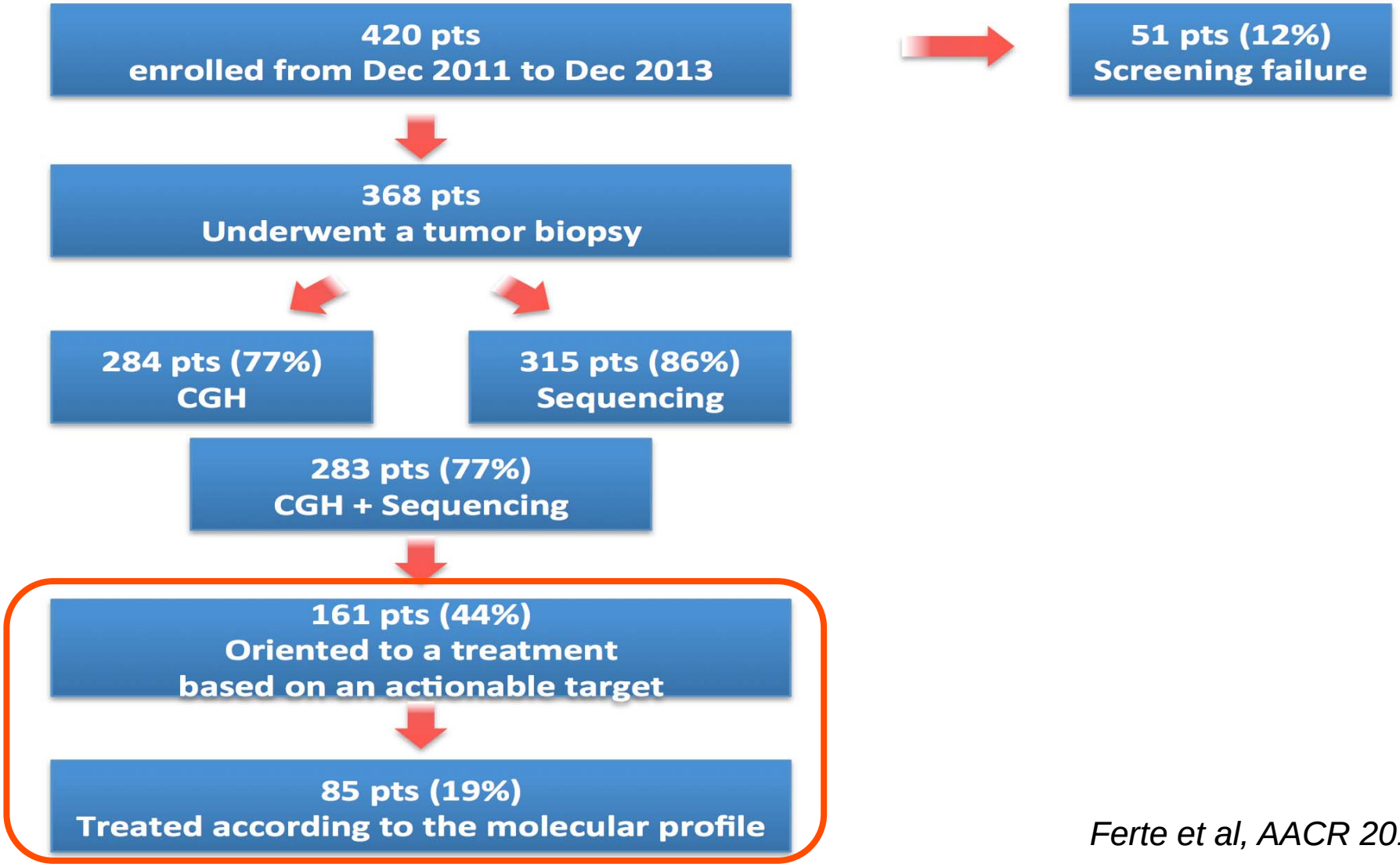

*Barlesi et al, Biomarkers France, Lancet 2016 (in press)*

# How large should be the analysis?



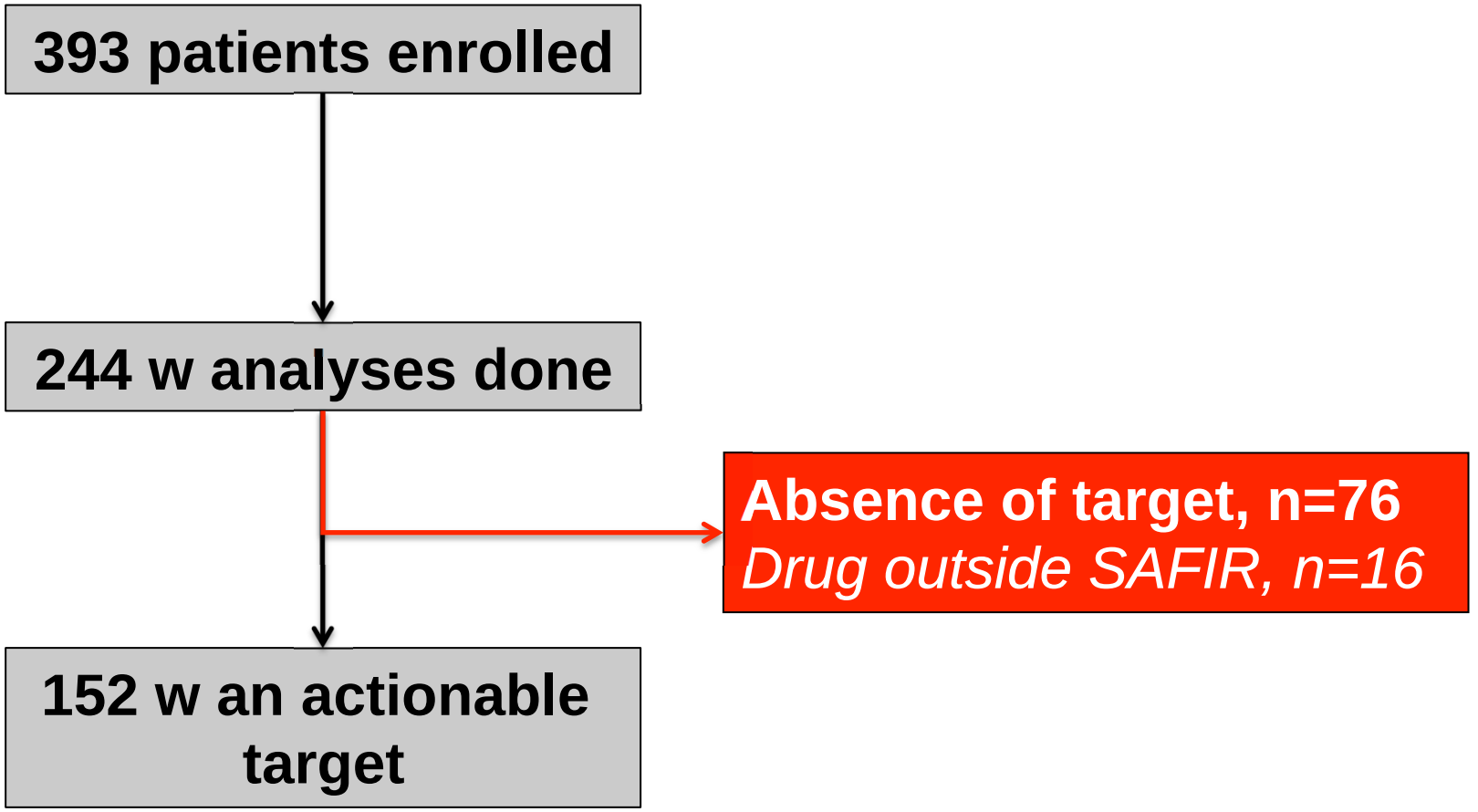

*Ferte C et al, AACR 2014*

# Precision medicine for increased survival?



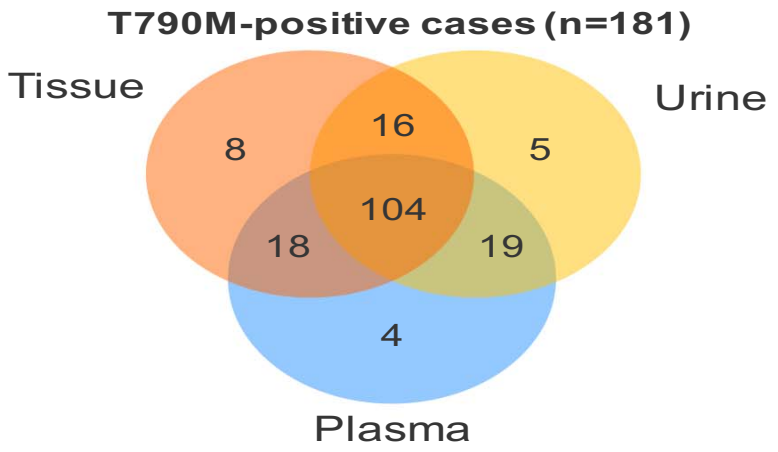

*Ferte et al, AACR 2014*

# Trial status (April 2nd, 2016)



# cfDNA for molecular genotyping

| T790M | | Tissue | | | Total |
|---|---|---|---|---|---|
| | | Positive | Negative | Inadequate | |
| Plasma (BEAMing) | Positive | 313 | 23 | 38 | 374 |
| | Negative | 74 | 17 | 17 | 108 |
| Total | | 387 | 40 | 55 | 482 |




Total positive by tissue: 146 of 181

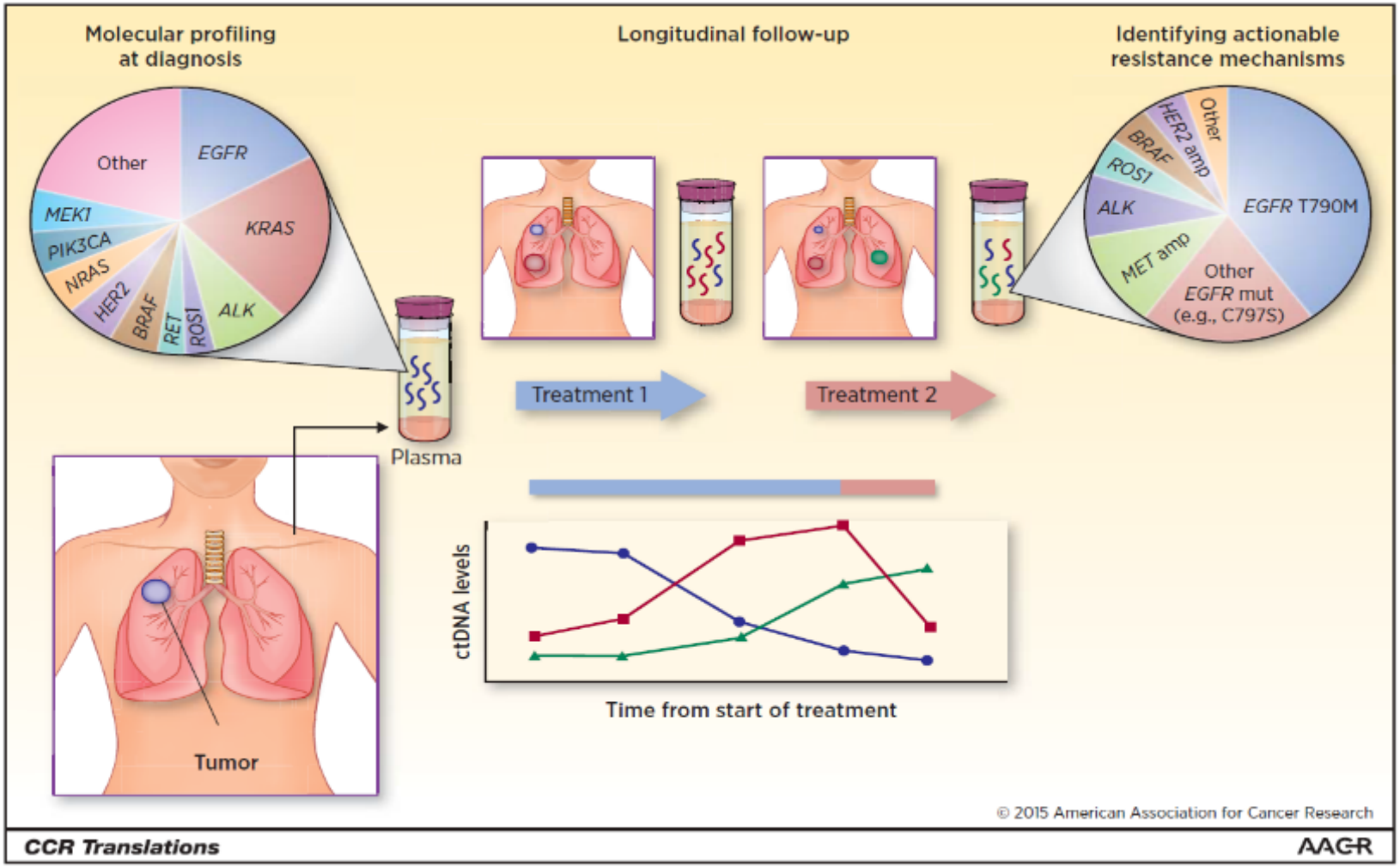
Total positive by plasma: 145 of 181

Total positive by urine: 144 of 181

***104 (57%) were positive by all 3 sample types***

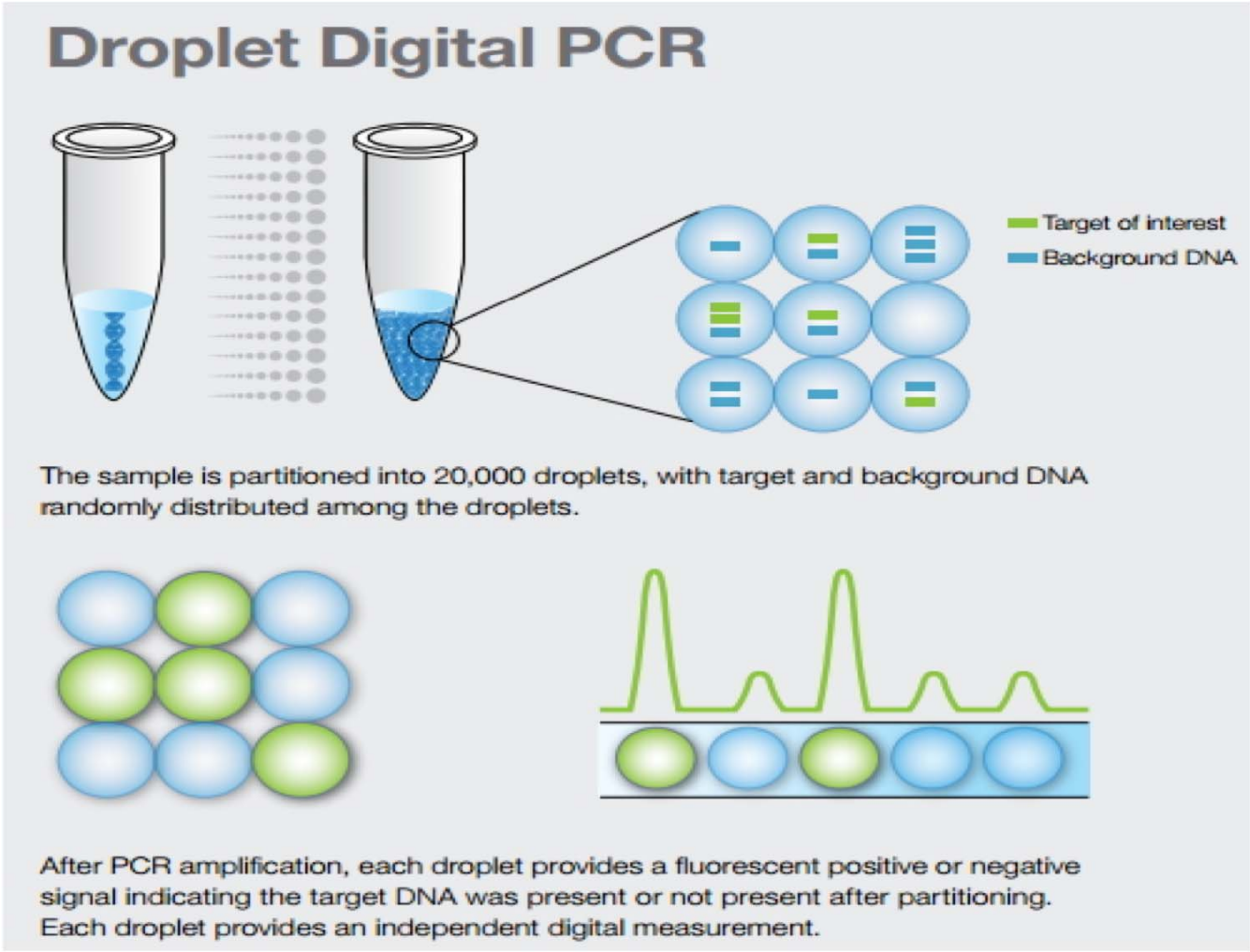
*Wakelee H et al, ASCO 2016 (abst 9001)*

# cfDNA as solution to monitor biomarkers?




*Tsuy DW et al, Clin Cancer Res (in press)*

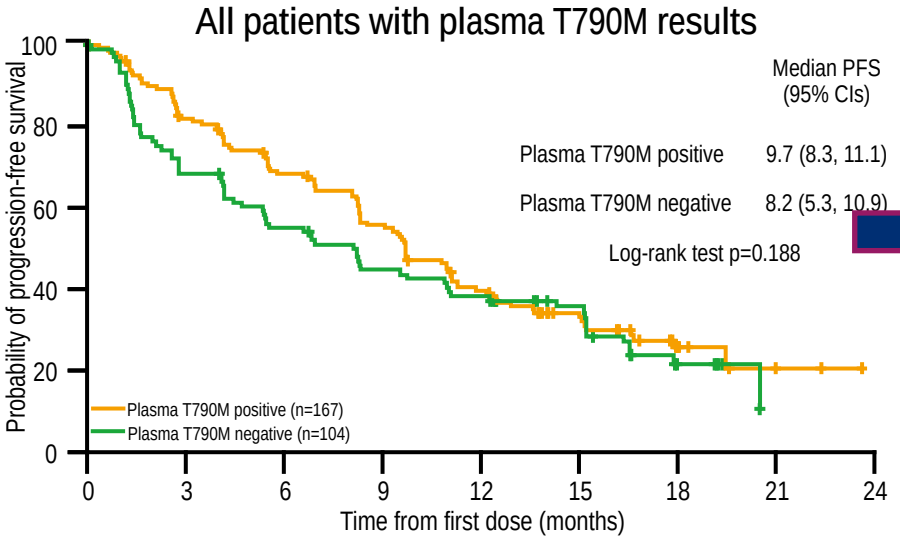
# ddPCR development

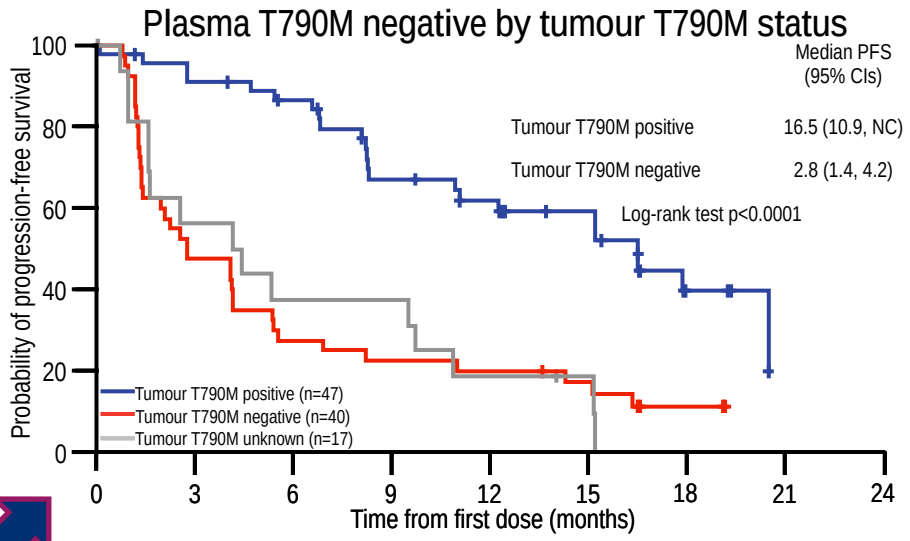


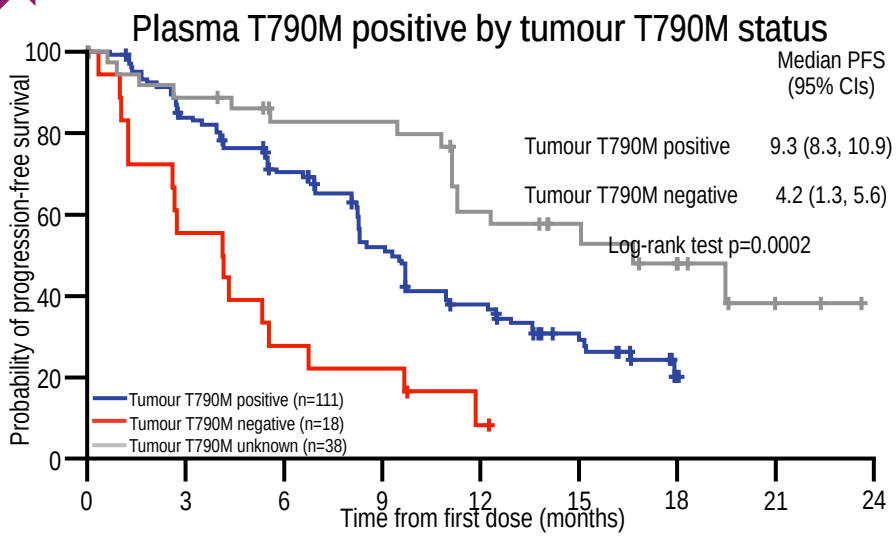

*Downloaded from biodiscover.com*

# PFS by tumour and plasma T790M status

- In plasma T790M negative patients, tumour genotyping can distinguish those patients with better and worse outcomes
- Interestingly, a difference based on tumour genotype is also seen in plasma T790M positive cases



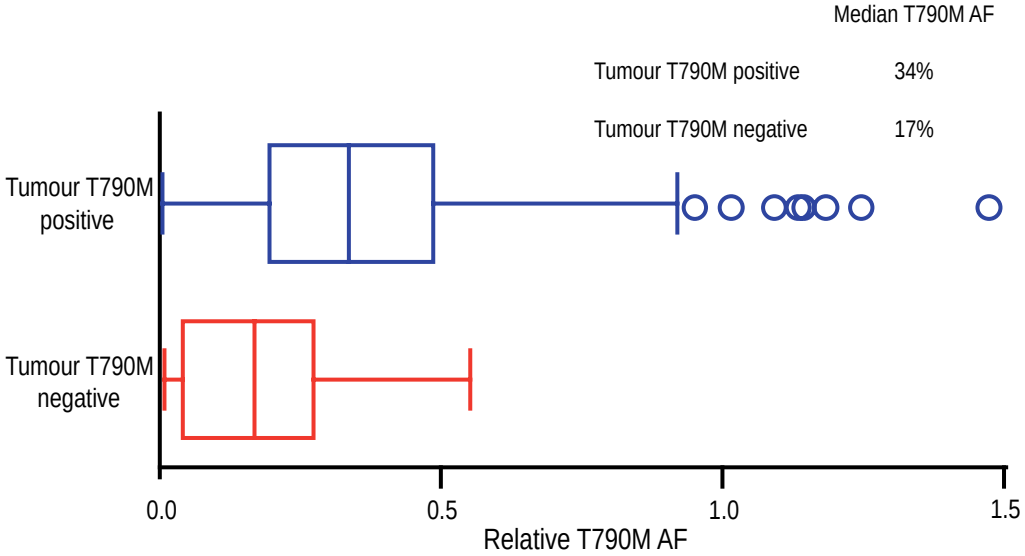



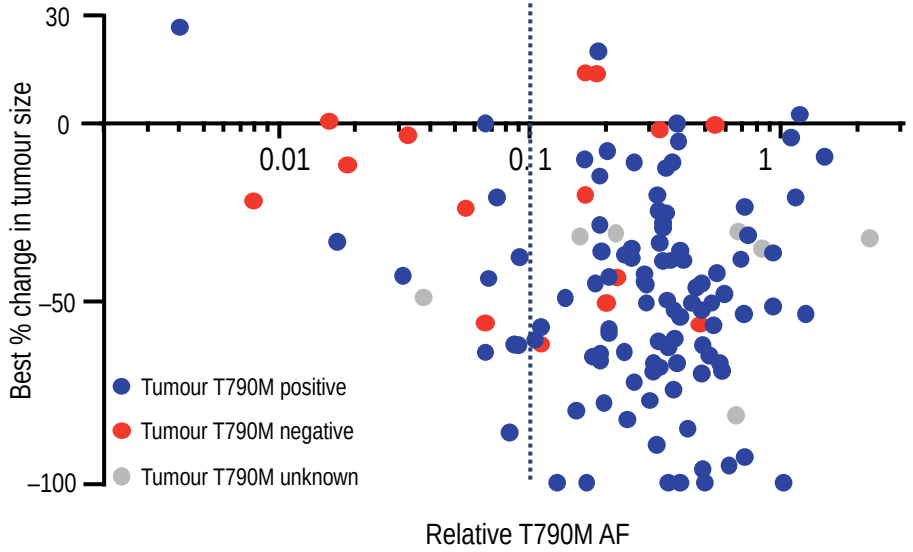

Data cutoff: 1 May 2015. Multiple doses included

Oxnard G, et al. ELCC 2016; Abstract 1350_PR

# T790M heterogeneity in plasma “false positives”

- We hypothesised that cases T790M negative in tumour and T790M positive in plasma might have heterogeneous presence of T790M
- Relative T790M AF was calculated as a proportion of EGFR sensitising AF:
  - T790M AF / sensitising AF
- Relative T790M AF was lower in cases with T790M negative in tumour, suggesting T790M may be present as a minor clone
- There was a trend toward lower response magnitude in the group with relative T790M AF <10% (p=0.08)

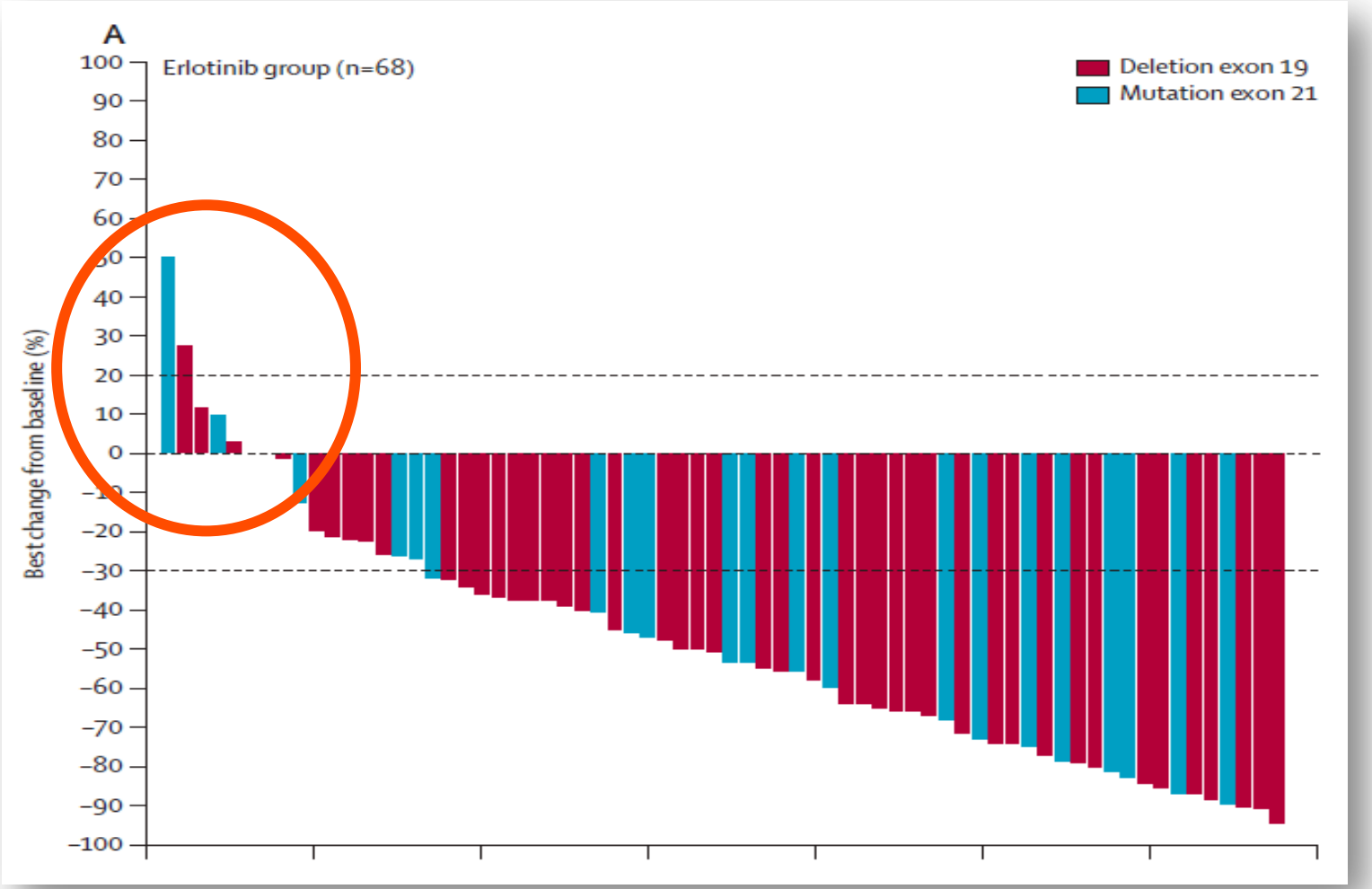



Data cutoff: 1 May 2015

Oxnard G, et al. ELCC 2016; Abstract 1350_PR

# Lung cancer EGFRm on 1G targeted therapy




*Rosell R et al, Lancet Oncol 2012*

# Where comes the resistance from?

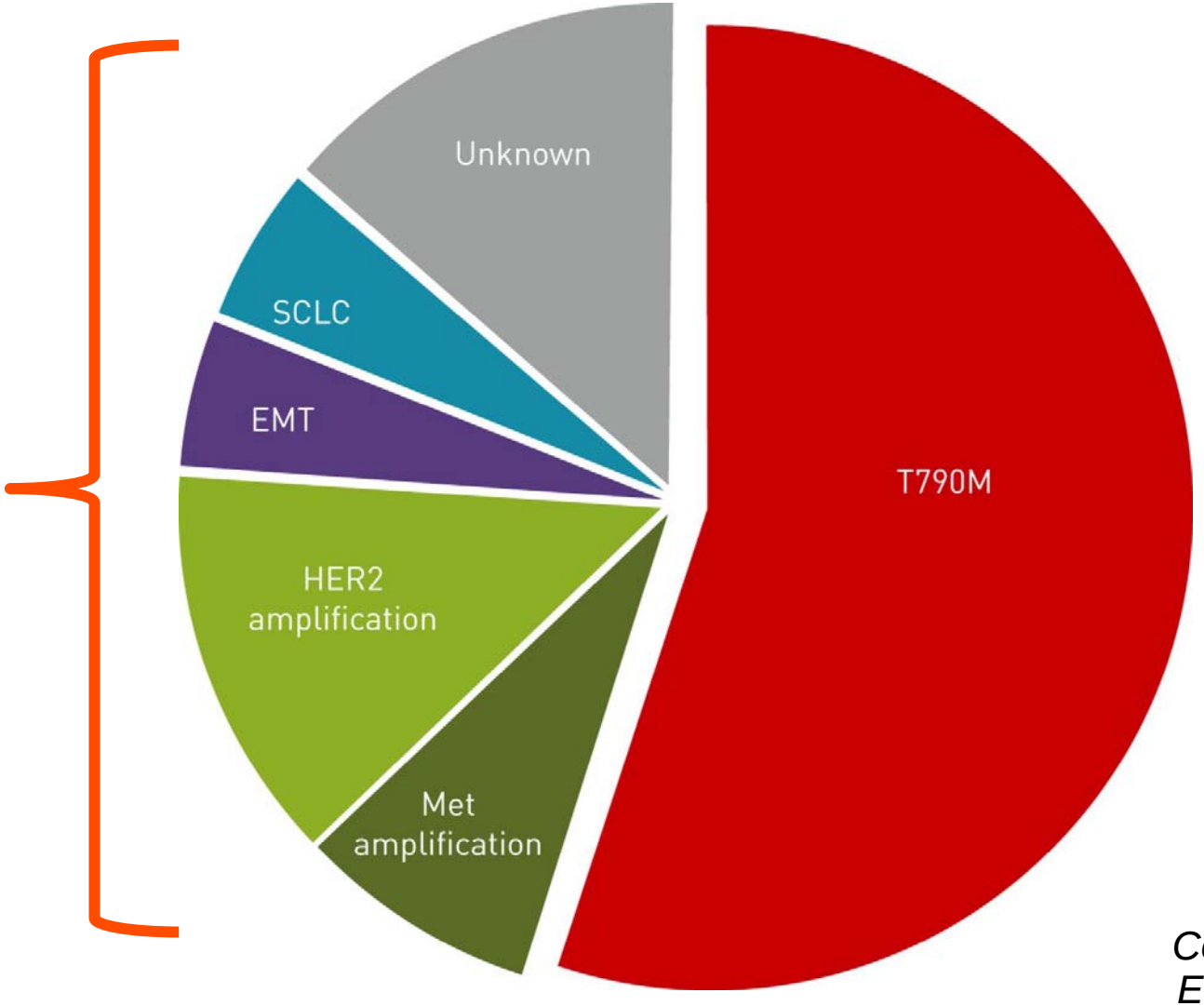
## Tumor cells can follow distinct evolutionary paths to become resistant to epidermal growth factor receptor inhibition

Aaron N Hata[1,2,14], Matthew J Niederst[1,2,14], Hannah L Archibald[1], Maria Gomez-Caraballo[1], Faria M Siddiqui[1], Hillary E Mulvey[1], Yosef E Maruvka[1,3], Fei Ji[4], Hyo-eun C Bhang[5], Viveksagar Krishnamurthy Radhakrishna[5], Giulia Siravegna[6,7], Haichuan Hu[1], Sana Raoof[1,2], Elizabeth Lockerman[1], Anuj Kalsy[1], Dana Lee[1], Celina L Keating[5], David A Ruddy[8], Leah J Damon[1], Adam S Crystal[1,13], Carlotta Costa[1,2], Zofia Piotrowska[1,2], Alberto Bardelli[6,7], Anthony J Iafrate[9], Ruslan I Sadreyev[4,9], Frank Stegmeier[5], Gad Getz[1,3,9,10], Lecia V Sequist[1,2], Anthony C Faber[11,12] & Jeffrey A Engelman[1,2]

**Although mechanisms of acquired resistance of epidermal growth factor receptor (EGFR)-mutant non-small-cell lung cancers to EGFR inhibitors have been identified, little is known about how resistant clones evolve during drug therapy. Here we observe that acquired resistance caused by the *EGFR*$^{T790M}$ gatekeeper mutation can occur either by selection of pre-existing *EGFR*$^{T790M}$-positive clones or via genetic evolution of initially *EGFR*$^{T790M}$-negative drug-tolerant cells. The path to resistance impacts the biology of the resistant clone, as those that evolved from drug-tolerant cells had a diminished apoptotic response to third-generation EGFR inhibitors that target EGFR$^{T790M}$; treatment with navitoclax, an inhibitor of the anti-apoptotic factors BCL-xL and BCL-2 restored sensitivity. We corroborated these findings using cultures derived directly from EGFR inhibitor–resistant patient tumors. These findings provide evidence that clinically relevant drug-resistant cancer cells can both pre-exist and evolve from drug-tolerant cells, and they point to therapeutic opportunities to prevent or overcome resistance in the clinic.**

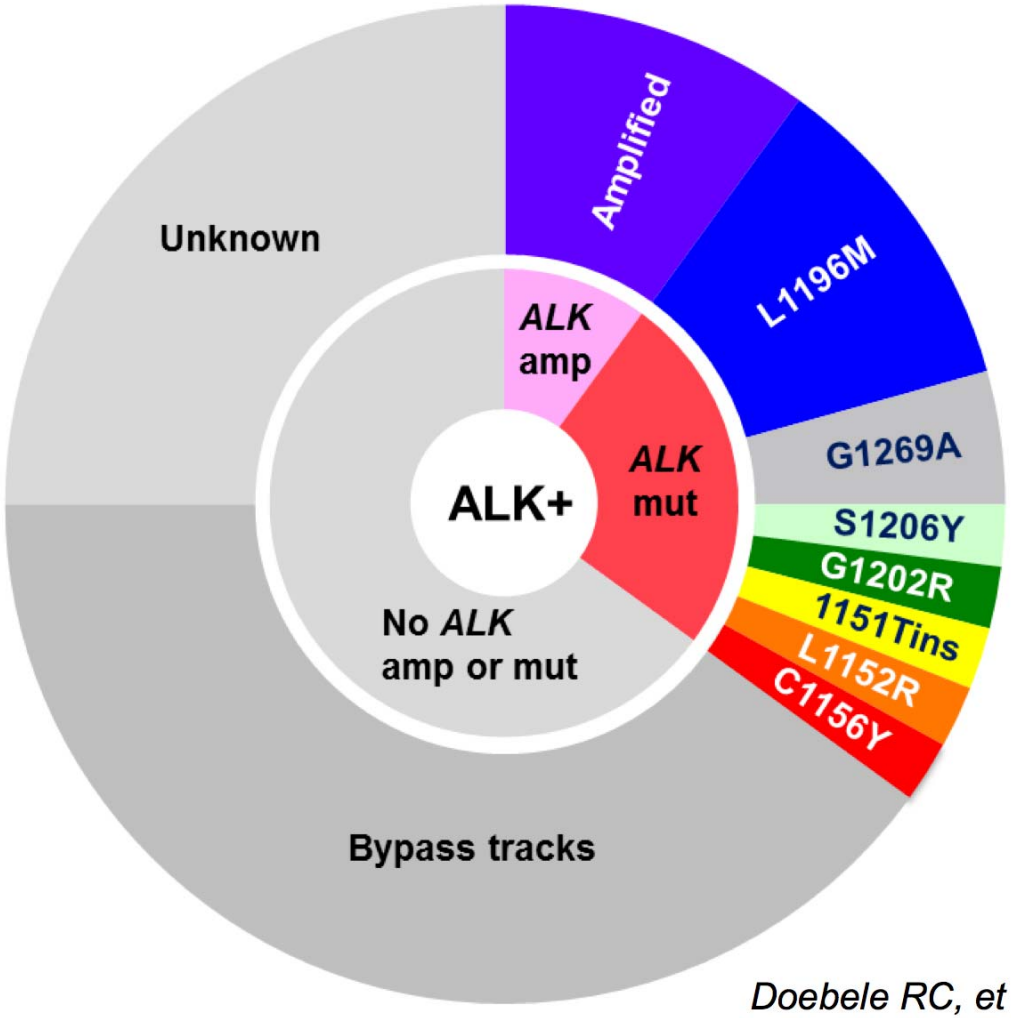
*Hata A et al, Nature Med 2016*

# Résistance acquise aux EGFR TKI (1G)




*Cortot A & Janne PA, Eur Respir Rev 2014*

# Résistance acquise au crizotinib




*Doebele RC, et al. Clin Cancer Res 2012*
*Takeda M, et al. J Thorac Oncol 2013*

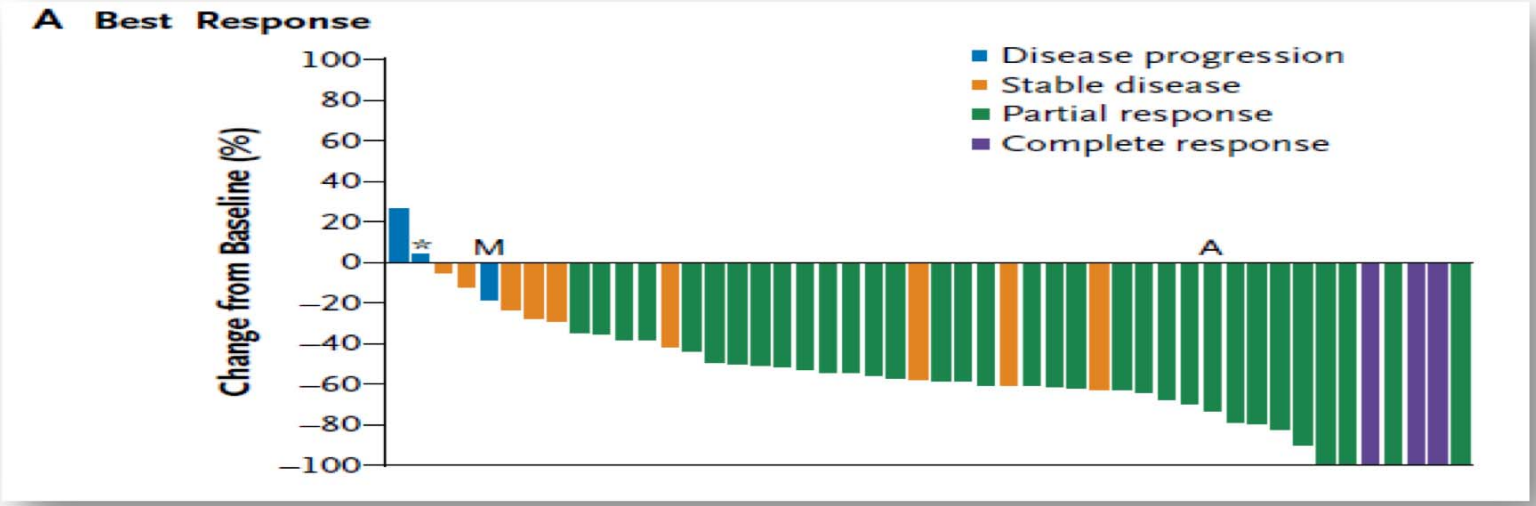
# ALK mutations: frequencies

| ALK inhibitor | Crizotinib | Ceretinib | Alectinib | PF-06463922 |
|---|---|---|---|---|
| *Resistance mutation* | | | | |
| G1123S | | Resistant [113] | Sensitive [113] | |
| 1151Tins | Resistant [79, 90] | Resistant [90] | Resistant [79] | Sensitive [87] |
| L1152P/R | Resistant [90] | Resistant [90] | Sensitive [114] | Sensitive [87] |
| C1156Y/T | Resistant [90] | Resistant [90] | Sensitive [87] | Sensitive [87] |
| I1171T/N | Resistant [90] | Sensitive [90, 115, 116] | Resistant [115, 116] | Sensitive [87] |
| F1174L/C | Resistant [90] | Resistant [90] | Sensitive [115] | Sensitive [87] |
| V1180L | Resistant [115] | Sensitive [115] | Resistant [115] | Sensitive [87] |
| L1196M | Resistant [78, 79, 83] | Sensitive [90] | Sensitive [87] | Sensitive [87] |
| G1202R | Resistant [79, 90] | Resistant [84, 90] | Resistant [79] | Sensitive [72, 87] |
| S1206Y | Resistant [79, 90] | Sensitive [90] | Sensitive [79] | Sensitive [87] |
| G1269A/S | Resistant [90] | Sensitive [90] | Sensitive [114] | Sensitive [87] |

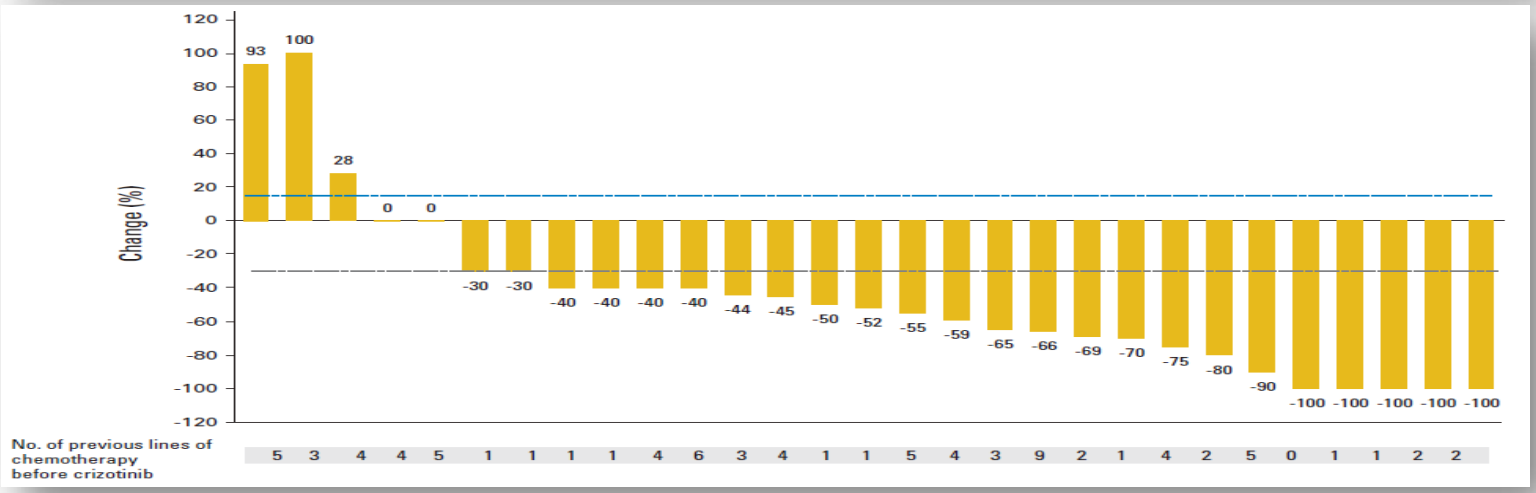
*Bayliss R et al,*
*Cell Mol Life Sci 2016*

# Lung cancer ROS1 on targeted therapy

US Cohort

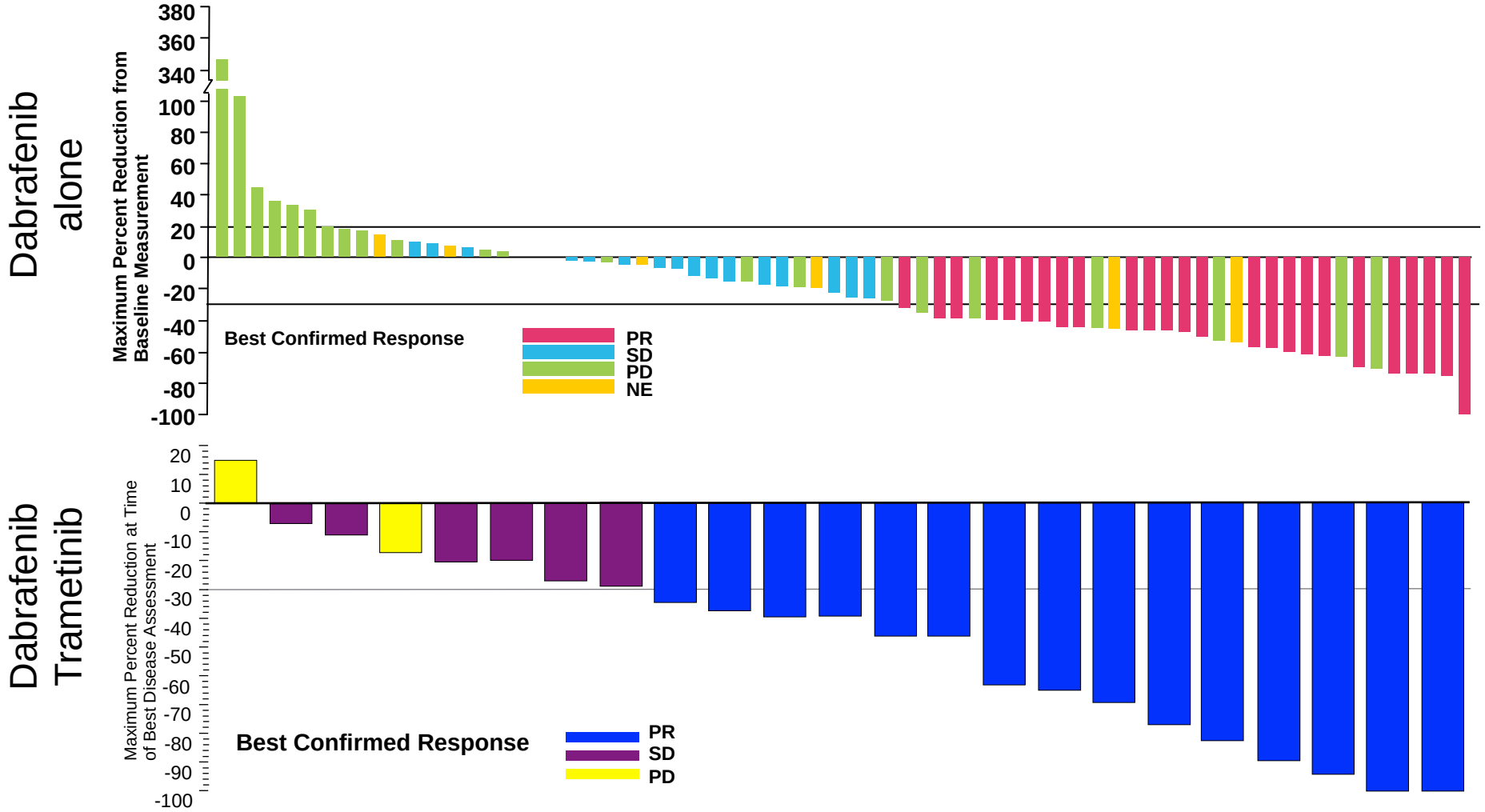



EU Cohort




*Shaw A et al, NEJM 2014; Mazieres et al, J Clin Oncol 2015*

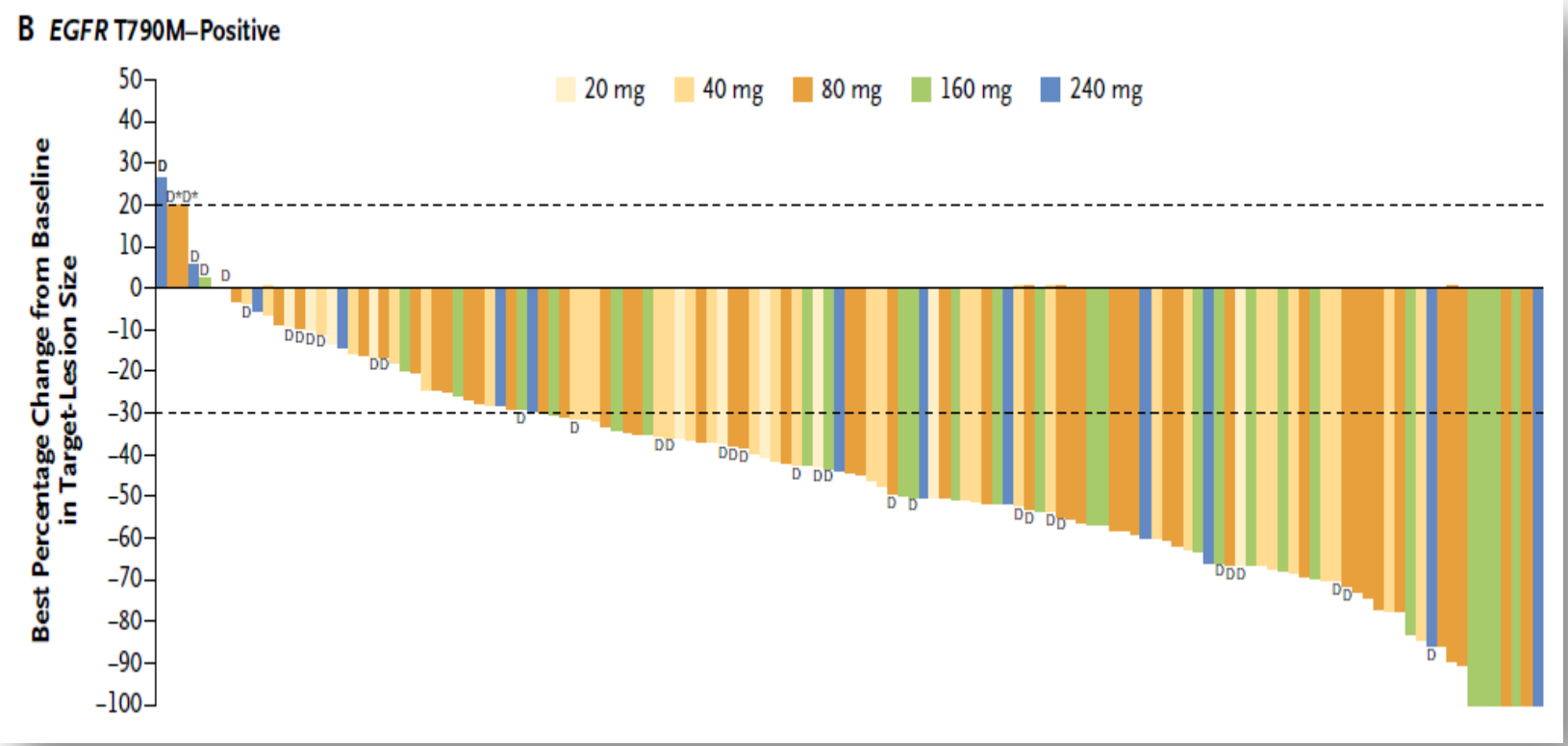
# Lung cancer BRAFm on targeted therapy




*Planchard et al, ASCO 2013; Planchard et al, ASCO 2016 & Lancet Oncol 2016 (in press)*

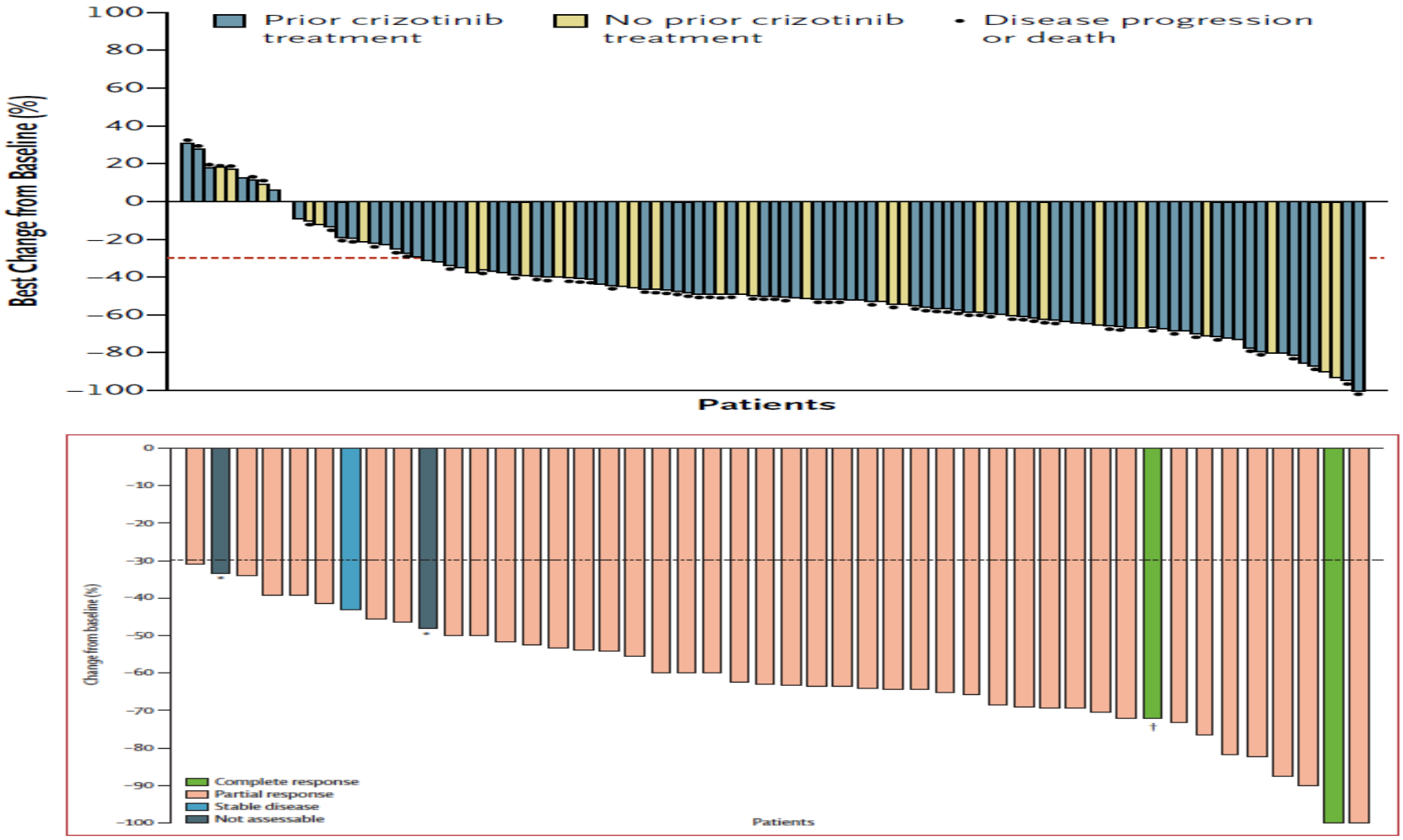
# Lung cancer EGFRm on targeted therapy

AZD9291
Osimertinib



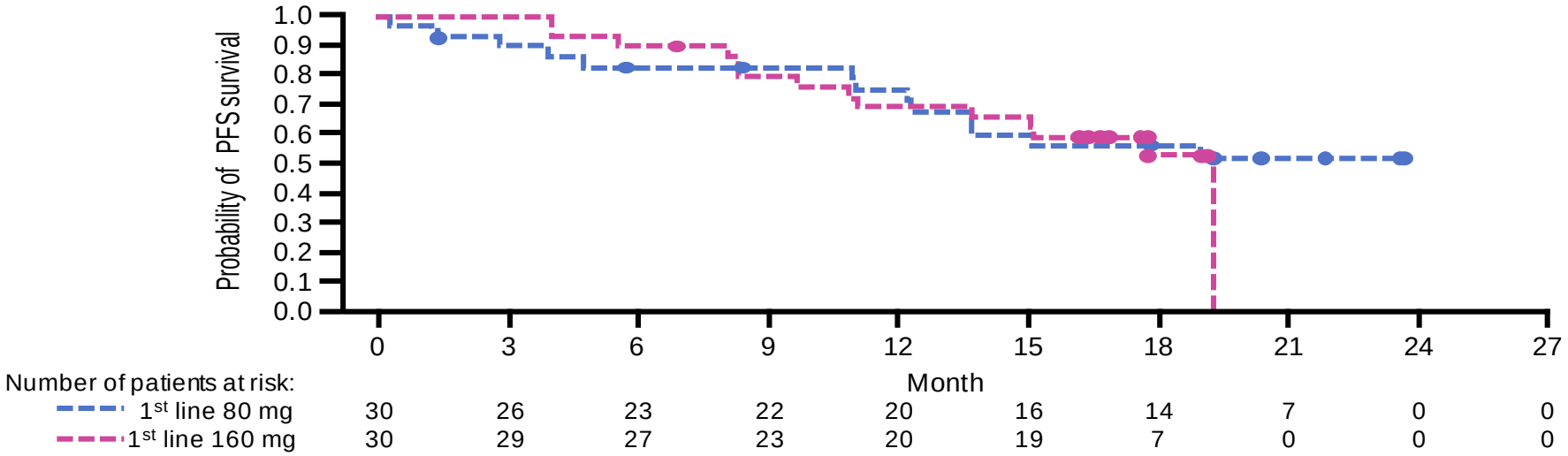

*Janne P, NEJM 2015*

# Lung cancer ALKrearr on targeted therapy




*Seto et al, Lancet Oncol 2013; Shaw A et al, NEJM 2014*

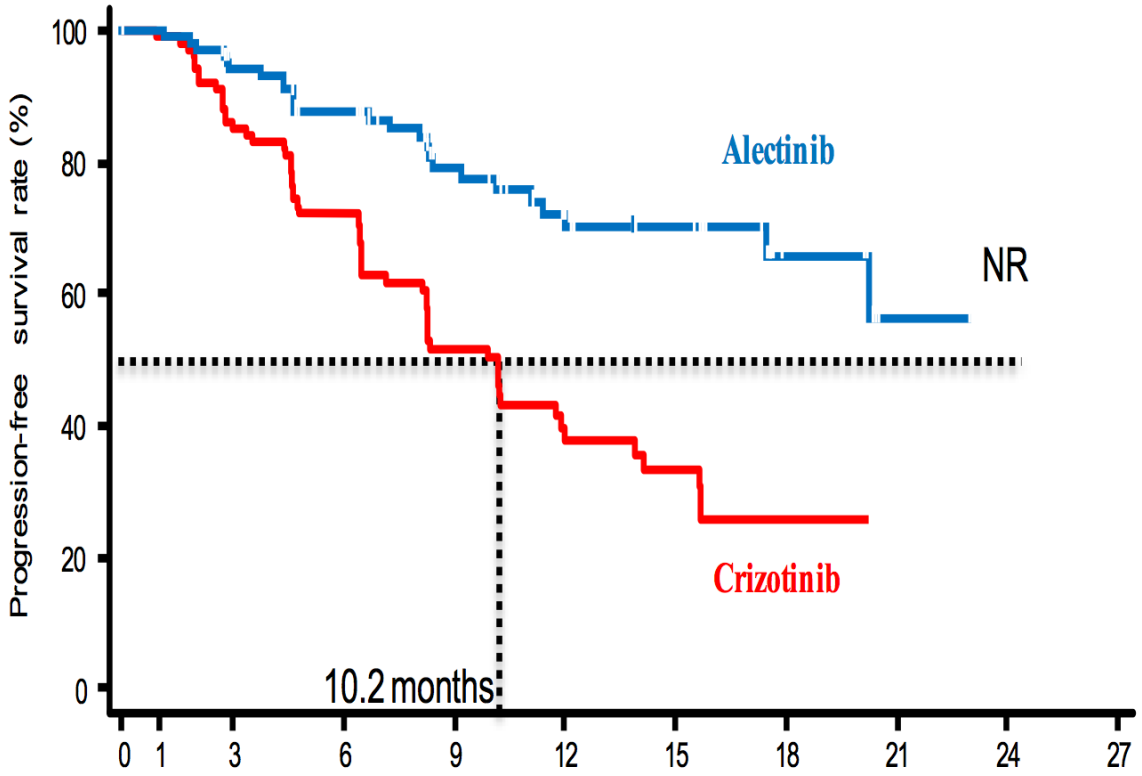
# 3G EGFR-TKI in 1st line (AURA program)




| | 80 mg n=30 | 160 mg n=30 | Total N=60 |
|---|---|---|---|
| Median PFS,* months (95% CI) | **NC (12.3, NC)** | **19.3 (11.1, 19.3)** | **19.3 (13.7, NC)** |
| Remaining alive and progression-free,† % (95% CI) | | | |
| 12 months | 75 (55, 88) | 69 (49, 83) | 72 (59, 82) |
| 18 months | 57 (36, 73) | 53 (32, 70) | 55 (41, 67) |

*Ramalingam S, et al. ELCC 2016; Abstract LBA1_PR*

# 3G ALKi Alectinib in 1st line



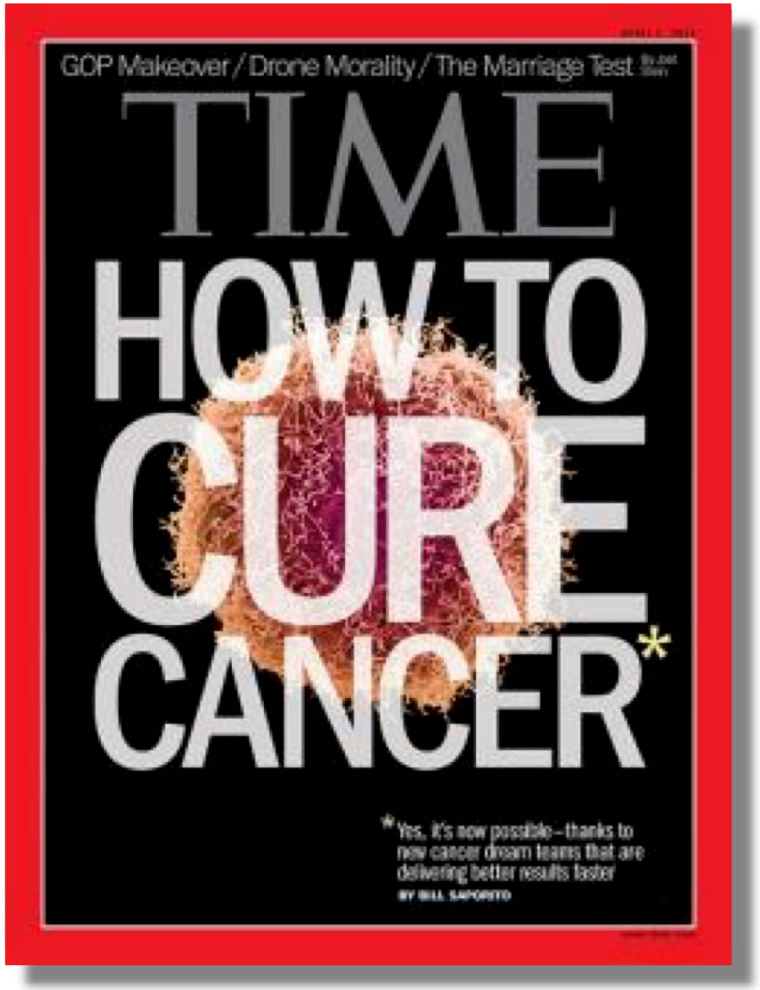

| | Alectinib (N=103) | Crizotinib (N=104) |
|---|---|---|
| Events, n (%) | 25 (24.3%) | 58 (55.8%) |
| Median, mo [95% CI] | NR [20.3 - NR] | 10.2 [8.2 - 12.0] |
| P-value | <0.0001 | |
| HR [95% CI] | **0.34** [0.17 - 0.71] | |

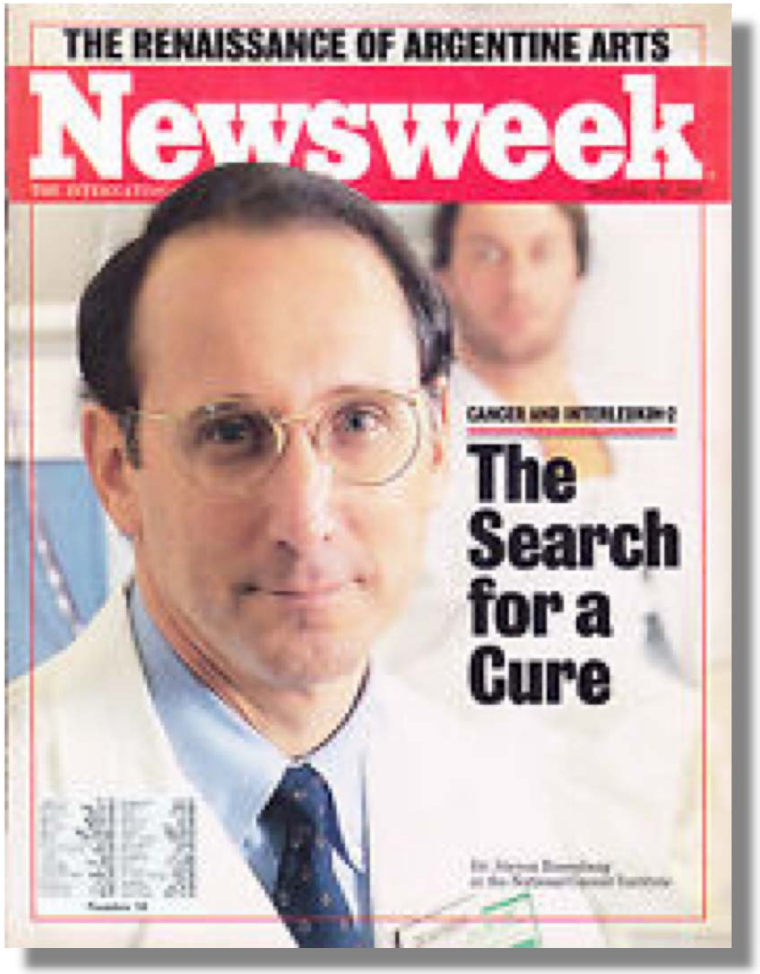
*Nokihara H et al, Abst #9008 ASCO 2016*

# En résumé … 2020

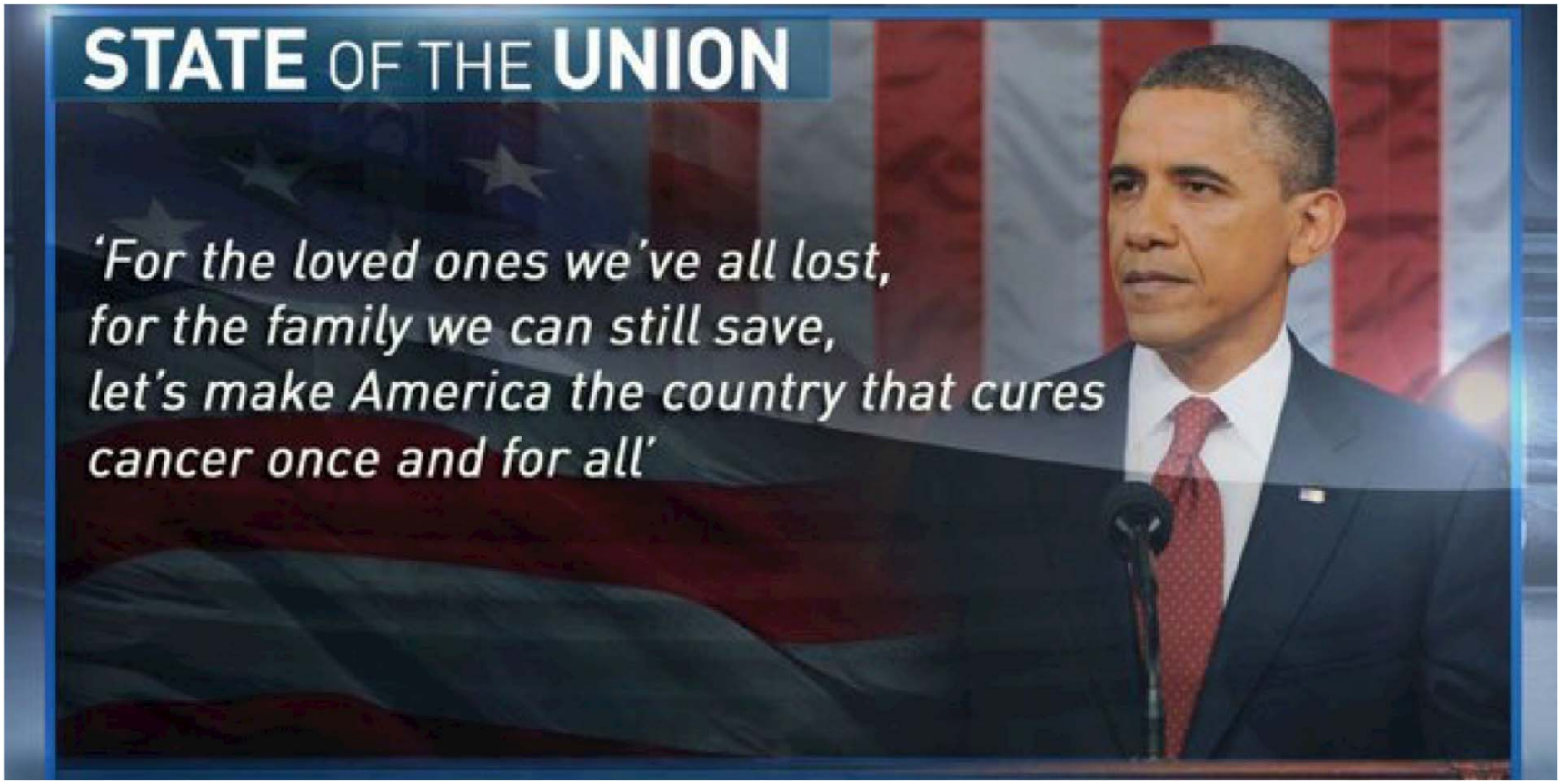
- **Poussée technologique**
- **Réorganisation (régionale)**
- **Peu de nouvelles cibles actionnables**
  - **KRAS: untargetable target?**
  - **Process décision (plus) complexe**
- **Passage en 1ère ligne TKI 3G**

# Les attentes ne sont pas là …



# US Cancer Moonshot

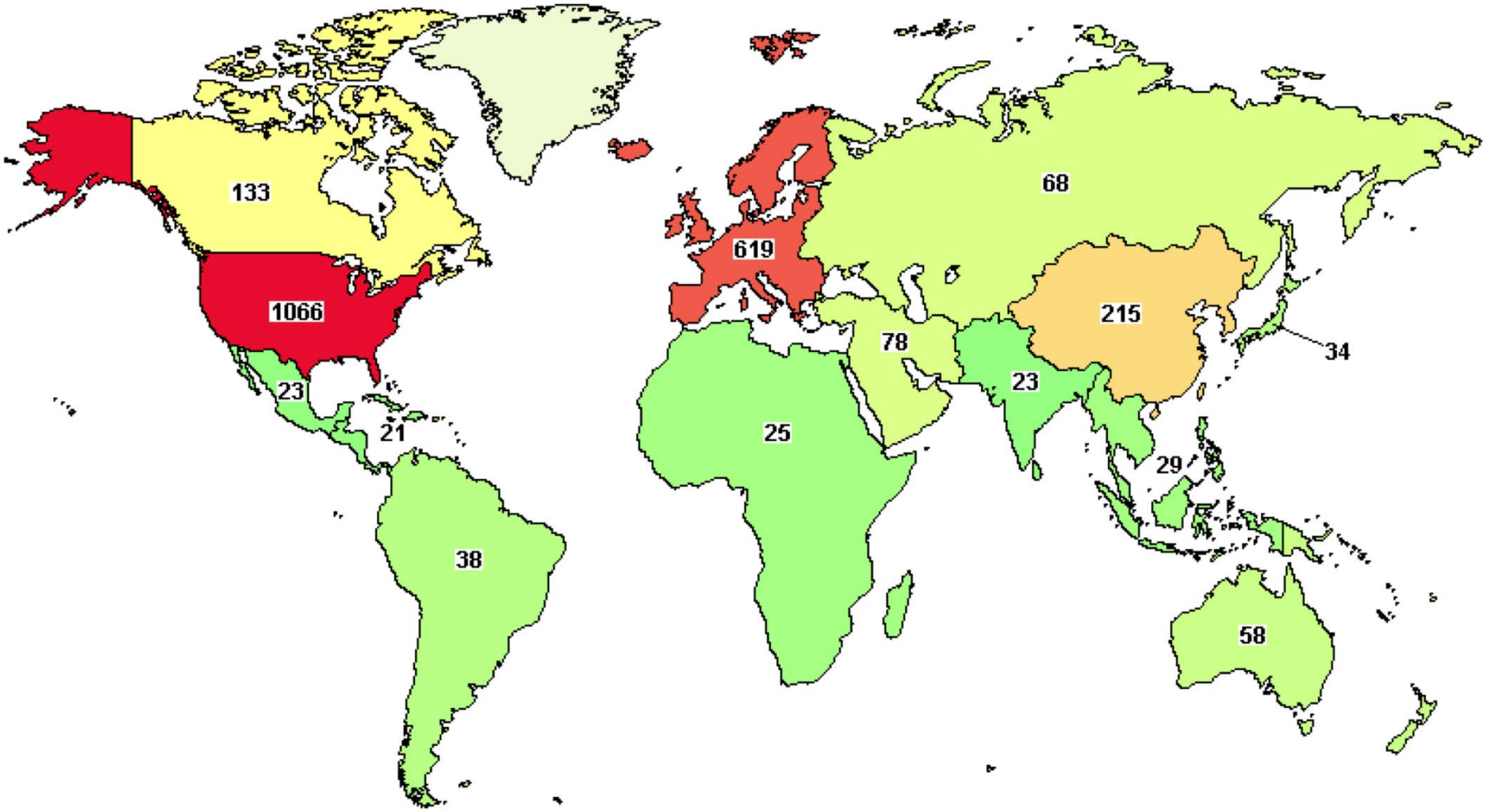



*Obama, January 2016*

# Agenda

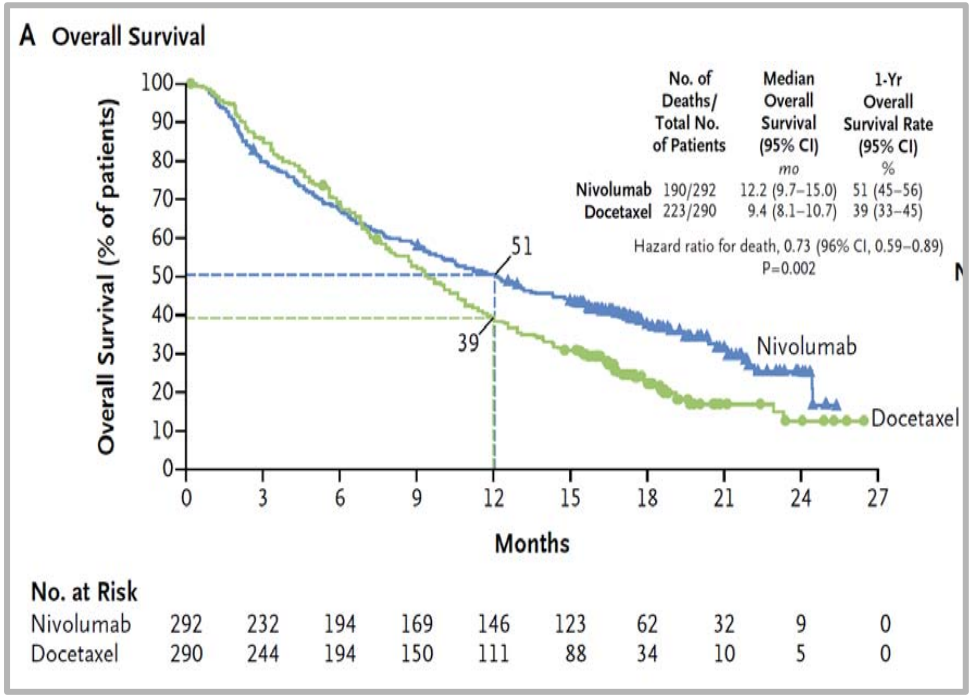
- Le whole genome pour tous ?
- **L'immunothérapie, le graal ?**
- Faire du neuf avec du vieux ?

# Consequences



# PD1 inhibitor 2L: Nivolumab (PhIII)

## Nsq-NSCLC




## Sq-NSCLC

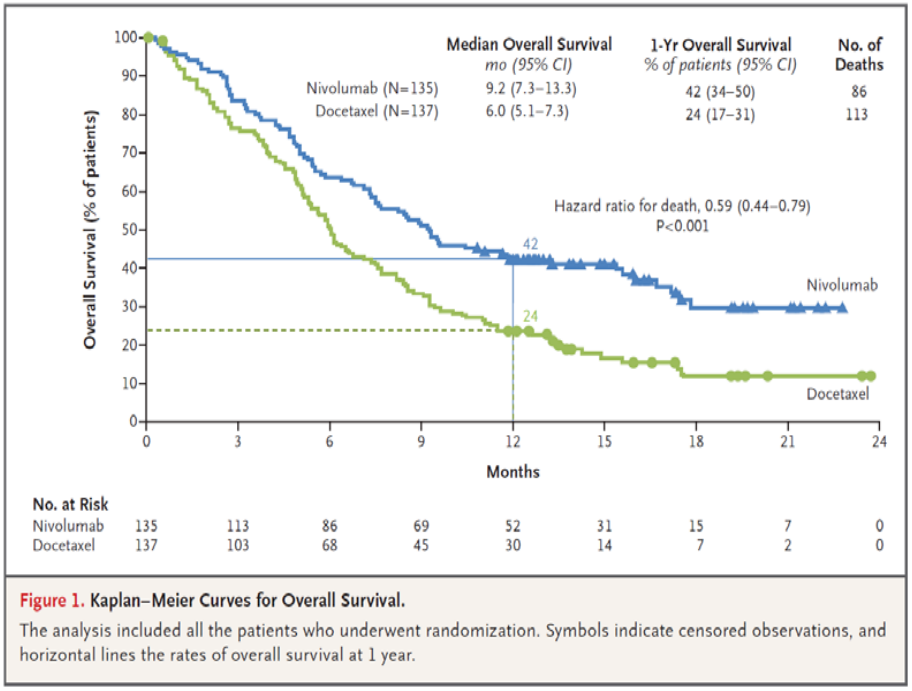
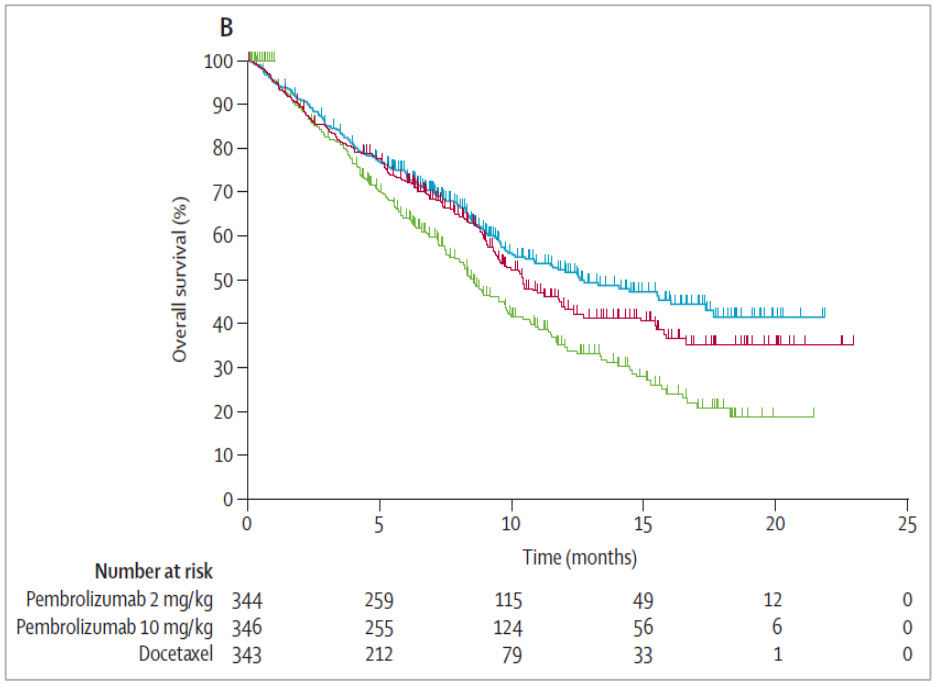



**Figure 1.** Kaplan–Meier Curves for Overall Survival.
The analysis included all the patients who underwent randomization. Symbols indicate censored observations, and horizontal lines the rates of overall survival at 1 year.

*Brahmer J et al, NEJM 2015; Borghaei H et al, NEJM 2015*

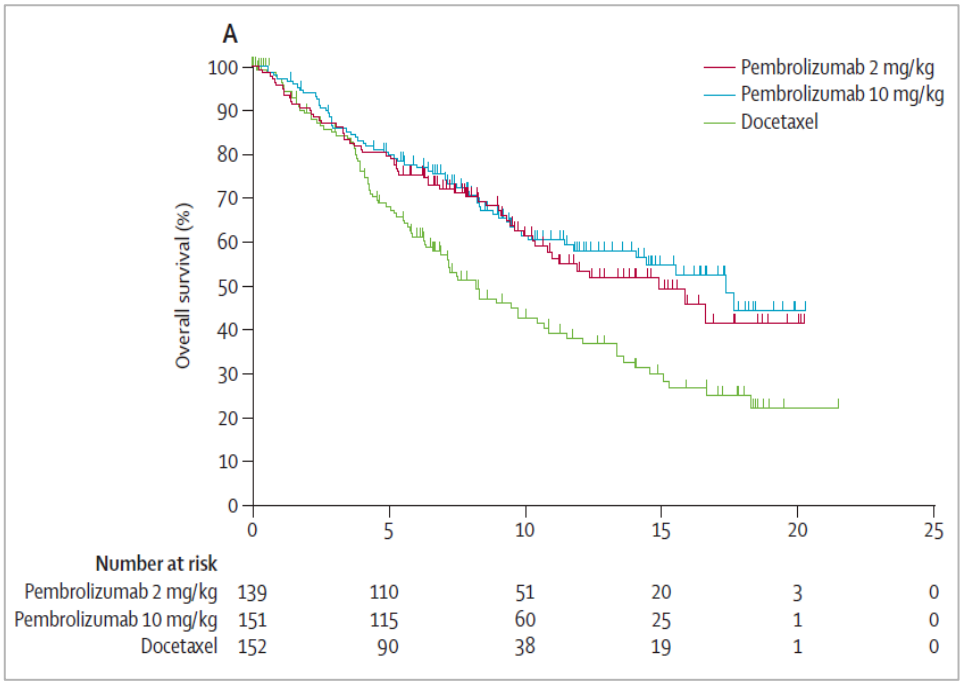
# PD1 inhibitor 2L: Pembrolizumab (PhIII)

## All NSCLC




HR for OS (doc vs 2): 0,71 (0,58-0,88)
HR for OS (doc vs 10): 0,61 (0,49-0,75)

## NSCLC w PD-L1+ >50%




HR for OS (doc vs 2): 0,54 (0,38-0,77)
HR for OS (doc vs 10): 0,50 (0,36-0,70)

*Herbst R et al., Lancet 2016*

# PD-L1 inhibitor 2L: Atezolizumab (PhIII)

Wednesday, Aug 31, 2016

## Phase III Study Showed Genentech's Cancer Immunotherapy TECENTRIQ™ (Atezolizumab) Helped People with a Specific Type of Lung Cancer Live Significantly Longer Compared to Chemotherapy

- **TECENTRIQ showed significant improvement in overall survival for people regardless of their PD-L1 status**

*To be presented at ESMO (Presidential session, Sunday 9th)*

# Intégration immunothérapie

| Drug | FDA Approval | EMEA Approval | Price (France) |
|---|---|---|---|
| **Nivolumab (Sq) 2L** | Mar 2015 | Jul 2015 | |
| **Nivolumab (Nsq) 2L** | Oct 2015 | Apr 2016 | |
| **Pembrolizumab (All PD-L1+) 2L** | Oct 2015 | Submitted | |
| **Atezolizumab (All) 2L** | 2017? | 2018? | |

# En 1ère ligne dès 2017 ?

Bristol-Myers Squibb

## Bristol-Myers Squibb Announces Top-Line Results from CheckMate -026, a Phase 3 Study of Opdivo (nivolumab) in Treatment-Naïve Patients with Advanced Non-Small Cell Lung Cancer

08/05/2016

**Opdivo *did not meet trial primary endpoint of progression-free survival in patients expressing PD-L1 = 5%***

PRINCETON, N.J.--(BUSINESS WIRE)-- Bristol-Myers Squibb Company (NYSE:BMY) announced today that CheckMate -026, a trial investigating the use of *Opdivo* (nivolumab) as monotherapy, did not meet its primary endpoint of progression-free survival in patients with previously untreated advanced non-small cell lung cancer (NSCLC) whose tumors expressed PD-L1 at = 5%. The company will complete a full evaluation of the CheckMate -026 data and work with investigators on the future presentation of the results.

*To be presented at ESMO (Presidential session)*

# En 1ère ligne dès 2017 !

MERCK

## Merck's KEYTRUDA® (pembrolizumab) Demonstrates Superior Progression-Free and Overall Survival Compared to Chemotherapy as First-Line Treatment in Patients with Advanced Non-Small Cell Lung Cancer

### KEYNOTE-024 Studied Patients Whose Tumors Expressed High Levels of PD-L1

June 16, 2016 06:45 AM Eastern Daylight Time

KENILWORTH, N.J.--(BUSINESS WIRE)--Merck (NYSE:MRK), known as MSD outside the United States and Canada, today announced that the KEYNOTE-024 trial investigating the use of KEYTRUDA® (pembrolizumab), in patients with previously untreated advanced non-small cell lung cancer (NSCLC) whose tumors expressed high levels of PD-L1 (tumor proportion score of 50 percent or more), met its primary endpoint. In this trial, KEYTRUDA was superior compared to chemotherapy for both the primary endpoint of progression-free survival (PFS), and the secondary endpoint of overall survival (OS). Based on these results, an independent Data Monitoring Committee (DMC) has recommended that the trial be stopped, and that patients receiving chemotherapy in KEYNOTE-024 be offered the opportunity to receive KEYTRUDA.

*To be presented at ESMO (Presidential session)*

# En 1ère ligne dès 2017 !

Essai combinaison

Cx +/- ICI

*To be possibly presented at ESMO (Presidential session)*

# PD-L1 expression as a predictive factor?

| Drug | Biomarker Antibody | Rx line | Definition of 'Positive' # | % N Positive % | Positive Predictive outcome | ORR % IHC pos cases | ORR % IHC neg cases |
|---|---|---|---|---|---|---|---|
| Nivolumab | Dako 28-8 | 1st | ≥5% in >100 cells | 59% | Yes | 31%* | 10% |
| Nivolumab | Dako 28-8 | ≥2nd | ≥5% | 49% | No | 15% | 14% |
| Nivolumab + Ipilimumab | Dako 28-8 | 1st | ≥5% in >100 cells | 42% | No | 19% | 14% |
| Nivolumab | Dako 28-8 | ≥2nd | ≥5% | 33%## | Yes | 24% | 14% |
| Nivolumab | 5H1 ** | ≥2nd | ≥5% Also studied TIICs | 67% | Yes | *No data For lung* | *No data For lung* |
| Pembrolizumab | Dako 22C3 | any | 'Strong' ≥50% 'Weak' 1-49% | 25% 0% | Yes Yes | 37% 17% | 9% |
| Pembrolizumab | Dako 22C3 | 1st | ≥50% ≥1% | ? | Yes | 47% 26% | ? |
| MPDL3280A | Roche Ventana SP142 | ≥2nd | ≥10% TIICs*** ≥5% TIICs ≥1% TIICs | 13% 28% 36% | Yes | 83% 46% 31% | 18% 18% 20% |
| MEDI-4736 | Roche Ventana SP263 | ≥2nd | *Data not available* | 41% | yes | 25% | 3% |

**PD-L1 IHC %**

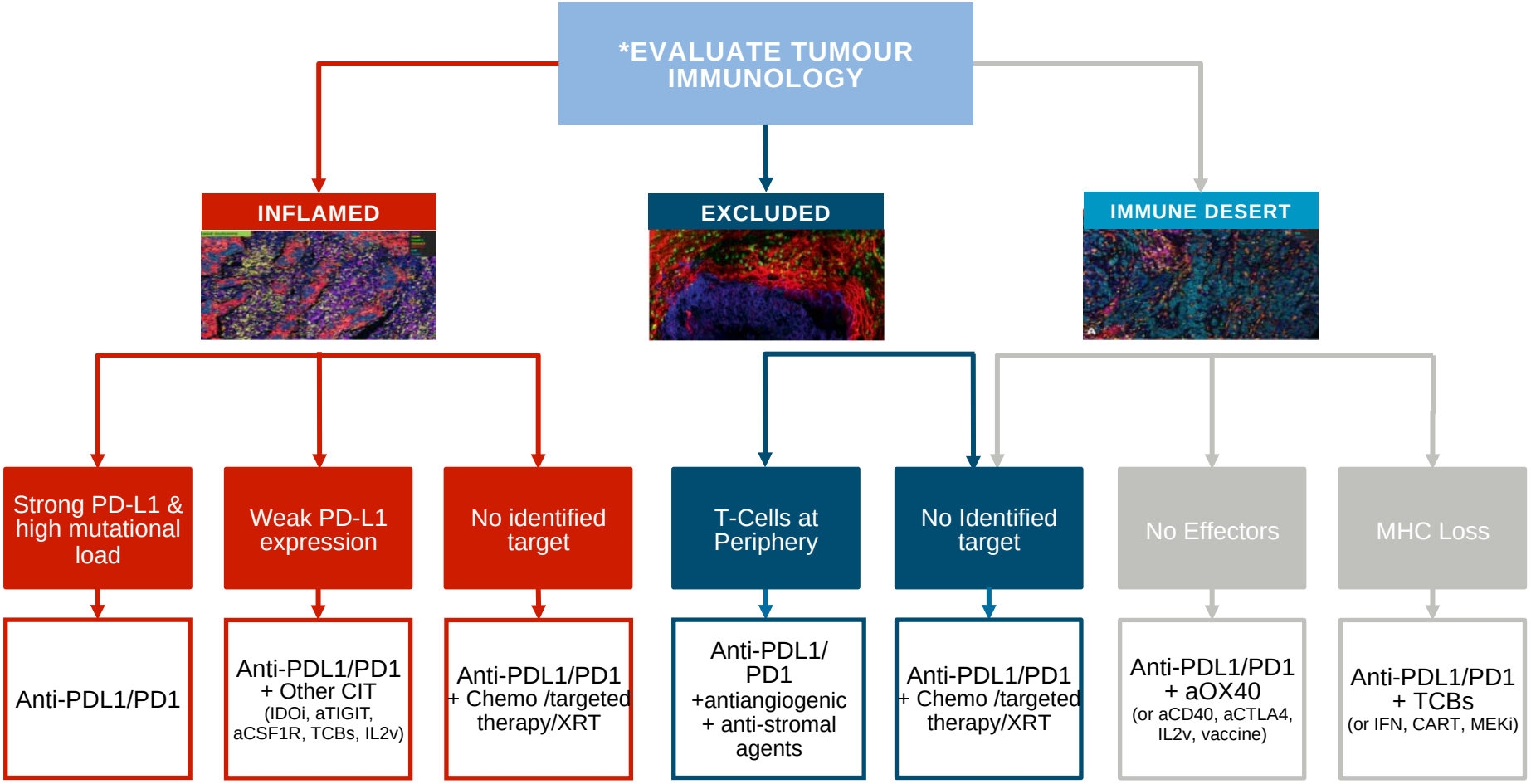
Highly + #20

Weakly + #40

Negative #40

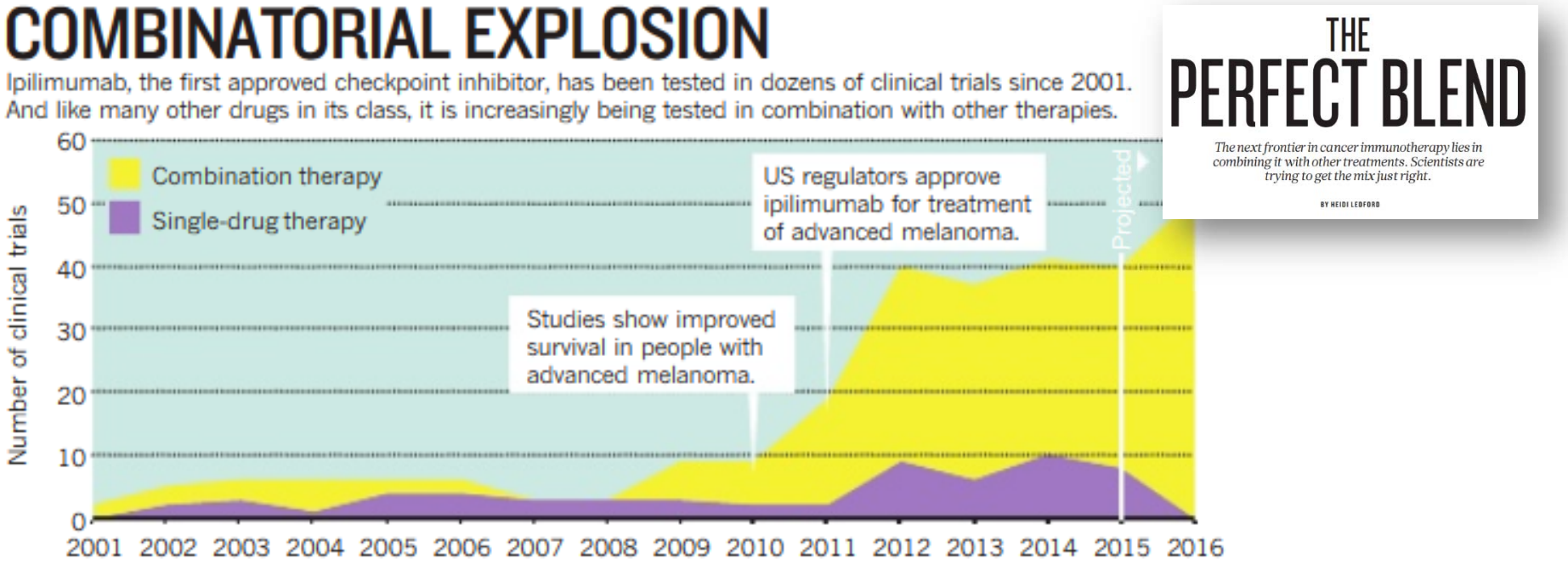
*Kerr K et al, J Thorac Oncol (in press)*

# Personnalized IO? > 2020




*Modified from Kim and Chen, Ann Oncol 2016*

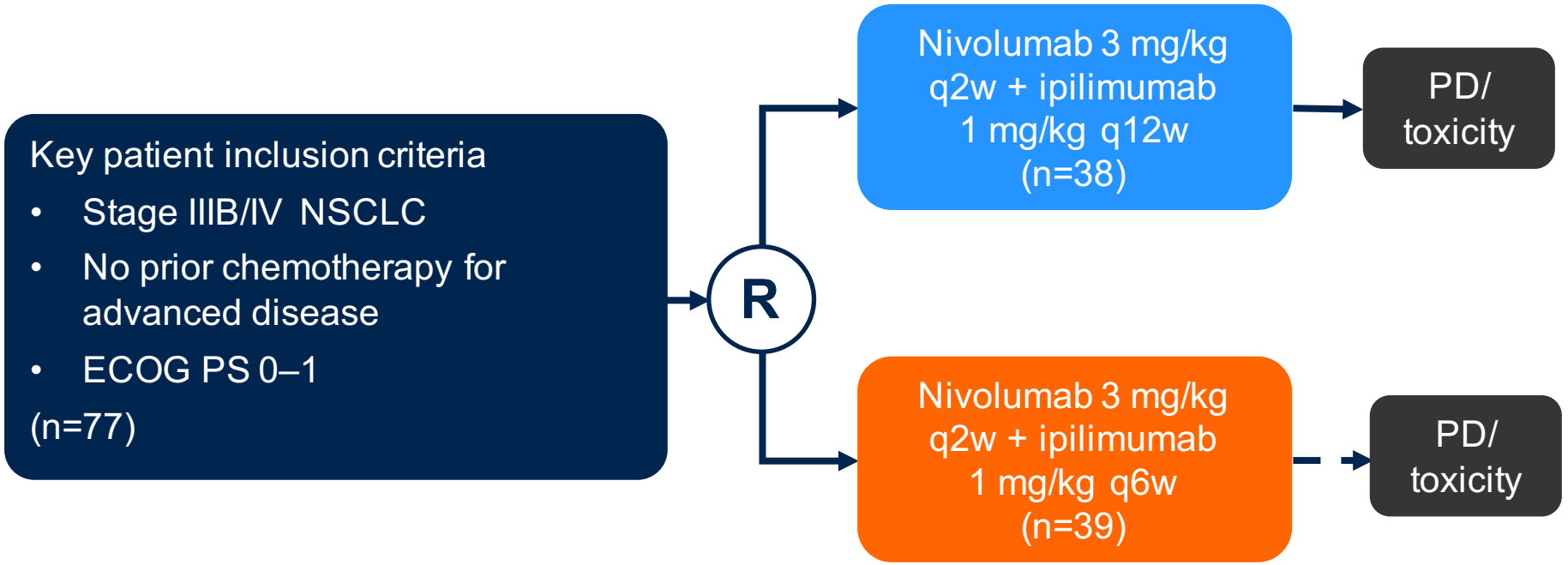
# Enjeux et Perspectives




**« There will be not enough money on this earth to test all the possible combinations »**

Ira Mellman, Vice-President, Cancer Immunology, Genentech Inc.
AACR, New Orleans April 2016

# PD-1 inhibitor 1L: Nivolumab




**Primary endpoint**

- Safety/tolerability

**Secondary endpoints**

- ORR, PFS, OS, efficacy by PD-L1 expression

*Hellman et al., ASCO 2016 (abst 3001)*

# PD-1 inhibitor 1L: Nivolumab/Ipilimumab

| | Nivo 3 q2w + Ipi 1 q12w (n=38) | Nivo 3 q2w + Ipi 1 q6w (n=39) | Nivo 3 q2w (n=52) |
|---|---|---|---|
| **Confirmed ORR, %** | **47** | **39** | **23** |
| Median DOR, months (95%CI) | NR (11.3, NR) | NR (8.4, NR) | NR (5.7, NR) |
| Median follow-up, months (95%CI) | 12.9 (0.9, 18.0) | 11.8 (1.1, 18.2) | 14.3 (0.2, 30.1) |
| mPFS, months (95%CI) | 8.1 (5.6, 13.6) | 3.9 (2.6, 13.2) | 3.6 (2.3, 6.6) |
| 1-year OS rate, % (95%CI) | NC | 69 (52, 81) | 73 (59, 83) |

Efficacy is enhanced with increasing PD-L1 expression:

≥1% tumour PD-L1 expression: **57% ORR**; 83–90% 1-year OS rate

≥50% tumour PD-L1 expression: **92% (12/13) ORR**

*Hellman et al., ASCO 2016 (abst 3001)*

# En résumé … 2020

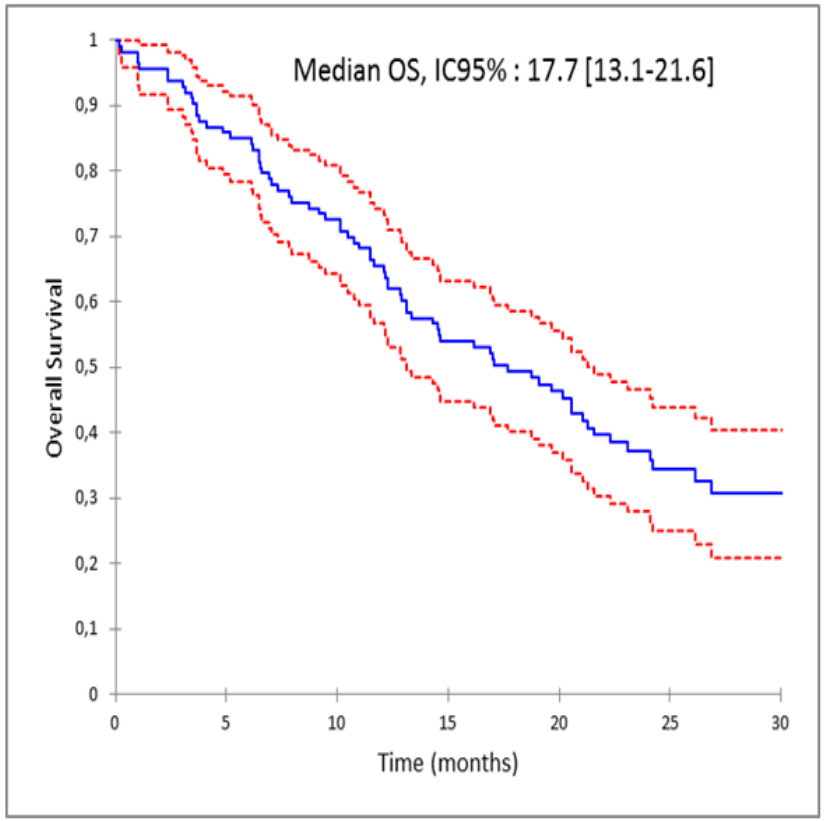
- **ICI 1ère ligne 2017-2018 (20% ?)**
- **ICI 2ème ligne 2016 (sans sélection)**
- **Combinaisons**
  - ICIs (2018-2020)
  - ICI + CT (2018-2020)

# Agenda

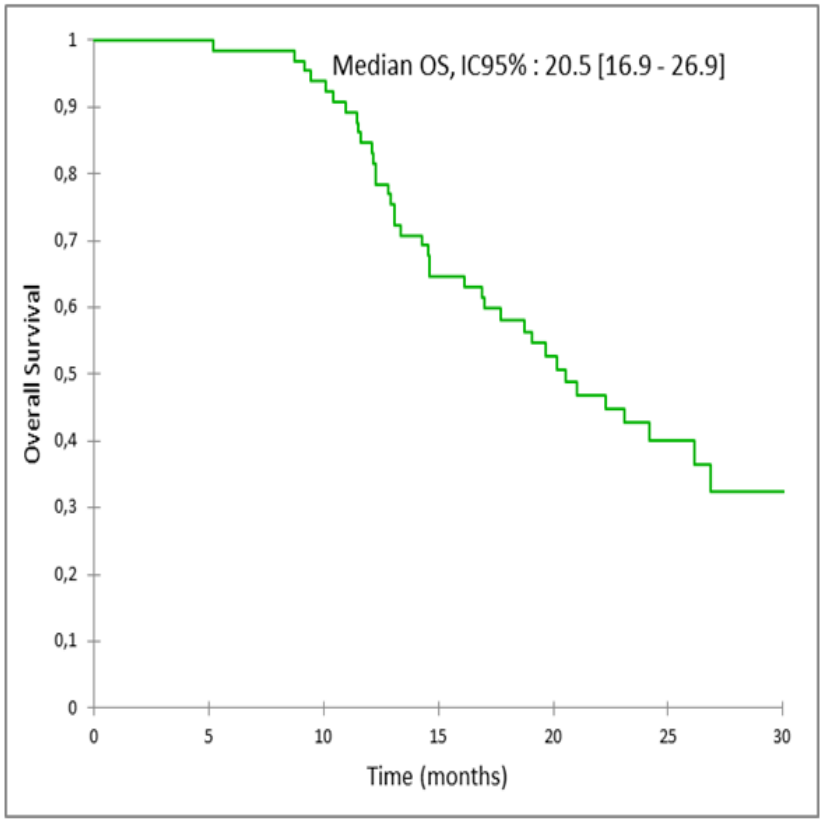
- Le whole genome pour tous ?
- L'immunothérapie, le graal ?
- **Faire du neuf avec du vieux ?**

# Angiogenics (BUCIL)

OS of all eligible patients(n=113)

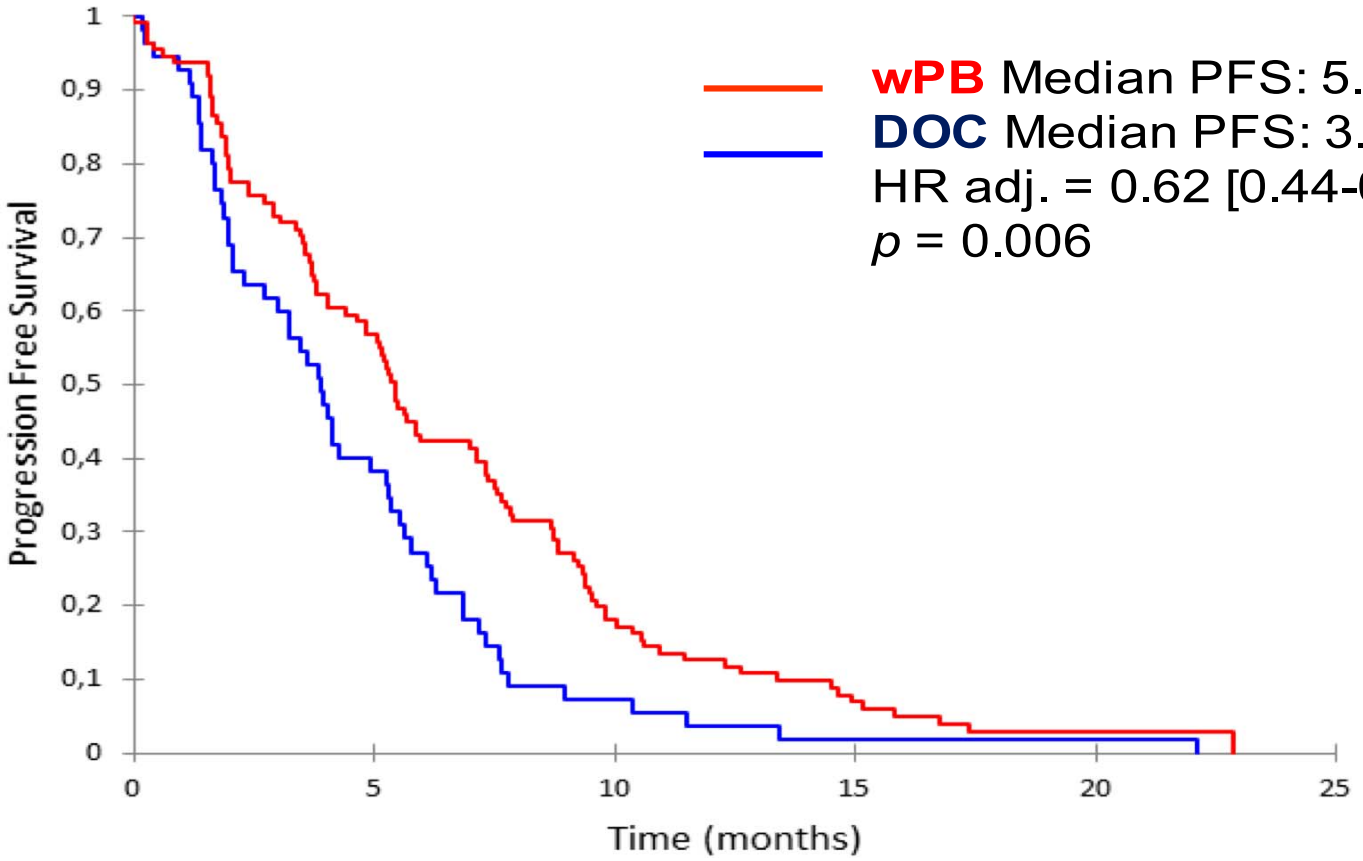



OS of patients receiving sequence 2 (n=65)




*Barlesi F et al, Abst #9077 ASCO 2016*

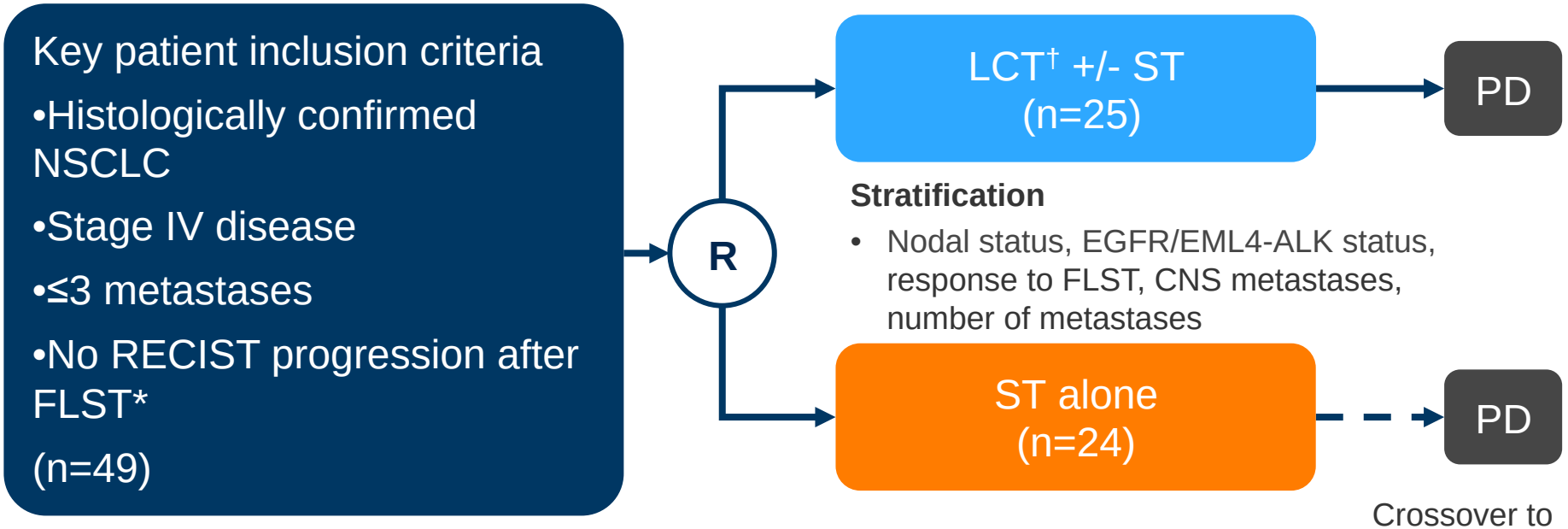
# Angiogenics (ULTIMATE)




**wPB** Median PFS: 5.4 mo, 95%CI: [4.6-7.1]
**DOC** Median PFS: 3.9 mo, 95%CI: [2.7-5.3]
HR adj. = 0.62 [0.44-0.87]
*p* = 0.006

*Cortot A et al, Abst #9077 ASCO 2016*

# Enjeux et Perspectives




**Primary endpoint(s)**

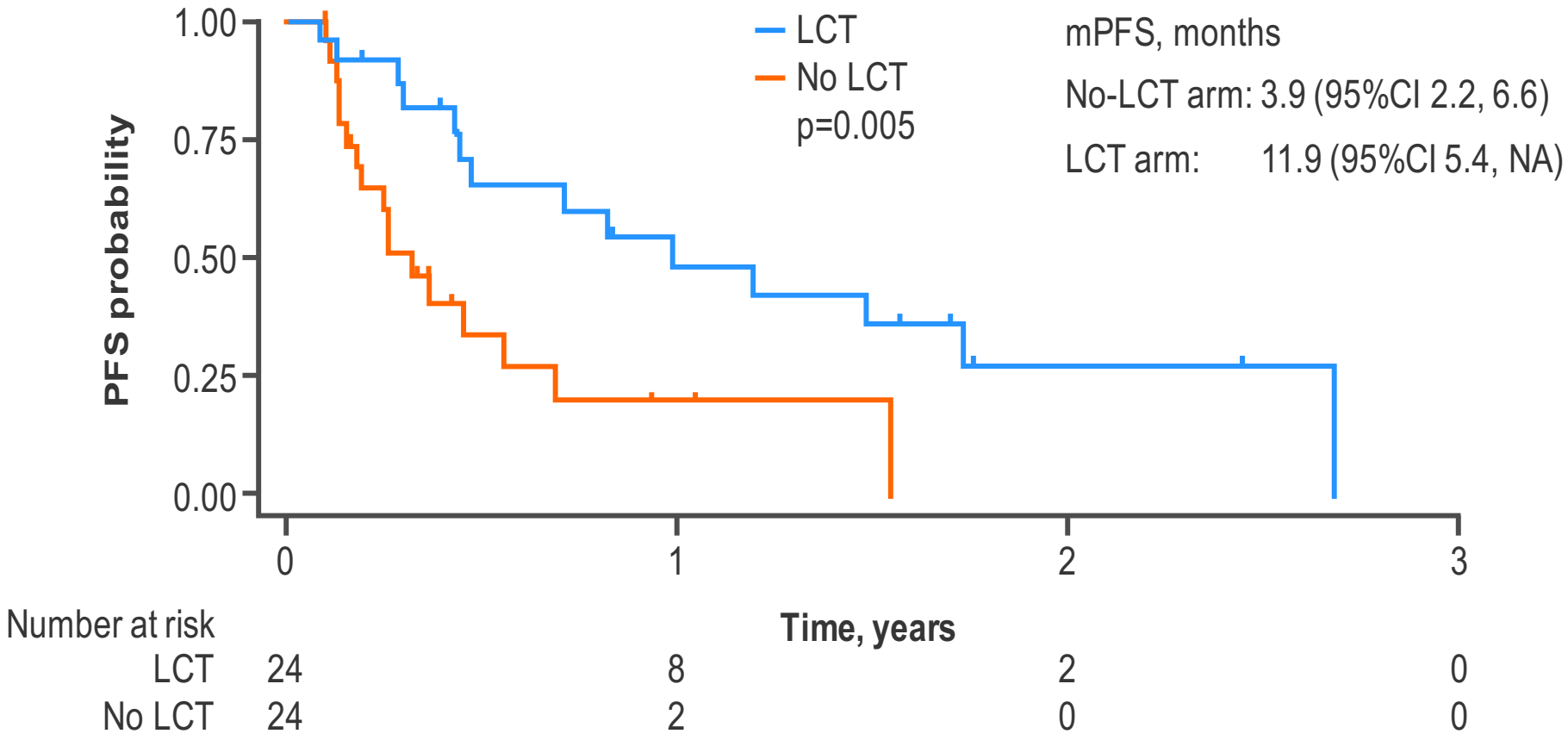
- PFS

**Secondary endpoints**

- OS, safety

*Gomez et al, ASCO 2016 (abst 9004)*

# Enjeux et Perspectives



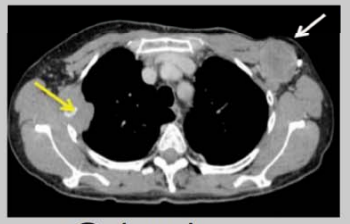

*Gomez et al, ASCO 2016 (abst 9004)*

# IFCT-UNICANCER SAFIR 02 lung trial

**Stage IV NSCLC**
**No EGFRm**
**No ALK**

Fresh biopsy @ 2 cycles max
- CGH
- NGS

cDNA
FFPE



@ 4 cycles

N=230

**R2:1**

**Bioguided Rx** (AZ pipeline: AZD2014, AZD4547, AZD5363, AZD8931, selumetinib, vandetanib)

*Until PRG*

**Standard Cx**
PMX (nSQ)
ERL (SQ)

N=180

**R2:1**

*Until PRG*

**Absence d'alt. mol. activable**

**MEDI4736 (durvalumab)**

EXIT

**Progression**

*Co-PIs*
*JC Soria / F Barlesi*

# Conclusions

- **2017-2018:**
  - **« NGS » accessible facilement**
  - **TKI 3G 1L**
  - **ROS1, BRAF, MET activables**
  - **Complexification décision (RCP bio mol)**
  - **Peu d'autres cibles (essais précoces)**
  - **ICI (mono PD-L1 high+ et combo?) 1L**

# Conclusions

- **2019-2020:**
  - **Profils prédictifs (Cx, ICI, etc) ?**
  - **Nouveaux réarrangements**
  - **Nouveaux TKI 3G ou 4G (paninhib)**
  - **Nouveaux inhibiteurs (CDK, JAK) ?**
  - **IO: ICI mono vs combo (ICI, Cx, AA)**
  - **Impact contraintes économiques ??**

# Conclusions

Ministère des Affaires sociales et de la Santé

Rechercher

Affaires sociales | Prévention en santé | Santé et environnement | Soins et maladies | Système de santé et médico-social

Accueil > Études et statistiques > Publications > Recueils, ouvrages et rapports > Recueils annuels > Panoramas de la DREES >
Les dépenses de santé en 2015 - Résultats des comptes de la santé

## Les dépenses de santé en 2015 - Résultats des comptes de la santé

publié le : 05.09.16

Comptes et analyses économiques | 2016

A+ A-

Les dépenses de santé en 2015
Résultats des comptes de la santé

PANORAMAS

En 2015, la consommation de soins et de biens médicaux (CSBM) est de 194,6 milliards d'euros. Elle progresse de 1,8 %, soit légèrement moins rapidement que le PIB en valeur (+1,9 %), contrairement à la période 2012-2014 où sa croissance était supérieure à celle du PIB. La France consacre, au total, 11 % de son PIB à la santé, tout comme la Suède, l'Allemagne et les Pays-Bas.

La Sécurité sociale finance plus des trois quarts de la CSBM et les organismes complémentaires 13,3 %. La part restant à la charge des ménages recule pour la quatrième année consécutive et atteint 8,4 % en 2015. Les ménages consacrent ainsi un peu moins de 250 euros par habitant à leur consommation de santé, soit moins que la plupart de leurs voisins européens.

Les dépenses de santé en 2015 – édition 2016 présentent également un éclairage sur les dépenses de prévention sanitaire, qui représenteraient plus de 4,8 % de la CSBM, en 2014.

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Avant-propos
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Dans la même rubrique
La complémentaire santé : acteurs, bénéficiaires, garanties - édition 2016
La protection sociale en France et en Europe en 2014 - Résultats des comptes de la protection sociale - Édition 2016
Les établissements de santé - Édition 2016
Les retraités et les retraites - édition 2016

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CENTRE D'ESSAIS PRÉCOCES EN CANCÉROLOGIE DE MARSEILLE

CLIP 2