

III JORNADA TRASLACIONAL DE ONCOLOGÍA DE PRECISIÓN:

A TRAVÉS DE LAS VÍAS DE SEÑALIZACIÓN
SEVILLA, 12 Y 13 DE FEBRERO DE 2026

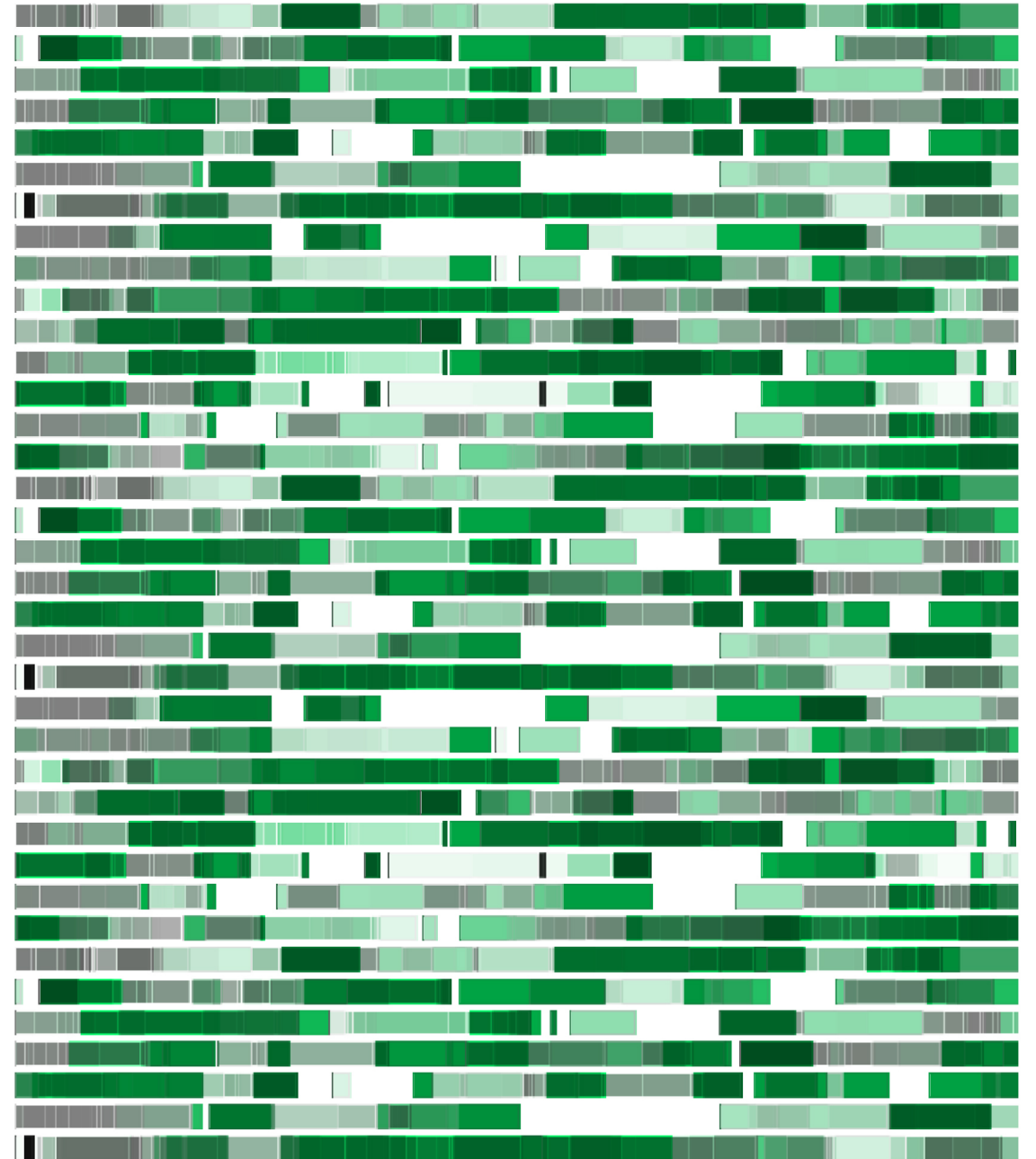
NUEVAS ESTRATEGIAS DE INMUNOTERAPIA EN EL CÁNCER DE PULMÓN

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Organizador por:

HENDERE HEALTHCARE





DISCLOSURES

- ❖ Honoraria: Takeda, Roche, Sanofi, AstraZeneca, BMS, J&J, Regeneron, Pfizer, Bione, Amgen.
- ❖ Consulting or advisory role: Elipse, Sanofi, Takeda, BMS, Astrazeneca, Roche, Beone, J&J.
- ❖ Research funding: AstraZeneca, Gilead
- ❖ Stock Ownership: None



BIOLOGICAL FRAMEWORK FOR CORRELATES OF ICB RESPONSE

Tumor Intrinsic Predictors

Mutation burden/neoantigen load

- Clonality/heterogeneity
- Indel load
- Mutation signatures (smoking, APOBEC)

Genomic loss of neoantigens

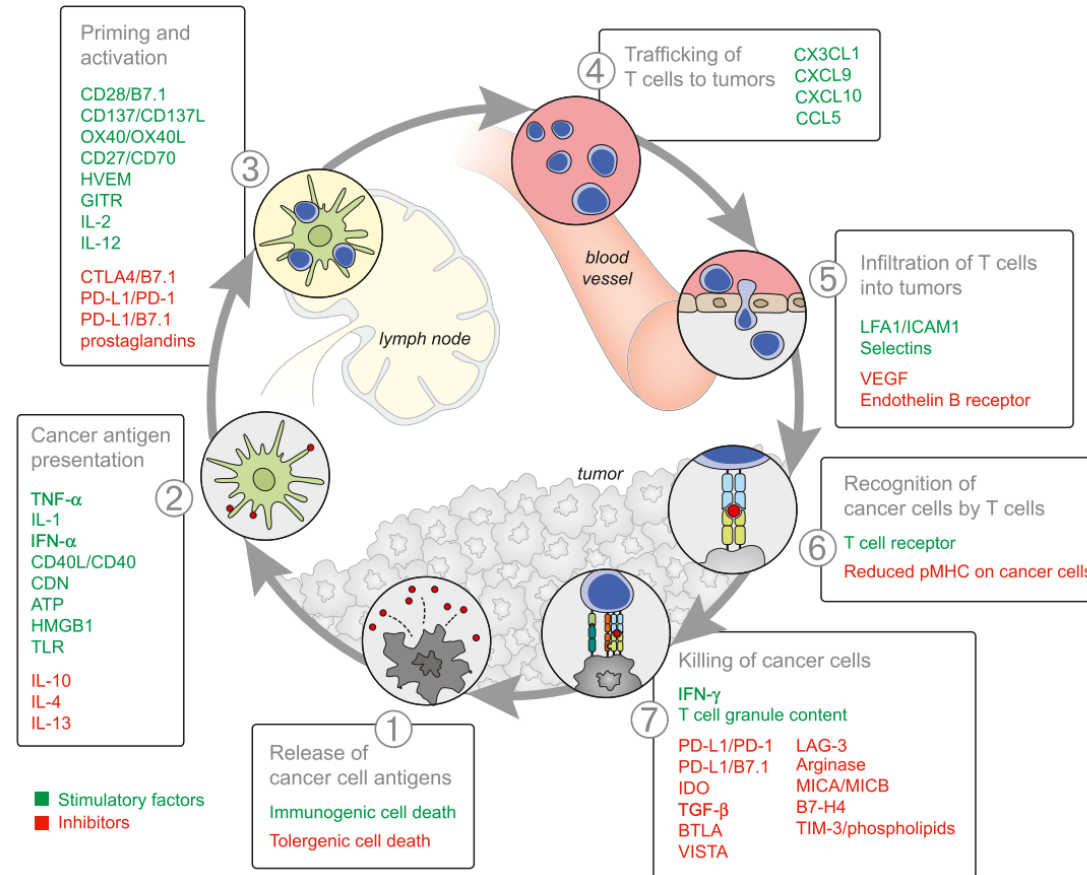
Loss of antigen presentation

- B2M loss
- HLA loss/phenotypes

Single gene associations/

Oncogenic immune exclusion

- Oncogenic drivers (*EGFR*, *ALK*)
- *STK11/KEAP1*
- Cell cycle
- *JAK1/2* mutations
- Impaired STING activation



Tumor Extrinsic Predictors

T cell activation

- IFN-gamma/T cell inflamed signatures
- PD-L1 expression

T cell infiltrate/inflamed tumor

TCR diversity

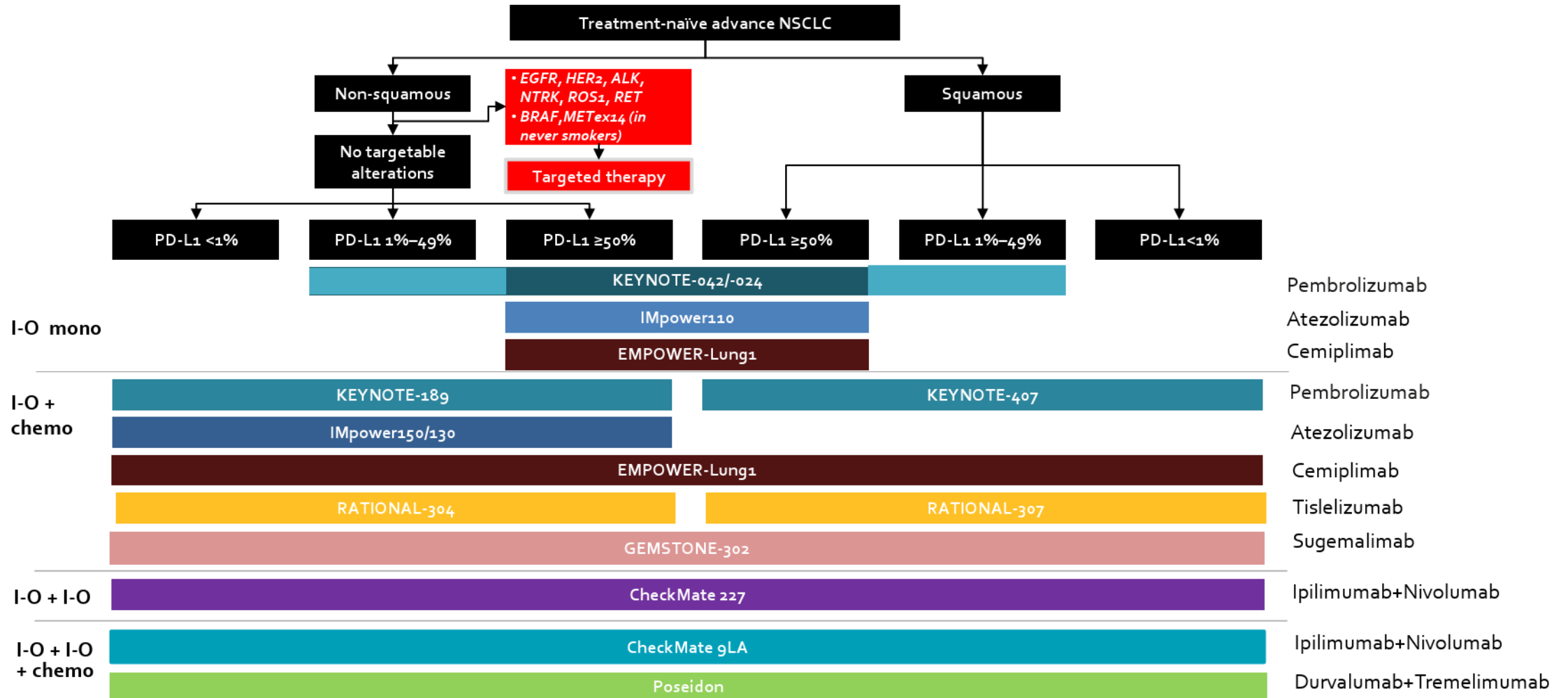
Immune excluded/cold tumors

Immune suppressive populations

- Suppressive myeloid cells
- Fibroblasts/TGF-beta

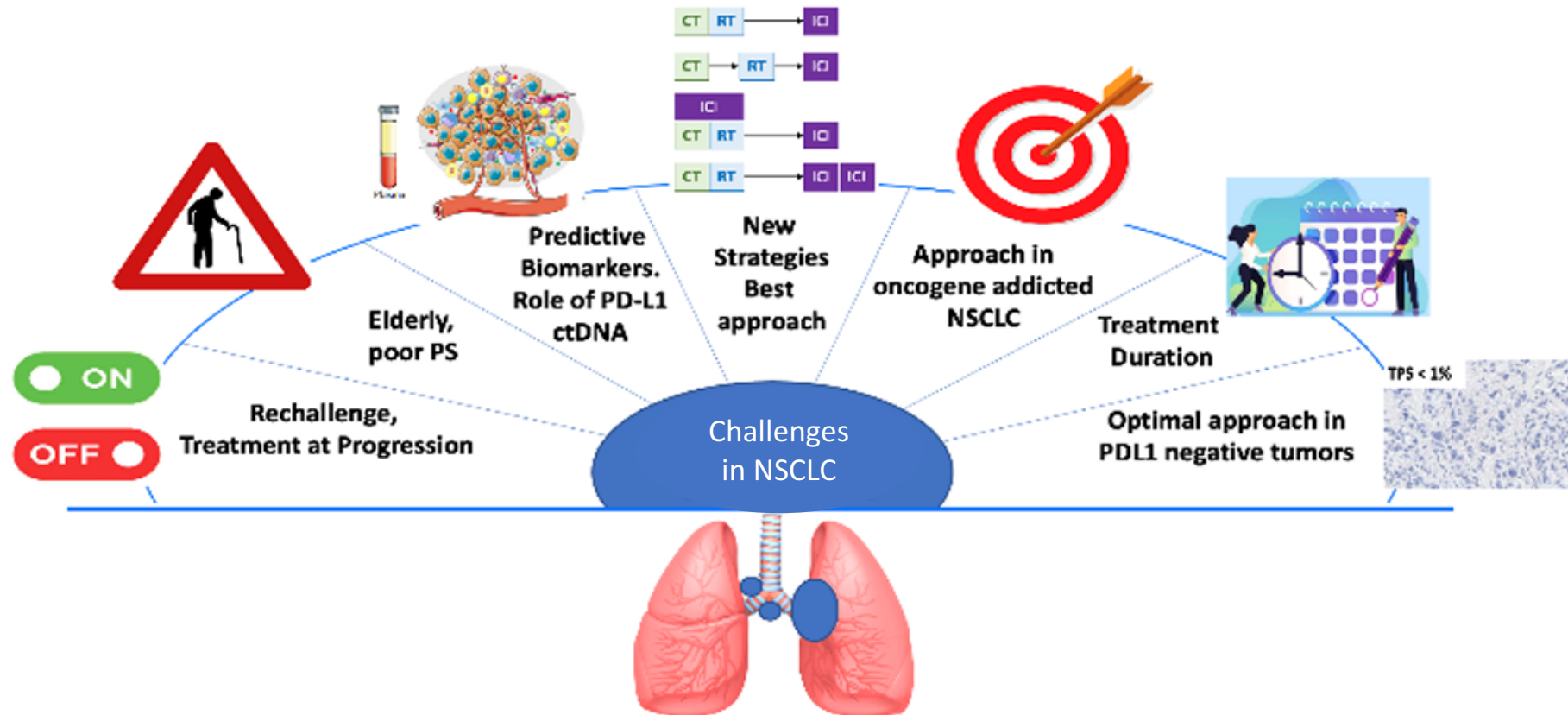


CURRENT TREATMENT ALGORITHM IN ADVANCED NSCLC





CHALLENGES IN THE ICB SETTING FOR NSCLC





DECISION-MAKING FACTORS IN CLINICAL PRACTICE



Disease

- ❖ PD-L1 expression
- ❖ Histology
- ❖ Metastatic sites (brain)
- ❖ Tumor kinetic
- ❖ Genomic (addictions, *KRAS*, *TP53*, *STK11*, *KEAP1*, *SMARCA4* ...)



Patient

- ❖ PS
- ❖ Sex, age
- ❖ Comorbidities
- ❖ CI immunotherapy
- ❖ Smoking habits
- ❖ Neutro./lympho. Ratio
- ❖ CRP, LDH

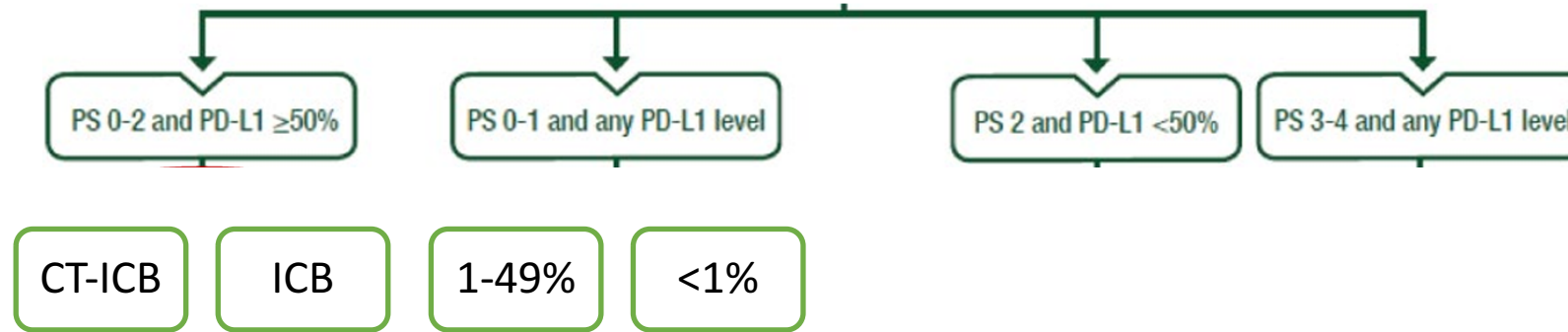


Co-medications

- ❖ Corticosteroids
- ❖ Antibiotics
- ❖ PPI



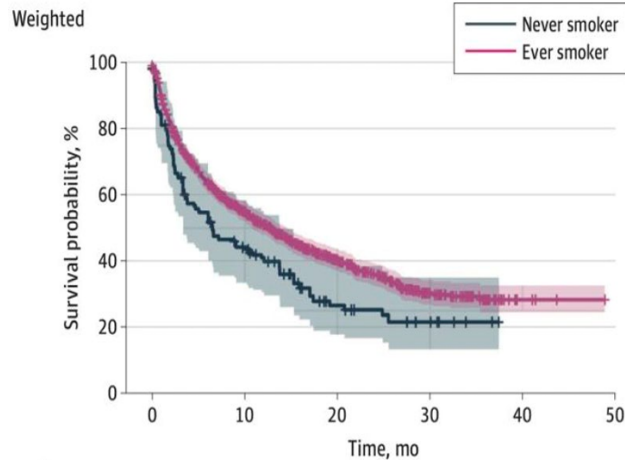
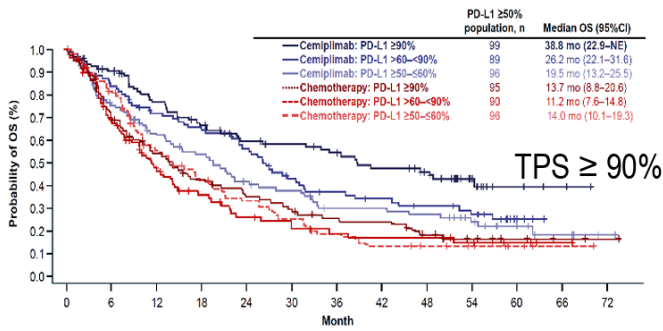
PRECISION IMMUNE-ONCOLOGY FOR THE TREATMENT OF MNSCLC



PRECISION IMMUNE-ONCOLOGY FOR THE TREATMENT OF MNSCLC



EMPOWER-LUNG1¹



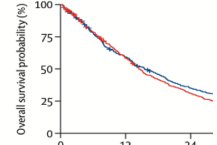
CM9LA¹ (6-y OS)

Nivo-ipi + PBC (two cycles)

PD-L1 TPS <1%



mOS 15.8 vs 11.0 months
HR 0.74 (0.63-0.87)



Number at risk (censored)	Dual CTLA-4 and PD-L1 or PD-1 blockade	Single PD-L1 or PD-1 blockade
447	260	152
(0)	(7)	(10)
512	292	155
(0)	(11)	(12)

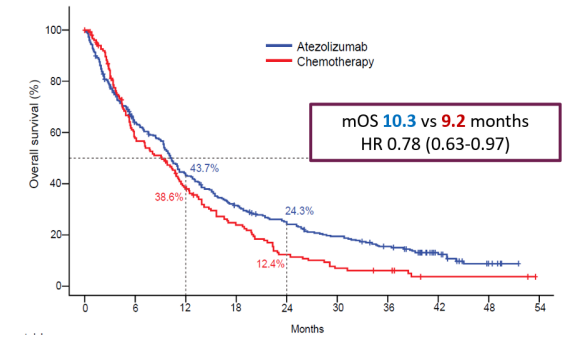
Reconstructed events/patients	Median overall survival, months (95% CI)	1-year overall survival, rate (95% CI)	2-year overall survival, rate (95% CI)	3-year overall survival, rate (95% CI)	
Dual CTLA-4 and PD-L1 or PD-1 blockade	65/81	13.9 (9.8-20.8)	55.6% (45.7-67.5)	30.9% (22.3-42.8)	28.4% (20.1-40.1)
Single PD-L1 or PD-1 blockade	102/120	7.8 (6.4-12.9)	40.8% (32.9-50.7)	22.7% (16.1-32.0)	13.4% (8.1-22.2)

HR 0.67; 95% CI 0.49-0.91; p=0.01

Number at risk (censored)	Dual CTLA-4 and PD-L1 or PD-1 blockade	Single PD-L1 or PD-1 blockade
81	45	25
(0)	(0)	(8)
120	49	23
(0)	(0)	(10)
	7	4
	(2)	(12)
	2	0
	(16)	(18)

Stratified patients	Median overall survival, months (95% CI)	3-year overall survival, rate (95% CI)	5-year overall survival, rate (95% CI)
13	16.5 (15.0-18.9)	30.8% (27.8-34.2)	21.5% (18.8-24.6)
056	18.1 (16.6-19.8)	30.9% (28.2-33.8)	19.3% (17.0-21.9)

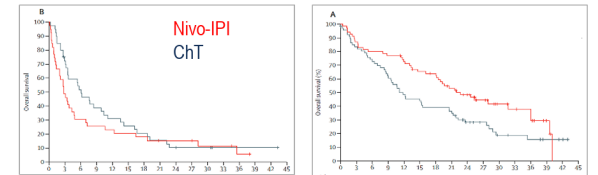
Stratified patients	Median overall survival, months (95% CI)	3-year overall survival, rate (95% CI)	5-year overall survival, rate (95% CI)
239	19.9 (19)	30.8% (23)	21.5% (17.8)
056	313 (25)	230 (31)	160 (66)



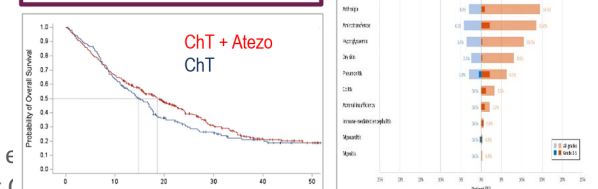
Benefit regardless of PD-L1 level
PS 0-1 > benefit (HR 0.64) vs PS 2/3 (HR 0.86-0.74)

≥70 & PS PS2
mOS 2.9 vs 6.1 m (HR 1.31)

≥70 & PS 0-1
mOS 22.6 vs 11.8 m (HR 0.64)

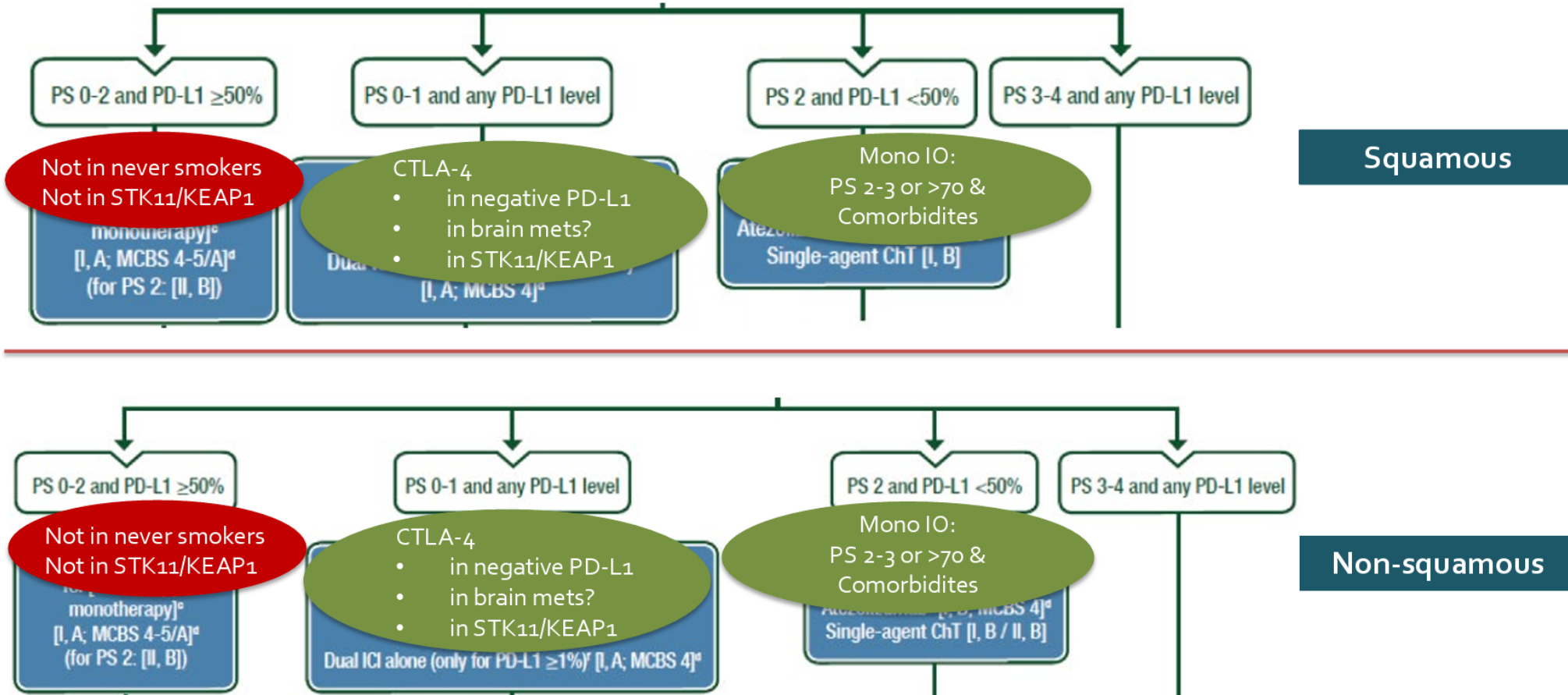


≥70 & PS 0-1
mOS 18.6 vs 15 mo (HR 0.87)



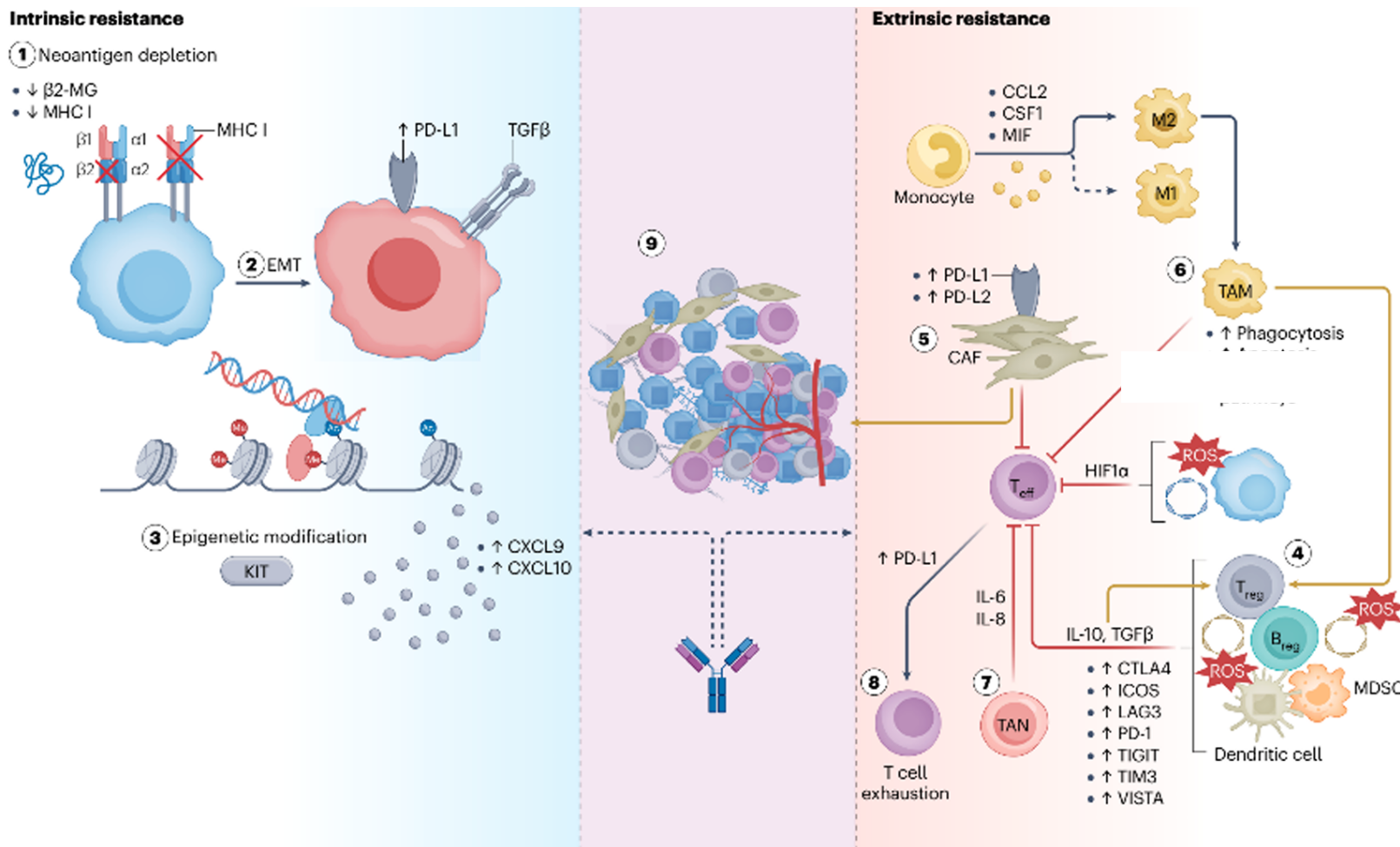


PRECISION IMMUNE-ONCOLOGY FOR THE TREATMENT OF MNSCLC

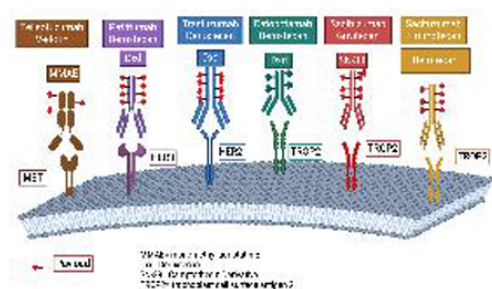
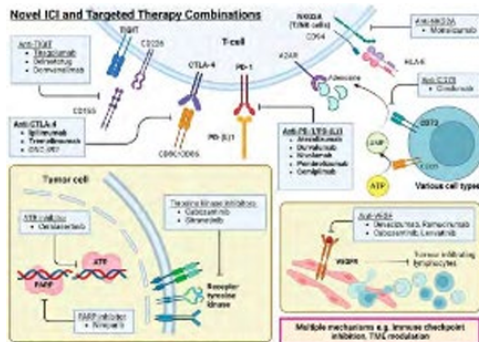




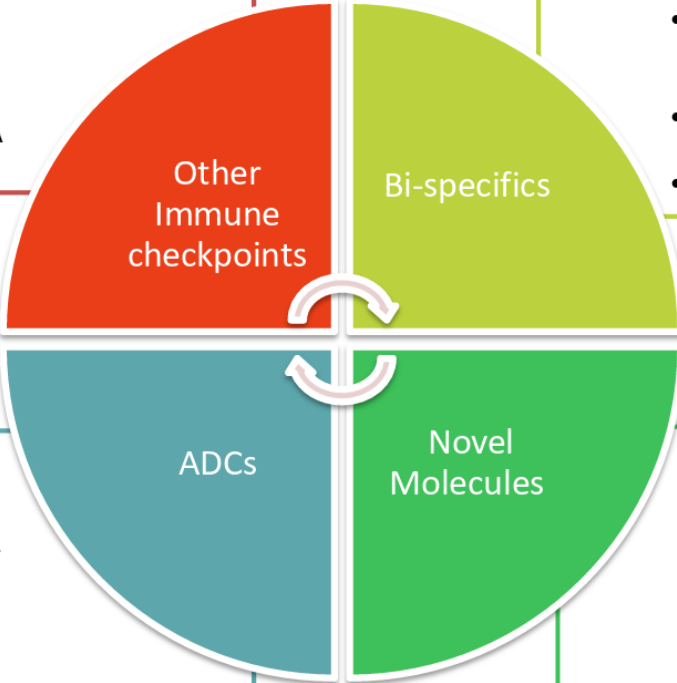
RESISTANCE MECHANISMS ? A SUMMARY OF THE UNKNOWN



TREATMENT STRATEGIES BEYOND PD-(L)1

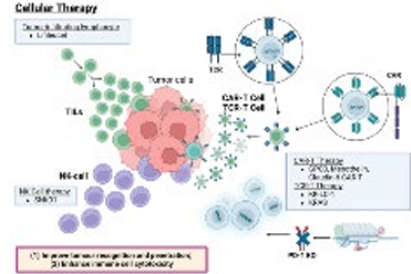
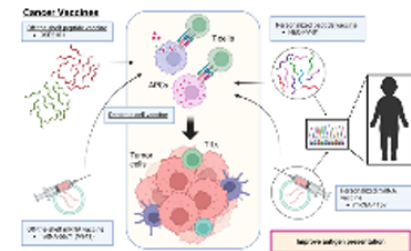
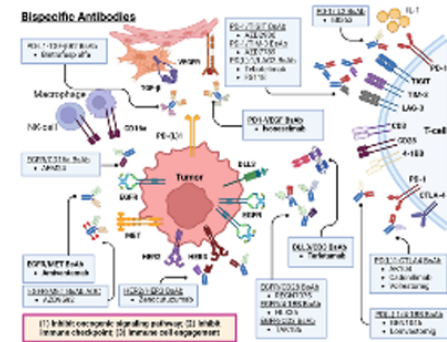


- TIGIT
- LAG3
- TIM3
- CD73
- NKG2A
- CCR8

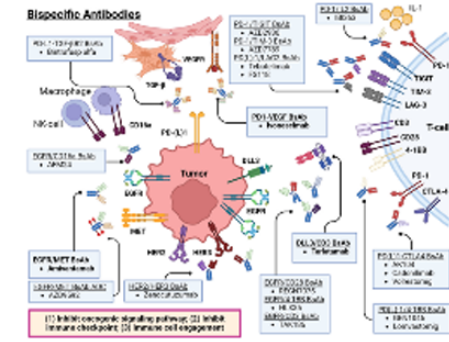
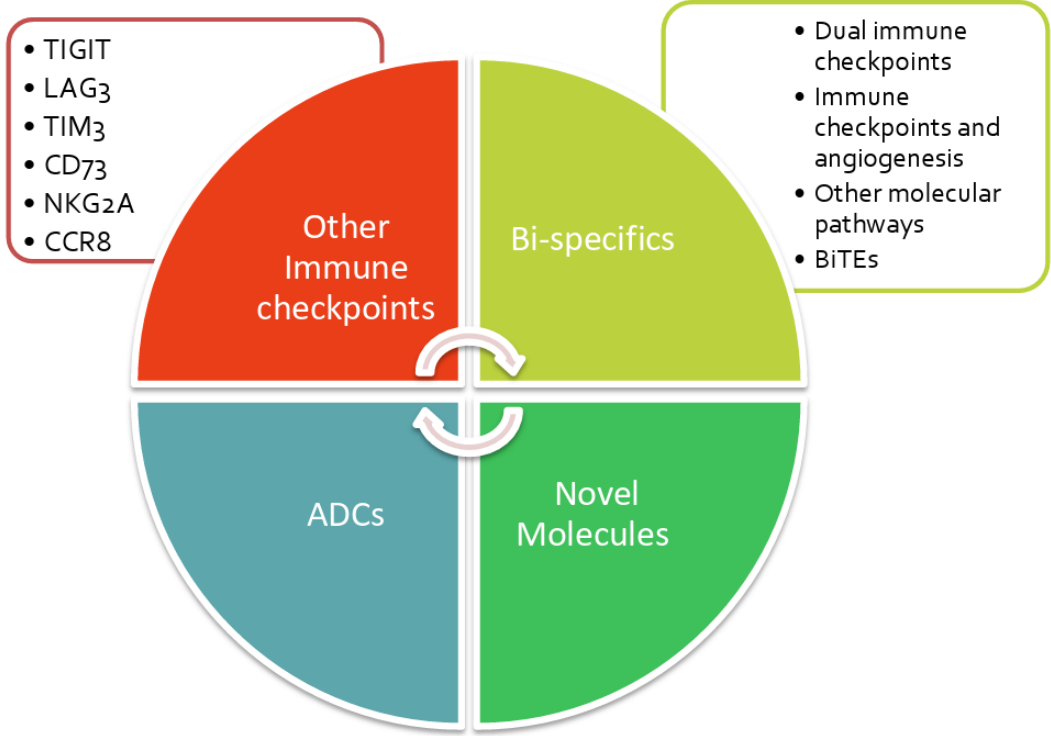
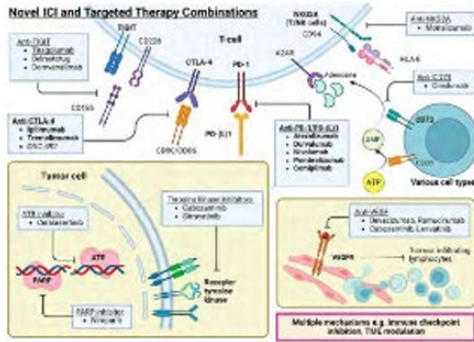


- Dual immune checkpoints
- Immune checkpoints and angiogenesis
- Other molecular pathways
- BiTEs

- mRNA vaccines
- Peptide vaccines
- Adoptive T-cell Therapies
- Intratumoral

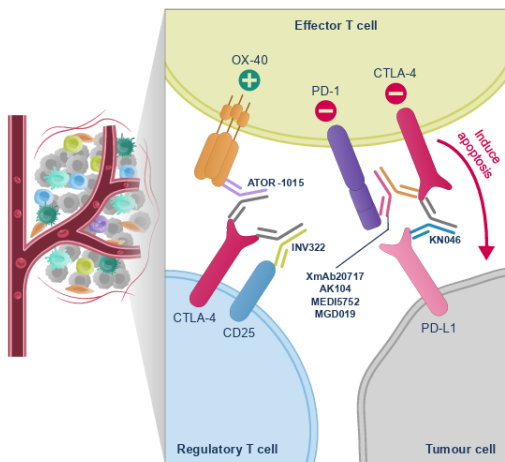


TREATMENT STRATEGIES BEYOND PD-(L)1





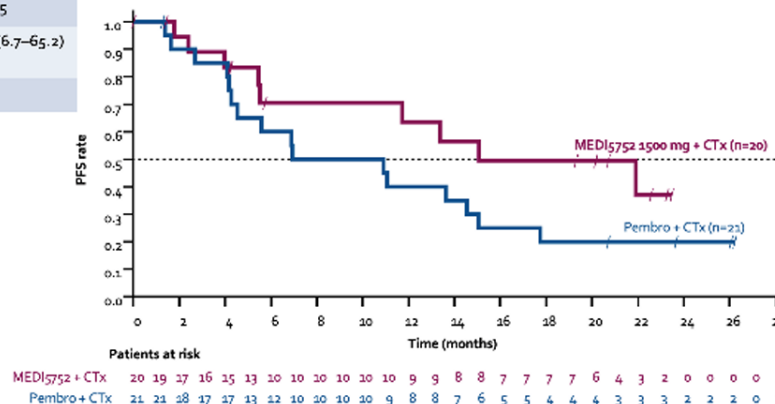
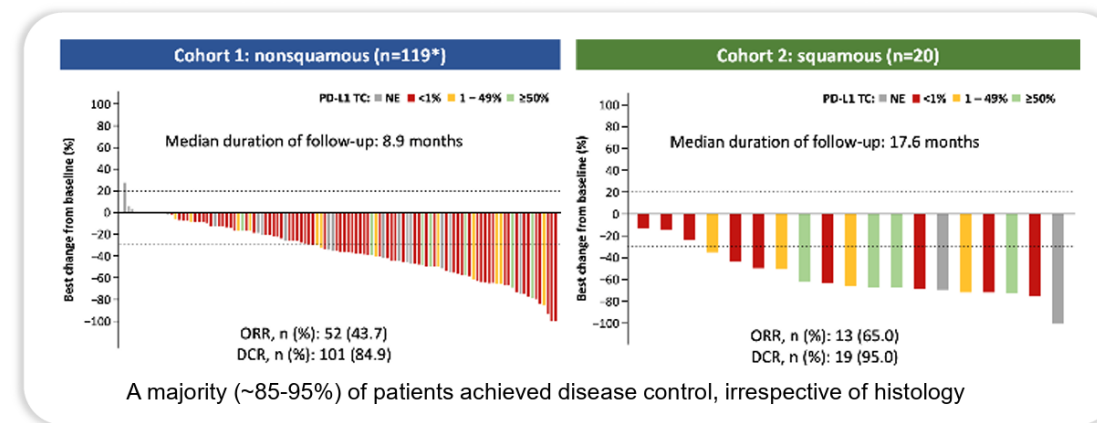
BISPECIFIC ANTI-PD1 AND CTLA-4 VOLRUSTOMIG + CHEMO: PHASE 1B/2 TRIAL



1L Non-squamous NSCLC	Randomised cohort (N=41)	
	MEDI5752 1500 mg + CTx (n=20)	Pembrolizumab + CTx (n=21)
Median follow-up, months (range)	22.8 (0.8–26.9)	14.5 (1.6–27.9)
ORR, n (%)	10 (50.0)	10 (47.6)
Disease control rate, n (%)	17 (85.0)	20 (95.2)
Median DOR, months (95% CI)	20.5 (4.1–NE)	9.9 (2.8–NE)
Median PFS, months	15.1	8.9
Median OS, months	NR	16.5
ORR, PD-L1 <1%, n/N (%) (95% CI)	5/9 (55.6) (21.2–86.3)	3/10 (30.0) (6.7–65.2)
Median PFS, PD-L1 <1%, months	13.4	9

Volrustomig 1500 mg + CTx

Volrustomig 750 mg + CTx leads to higher T cell proliferation and T cell clonal expansion when compared with pembro + CTx





STATUS OF PD-(L)1XCTLA4 DEVELOPMENT IN NSCLC

BsAb	Phase	Population	N	Treatment	PEP	NCT
Efonrilimab	III	Advanced Sq-NSCLC, 1L	482	carboplatin and paclitaxel +/- KNo46	PFS, OS	NCT04474119
Efonrilimab	II	Advanced NSCLC, 1L	54	KNo46+ Axitinib	ORR	NCT05420220
Cadonilimab	III	Advanced NSCLC, 1L, PD-L1 < 1%	642	Cadonilimab + chemo v Tislelizumab+ chemo	OS, PFS	NCT05990127
Cadonilimab	II	Resectable NSCLC	43	Periop Cadonilimab+ chemo	pCR	NCT05377658
Cadonilimab	III	Unresectable stage III NSCLC	560	Consolidation Cadonilimab Versus Sugemalimab	PFS	NCT06617416
Volrustomig	III	Advanced NSCLC, 1L, PD-L1 < 50%	900	MEDI5752+ chemo v pembro+ chemo	PFS, OS	NCT05984277
Volrustomig	II	Resectable II to IIIB	490	Neoadj Volrustomig+ chemo, adjuvant Volrustomig	pCR	NCT05061550
Volrustomig	Ib	Metastatic HER2+, NSCLC	244	Volrustomig+ T-DXd +/- carboplatin	Safety	NCT04686305
Vudalimab	Ib/rII	Advanced non-Sq NSCLC, 1L	168	Vudalimab+ chemo v pembro+ chemo	RP2D, PFS	NCT06173505



ADVANCES IN LAG3 CANCER IMMUNOTHERAPEUTICS

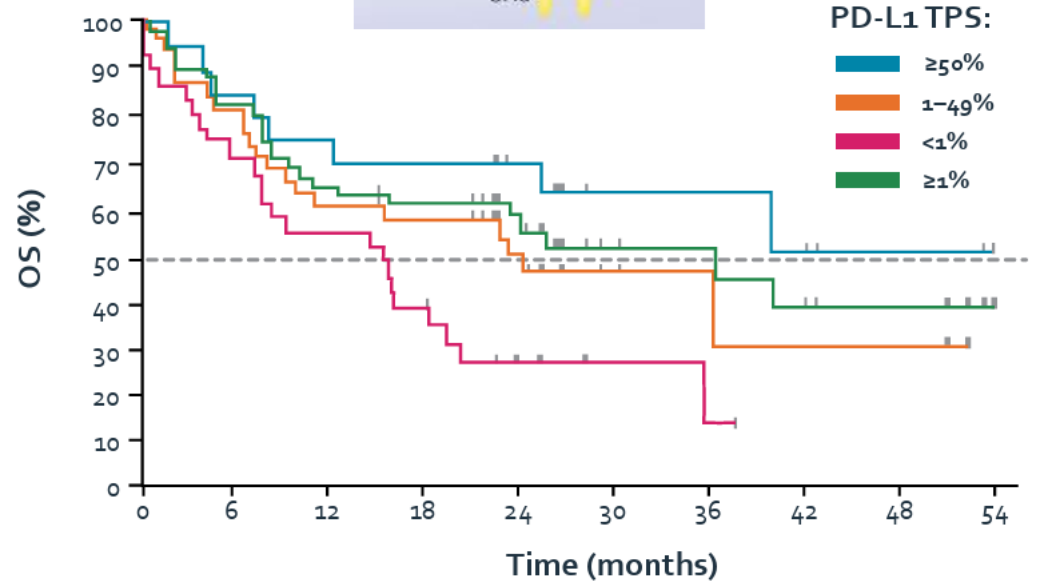
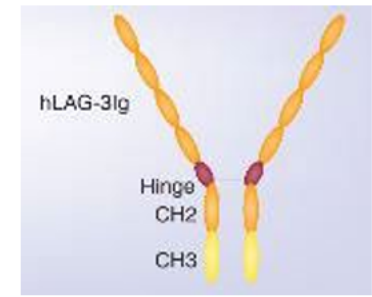
Phase	Line	Primary endpoint	Sample size
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Relatlimab: A Phase 3, Randomized, Open-label Study of Nivolumab + Relatlimab Fixed-dose Combination With Chemotherapy Versus Pembrolizumab With Chemotherapy as First-line Treatment for Participants With Non-squamous (NSQ), Stage IV or Recurrent NSCLC and With Tumor Cell PD-L1 Expression $\geq 1\%$ (**RELATIVITY 1093**)

Fianlimab: A Randomized, Double-Blind Phase 2/3 Study of Fianlimab, Cemiplimab, and Chemotherapy Versus Cemiplimab and Chemotherapy in First-Line Treatment of Patients With Advanced NSCLC irrespective of PD-L1 Expression Levels

Fianlimab A Randomized, Double-Blind Phase 2/3 Study of Fianlimab in Combination With Cemiplimab Versus Cemiplimab Monotherapy in First-Line Treatment of Patients With Advanced NSCLC With Tumors Expressing PD-L1 $\geq 50\%$

Eftilagimod alpha: Study of Eftilagimod Alfa in Combination With Pembrolizumab and Chemotherapy Versus Placebo in Combination With Pembrolizumab and Chemotherapy in Participants With Metastatic NSCLC (**TACTI-004**)



treatment until disease progression, unacceptable toxicity or loss of clinical benefit

PD-L1 subgroups (indicated by ADAs safety)

Pembrolizumab + chemotherapy (n=91)
7.1 (5.6-NE)
1.99 (1-1.56)
9705

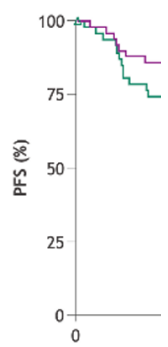
Key eligibility criteria

- 1L stage IV/recurrent NSCLC
- No prior systemic therapy for disease
- No EGFR, ALK, ROS-1 mutation
- ECOG PS 0-1

Stratified by tumor PD-L1^h (by histology (NSQ vs SQ), and EC

Primary endpoint

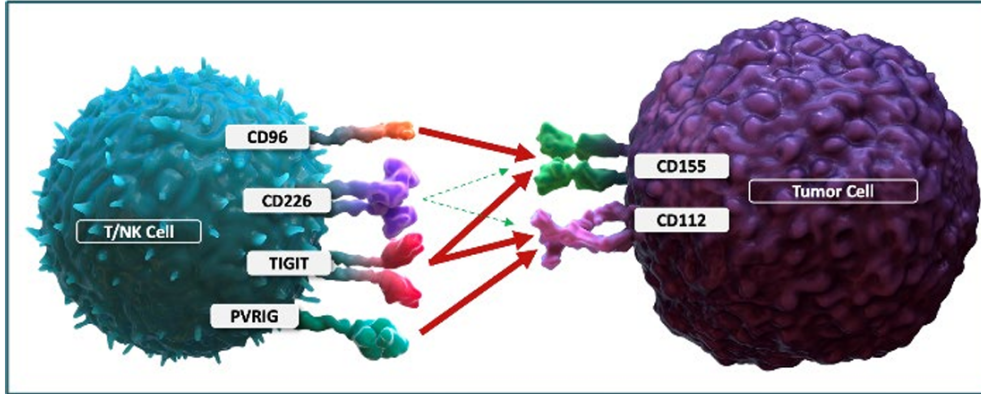
- ORR (BIC)



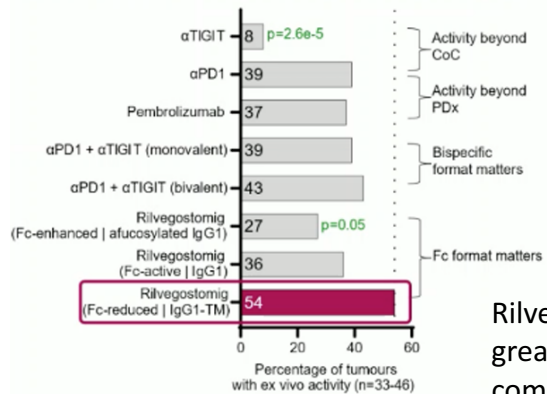
No. at risk
50
48



ANTI-PD-1/TIGIT BISPECIFIC ANTIBODY



Anti-tumour activity according to IFN γ positivity in resected NSCLC tumours



Rilvegostomig induced greater ex-vivo activity compared to other anti-PD-1/anti-TIGIT



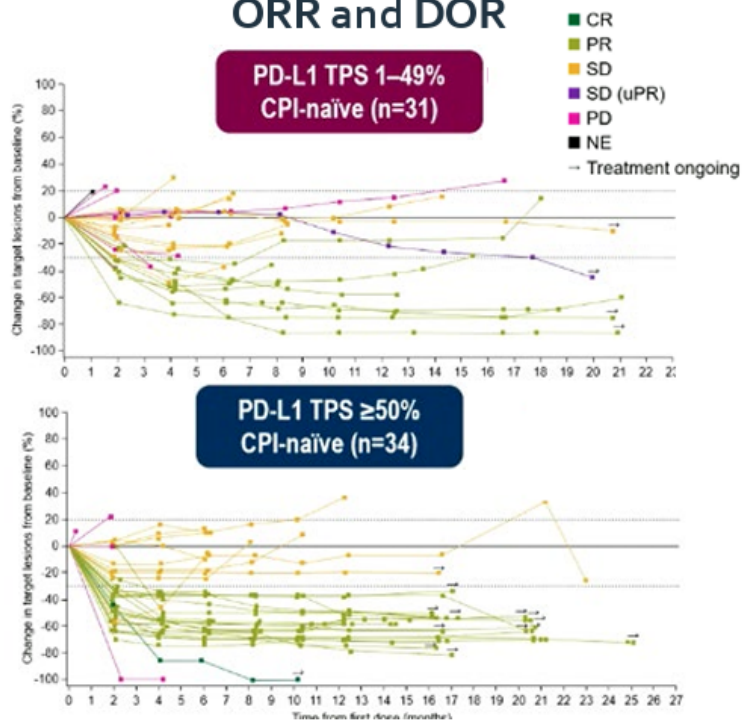
WHERE DO WE STAND WITH TIGIT IN MNSCLC?

COMPANY	AGENT	STUDY	SETTING	DESIGN	RESULTS/STATUS	REFERENCE
Roche	Tiragolumab	SKYSCRAPER-01 ph3	1 st Line PDL1>50%	Atezo+Tira Vs Atezo	PFS 7 vs 6.6 m (HR=0.78) OS 23.1 vs 16.9m (HR=0.87) NS	Peters et al. AACR 2025
Roche	Tiragolumab	SKYSCRAPER-06 ph2/3	1 st Line Non-squamous	PBC+Atezo+Tira Vs PBC+Pembro	DISCONTINUED Futility by IDMC	Press release 04JUL2024
MSD	Vibostolimab	KEYVIBE-003 ph3	1 st Line PDL1>50%	Pembro+Vibo Vs Pembro	DISCONTINUED Futility by IDMC	Press release 16DEC2024
MSD	Vibostolimab	KEYVIBE-007 ph3	1 st Line PDL1+	PBC+ MK7684A Vs PBC +Pembro	DISCONTINUED Futility by IDMC	Press release 16DEC2024
ARCUS GILEAD	Domvanalimab	ARC-10 Ph2/3	1 st Line PDL1>50%	Zimbe+Domva Vs Zimbe vs PBC (modified to Pembro as control)	Part-1 Random Ph2 Significant improvement in PFS/OS over zimbe or chemo. Ph3 ongoing	Naidoo et al. JITC 2024
NOVARTIS BEIGENE	Ociperlimab	AdvanTIG-302 ph3	1 st -Line PDL1>50%	Ociperlimab+Tisle Vs Tislelizumab	DISCONTINUED Futility by IDMC	Press release 03APR2025
ITEOS GSK	Belrestotug	GALAXIES-LUNG-301	1st Line PDL1>50%	Dostarlimab+ Belrestotug Vs Pembro	DISCONTINUED ph2 GALAXIES-LUNG 201 met Futility criteria	Press release 13MAY 2025



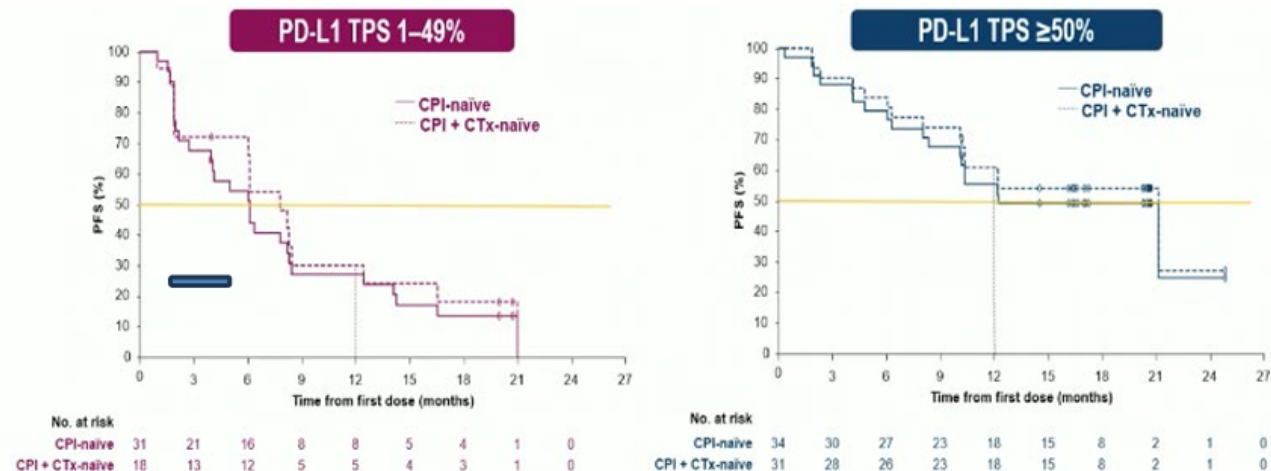
ARTEMIDE-01 (PHASE 1/2): RILVEGOSTOMIG, AN ANTI-PD-1/TIGIT BISPECIFIC ANTIBODY, AMONG CHECKPOINT INHIBITOR-NAÏVE METASTATIC NSCLC

ORR and DOR



	PD-L1 TPS 1-49%		PD-L1 TPS ≥50%	
	CPI-naïve (n=31)	CPI + CTx-naïve (n=18)	CPI-naïve (n=34)	CPI + CTx-naïve (n=31)
ORR, % (95% CI)	29.0 (14.2-48.0)	44.4 (21.5-69.2)	61.8 (43.6-77.8)	67.7 (48.6-83.3)
Median DoR, months (range)	9.9 (4.1-NC)	8.5 (4.1-NC)	NR (10.3-NC)	NR (10.3-NC)

PFS in CPI-naïve and CPI+CTx-naïve patients



	PD-L1 TPS 1-49%		PD-L1 TPS ≥50%	
	CPI-naïve (n=31)	CPI + CTx-naïve (n=18)	CPI-naïve (n=34)	CPI + CTx-naïve (n=31)
Median PFS, months (95% CI)	6.1 (2.7-8.3)	7.8 (1.9-12.5)	12.3 (8.4-NC)	21.2 (10.2-NC)
12-month PFS, % (95% CI)	27.2 (12.9-43.6)	30.1 (11.1-52.0)	55.5 (37.3-70.3)	60.8 (41.4-75.6)

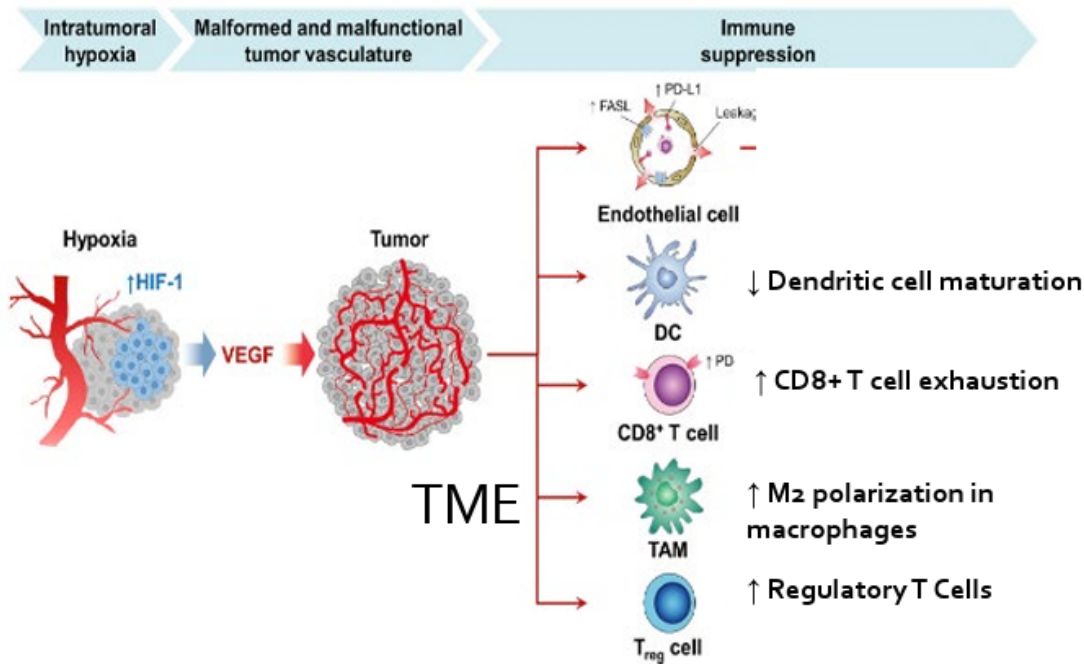
No notable activity at anti-PD-1/PD-L1 resistance



REVISITING VEGF BLOCKADE AND IMMUNOTHERAPY IN NSCLC

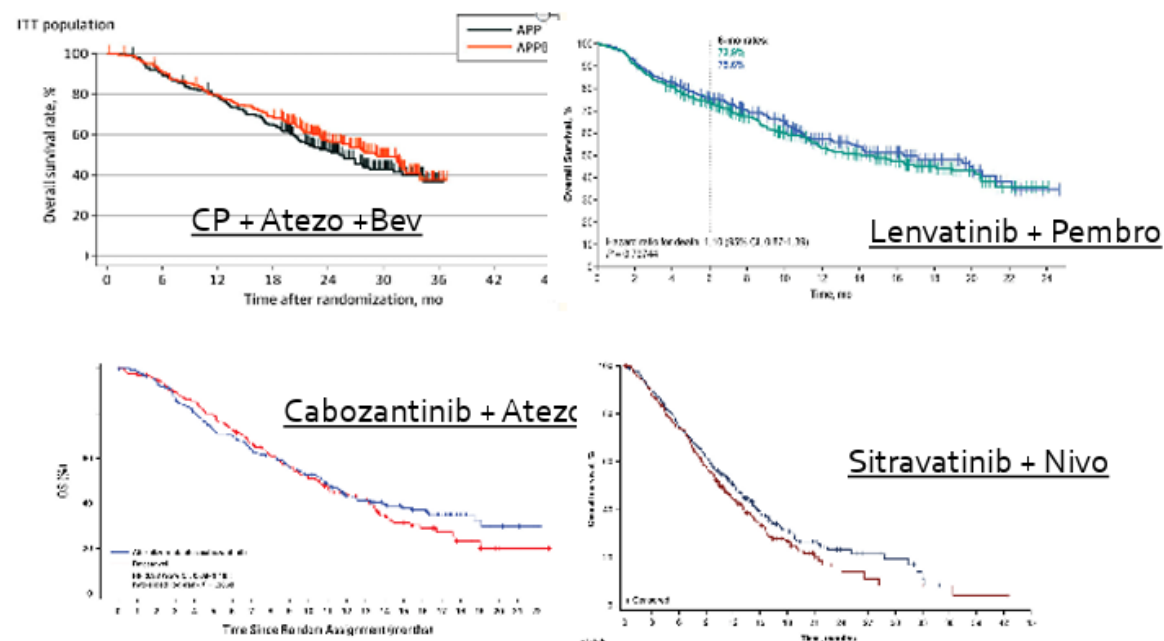
A Promising Concept...

VEGF Supresses Antitumor Immunity



When Hopes Fall Short: Several Failed Attempts Combining CPIs + Anti-Antiangiogenics²⁻⁵

APPLE (WJOG11218L), LEAP-007, CONTACT-01, SAPPHIRE, Lung-MAP S1800A, ...



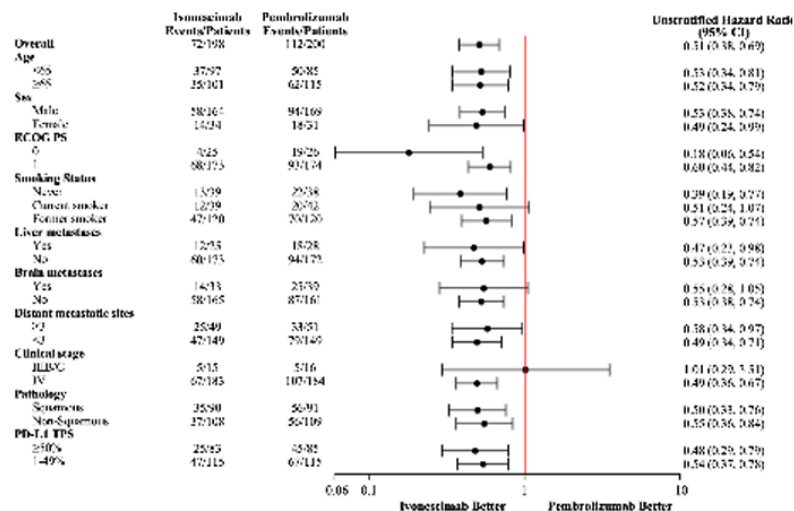
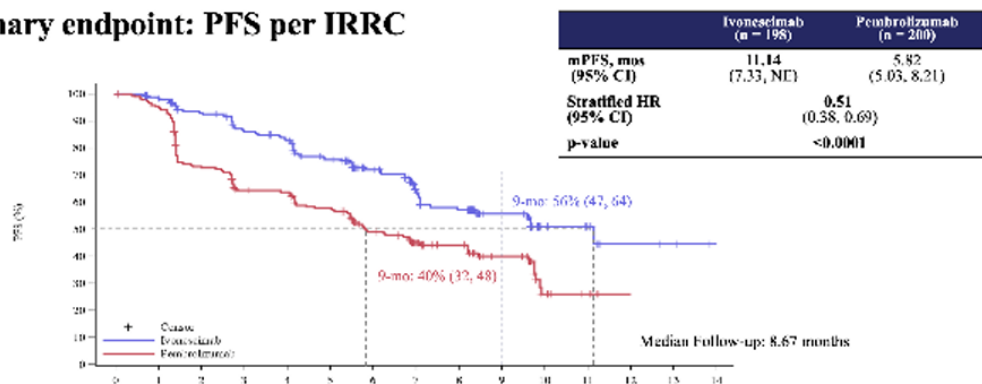


BI-ABS TARGETING PD – (L)1 AND VEGF IN NSCLC: SELECTED PHASE II/III

AGENT	Manufacturer	TARGET	SETTING	Phase	Intervention (for phase III)	Trial
Ivonescimab	Summit (Akeso)	PD-1 X VEGF	1L metastatic NSCLC	III	PBC + Ivonescimab vs PBC + Pembrolizumab	HARMONi-3
Ivonescimab	Summit (Akeso)	PD-1 X VEGF	1L mNSCLC with PD-L1>50%	III	Ivonescimab vs Pembrolizumab	HARMONi-7
Ivonescimab	Summit (Akeso)	PD-1 X VEGF	1L Squamous mNSCLC	III	PBC + Ivonescimab vs PBC+ Tislelizumab	HARMONi-6
Pumitamig	Biontech (BMS)	PD-L1 X VEGF	1L metastatic NSCLC	II/III	PBC + Pumitamig vs PBC+ Pembrolizumab	ROSETTA–LUNG 01
SSGJ-707	Shenyang Sunshine	PD-1 X VEGF	1L advanced NSCLC PDL1>1%	III China	SSGJ-707 vs pembrolizumab	NCT06980272
LM-299	Merck (LaNova)	PD-1 X VEGF	Solid tumors	I China		NCT06650566
JS207	Junshi Biosciences	PD-1 X VEGF	1L advanced NSCLC with chemotherapy	II China		NCT06969027
SCTB-014	Sinoceltech	PD-1 X VEGF	Solid tumors	I-II		Trial registered in China

HARMONI-2

Primary endpoint: PFS per IRRC



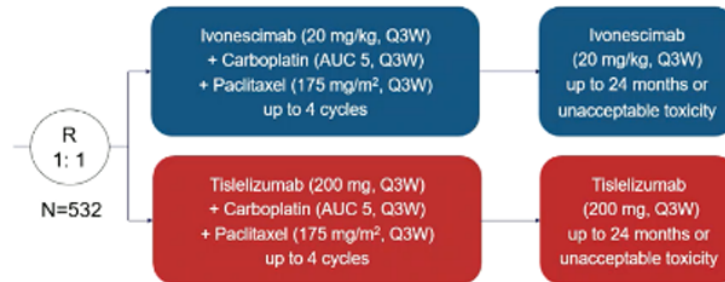
Interim analysis of overall survival (OS) at 39% maturity (with α set at 0.0001) reported HR=0.777, corresponding to a 22.3% reduction in death risk. PFS 4.99% of α , OS 0.01%10

HARMONI-6

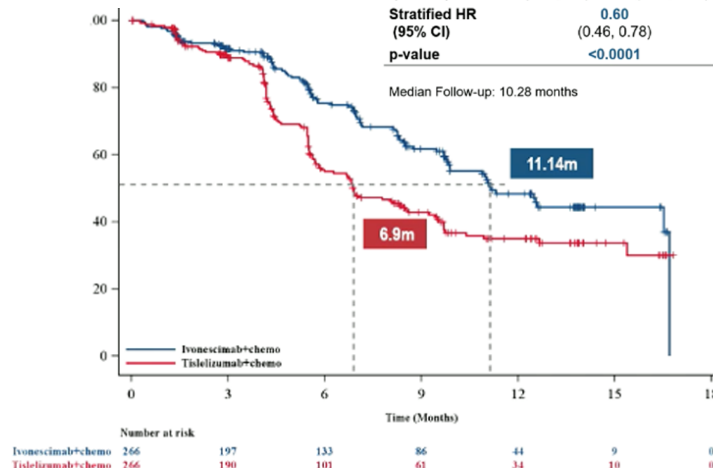
A multicenter, randomized, double-blind, parallel-controlled phase III study

Key Eligibility Criteria

- Pathologically confirmed sq-NSCLC
- Stage IIIB-IV
- No prior systemic therapy
- No EGFR mutations or ALK rearrangements
- ECOG PS 0 or 1



	Ivinescimab + chemo (N=266)	Tislelizumab + chemo (N=266)
mPFS, months (95% CI)	11.14 (9.86, NE)	6.90 (5.82, 8.57)
Stratified HR (95% CI)	0.60 (0.46, 0.78)	
p-value	<0.0001	

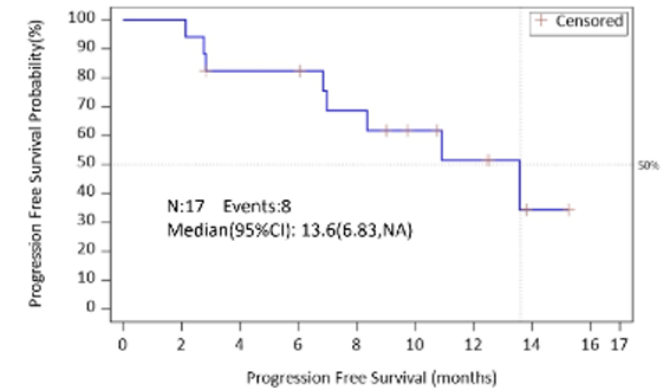
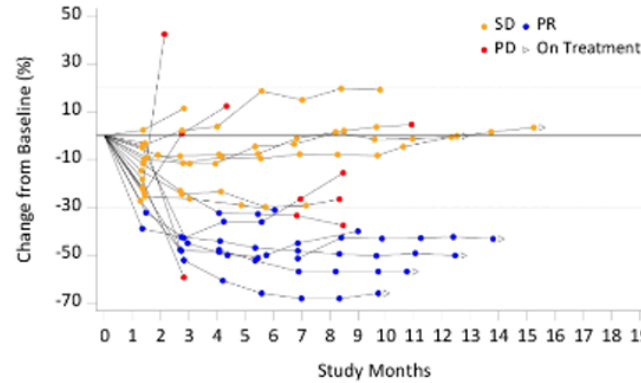
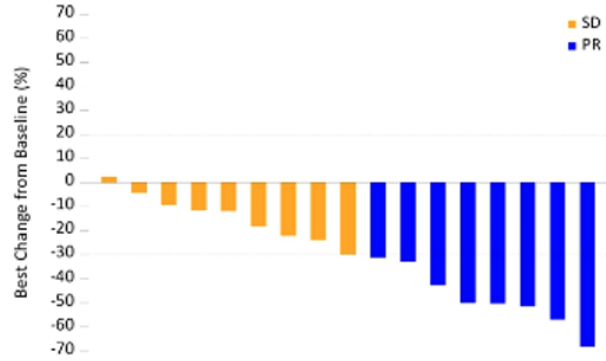


Possibly VEGF-Related AEs#	Ivinescimab + chemo (N=266)		Tislelizumab + chemo (N=265)	
	Any Grade	Grade ≥3	Any Grade	Grade ≥3
Any	123 (46.2)	20 (7.5)	60 (22.6)	6 (2.3)
Proteinuria	72 (27.1)	6 (2.3)	29 (10.9)	0
Haemorrhage	57 (21.4)	5 (1.9)	25 (9.4)	2 (0.8)
Hypertension	27 (10.2)	8 (3.0)	12 (4.5)	3 (1.1)

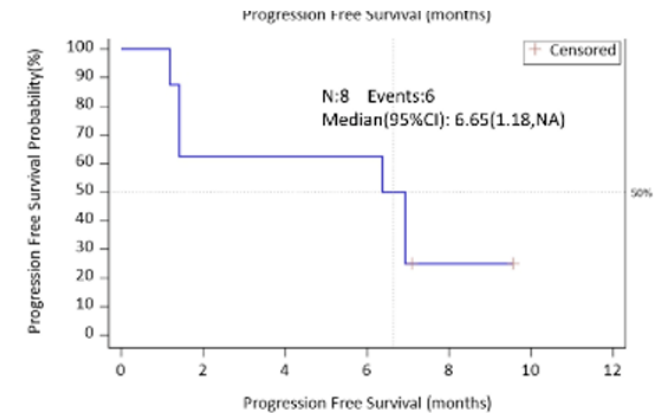
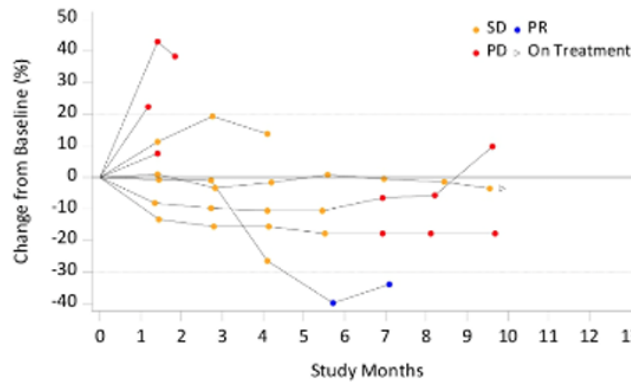
Challenging the dogma of SCC Lung treatment: VEGF inhibition is (relatively) safe and efficacious Await global confirmatory phase 3: HARMONI-3



BNT327/PM8002 PUMITAMIG PHASE 1/2 IN NSCLC



PD-L1 positive treatment naive



After chemo/IO failure



ONGOING FRONTLINE GLOBAL PHASE 3 HEAD-TO-HEAD TRIALS

IVO Monotherapy 1L SQ + NSQ, TPS ≥ 50%

IVO + ChT Combo 1L SQ + NSQ, TPS all comers

BNT327 + ChT Combo 1L SQ + NSQ, TPS all comers

HARMONI-7: Phase 3 Study in 1L Metastatic NSCLC (NCT06767514)

Key Inclusion:

- Eastern Stage NSCLC (1L SQ + NSQ)
- ECOG PS 0-1
- Histologically confirmed metastatic disease (NSCLC)

Key Exclusion:

- Any prior systemic therapy for metastatic disease
- Significant CNS metastases
- Uncontrolled active disease
- Any prior or concurrent systemic anti-PD-1/PD-L1 therapy
- Active autoimmune disease

Stratification Factors:

- Histology (adenocarcinoma vs squamous)
- Time to treatment initiation (within 14 days vs >14 days)
- Geographic region (Asia/Pacific vs Other)

Endpoints:

- Primary:** PFS, OS
- Secondary:** ORR, DOR, Safety

Treatment: Ixodescimab + 25 mg/m² Q3W vs Pembrolizumab + 200 mg Q3W

Treatment until: Incidence of toxicity, Disease progression, or Standard of care

Study and Events Follow-up:

Investigator-initiated study; not subject to regulatory oversight; not a clinical trial; not a Phase 3 study; not a clinical trial

HARMONI-3: Phase 3 Study in 1L Metastatic NSCLC (NCT05899608)

Key Inclusion:

- Eastern Stage NSCLC (1L SQ + NSQ)
- ECOG PS 0-1
- Histologically confirmed metastatic disease (NSCLC)

Key Exclusion:

- Any prior systemic therapy for metastatic disease
- Significant CNS metastases
- Uncontrolled active disease
- Any prior or concurrent systemic anti-PD-1/PD-L1 therapy
- Active autoimmune disease

Stratification Factors:

- Histology (adenocarcinoma vs squamous)
- Time to treatment initiation (within 14 days vs >14 days)
- Geographic region (Asia/Pacific vs Other)

Endpoints:

- Primary:** PFS, OS
- Secondary:** ORR, DOR, Safety

Treatment: Ixodescimab + Carboplatin + Paclitaxel vs Pembrolizumab + Carboplatin + Paclitaxel

Treatment until: Incidence of toxicity, Disease progression, or Standard of care

Study and Events Follow-up:

Investigator-initiated study; not subject to regulatory oversight; not a clinical trial; not a Phase 3 study; not a clinical trial

ROSETTA LUNG-02

A Phase 2/3 multi-site, randomized global trial of BNT327 in combination with chemotherapy in first-line non-small cell lung cancer (NCT06712316)

Key Inclusion:

- Eastern Stage NSCLC (1L SQ + NSQ)
- ECOG PS 0-1
- Histologically confirmed metastatic disease (NSCLC)

Key Exclusion:

- Any prior systemic therapy for metastatic disease
- Significant CNS metastases
- Uncontrolled active disease
- Any prior or concurrent systemic anti-PD-1/PD-L1 therapy
- Active autoimmune disease

Stratification Factors:

- Histology (adenocarcinoma vs squamous)
- Time to treatment initiation (within 14 days vs >14 days)
- Geographic region (Asia/Pacific vs Other)

Endpoints:

- Primary:** PFS, OS
- Secondary:** ORR, DOR, Safety

Treatment: BNT327 + Carboplatin + Paclitaxel vs Pembrolizumab + Carboplatin + Paclitaxel

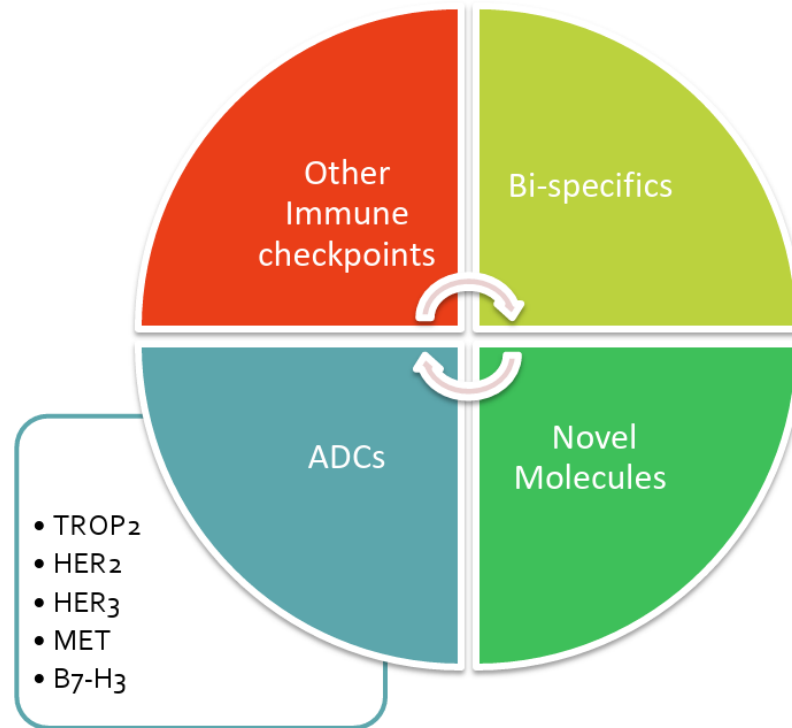
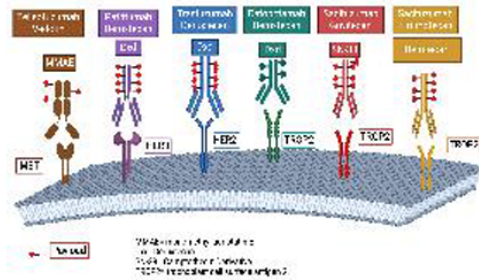
Treatment until: Incidence of toxicity, Disease progression, or Standard of care

Study and Events Follow-up:

Investigator-initiated study; not subject to regulatory oversight; not a clinical trial; not a Phase 3 study; not a clinical trial



TREATMENT STRATEGIES BEYOND PD-(L)1





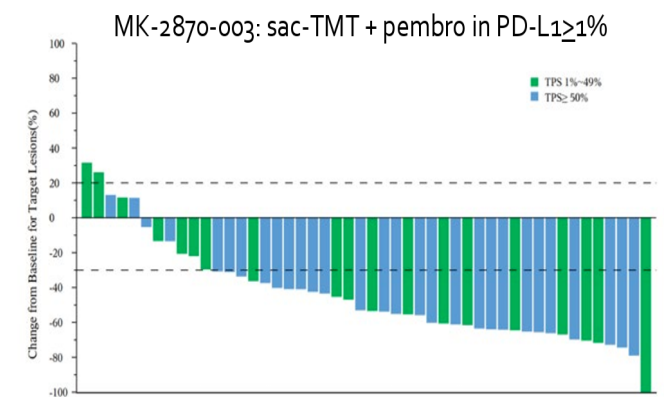
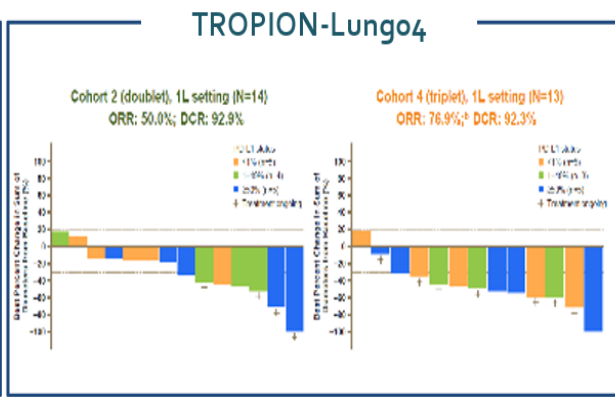
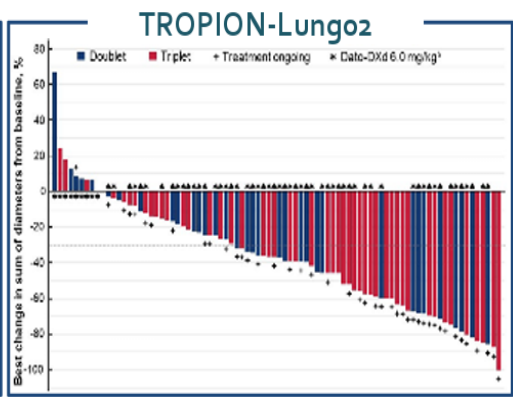
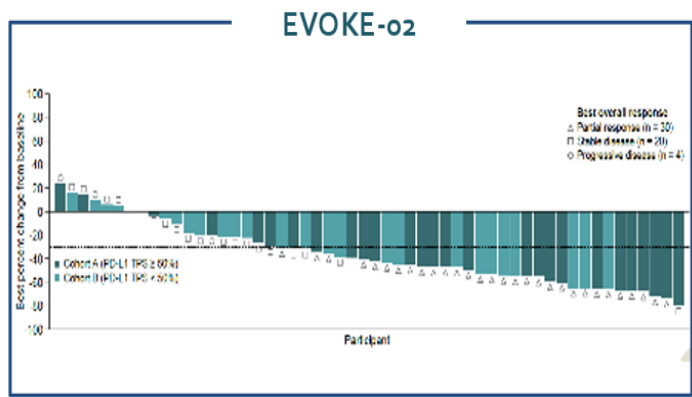
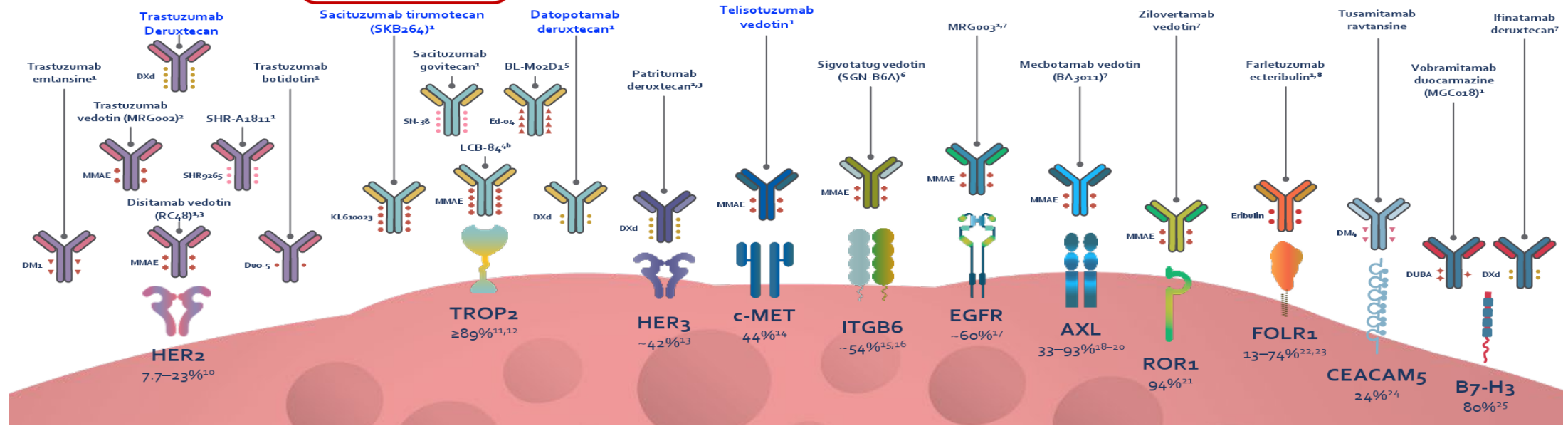
2022: FDA and EMA APPROVED **trastuzumab deruxtecan** (HER2mut) FDA (HER2 3+) 2025: NMPA approval **trastuzumab rezetecan** (HER2m)

2024: FDA Breakthrough designation for pretreated EGFR+ 2025: NMPA approval of **sacituzumab tirumotecan** for EGFR+ NSCLC

2025: FDA approves **datopotamab deruxtecan** for pretreated EGFR-mutated advanced NSCLC

2025: FDA accelerated approval for **telisotuzumab vedotin** in MET3+

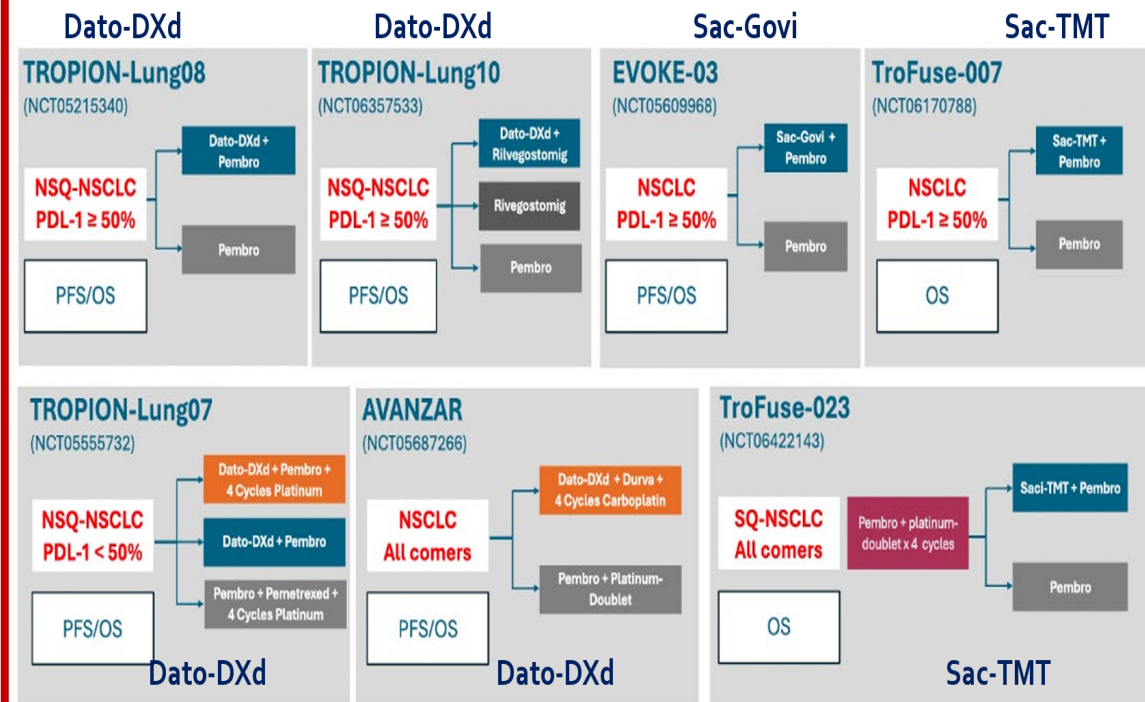
DISCONTINUED **tusamitamab ravtansine**



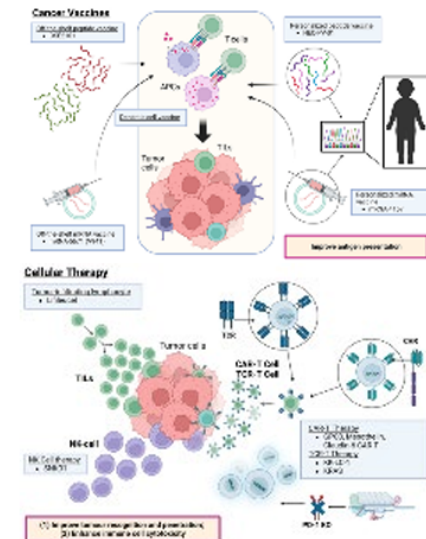
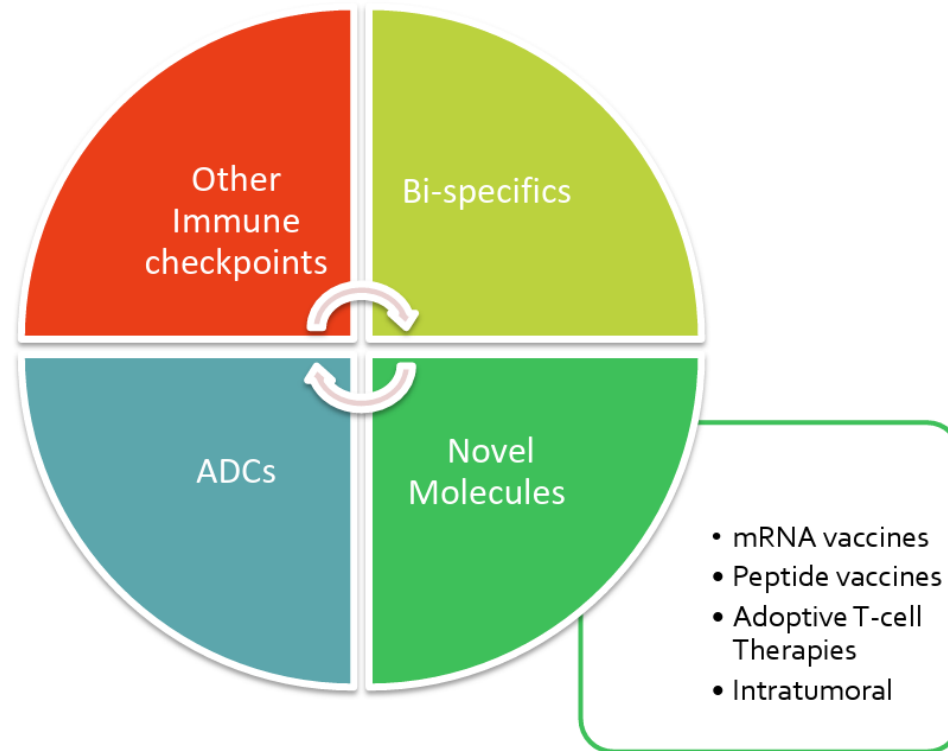


TROP2-DIRECTED ADCS+ ANTI-PD(L)-1 +/-CARBO(CIS)PLATININ 1L

Trial	Combination	Patients	N	ORR
Evoked-02	Saci-Govitecan + Pembro	PD-L1≥50%	30	69%
Evoked-02	Saci-Govitecan + Pembro	PD-L1<50%	33	44%
TL-04	Dato-DXd + durvalumab	All PD-L1	19	50%
TL-04	Dato-DXd + durvalumab + carboplatin	All PD-L1	14	76.9%
TL-02	Dato-DXd + pembrolizumab	All PD-L1	42	54.8%
TL-02	Dato-DXd + pembro + carbo(cis)platin	All PD-L1	54	55.6%
OptiTROP-Lung01	Saci-tirumotecan + tagitanlimab q2w	All PD-L1	63	77.6%
2870-003	Saci-tirumotecan + pembrolizumab q6w	PD-L1≥1%	50	68%
Keynote 024	Pembrolizumab	PD-L1≥50%	154	46.1%
Keynote 189	Carbo(cis)-pemetrexed-pembrolizumab	N-Sq, PD-L1≥50%	132	62.1%
Keynote 407	Carbo-(nab)paclitaxel-pembrolizumab	Sq, PD-L1≥50%	73	64.4%
Keynote 189	Carbo(cis)-pemetrexed-pembrolizumab	N-Sq, all PD-L1	410	48.3%
Keynote 407	Carbo-(nab)paclitaxel-pembrolizumab	Sq, all PD-L1	278	62.2%



TREATMENT STRATEGIES BEYOND PD-(L)1



Peptide-based vaccines

Drug (trial)	TAA	Disease setting
MAGE-A3 (MAGRIT trial)	MAGE-A3	Adjuvant (MAGE-A3+ tumors)
Tecemotide (START trial)	MUC1	Locally advanced (maintenance after chemo-RT)
CIMAvax-EGF	Epidermal Growth Factor	Advanced (maintenance after 1L platinum)

ARTEMIA (NCT06472245)

KEY ELIGIBILITY CRITERIA

- Metastatic squamous and non-squamous NSCLC without known actionable genomic alterations.
- HLA-A2 positive in blood by central laboratory.
- In 2nd line treatment after 1st line CT-immune checkpoint inhibitor (ICI) with secondary resistance to ICI
- ECOG PS 0 to 1
- No treated or untreated brain metastases

Stratification criteria

- Histology: squamous vs non-squamous
- ECOG performance status: 0 vs 1

ARM A: OSE2101 5 mg (1 mL) Q3W for 6 sc. inj., then Q8W until end year 1, then Q12W until PD, toxicity or withdrawal of consent & up to 24 months

ARM B: DOCETAXEL 75 mg/m² Q3W iv infusion until PD, toxicity or withdrawal of consent

PRIMARY ENDPOINT: Overall Survival

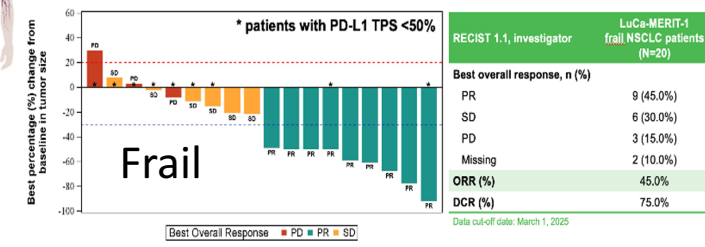
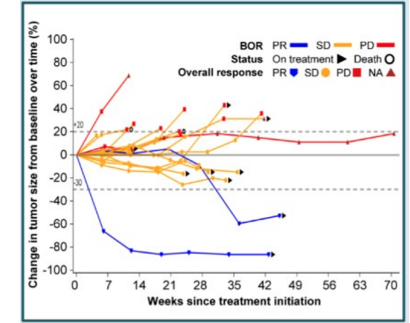
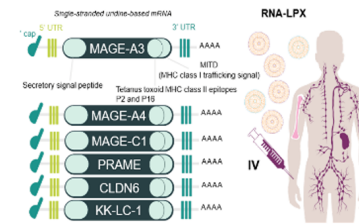
SECONDARY ENDPOINTS:

- Patient Reported Outcomes: QLQ-C30 Physical functioning, Role functioning & Global Health Score
- Time to ECOG PS >1 deterioration

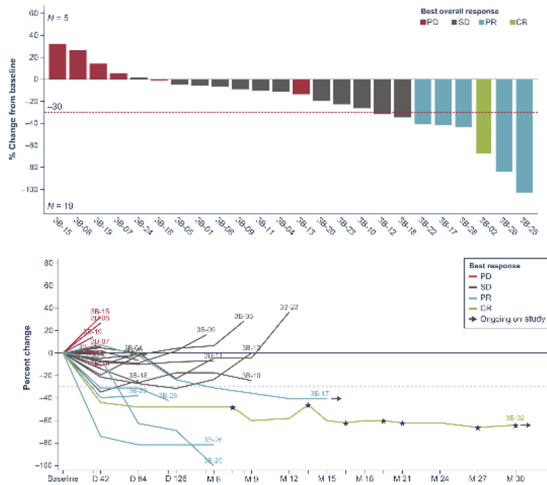
R 2:1
N=363

DNA vs RNA vaccines

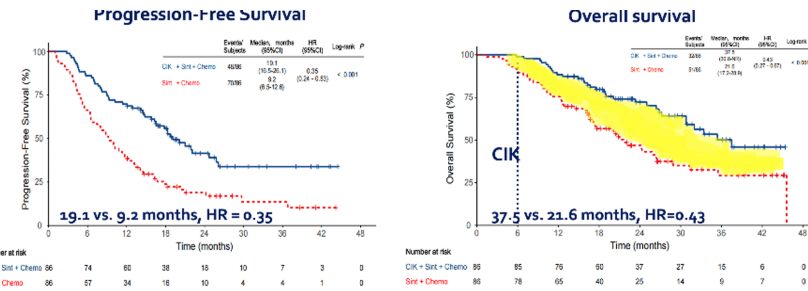
Preliminary results from LuCa-MERIT-1, a Phase I trial evaluating BNT116, a fixed antigen mRNA vaccine, plus cemiplimab in advanced non-small cell lung cancer after progression on PD-1 inhibition



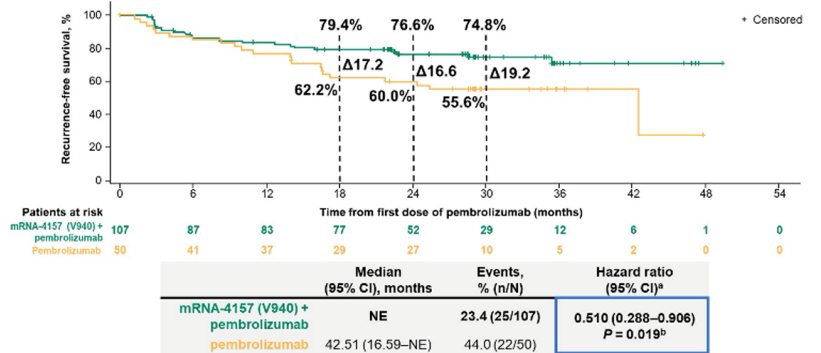
Adoptive Cell Therapies: TILs, CARs, TCRs



Chemo/ICI vs chemo/ICI + CIK Administration

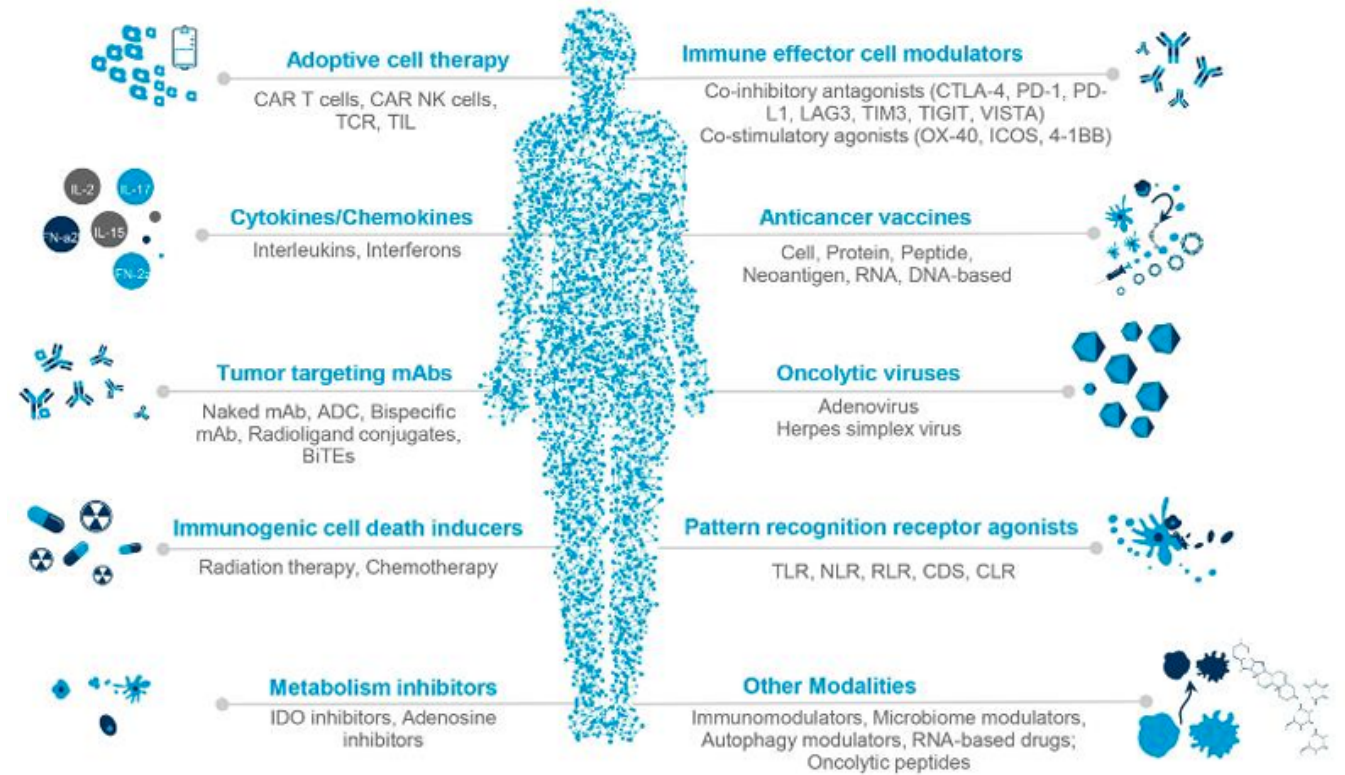
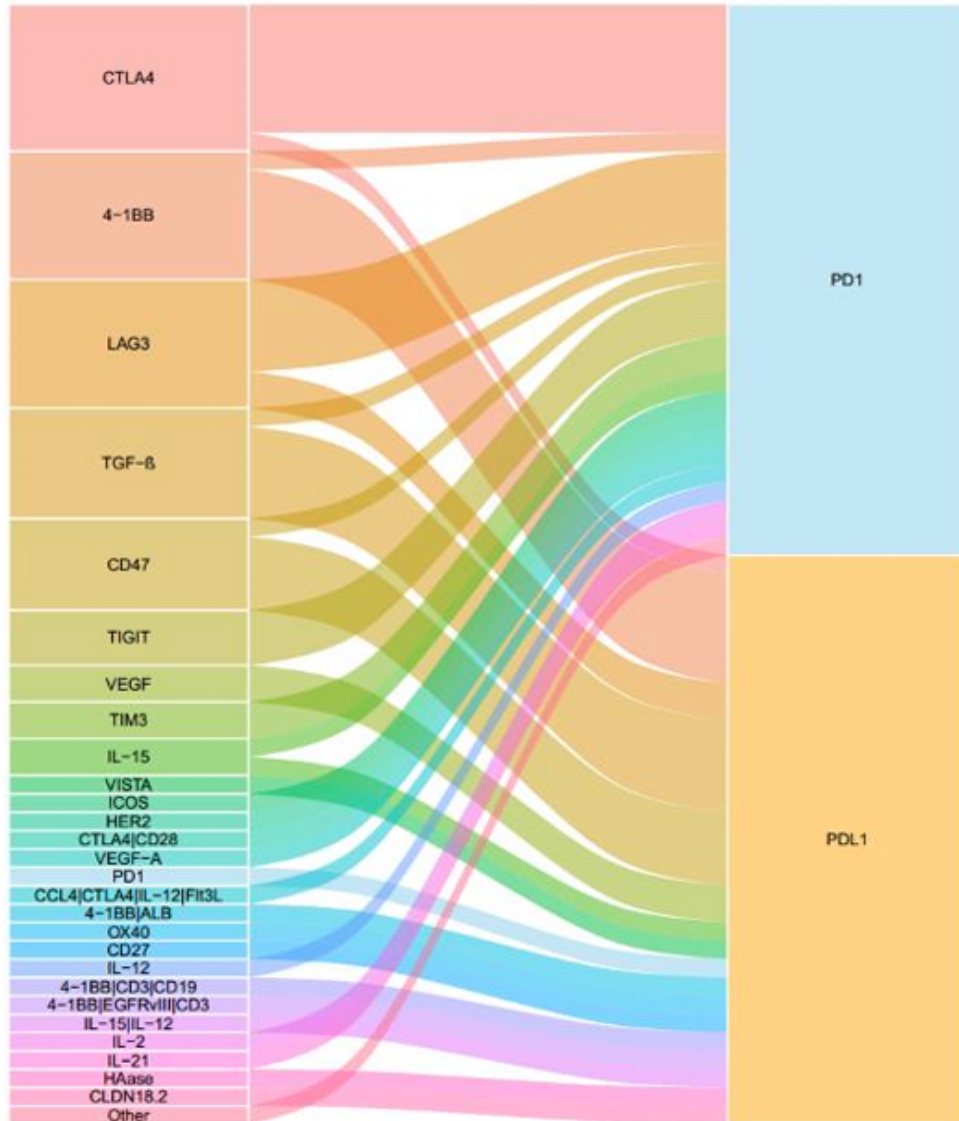


mRNA-4157 (V940) in early melanoma



Lifileucel, an autologous TILs monotherapy in resistance to ICIs

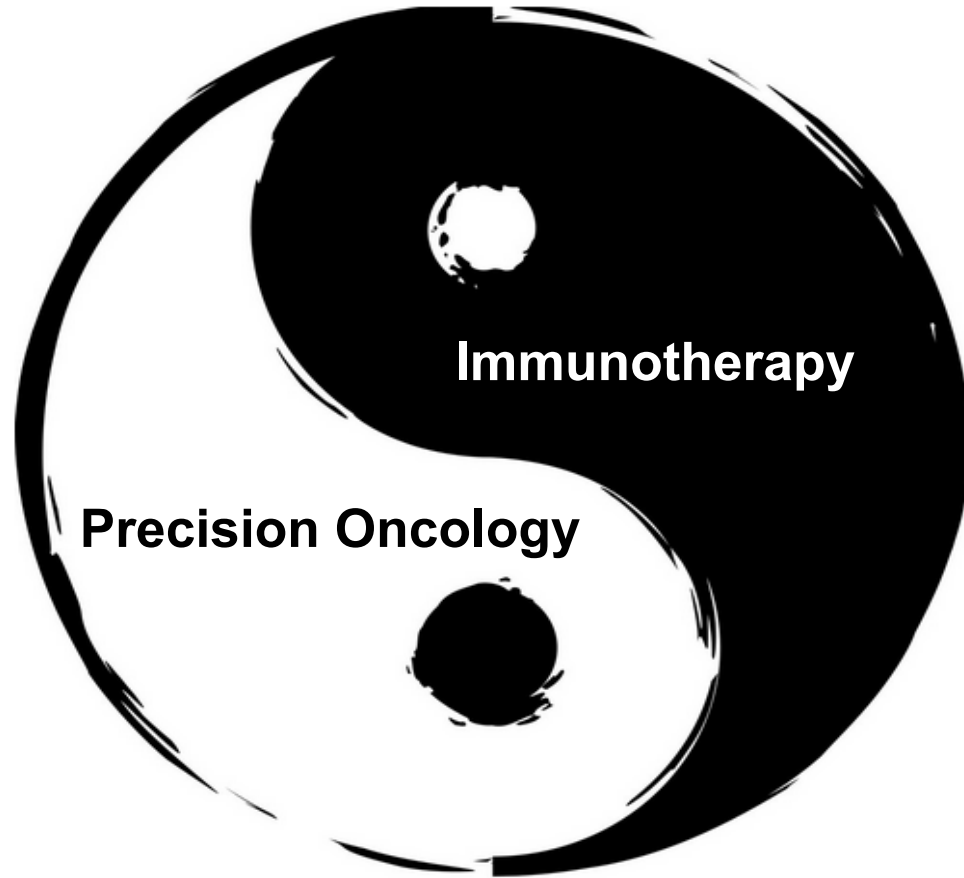
V940 (mRNA-4157) is a novel individualized neoantigen therapy (INT) that encodes up to 34 personalized neoantigens





ONGOING FRONTLINE IO-BASED PHASE III TRIALS IN NON-AGA

Trial name	Experimental arm	Comparator arm	Setting	Biomarker	Primary End-Point
ZEAL-1	Pembrolizumab + P-chemo + Niraparib	Pembrolizumab + P-chemo	1L NSq & Sq	PD-L1 all comers	PFS, OS
HARMONI-3	Ivonescimab + P-chemo	Pembrolizumab+ P-chemo	1L NSq & Sq	PD-L1 all comers	PFS, OS
HARMONI-7	Ivonescimab	Pembrolizumab	1L NSq & Sq	PD-L1 ≥ 50%	PFS, OS
BNT327 NSCLC	BNT327 + P-chemo	Pembrolizumab+ P-chemo	1L NSq & Sq	PD-L1 all comers	PFS, OS
TROPION-Lungo7	Dato-DXd + Pembrolizumab +/- P-chemo	Pembrolizumab +/- P-chemo	1L NSq	PD-L1 < 50% with or without AGA	PFS, OS
TROPION-Lungo8	Dato-DXd + Pembrolizumab	Pembrolizumab	1L NSq & Sq	PD-L1 ≥ 50%	PFS, OS
AVANZAR	Dato-DXd + Durva + Carbo	Pembrolizumab + P-chemo	1L NSq & Sq	PD-L1 all comers	PFS, OS
EVOKE-03	Sacituzumab govitecan + Pembrolizumab	Pembrolizumab	1L NSq & Sq	PD-L1 ≥ 50%	PFS, OS
TROPION-Lungo10	Dato-DXd + Rilvegostomig	Pembrolizumab	1L NSq	PD-L1 ≥ 50%	PFS, OS
MK-2870-007	Sacituzumab Tirumotecan + Pembrolizumab	Pembrolizumab	1L NSq	PD-L1 ≥ 50%	OS
SKB264	Sacituzumab Tirumotecan + Pembrolizumab	Pembrolizumab	1L NSq & Sq	PD-L1 ≥ 1%	PFS
eVOLVE-Lungo2	Volrustomig + P-chemo	Pembrolizumab + P-chemo	1L NSQ & Sq	PD-L1 < 50%	PFS, OS
ARTEMIDE-Lungo3	Rilvegostomig + P-chemo	Pembrolizumab + P-chemo	1L NSQ & Sq	1L NSQ	PFS, OS
RELATIVITY-1093	Nivolumab + Relatlimab + P-chemo	Pembrolizumab + P-chemo	1L NSQ	PD-L1 ≥ 1%	OS PD-L1 1-49%



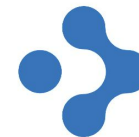
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Plataforma BIONAND