

Needham & Company 18th Annual Healthcare Conference

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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, future financial position, future revenues, projected costs, prospects, plans and objectives of management, are forward-looking statements. 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. We assume no obligation to update any forward-looking statements, except as required by applicable law.

Highlights

DKN-01

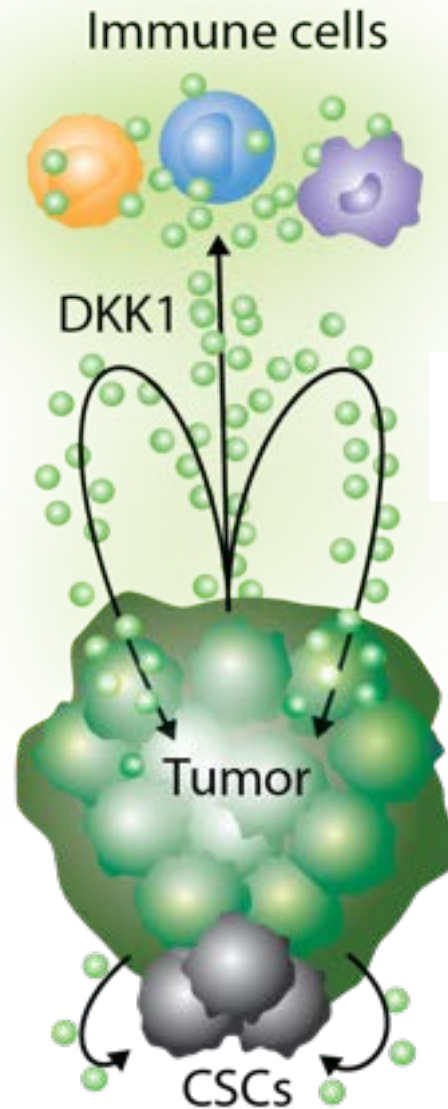
- Keytruda and paclitaxel combinations exceed benchmarks
- Predictive biomarkers
- Monotherapy responses in three tumor types
- Prostate cancer study now enrolling

TRX518

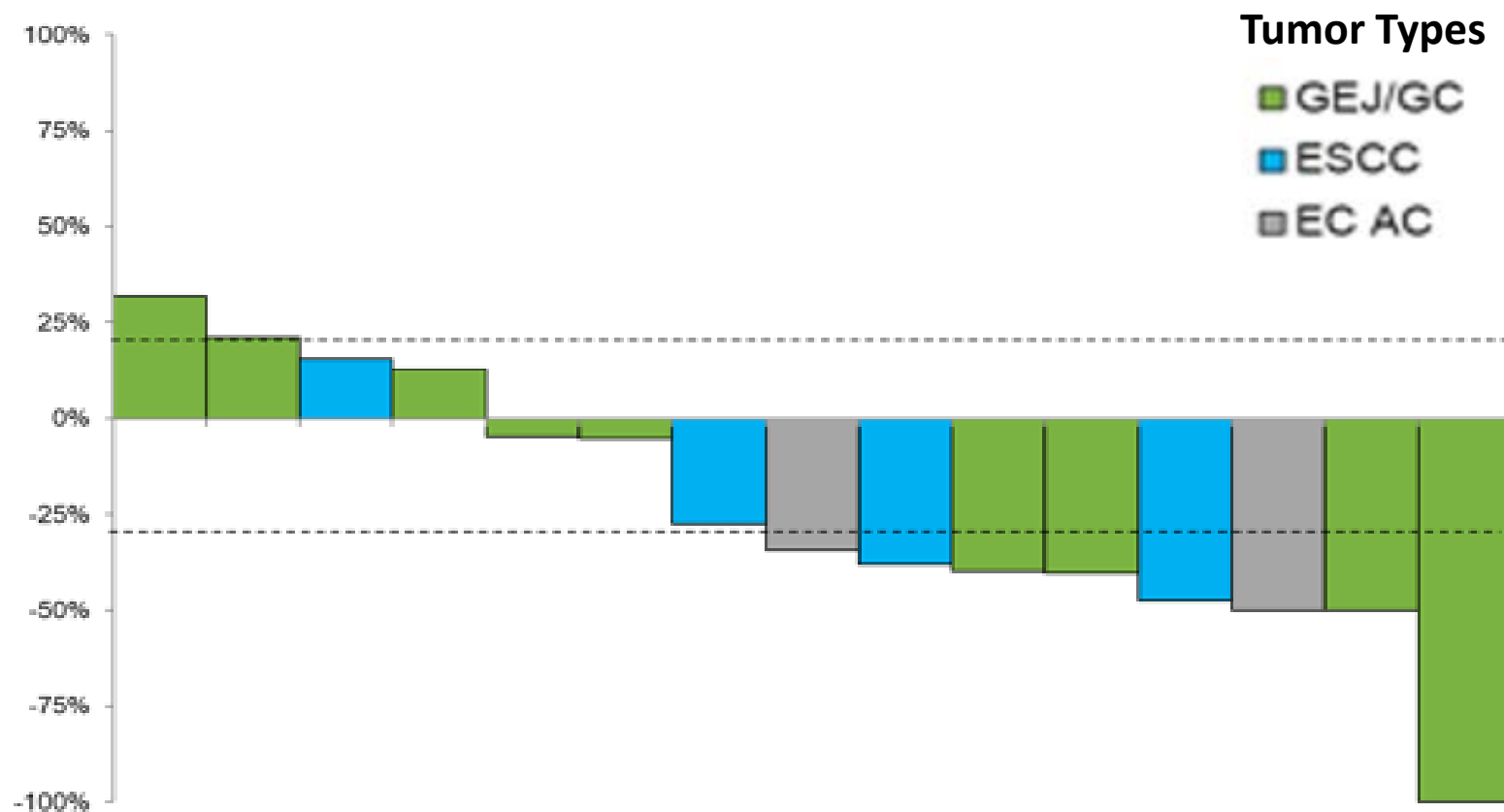
- Monotherapy response
- Keytruda and Opdivo combinations generate complete and partial responses
- Partial response and durable clinical benefit in gemcitabine refractory patients

DKK1 in Cancer – Linked to Poor Prognosis

- Suppresses anti-tumor immune responses
- Promotes proliferation, metastasis, and angiogenesis
- Enables cancer stem cells evasion of the immune system



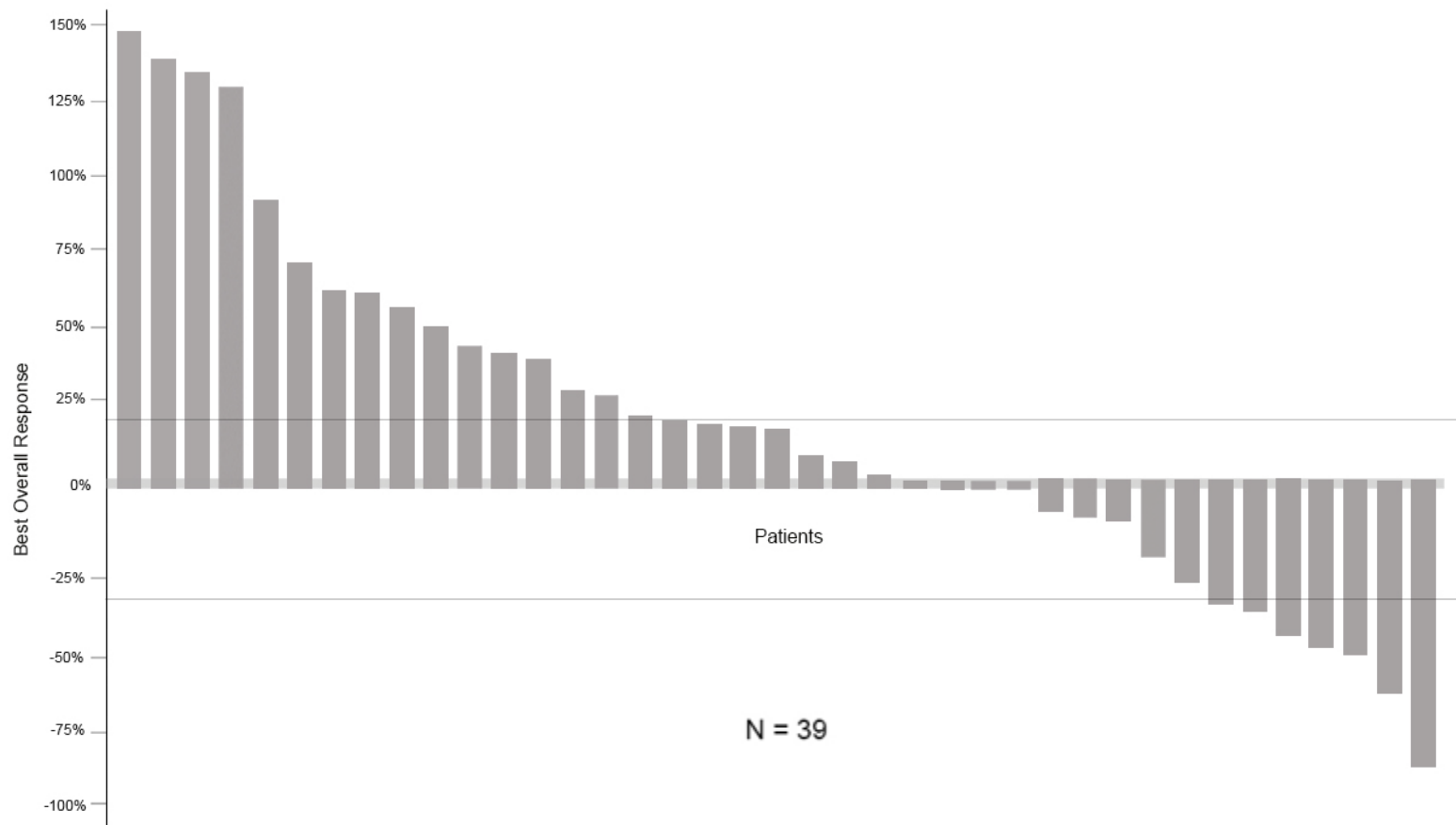
DKN-01 plus Paclitaxel Exceeds Benchmarks in Esophageal Cancer



2nd Line	Study	n	ORR (%)	DCR (%)	PFS (months)	OS (months)
DKN-01 + pac		15	46.7%	73.3%	4.5	14.1
Ram + pac	RAINBOW	330	28%	80%	4.4	9.6
Pac	RAINBOW	335	16%	64%	2.9	7.4
Chemo	KN-181	314	6.7%	-	3.4	7.1

DKN-01 plus Keytruda Exceeds Benchmarks

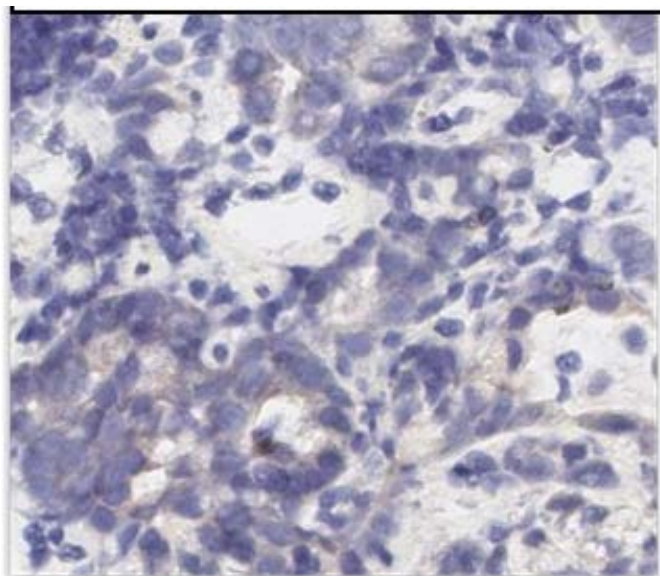
DKN-01 plus Keytruda in esophagogastric cancer



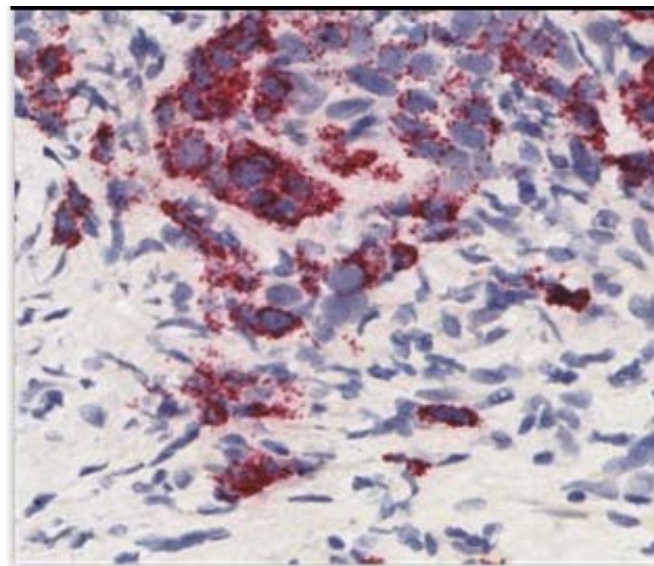
Predictive Biomarker Enables Patient Selection

RNA expression in tumor biopsies

DKK1 Low

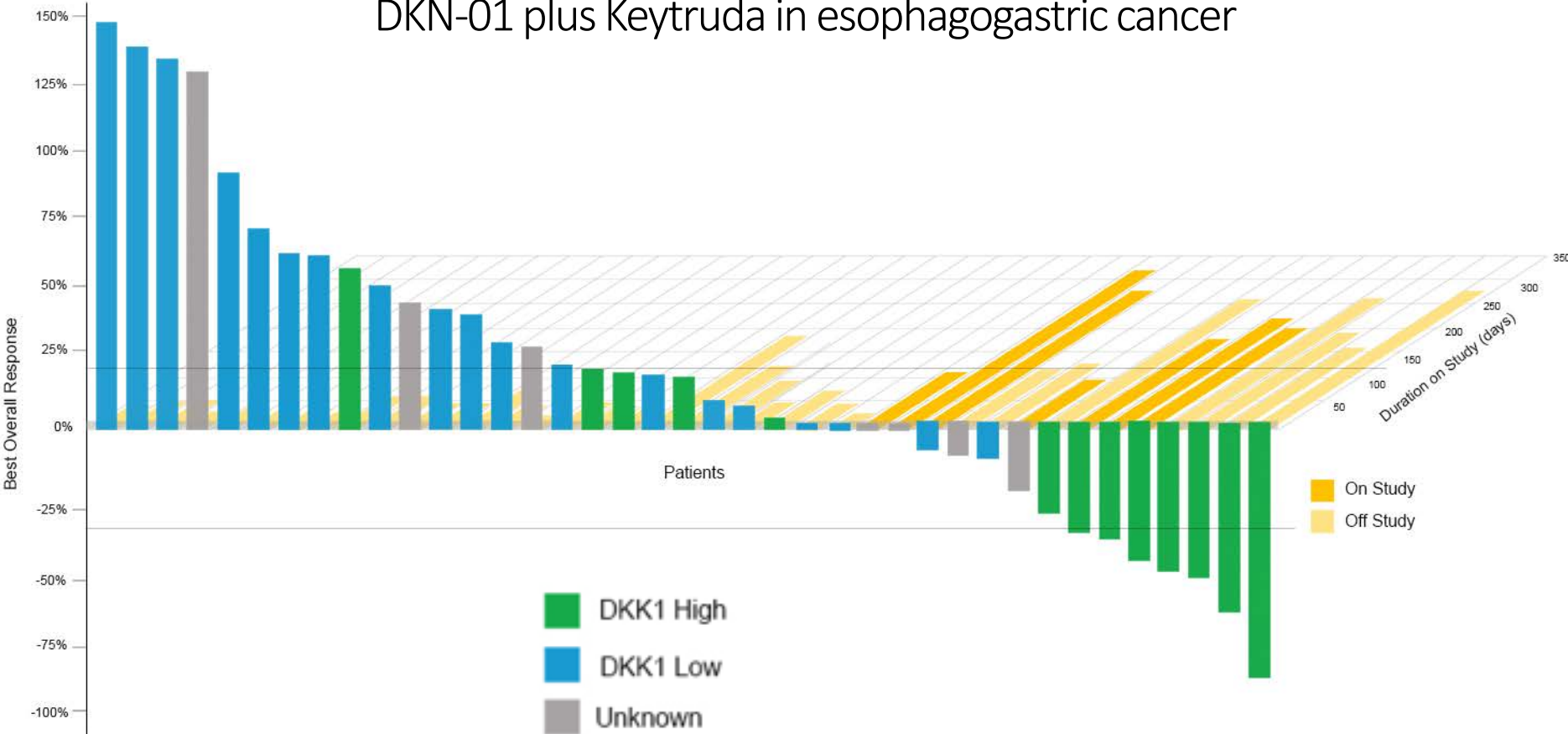


DKK1 High

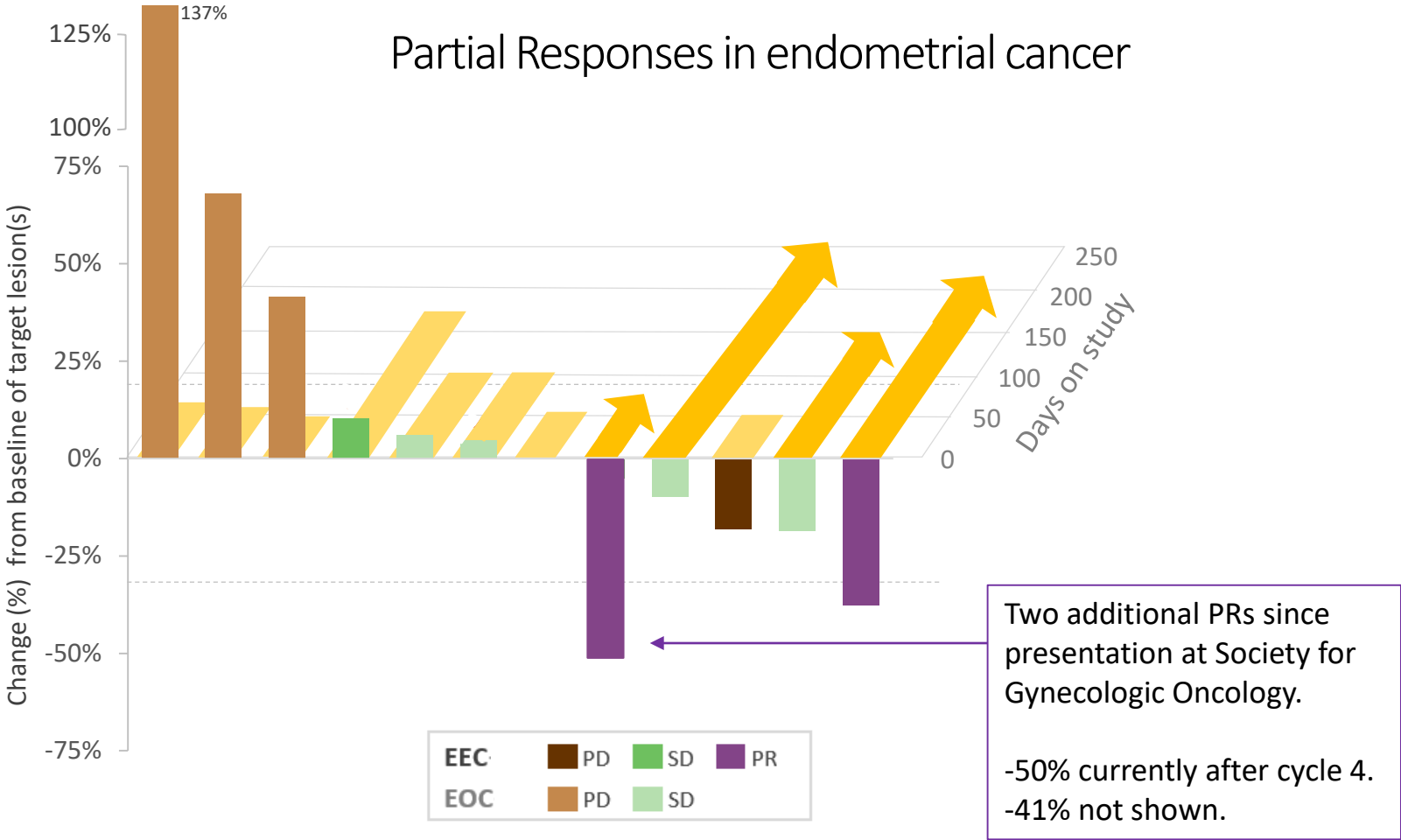


Predictive Biomarker Enables Patient Selection

DKN-01 plus Keytruda in esophagogastric cancer



Monotherapy Activity in Advanced Gynecologic Cancers



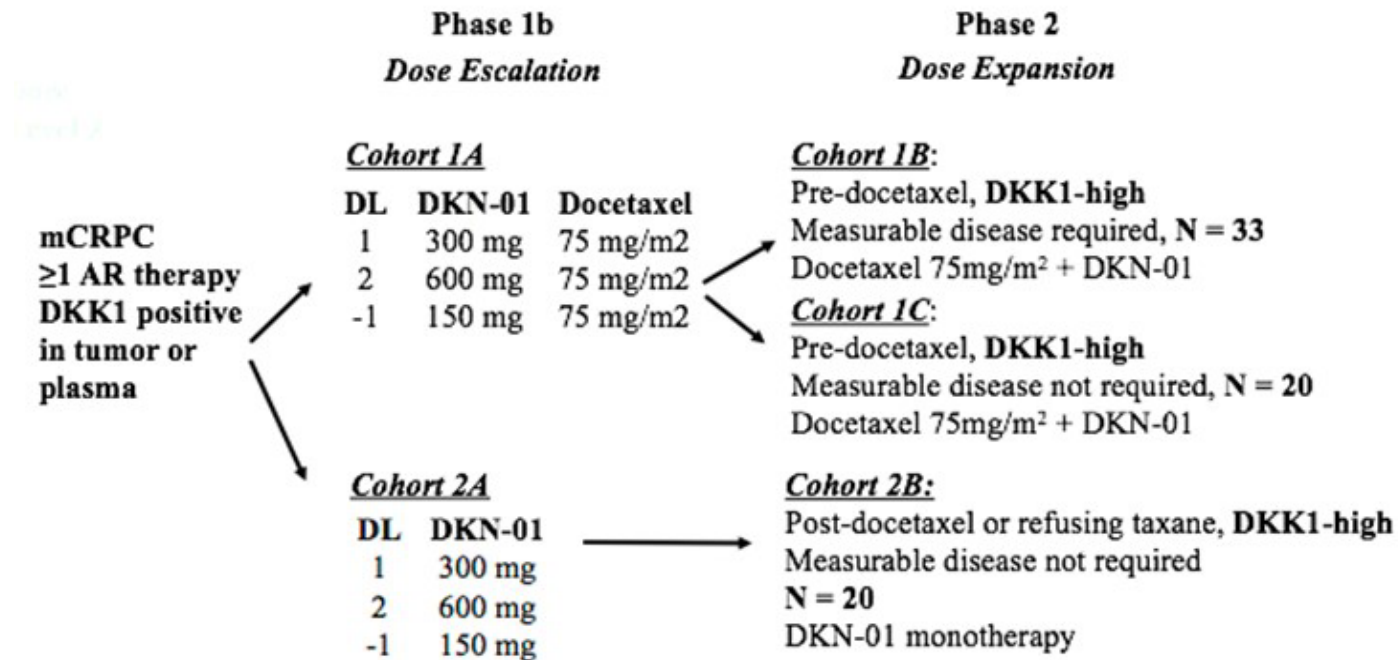
DKN-01 Prostate Cancer Study

Collaboration with NYU Langone

Targets DKK1 High Prostate Cancer Patients

- Androgen-receptor negative, non-neuroendocrine tumors express high levels of DKK1
- Increased expression of DKK1 correlates with reduced inflammatory immune infiltrate

Study Design

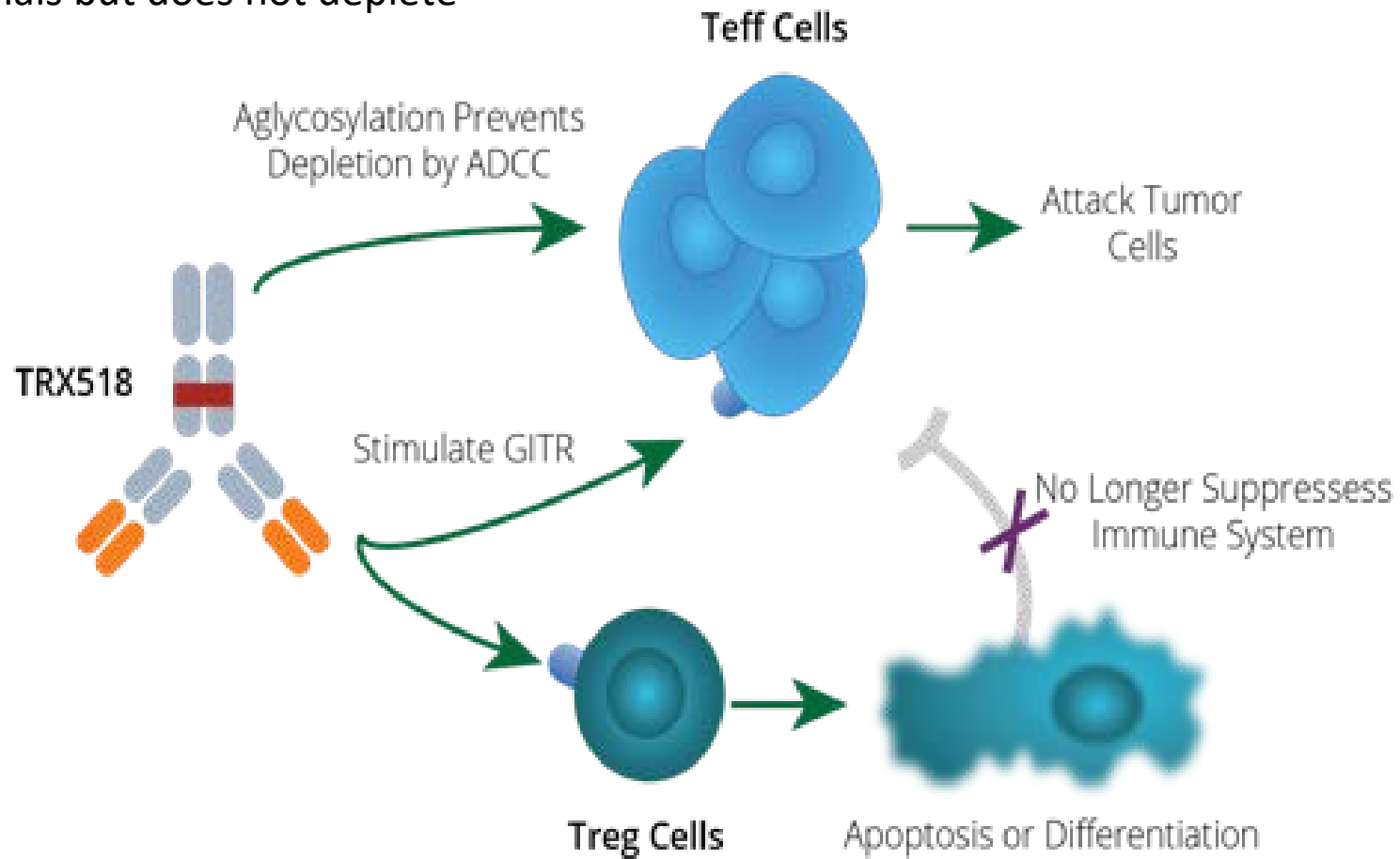


DKN-01 Insights

- Unequivocal monotherapy responses in heavily pretreated patients in three distinct tumor types
- In combination with paclitaxel, shows superior ORR and OS compared to benchmarks
- In combination with Keytruda, 20% ORR in GEJ and Gastric Cancer is twice the 9% PD-1 ORR in microsatellite stable patients
- Patient selection biomarker: tumor DKK1 levels
- In combination with Keytruda, DKK1 High GEJ and Gastric Cancer patients have 67% ORR
- Excellent patient safety profile as monotherapy and in combination

TRX518: Engineered to Optimize GITR Activation

- Humanized IgG1 mAb
- Agonist without FcR binding
- Signals but does not deplete



First Anti-GITR Monotherapy Partial Response

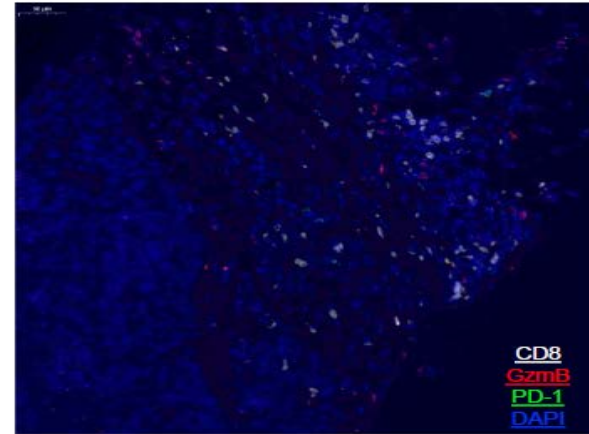
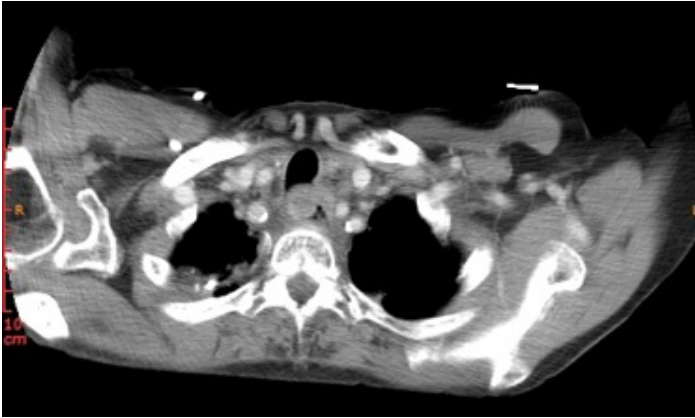
Patient Experience on TRX518 monotherapy

- 72 year old male with non-virally mediated hepatocellular carcinoma
- Failed radioembolization and CTLA-4 plus PD-L1 antibodies
- Began TRX518 monotherapy in May 2017
- Experienced prolonged stable disease
- Most recent scans show 47.5% reduction in hepatic lesion
- Confirmed Partial Response
- Prolonged clinical benefit: remains on TRX518 (33 cycles ~2 years)

TRX518 Combination with Keytruda

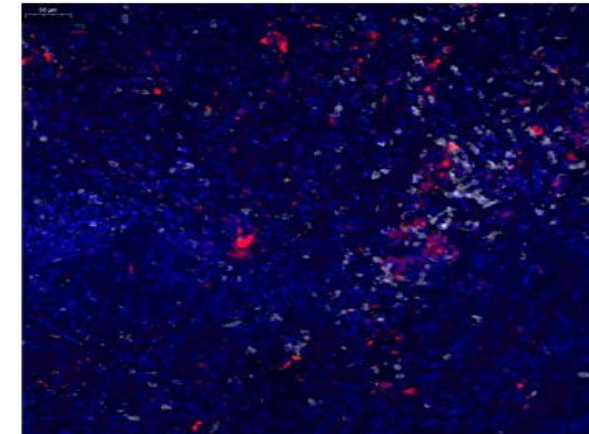
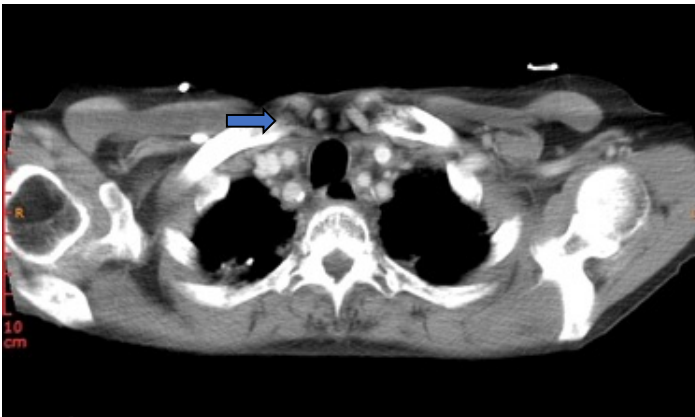
- 86 year old female with Esophageal Squamous Cell Carcinoma
- Biopsy shows increased CD8+ T cells and Granzyme B (GzmB)
- Confirmed Complete Response
- Remains on study (15 cycles ~11 months)

Baseline



Baseline

EOC6



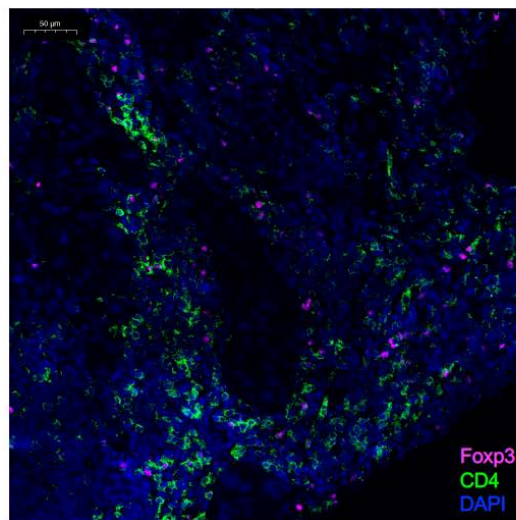
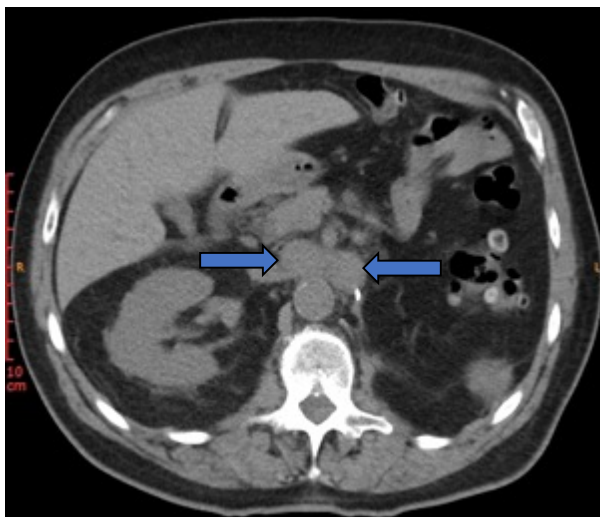
C1D21

Data as of Dec 2018

TRX518 Combination with Opdivo

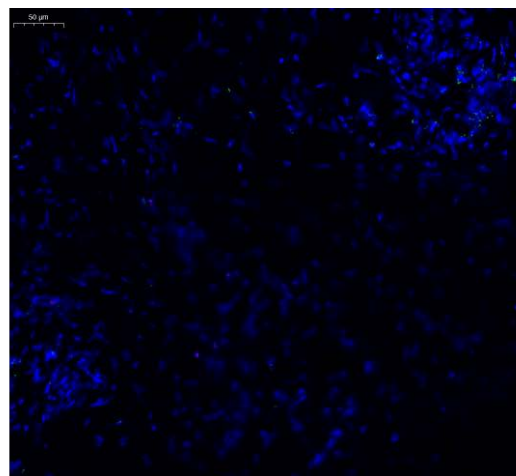
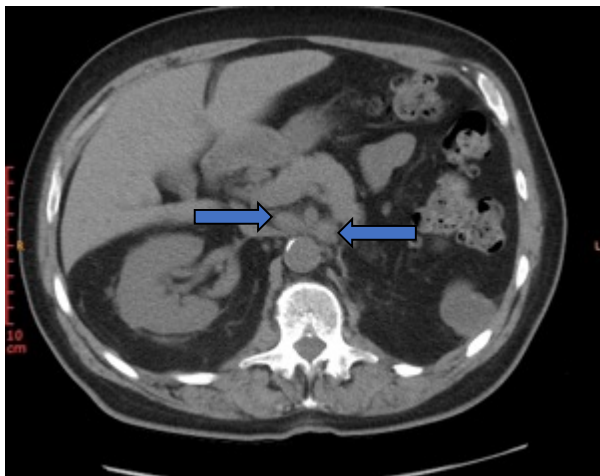
- 76 year old male with Urothelial Carcinoma patient
- Previously failed Keytruda
- Partial Response (-39.5%) with TRX518/Opdivo
- Biopsy shows reduction of immunosuppressive T regulatory cells

May 7, 2018:
38 mm



Pre-Treatment

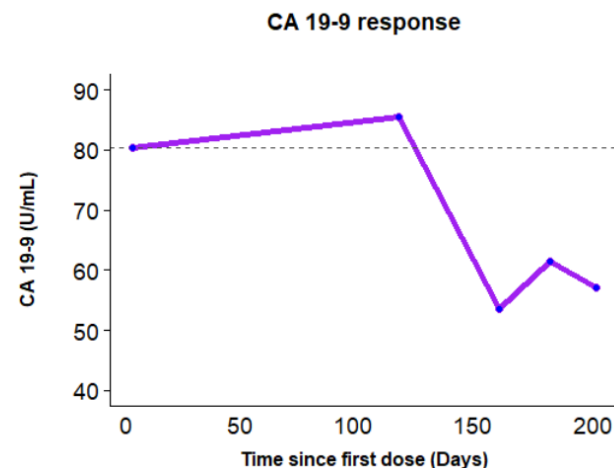
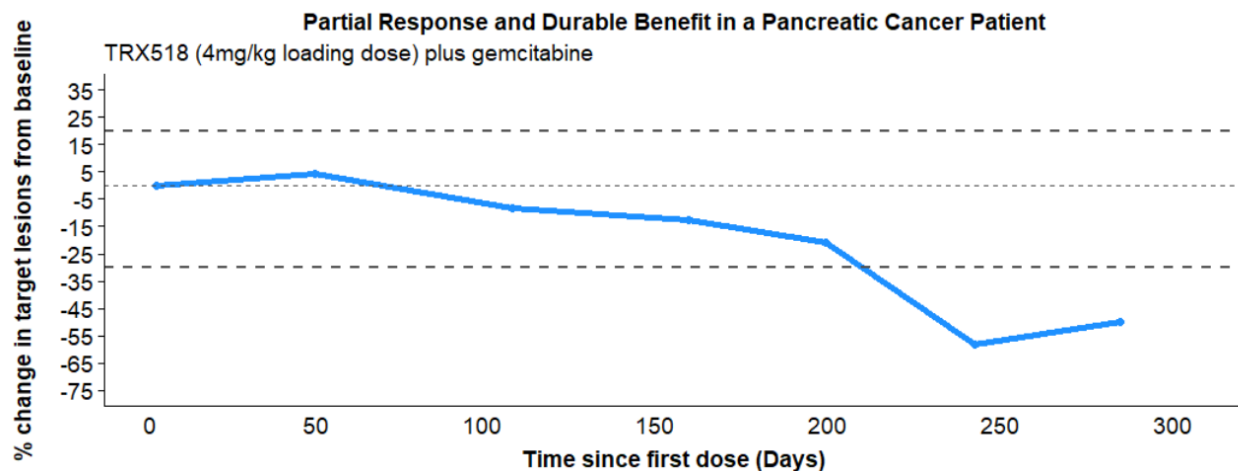
July 27, 2018:
23 mm



Post-Treatment (C1D21)

TRX518 Combination with Gemcitabine

- 48 year old female with Pancreatic Cancer
- Failed FOLFIRINOX, gemcitabine/nab-paclitaxel, and capecitabine
- Mild growth followed by partial response with 58% tumor reduction and biochemical (CA 19-9) response
- Confirmed Partial Response
- Remains on study (12 cycles ~9 months)



TRX518 Insights

- First confirmed monotherapy response among many competing anti-GITR programs
- Responses to TRX518 combinations seen in patients previously refractory to chemotherapy and checkpoint blockers
- Efficacy linked to pharmacodynamic markers
- Excellent patient safety profile as monotherapy and in combination
- Consistent with immunotherapy, patients respond over time

DKN-01

Esophagogastric Cancer Study - Combination with KEYTRUDA

- Enrollment complete
- Mature clinical outcomes and biomarkers in Q3 2019

Gynecologic Cancer Study - Monotherapy and Combination with paclitaxel

- >78 patients enrolled; projected complete Q3 2019
- Updated efficacy and biomarker data in Q3 2019

TRX518

Advanced Solid Tumor Study - Combination with KEYTRUDA/OPDIVO

- IO combination expansion ongoing
- Efficacy and pharmacodynamic marker data in Q4 2019