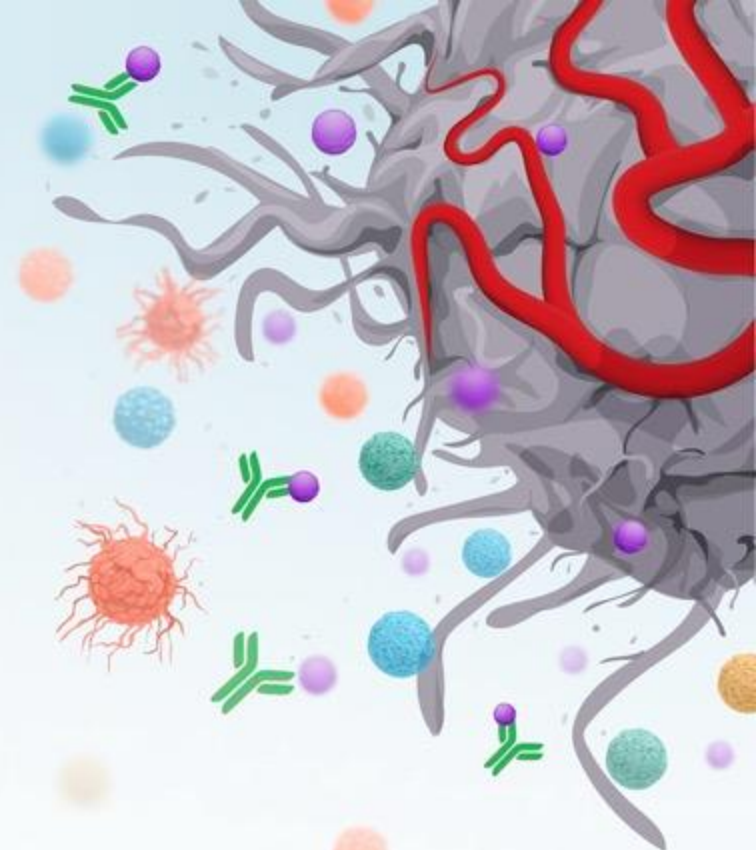


LEAP THERAPEUTICS

company presentation

November 13, 2024



Forward looking statements

This presentation contains forward-looking statements that involve substantial risks and uncertainties.

All statements, other than statements of historical facts, contained in this presentation, including statements regarding our strategy, future operations, clinical trials, collaborations and partnerships, future financial position, future revenues, projected costs, prospects, plans and objectives of management, are forward-looking statements within the meaning of U.S. securities laws. The words “anticipate,” “believe,” “estimate,” “expect,” “intend,” “may,” “plan,” “predict,” “project,” “target,” “potential,” “will,” “would,” “could,” “should,” “continue,” and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words.

Forward-looking statements are neither historical facts nor assurances of future performance. Instead, they are based only on our current beliefs, expectations and assumptions regarding the future of our business, future plans and strategies, projections, anticipated events and trends, the economy and other future conditions.

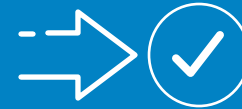
Because forward-looking statements relate to the future, they are subject to inherent uncertainties, risks and changes in circumstances that are difficult to predict and many of which are outside of our control. We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements, and you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements we make. These and other risk factors are listed from time to time in reports filed with the Securities and Exchange Commission, including, but not limited to, our Annual Reports on Form 10-K and our Quarterly Reports on Form 10-Q. We assume no obligation to update any forward-looking statements, except as required by applicable law.

This presentation does not constitute an offer to sell, or the solicitation of an offer to buy, any securities.

Developing biomarker-targeted antibody therapies for cancer patients



Lead clinical stage antibody program – DKN-01 targeting DKK1



Upcoming multiple milestones from two randomized clinical trials

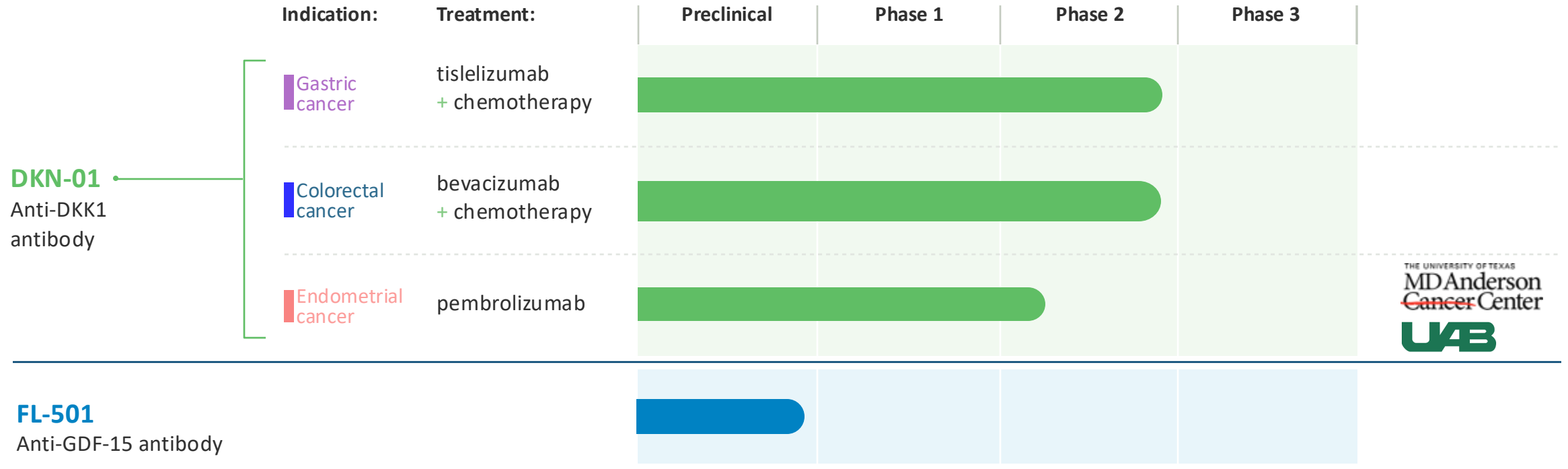


Biomarker strategy, focus on GI cancers



Cash runway to Q2 2026 with \$62.8M cash at September 30, 2024

Pipeline

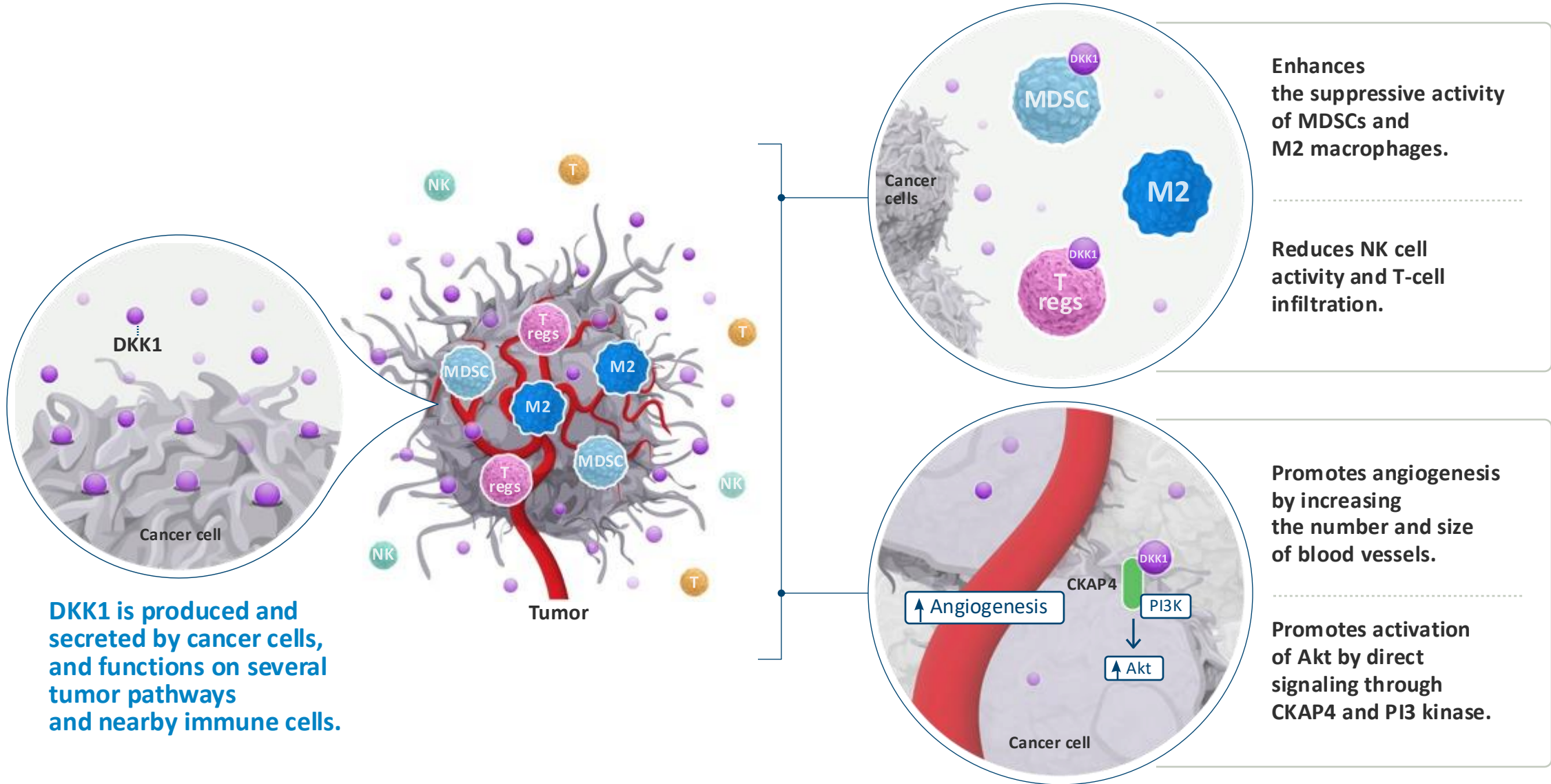


DKN-01

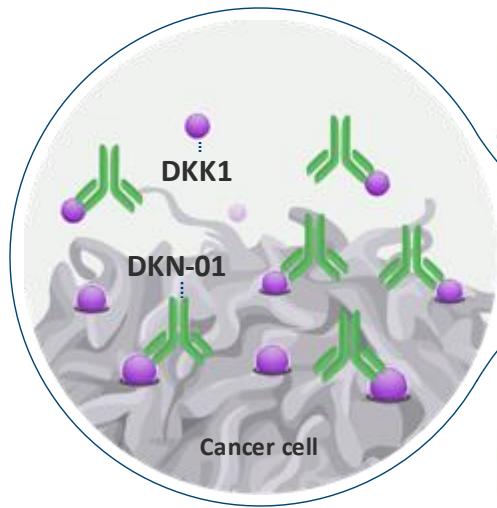
Anti-DKK1 monoclonal antibody



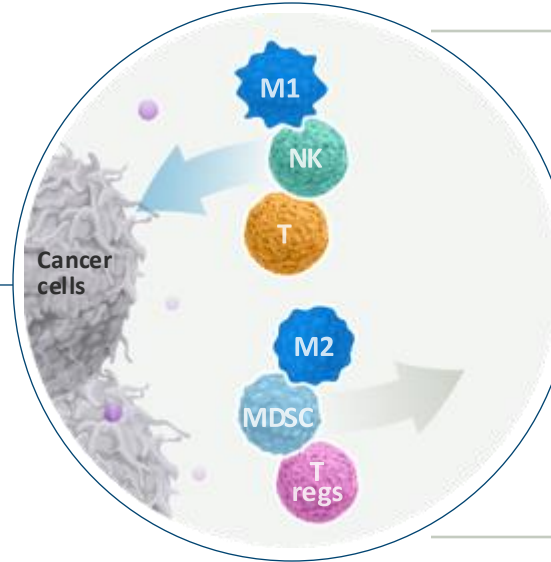
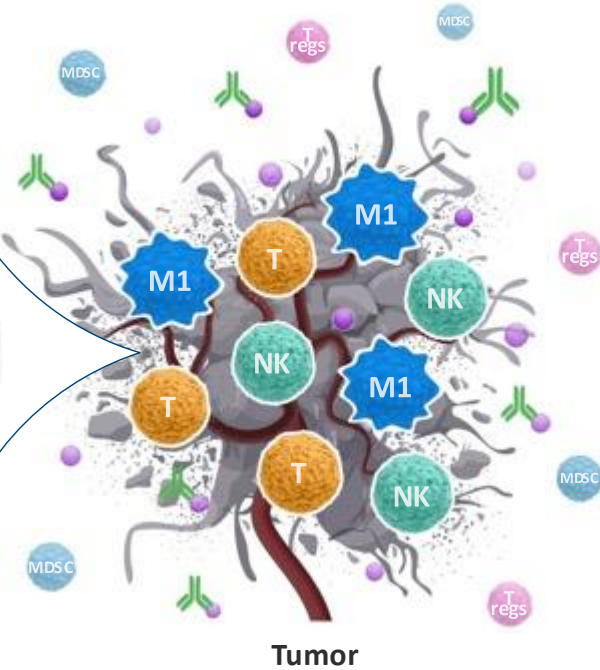
The role of DKK1 in cancer



Activity of DKN-01 to treat cancer

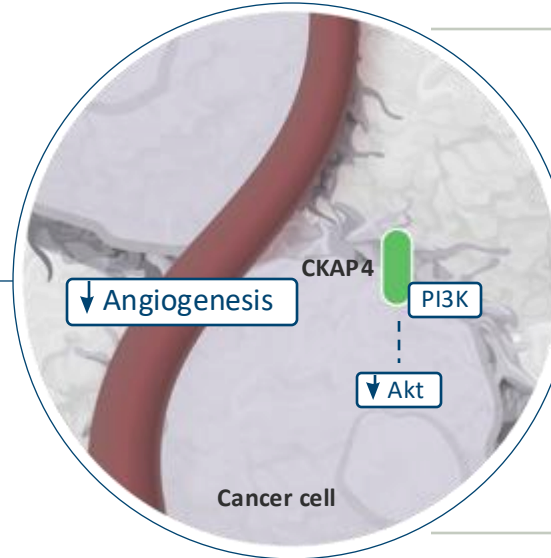


DKN-01 treatment neutralizes DKK1 and stimulates an immune mediated anti-tumor response.



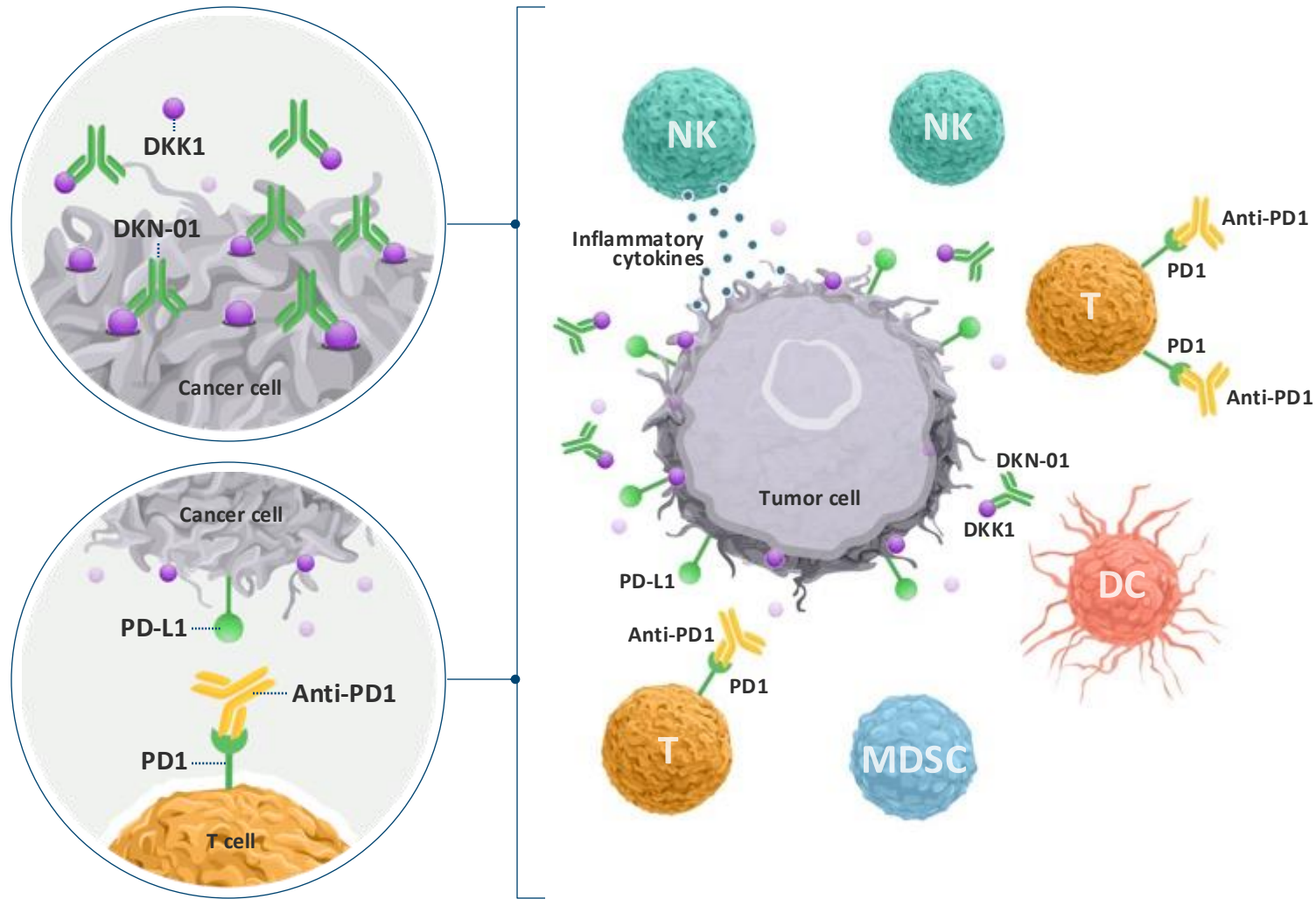
DKN-01 activates NK cells, reprograms macrophages into the tumor-attacking M1 subtype and promotes T cell infiltration.

DKN-01 reduces MDSCs and tumor suppressive M2 macrophages in the TME.



DKN-01 reduces angiogenesis and inhibits pro-oncogenic PI3K/AKT signaling.

DKN-01 and anti-PD-1 cooperativity



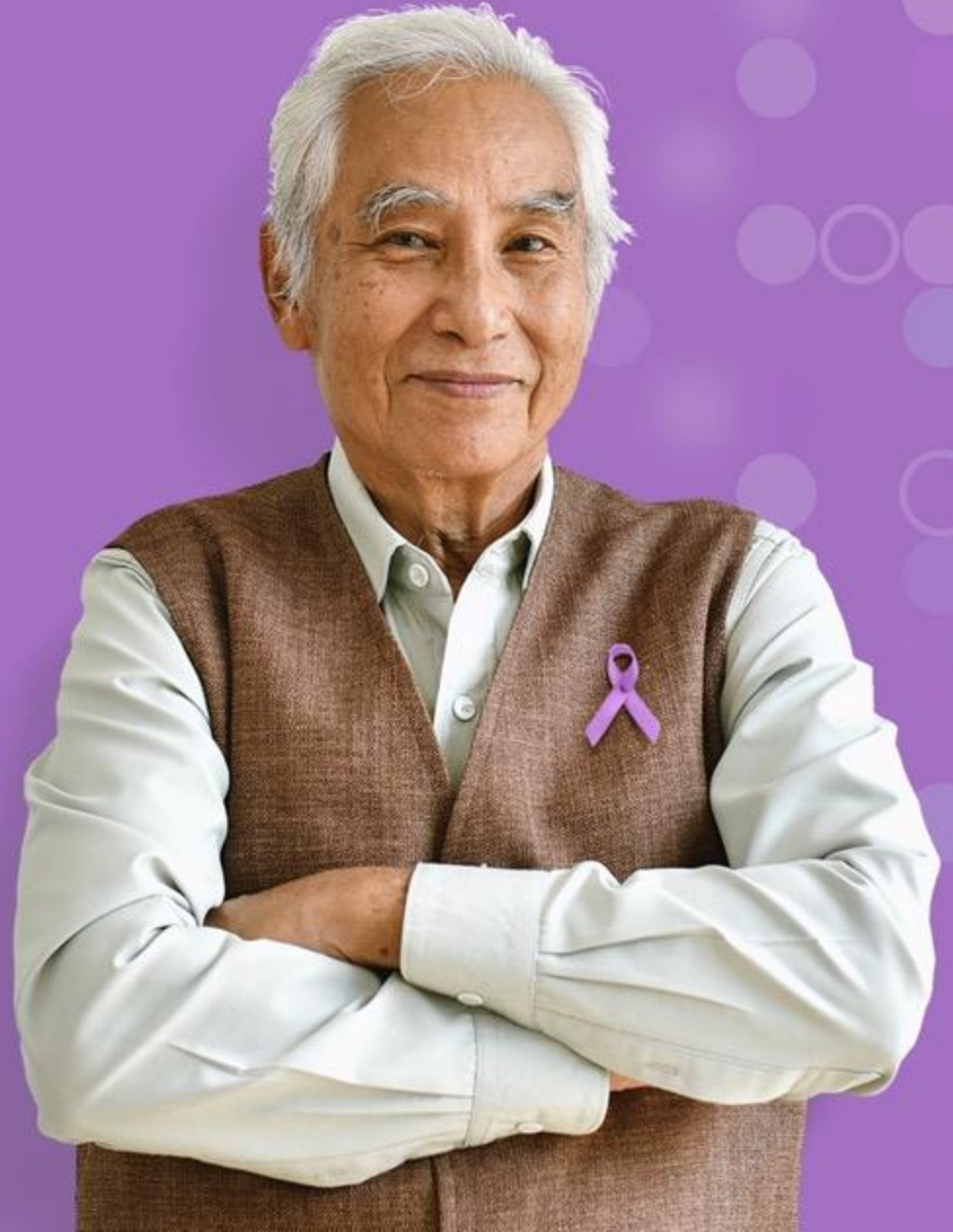
DKN-01 targets innate immunity by activating NK cells, reprogramming Macrophages and inhibiting MDSCs, thus setting the stage for an enhanced adaptive immune response by anti-PD-1.

Promotes a pro-inflammatory M1 macrophage phenotype.

DKN-01 sensitizes tumors to anti-PD-1 therapies through upregulation of PD-L1.

DKN-01

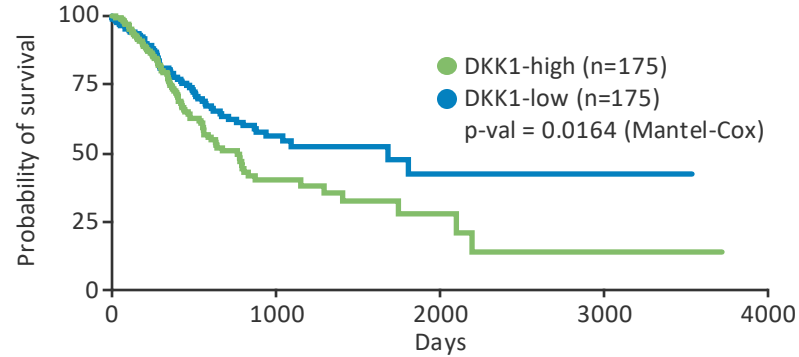
Gastric cancer development



DKK1-high levels are associated with poor survival in gastric cancer

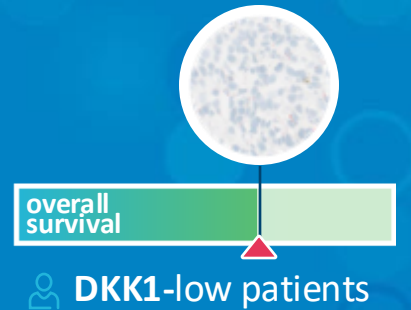
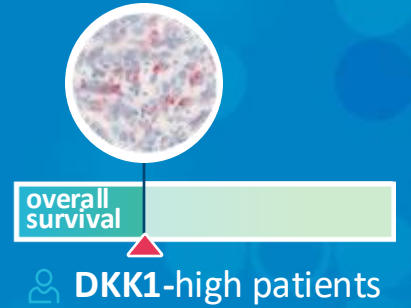
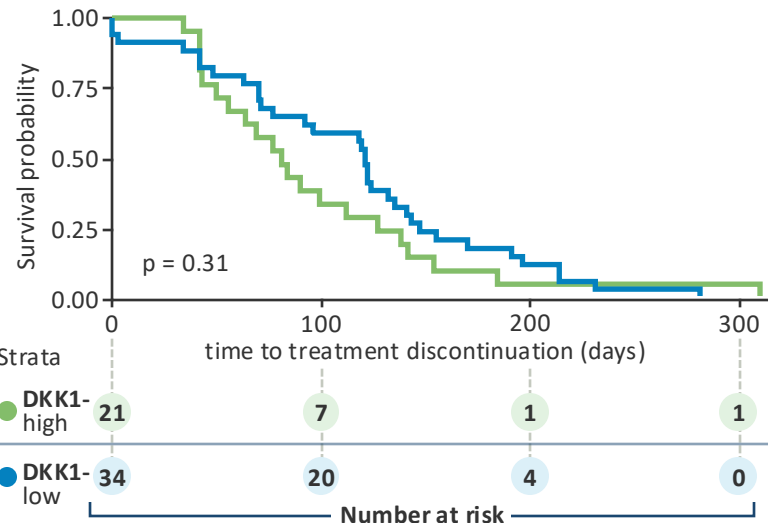
High levels of DKK1 correlate with shorter overall survival In gastric cancer

TCGA STAD dataset



DKK1-high is associated with poor response to first-line platinum + fluoropyrimidine based therapies in GEJ/gastric cancer patients

Collaboration with Tempus



~2.5 years shorter OS in DKK1-high patients

DKN-01 single agent activity in heavily pretreated esophagogastric cancer patients

2L+ EGC
DKN-01

On Study 1 Year, Reduction -33.9%
Failed Prior anti-PD-L1 + IDOi



Baseline



4-month scan

Best Overall Response
of 20 Evaluable Patients*

Partial Response	2
Stable Disease	6
Progressive Disease	12

2 Monotherapy PRs

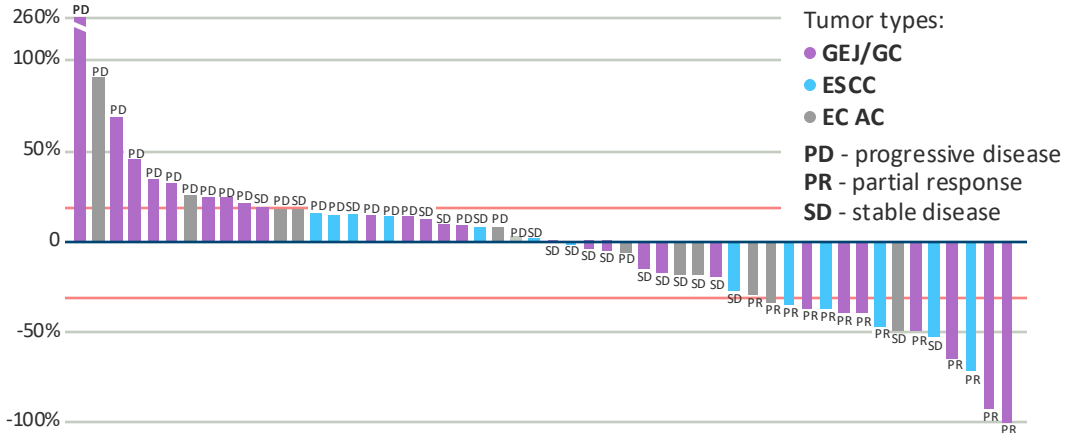
Clinical Benefit Rate
40%

Clinical activity of DKN-01 plus paclitaxel or anti-PD-1 antibody

GEJ/GC
Historical data

**DKN-01
+ paclitaxel**

**N=52
2L-8L esophagogastric pts**



	Patients treated	Prior therapies	Overall response rate (ORR)	Disease control rate (DCR)
DKN-01 + paclitaxel	N=52	1-7	25%	60%

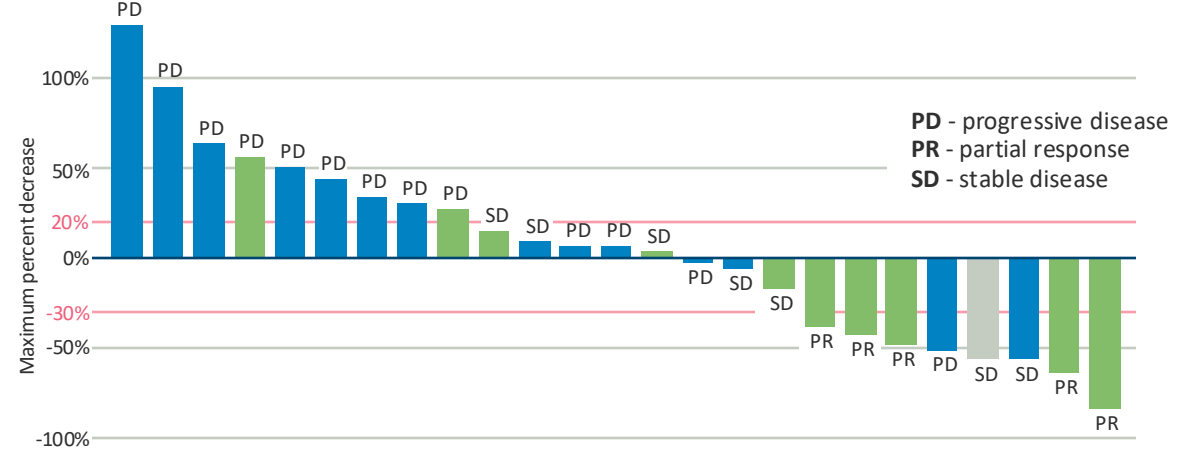
Strong broad activity in esophagogastric cancer in heavily pretreated patients

	Patients treated	PFS (months)	OS (months)	Overall response rate (ORR)	Disease control rate (DCR)
DKN-01 + paclitaxel	N=15	4.5	12.7	46.7%	73.3%

ORR in 2L patients is ~47%

**DKN-01
+ pembro**

**N=31
2L+ GEJ/GC pts**



location	Total (n)	PFS (mo)	OS (mo)	RE (n)	PR (n)	SD (n)	PD (n)	NE (n)	Overall response rate (ORR)	Disease control rate (DCR)
DKK1-high	n=11	5.1	7.3	10	5	3	2	1	5 (50%)	8 (80%)
DKK1-low	n=20	1.4	4	15	0	3	12	5	0 (0%)	3 (20%)

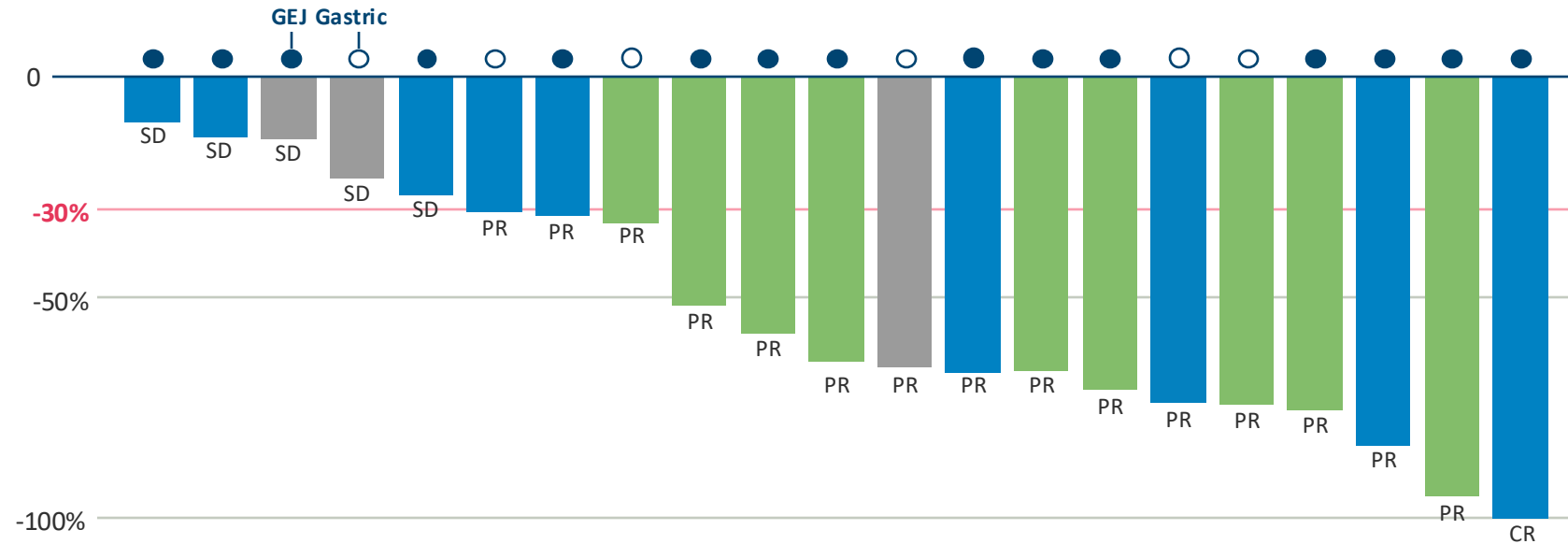
*DKK1-high ≥ upper tertile (35)

**Achieved improved ORR, PFS, and OS in DKK1-high patients
Identified H-score threshold for DKK1 high/low expression**

Response by DKK1 expression in first-line patients

1L GEJ/GC
 DKN-01
 + tislelizumab
 + chemotherapy

Best % change in sum of diameters



73%
 ORR
 in the mITT
 Population
 (1 CR; 15 PR)

	mITT* population 👤 N=22	● DKK1-high 👤 N=10	● DKK1-low 👤 N=9	● DKK1-unknown 👤 N=3
CR - complete response	1 (5%)	0	1 (11%)	0
PR - partial response	15 (68%)	9 (90%)	5 (56%)	1 (33%)
SD - stable disease	5 (23%)	0	3 (33%)	2 (67%)
PD - progressive disease	0	0	0	0
NE - non-evaluable	1 (5%)	1 (10%)	0	0

All 9 of the evaluable DKK1-high patients had a partial response
 1 PR went to curative surgery with pathological CR

*mITT population includes all patients who received > 1 dose of DKN-01
 As presented at ASCO 2023



Response by PD-L1 expression

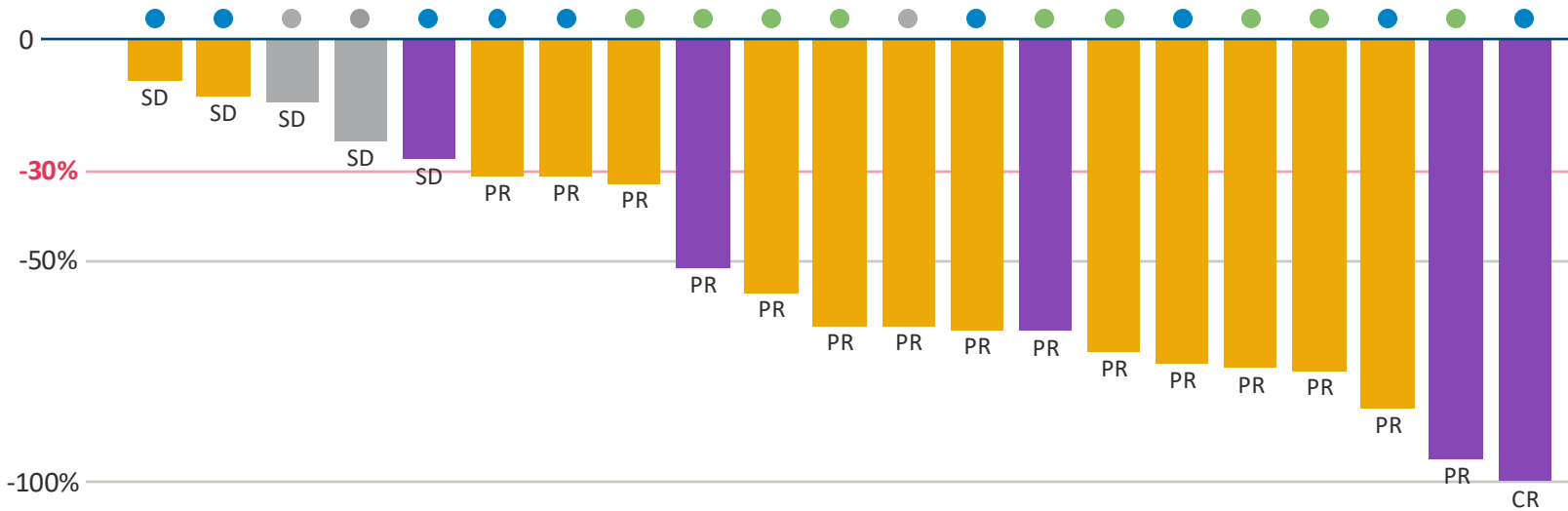
1L GEJ/GC

DKN-01

+ tislelizumab

+ chemotherapy

Best % change in sum of diameters



86%
ORR in PD-L1
low patients

	PD-L1 ↑ CPS ≥5		PD-L1 ↓ CPS <5		
	DKK1-high N=4	DKK1-low N=2	DKK1-high N=6	DKK1-low N=7	DKK1-unknown N=1
CR - complete response		1 (50%)			
PR - partial response	3 (75%)	0	6 (100%)	5 (71%)*	1 (100%)
SD - stable disease	0	1 (50%)	0	2 (29%)	0
PD - progressive disease	0	0	0	0	0
NE - non-evaluable	1 (25%)	0	0	0	0
	N=6 67% ORR		N=14 86% ORR		

vCPS: visually-estimated combined positive score; PD-L1: programmed death-ligand 1

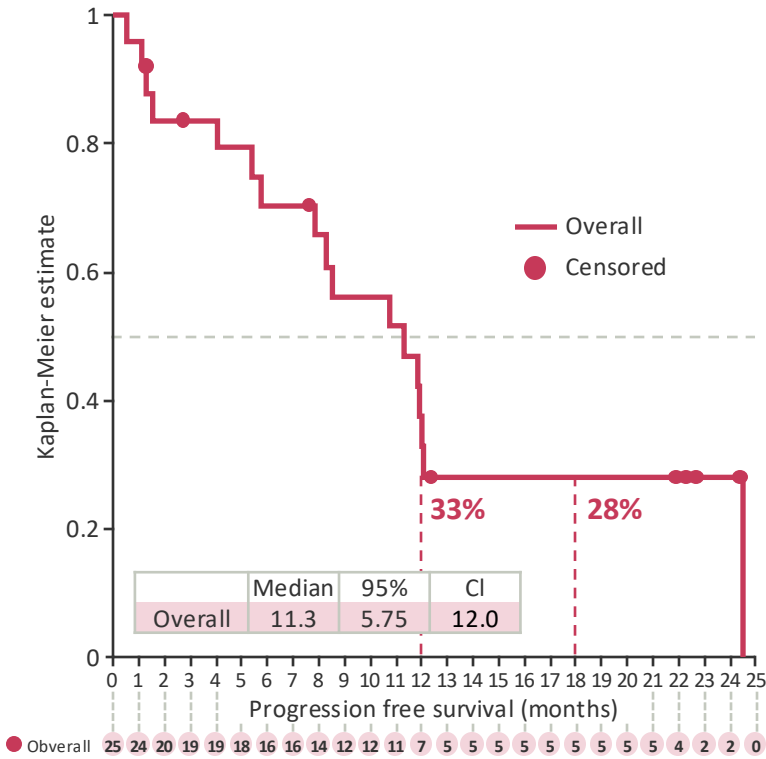
*Includes one pathologic CR

As presented at ASCO 2023

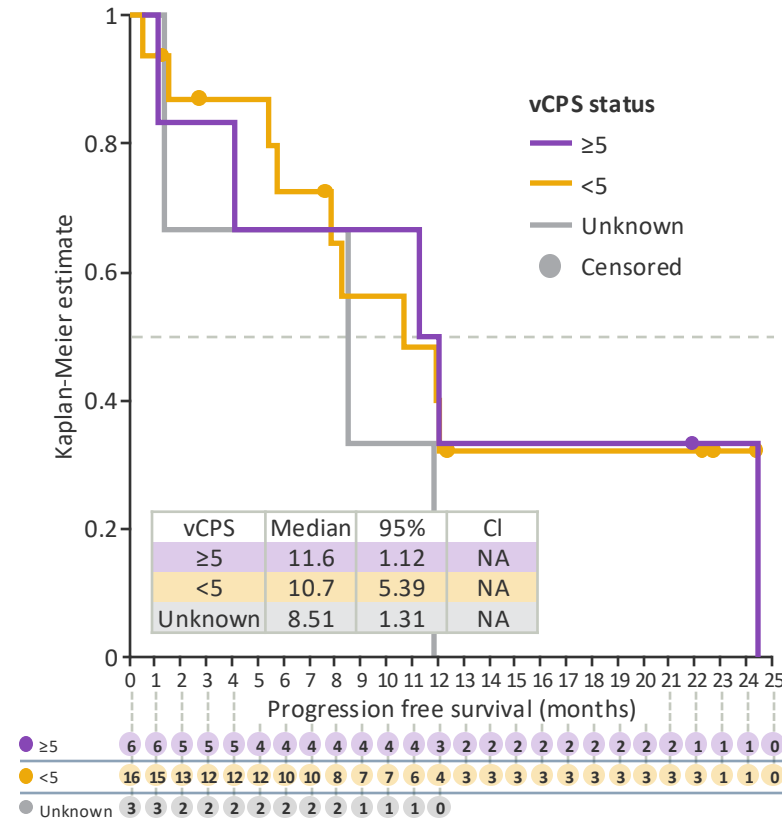
Progression-free survival

1L GEJ/GC
DKN-01
 + tislelizumab
 + chemotherapy

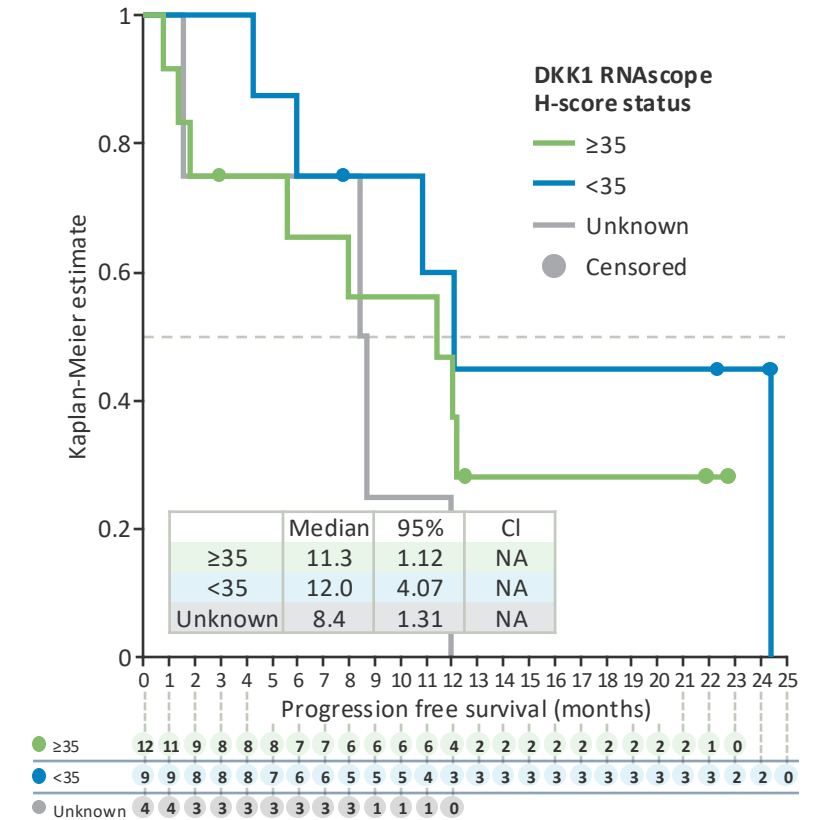
Overall Population



By PD-L1 Expression



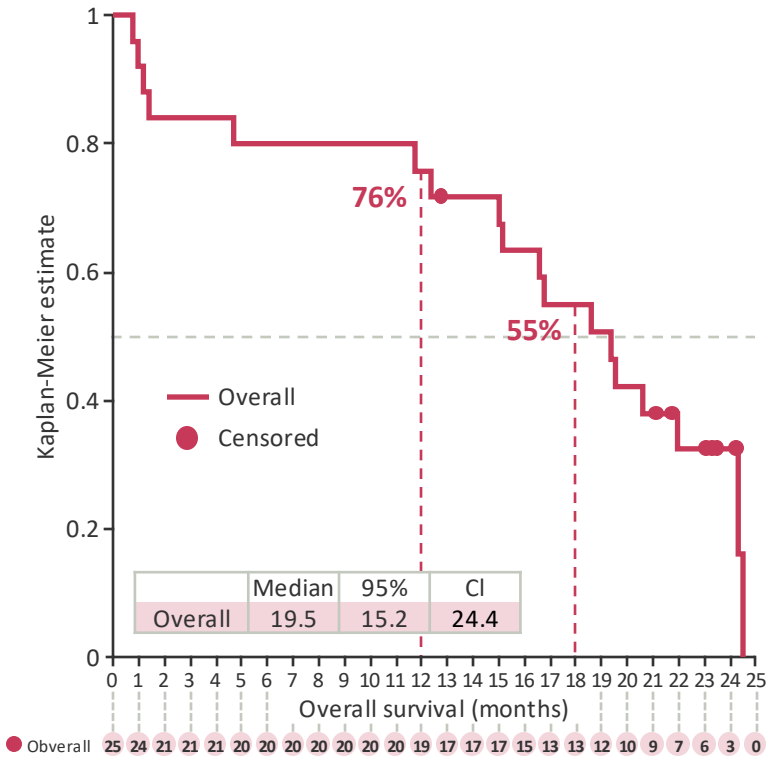
By DKK1 Expression



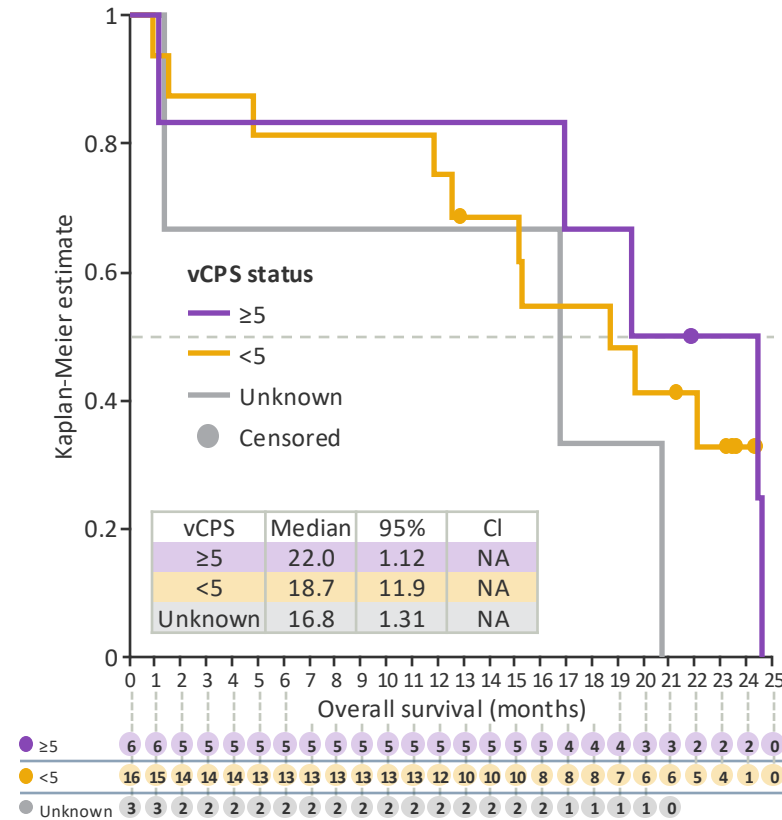
Overall survival

1L GEJ/GC
DKN-01
 + tislelizumab
 + chemotherapy

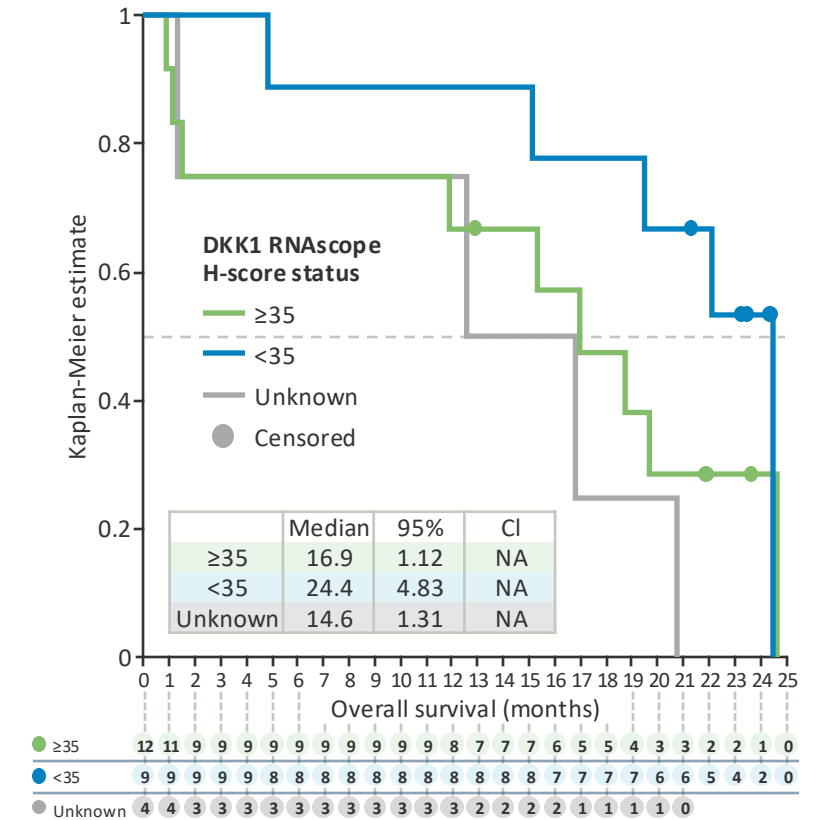
Overall Population



By PD-L1 Expression



By DKK1 Expression



Competitive benchmarks for anti-PD-1 + chemotherapy in 1L GEJ/GC patients








1L GEJ/GC
DKN-01
+ tislelizumab
+ chemotherapy



	Nivolumab		Tislelizumab		Pembrolizumab
	Checkmate-649 (All) N=789	Checkmate-649 PD-L1 ↑ CPS ≥ 5 N=473	Rationale-305 (All) N=501	Rationale-305 PD-L1 ↑ CPS ≥ 5 N=274	Keynote-859 (All) N=790
OS months (95% CI)	13.7 (12.4, 14.5)	14.4 (13.1, 16.2)	15.0 (13.6, 16.5)	16.4 (13.6, 19.1)	12.9 (11.9, 14.0)
DOR months (95% CI)	8.5 (7.7, 9.9)	9.6 (8.2, 12.4)	8.6 (7.9, 11.1)	9.0 (8.2, 19.4)	8.0 (7.0, 9.7)
PFS months (95% CI)	7.7 (7.1, 8.6))	8.3 (7.0, 9.3)	6.9 (5.7, 7.2)	7.2 (5.8, 8.4)	6.9 (6.3, 7.2)
ORR (%) (95% CI)	47% (43%, 50%)	50% (46%, 55%)	47.3% (42.9%, 51.8%)	50.4% (44.3%, 56.4%)	51.3% (47.7%, 54.8%)

Rationale-305 study: tislelizumab + chemotherapy in 1L GEJ/GC patients

1L GEJ/GC
DKN-01
+ tislelizumab
+ chemotherapy

	All Patients			North America & Europe			PD-L1  CPS ≥ 5		
	Tislelizumab + Chemo  N= 501	Control  N= 496	HR (95% CI)	Tislelizumab + Chemo  N= 125	Control  N= 124	HR (95% CI)	Tislelizumab + Chemo  N= 274	Control  N= 272	HR (95% CI)
OS months (95% CI)	15.0 (13.6, 16.5)	12.9 (12.1, 14.1)	0.80 (0.70, 0.92)	11.0 (8.4, 13.9)	10.5 (8.1, 12.1)	0.71 (0.54, 0.94)	17.2 (13.9, 21.3)	12.6 (12.0, 14.4)	0.74 (0.59, 0.94)
DOR months (95% CI)	8.6 (7.9, 11.0)	7.2 (6.0, 8.5)		7.5 (4.4, 12.0)	5.0 (3.9, 6.7)		9.0 (8.2, 19.4)	7.1 (5.7, 8.3)	
PFS months (95% CI)	6.9 (5.7, 7.2)	6.2 (5.6, 6.9)	0.78 (0.67, 0.90)	5.6 (4.4, 7.0)	5.4 (4.3, 5.9)	0.84 (0.63, 1.11)	7.2 (5.8, 8.4)	5.9 (5.6, 7.0)	0.67 (0.55, 0.83)
ORR (%) (95% CI)	47.3% (42.9%, 51.8%)	40.5% (36.2%, 45.0%)		36.0% (27.6%, 45.1%)	31.5% (23.4%, 40.4%)		50.4% (44.3%, 56.4%)	43.0% (37.1%, 49.1%)	

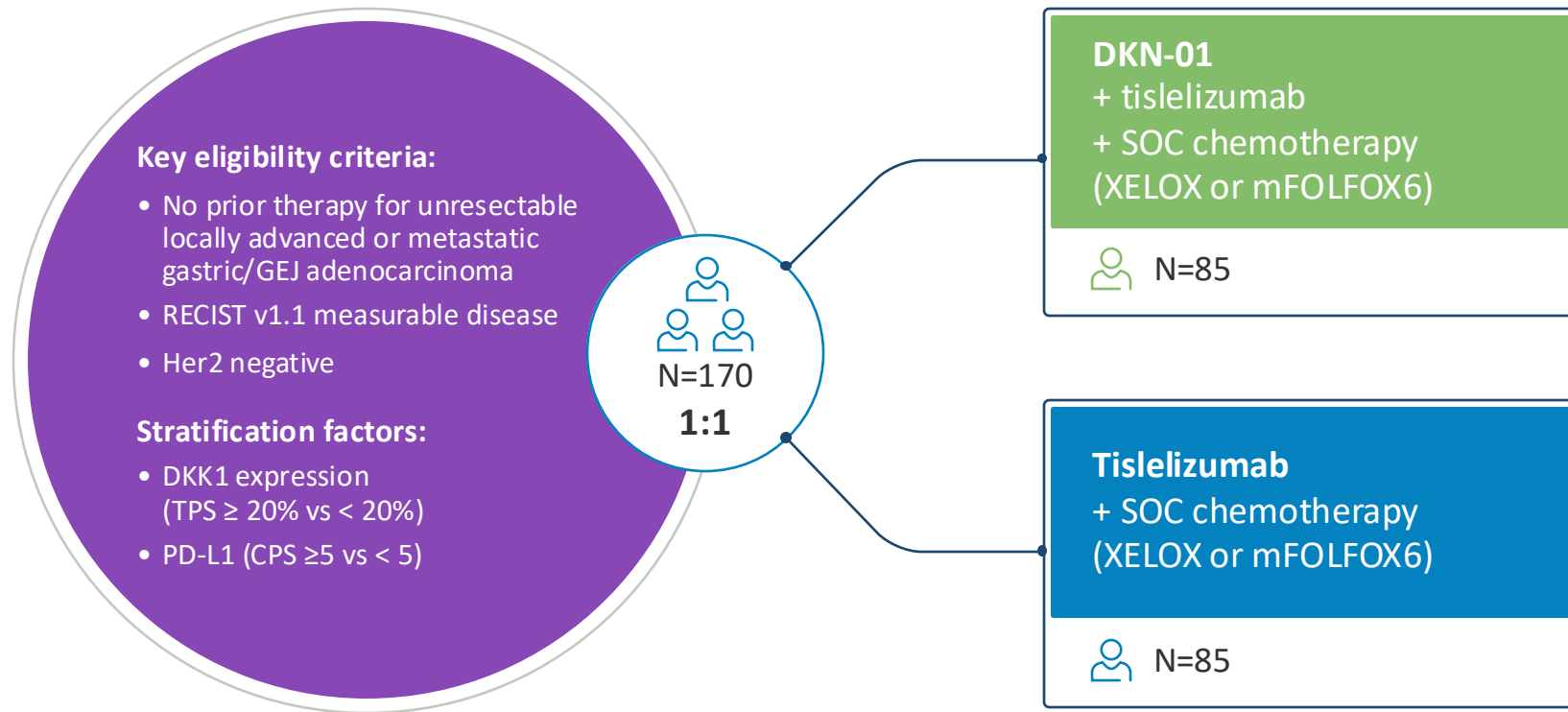
DisTinGuish Part C randomized study

1L GEJ/GC

DKN-01

+ tislelizumab

+ chemotherapy



✓ **Primary objective:**
PFS, DKK-high and all

✓ **Secondary objectives:**

- OS, DKK1-high and all
- DOR, DKK1-high and all
- ORR, DKK1-high and all

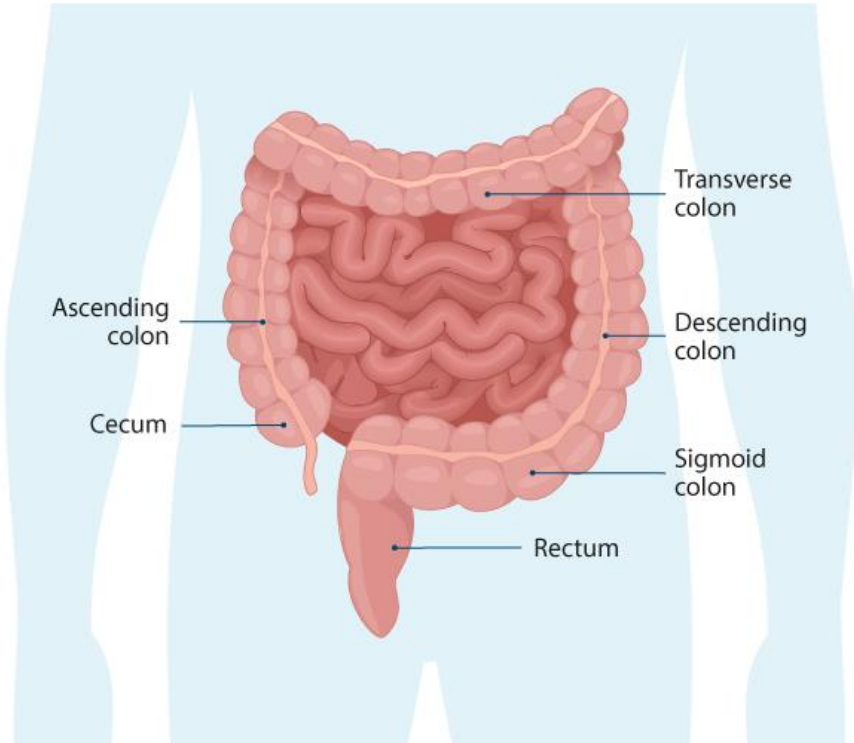
DKN-01

Colorectal cancer development



Rationale for targeting colorectal cancer with DKN-01

DKK1 expression is the highest in metastatic rectum

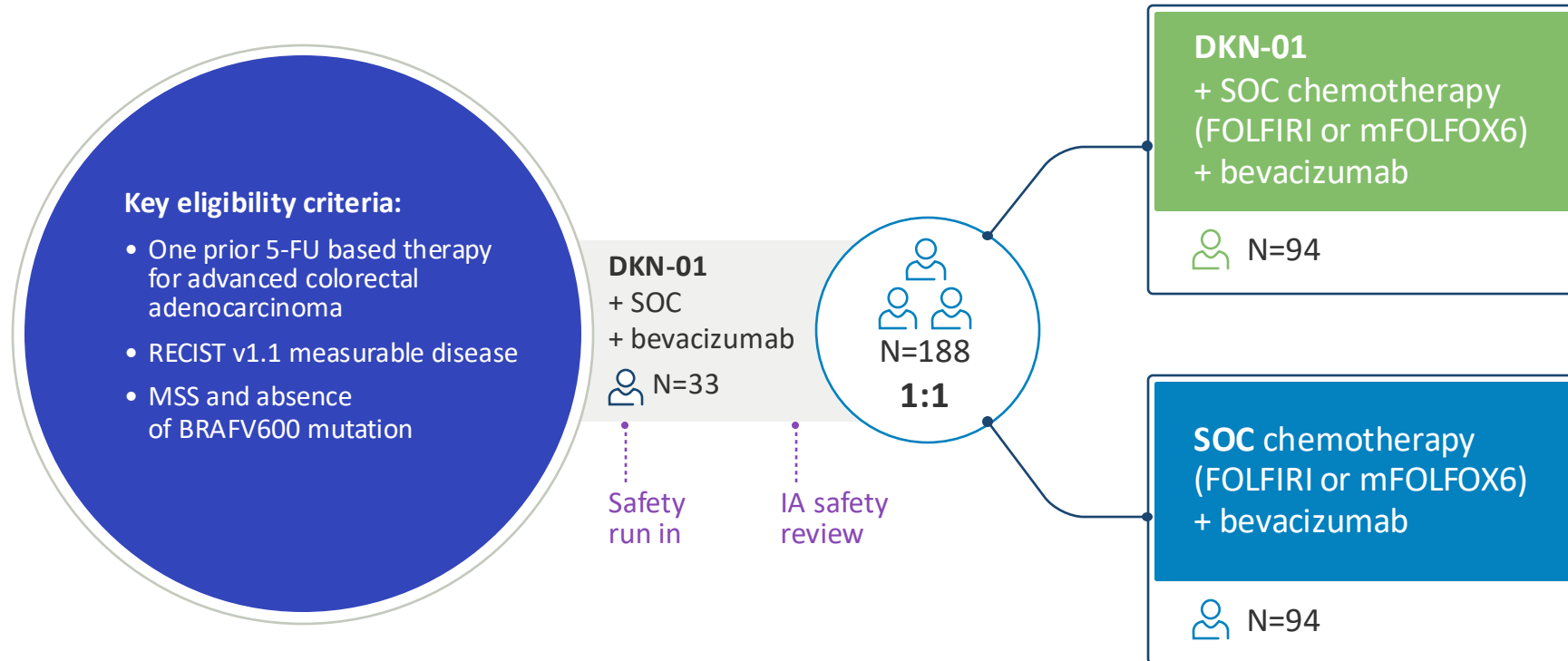


- CRC is characterized by hyperactivation of the Wnt pathway, often believed to be the initiating and driving event
 - Consensus Molecular Subtype 2 primarily in left-sided tumors
- DKK1 highest in metastatic rectum
- DKK1 drives resistance to 5FU chemotherapy
- Preclinically DKN-01 treatment:
 - Shows additive activity with 5FU and is able to overcome 5FU-resistance
 - Has activity alone and with an anti-VEGF antibody

DeFianCe study design: advanced colorectal cancer

2L CRC
DKN-01
+ bevacizumab
+ chemotherapy

Randomized phase 2 study of FOLFIRI/FOLFOX and bevacizumab +/- DKN-01 as second-line treatment of advanced colorectal cancer



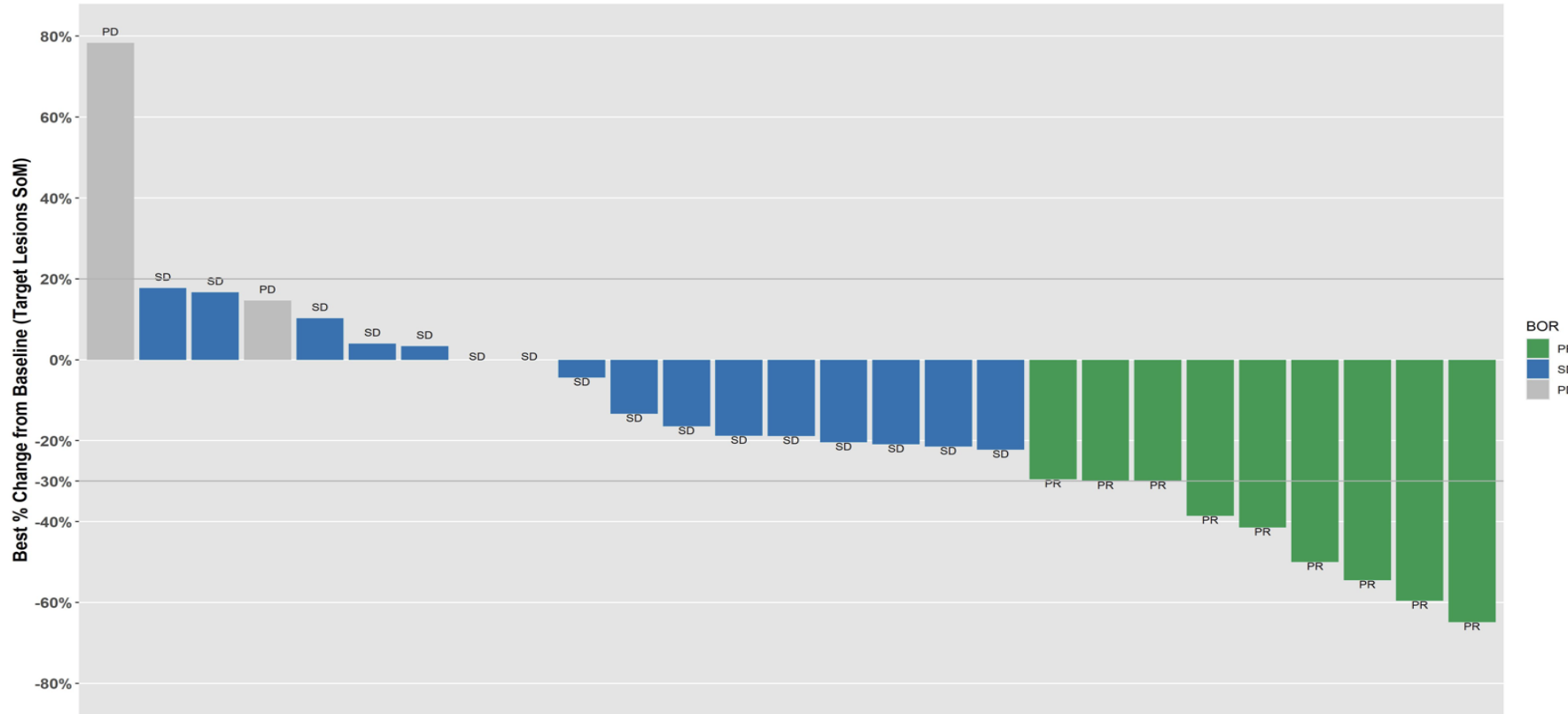
✓ **Primary objective:**
PFS, left-side and all

✓ **Secondary objectives:**

- ORR
- DoR
- OS

Overall response rate exceeded 20% target with high disease control rate

2L CRC
DKN-01
+ bevacizumab
+ chemotherapy



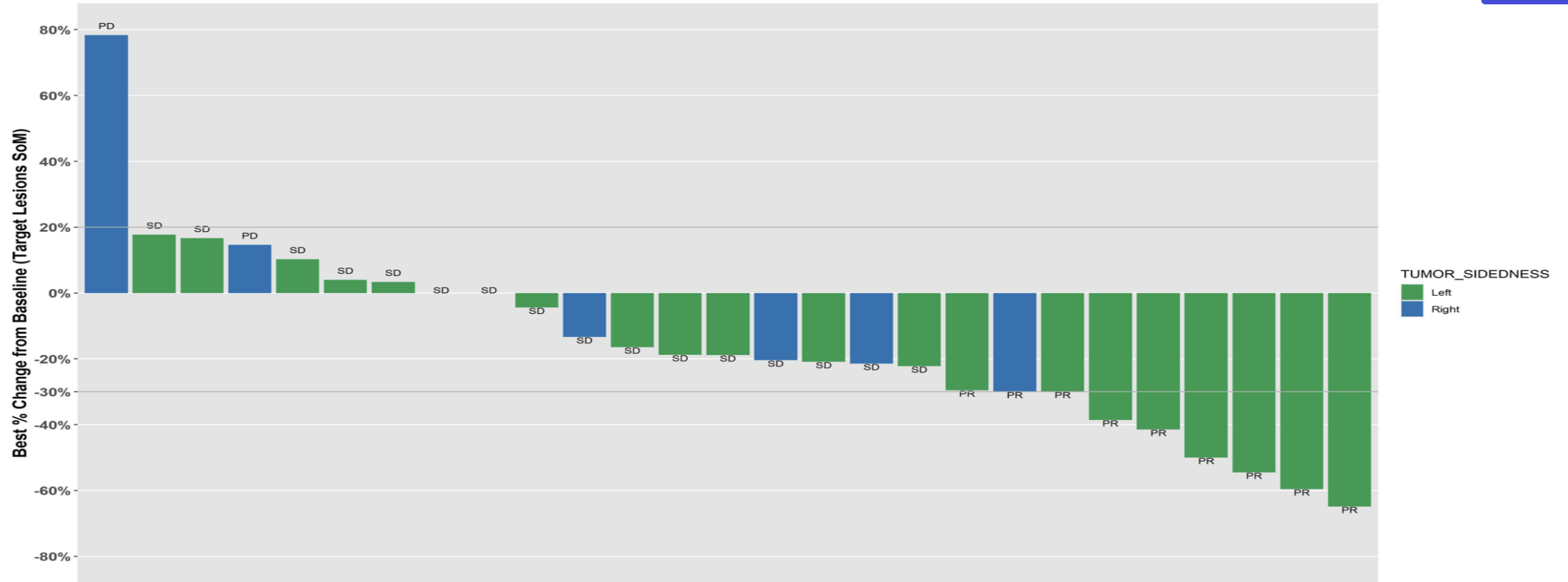
ORR in RE patients:
9/27 = 33%

DCR in RE patients:
25/27 = 93%

	Objective Response Rate (%)	Disease Control Rate (%)	Partial Response n (%)	Stable Disease n (%)	Progressive Disease n (%)
Overall, n=27	33	93	9 (33)	16 (59)	2 (7)

Greater activity in left-sided tumors subgroup

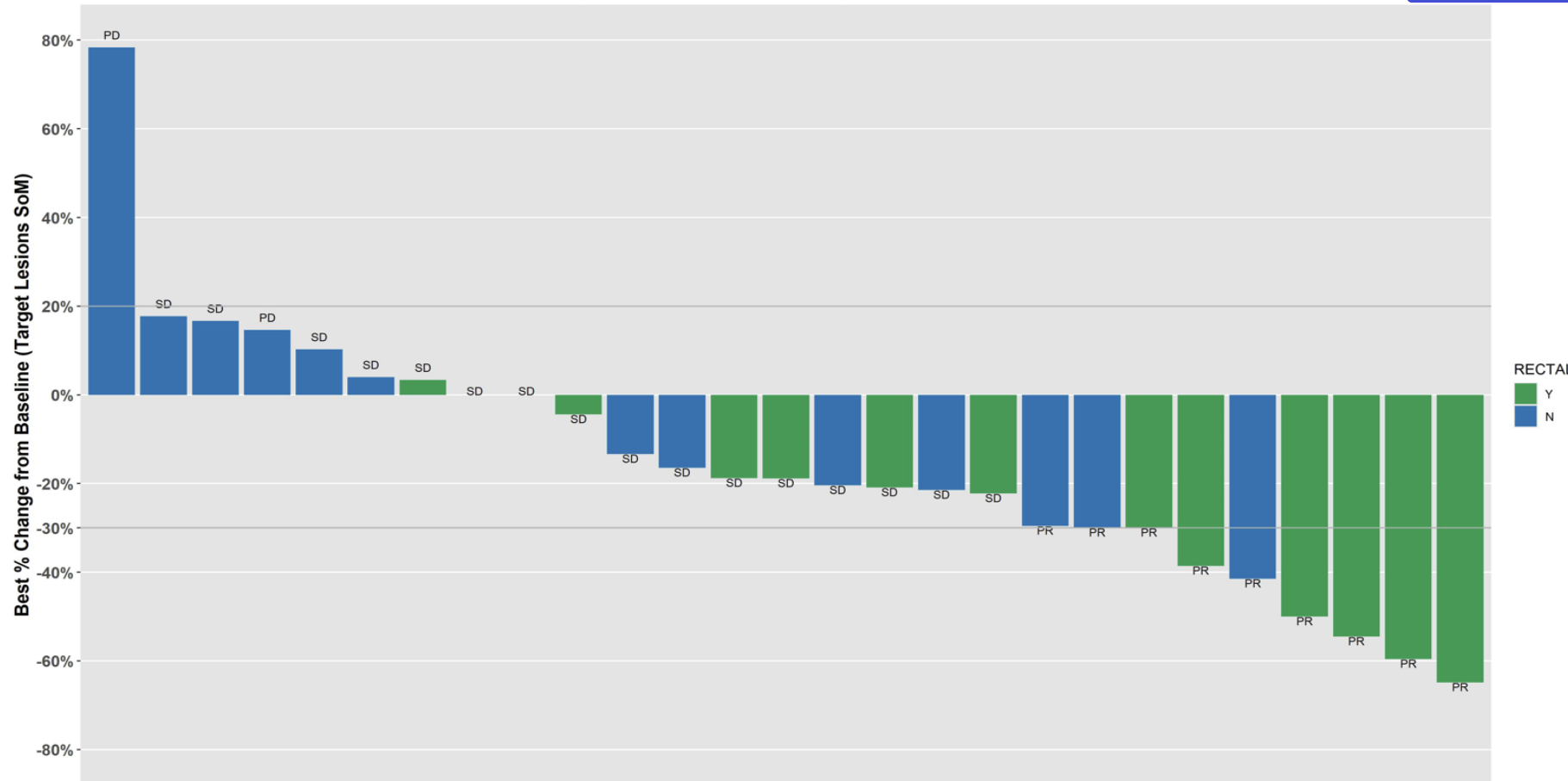
2L CRC
DKN-01
+ bevacizumab
+ chemotherapy



Overall, n=27	Objective Response Rate (%)	Disease Control Rate (%)	Partial Response n (%)	Stable Disease n (%)	Progressive Disease n (%)
Left (n=21)	38	100	8 (38)	13 (62)	0 (0)
Right (n=6)	17	67	1 (17)	3 (50)	2 (33)

Enriched responses in rectal/rectosigmoid cancer patients

2L CRC
DKN-01
+ bevacizumab
+ chemotherapy



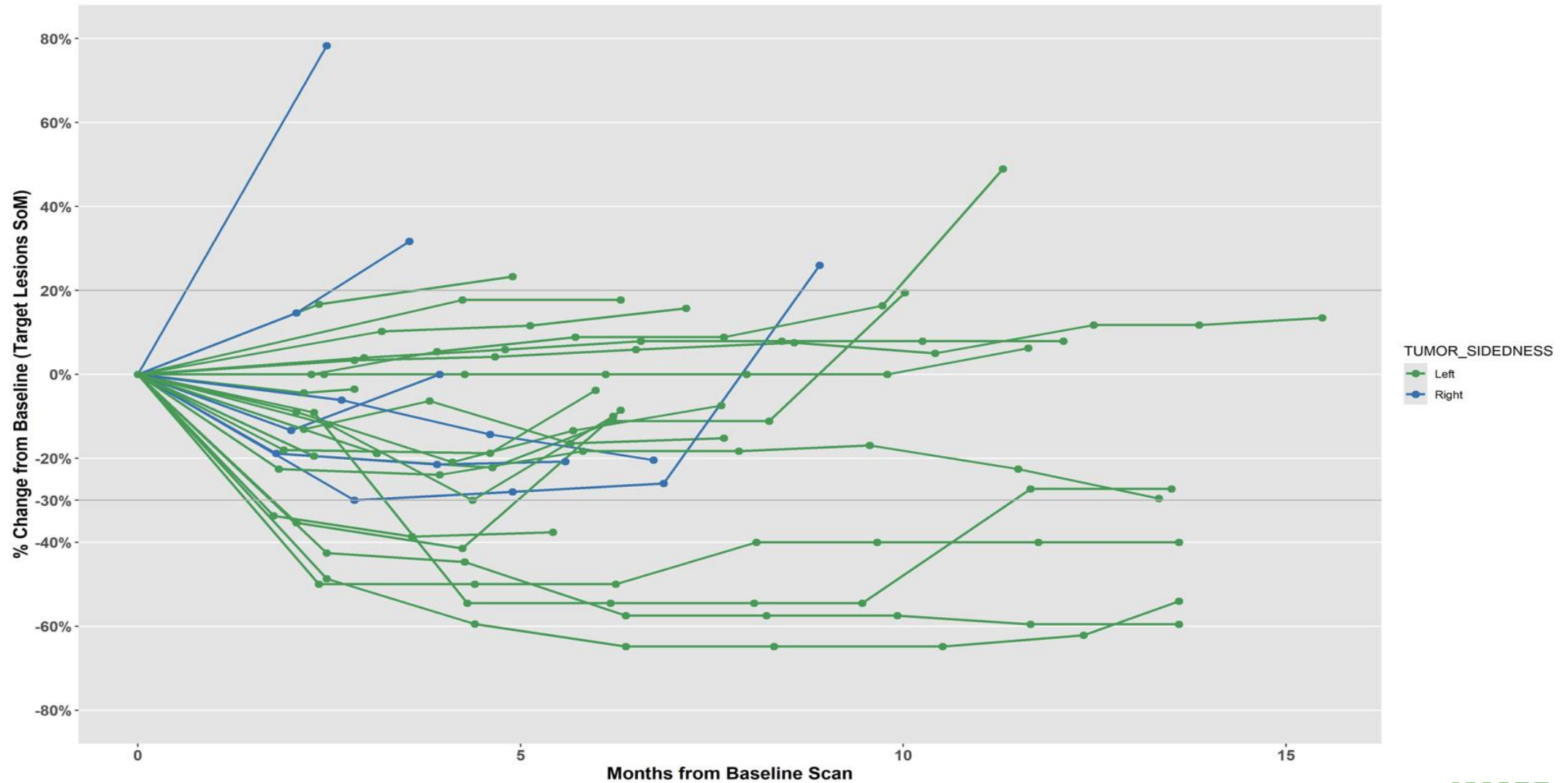
Overall, n=27	Objective Response Rate (%)	Disease Control Rate (%)	Partial Response n (%)	Stable Disease n (%)	Progressive Disease n (%)
Left (n=21)	38	100	8 (38)	13 (62)	0 (0)
Rectal (n=13)	46	100	6 (46)	7 (54)	0 (0)

6 of the 9 responding patients were in the rectal/rectosigmoid subgroup

ORR RE: 46%

Duration of clinical benefit

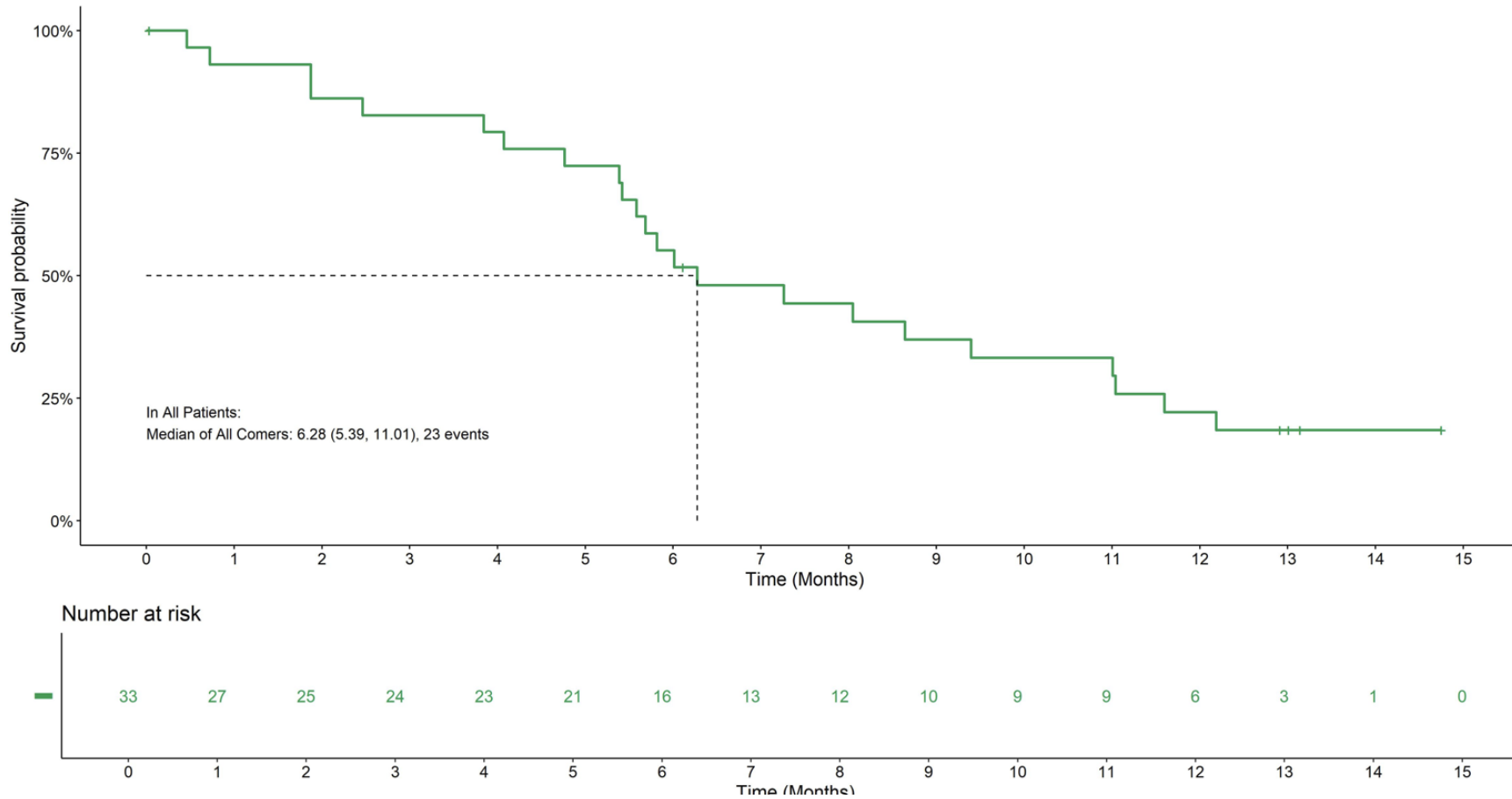
Tumor sidedness subgroup



Progression-free survival

2L CRC
DKN-01
+ bevacizumab
+ chemotherapy

- Heterogeneous population included many unfavorable subgroups



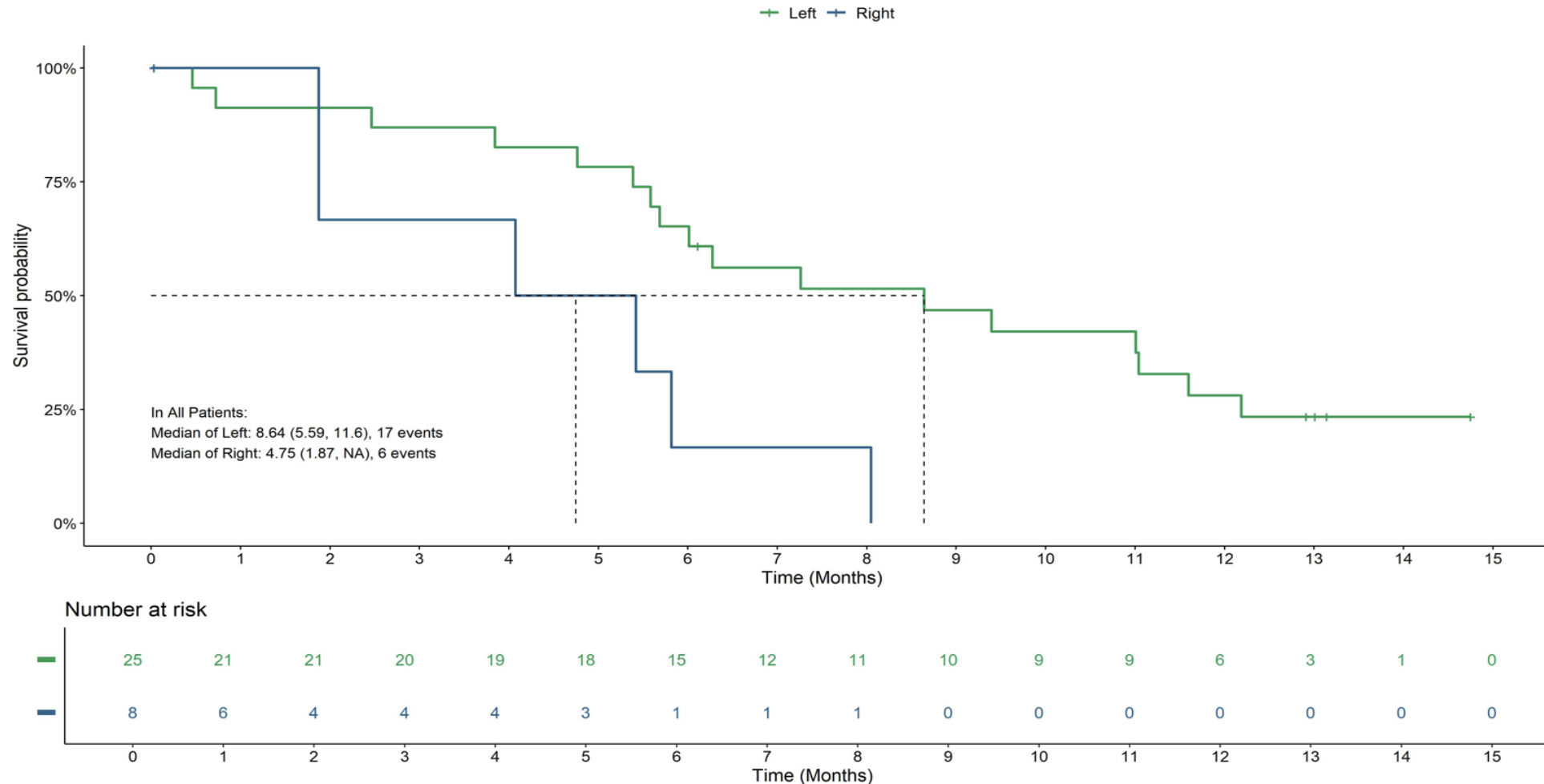
Median PFS:
6.3 months

6-month PFS rate:
55.2%

Longer progression-free survival in patients with left-sided tumors

2L CRC
DKN-01
+ bevacizumab
+ chemotherapy

- Median PFS in left-sided tumors: 8.6 months



DKN-01

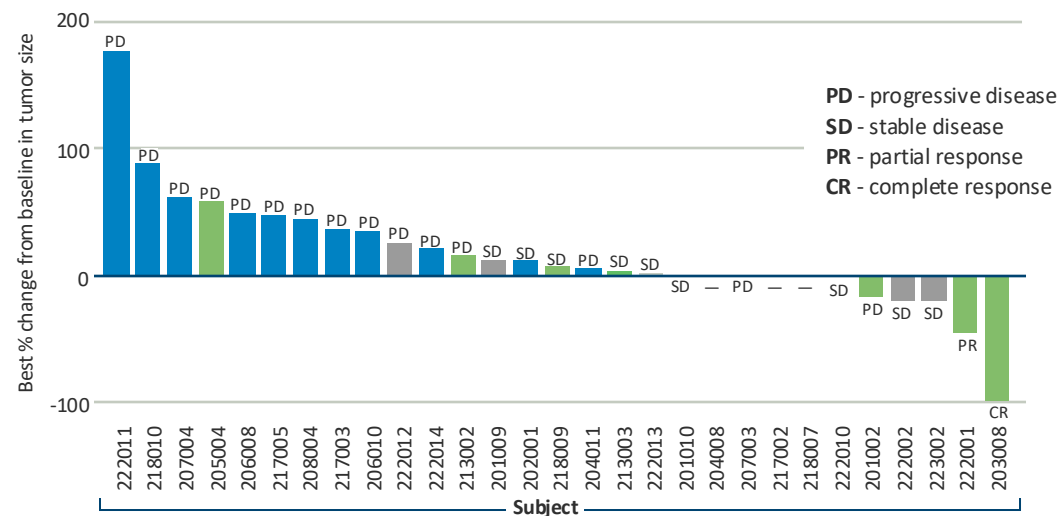
Endometrial cancer development



DKN-01 monotherapy - overall response by DKK1 tumoral expression

2L+ EEC
DKN-01
monotherapy

Overall response by DKK1 tumoral expression



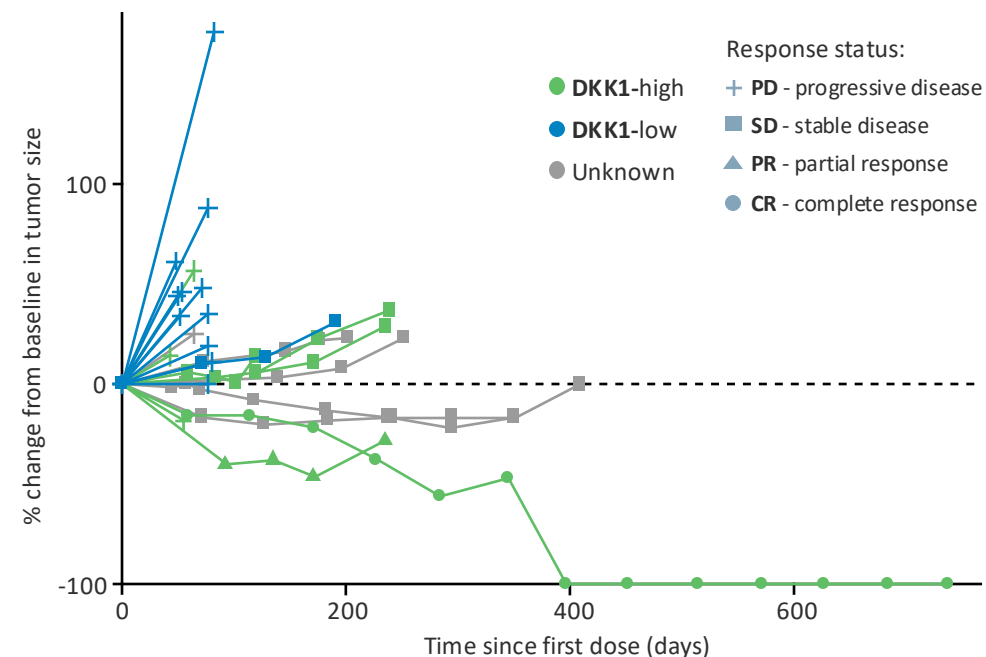
Status	Total	CR	PR	SD	PD	NE	ORR	DCR
DKK1-high (≥18)*	n=8	1	1	3	3	0	25%	63%
DKK1-low (<18)	n=15	0	0	1	11	3	0%	7%
Unknown	n=6	0	0	5	1	0	0%	83%

*H-score ≥ 18, upper tertile of overall study population

**DKK1-high tumors have better ORR (25% vs. 0%)
and clinical benefit (63% vs. 7%)**

**Patients with unknown DKK1 expression include
3 patients with durable SD and Wnt activating mutations**

Durable clinical benefit in DKK1-high tumors



**DKK1-high patients have longer progression-free survival
(4.3 vs. 1.8 months [HR 0.26; 95 CI: 0.09, 0.75])**

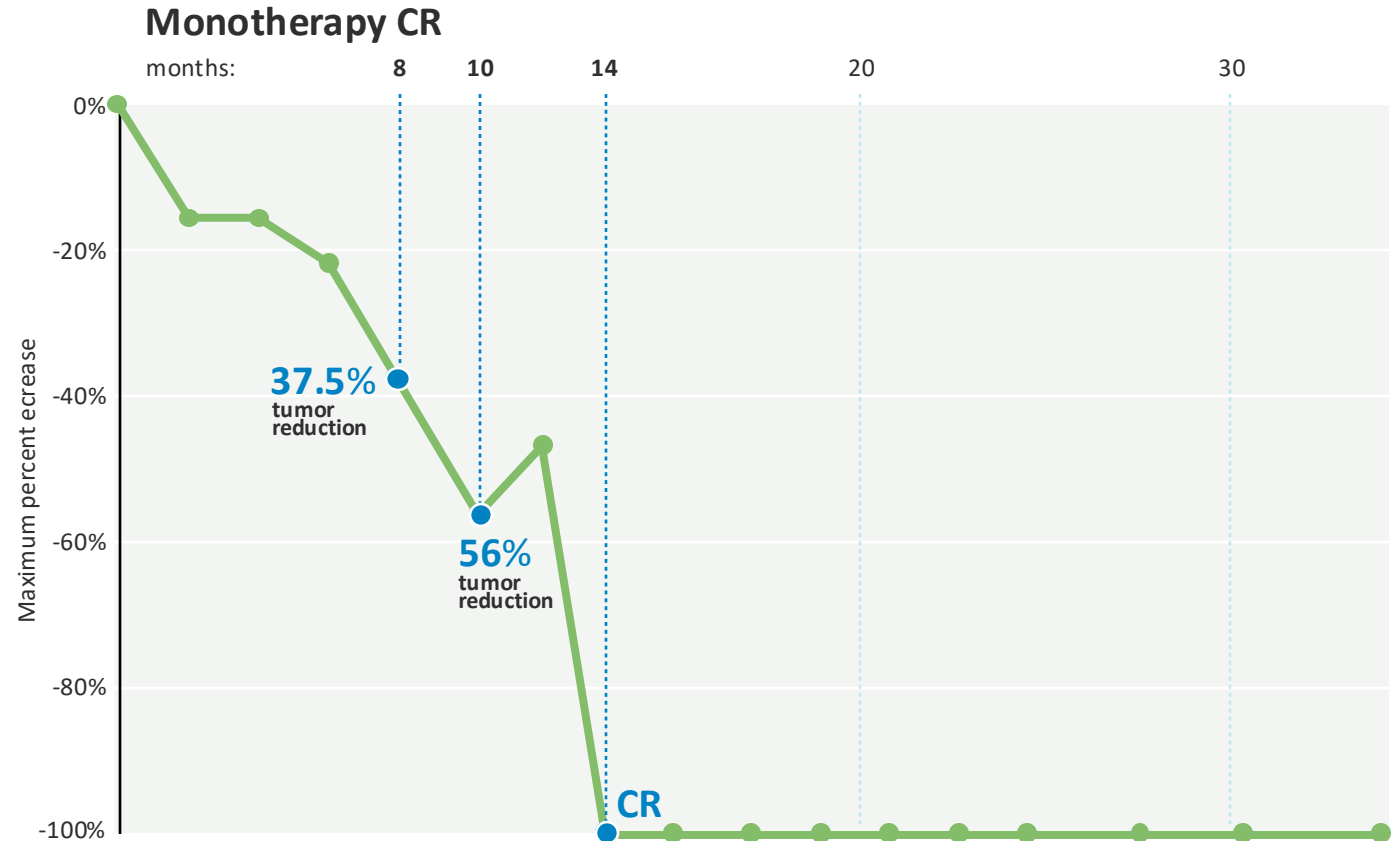
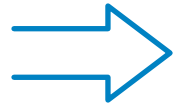
Complete response in endometrial cancer patient on DKN-01 monotherapy

2L+ EEC
DKN-01
monotherapy

- ✓ **Patient:**
60 yo female with recurrent endometrial cancer
- ✓ **Prior treatment:**
radiation and chemotherapy poorly tolerated (neuropathy and thrombocytopenia)
- ✓ **Baseline disease characteristics:**
MSI-H, TMB: 46.65
- ✓ **Genetics:**
ARID1A, PIK3CA; DKK1-high

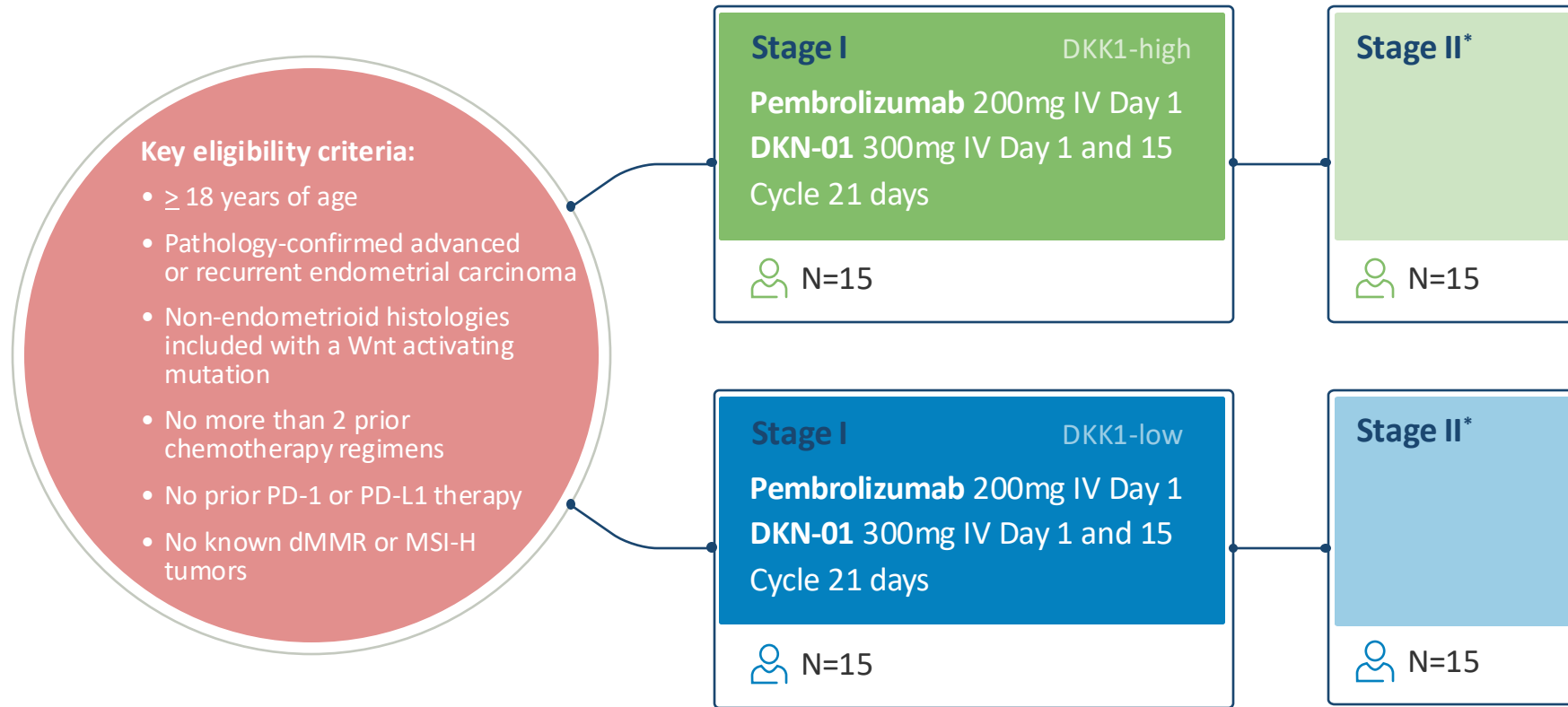
Treatment:
DKN-01 monotherapy

Enrolled in July 2018



DKN-01 plus pembrolizumab endometrial cancer study

2-3L EEC
DKN-01
+ pembrolizumab



✓ **Primary objective:**
Objective response rate (ORR)

✓ **Secondary objectives:**
Clinical benefit, PFS, OS, DOR

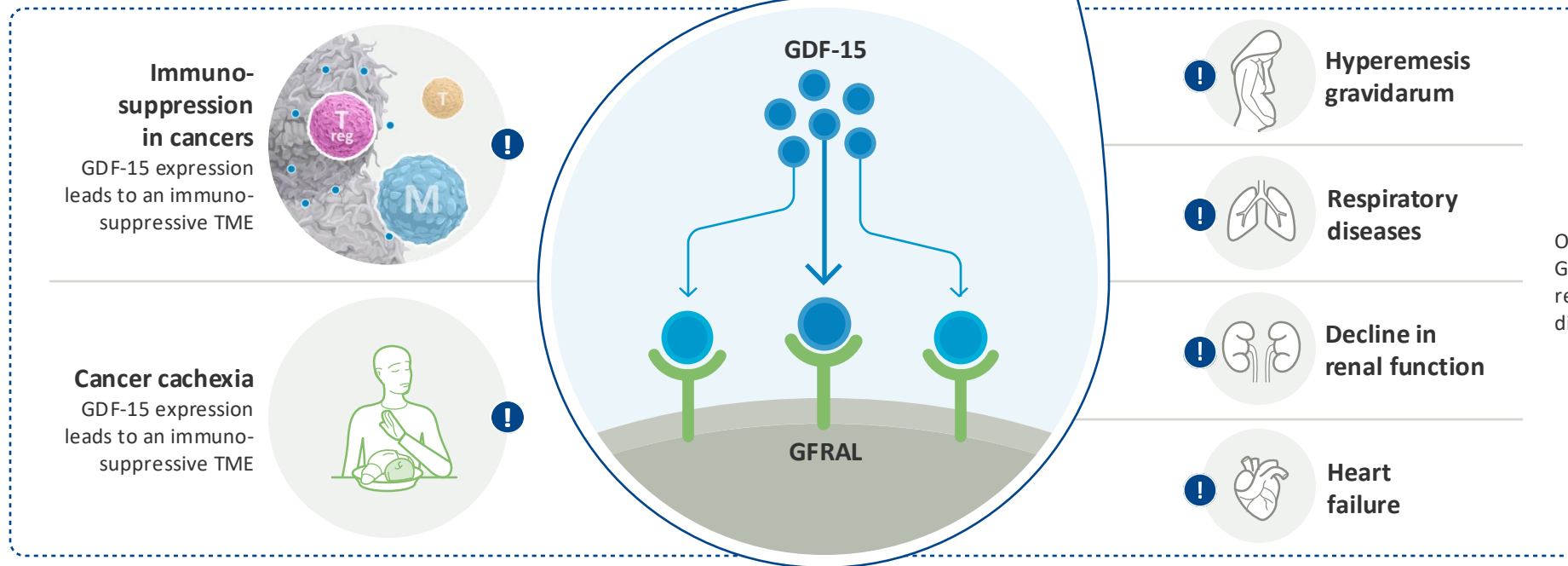
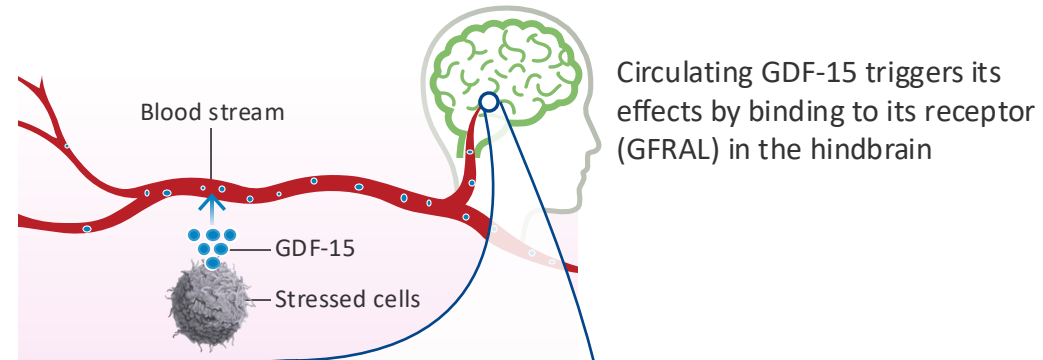
Open-label, phase 2 trial,
Bayesian optimal phase II design,
Investigator-initiated study with pembrolizumab supplied by Merck.

FL-501

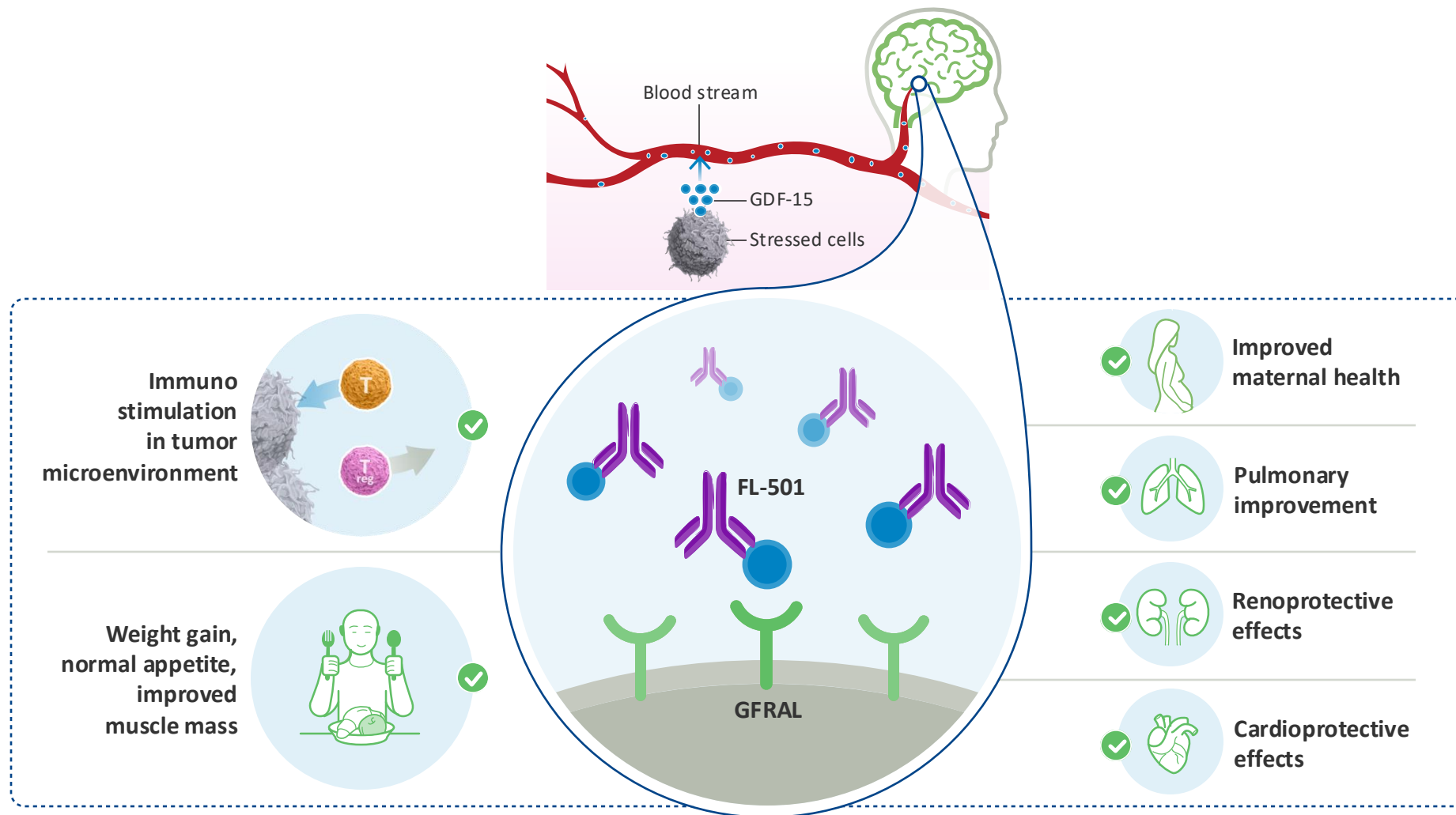
Anti-GDF-15 monoclonal antibody



The role of GDF-15 in cachexia and cancer



FL-501 mechanism of action



CORPORATE



Management team



Christopher Mirabelli, PhD
Chairman of the board



Douglas Onsi
President & chief executive officer



Gus Lawlor
Chief operating officer



Walter Newman, PhD
Senior research fellow



Cyndi Sirard, MD
Chief medical officer



Jason Baum, PhD
Chief scientific officer



Mark O'Mahony
Chief manufacturing officer



Christine Granfield
Vice president, head of regulatory affairs and quality



DKN-01 clinical milestones 2024-2025

