

TRACON PHARMACEUTICALS

March 2018



NASDAQ: TCON

Forward-Looking Statements

This presentation contains statements that are, or may be deemed to be, "forward-looking statements." In some cases these forward-looking statements can be identified by the use of forward-looking terminology, including the terms "believes," "estimates," "anticipates," "expects," "plans," "intends," "may," "could," "might," "will," "should," "approximately," "potential," or, in each case, their negatives or other variations thereon or comparable terminology, although not all forward-looking statements contain these words. These statements relate to future events or our future financial performance or condition, business strategy, current and prospective product candidates, planned clinical trials and preclinical activities, product approvals, research and development costs, current and prospective collaborations, timing and likelihood of success of development activities and business strategies, plans and objectives of management for future operations, and future results of anticipated product development efforts, including potential benefits derived therefrom. These statements involve substantial known and unknown risks, uncertainties and other important factors that may cause our actual results, levels of activity, performance or achievements to differ materially from those expressed or implied by these forward-looking statements. These risks, uncertainties and other factors include, but are not limited to, risks associated with conducting clinical trials, whether any of our product candidates will be shown to be safe and effective, our ability to finance continued operations, our reliance on third parties for various aspects of our business, competition in our target markets, our ability to protect our intellectual property, and other risks and uncertainties described in our filings with the Securities and Exchange Commission, including under the heading "Risk Factors". In light of the significant uncertainties in our forward-looking statements, you should not place undue reliance on these statements or regard these statements as a representation or warranty by us or any other person that we will achieve our objectives and plans in any specified time frame, or at all. The forward-looking statements contained in this presentation represent our estimates and assumptions only as of the date of this presentation and, except as required by law, we undertake no obligation to update or revise publicly any forward-looking statements, whether as a result of new information, future events or otherwise after the date of this presentation.

This presentation also contains estimates, projections and other information concerning our industry, our business, and the markets for our drug candidates, as well as data regarding market research, estimates and forecasts prepared by our management. Information that is based on estimates, forecasts, projections, market research or similar methodologies is inherently subject to uncertainties and actual events or circumstances may differ materially from events and circumstances reflected in this information.

Investment Highlights

Capital efficient Product Development Platform advancing a late stage and diverse pipeline of proprietary as well as pharma partner assets

TRC105

- Endoglin antibody in late stage trials in oncology and wet AMD with VEGF inhibitors, a franchise currently generating > \$18B annually; Immune oncology opportunity

*Oncology
Phase 3*

Dosing Phase 3 TAPPAS trial under SPA in orphan drug indication of angiosarcoma; multiple ongoing Phase 2 trials

*Ophthalmology
Phase 2*

Dosing Phase 2 AVANTE randomized wet AMD trial; partnered with Santen

*Immune Oncology
Phase 1*

Dosing Phase 1 trial of TRC105 and Opdivo

TRC102 Phase 2

- Inhibitor of DNA repair dosing in Phase 2 glioblastoma and mesothelioma trials supported by NCI

TRC253 Phase 1

- Inhibitor of mutated and wild-type Androgen Receptor dosing in Phase 1/2 prostate cancer trial

Capital Efficient Product Development Platform

Internal product development platform allows TRACON to conduct clinical trials without a CRO

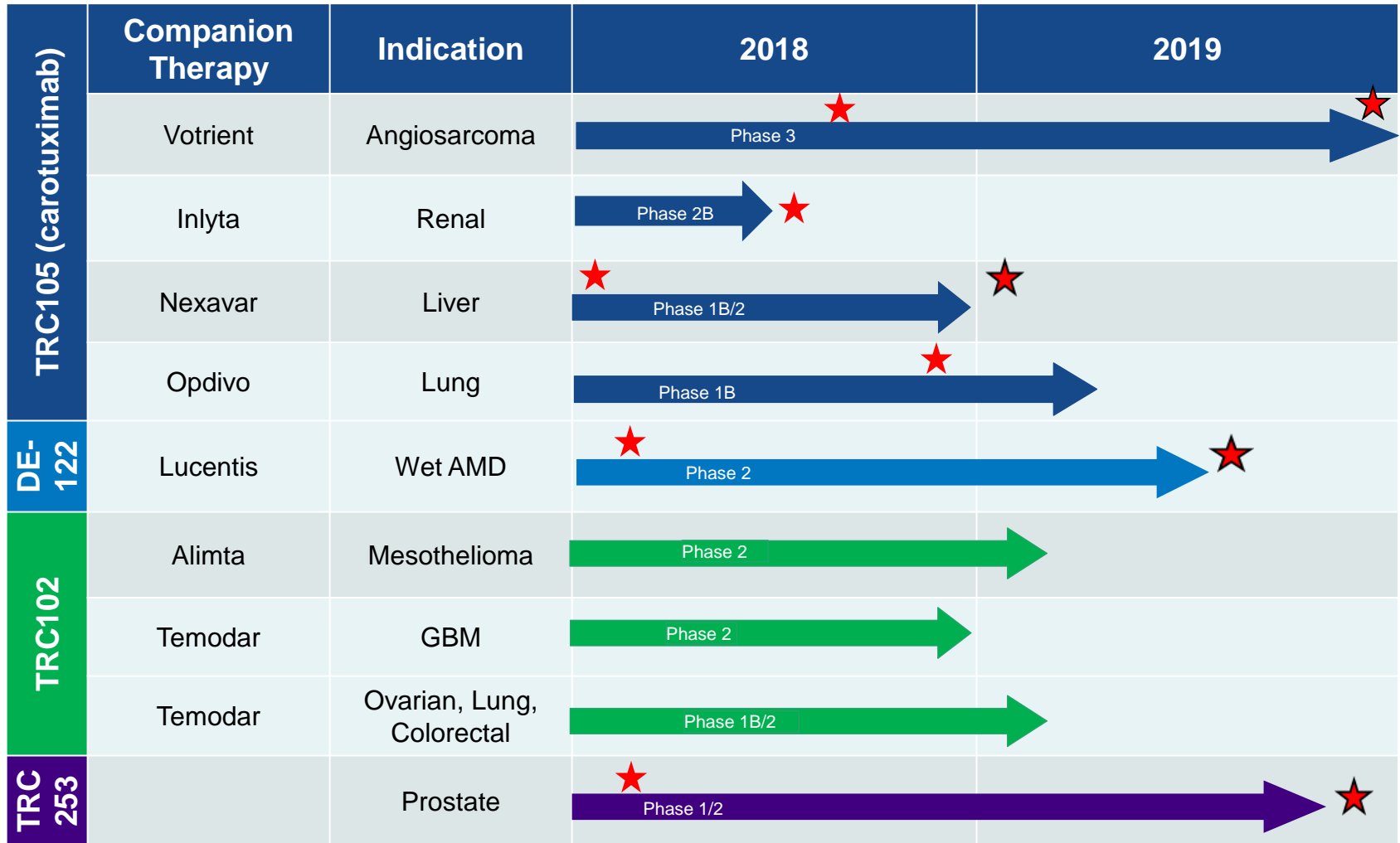
- More efficient access to clinical data at lower cost

Management team with comprehensive CMC, Regulatory and QA expertise

- Development of multiple products through launch

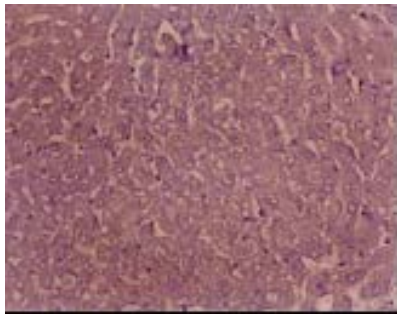
Allows for significant costs savings to TRACON and the opportunity to expand the portfolio through in-licensing of additional programs at no cost (e.g., Janssen transaction)

Multiple Expected Near-Term Value Inflection Points

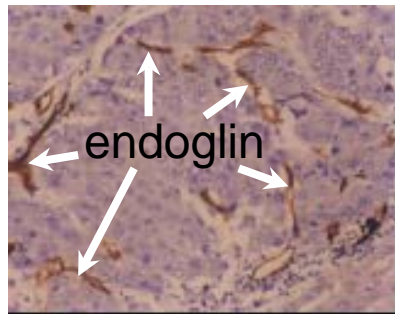


Endoglin: Essential Non-VEGF Angiogenic Target

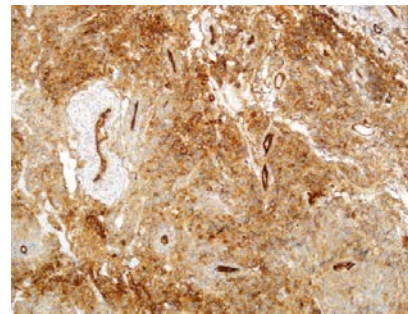
- Endoglin is expressed on endothelial cells and is essential for angiogenesis
 - Selectively expressed on proliferating vessels in cancer and AMD; up-regulated following VEGF inhibition
 - Unfavorable prognostic marker
- Attenuated endoglin expression causes Osler-Weber-Rendu syndrome which is associated with improved cancer survival (31% reduced risk of death)
- Persistent expression on tumor vessels results in progression despite VEGF inhibition, while knockdown of endoglin resensitizes tumors to VEGF inhibition
- Targeting VEGF and endoglin concurrently improves antitumor effects
- Endoglin is also expressed on myeloid derived suppressor cells (MDSCs) and potentiates PD-1/PD-L1 inhibition in preclinical models



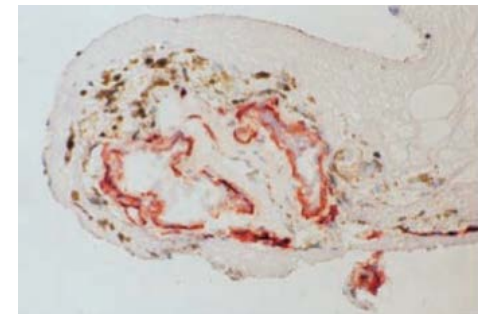
Normal Human Liver



Human Liver Cancer



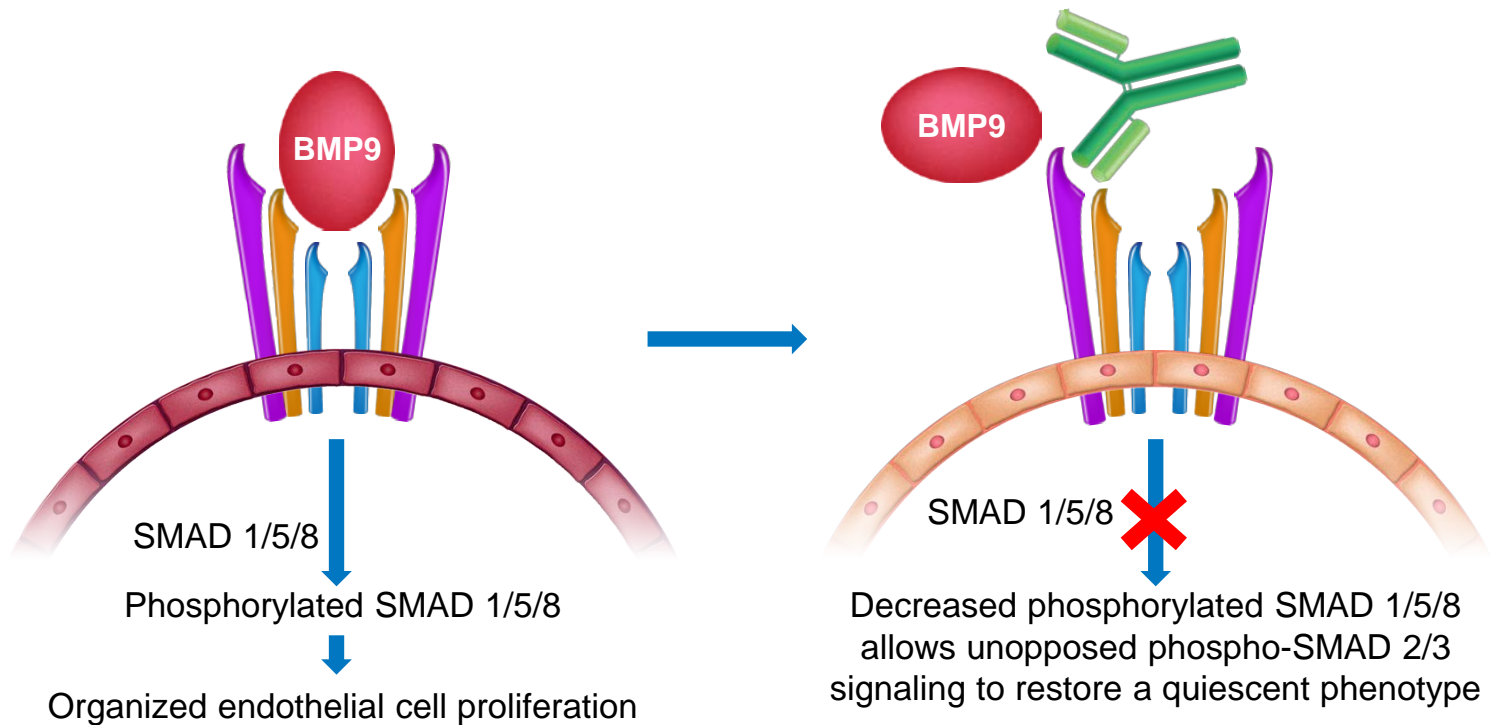
Angiosarcoma



Human AMD Membrane

TRC105: Our Lead Endoglin Antibody

- TRC105 binds a precise endoglin epitope to inhibit BMP binding and angiogenesis
- TRC105 also potently mediates antibody-dependent cell mediated cytotoxicity (ADCC)



Endoglin Antibody Tiered Clinical Development

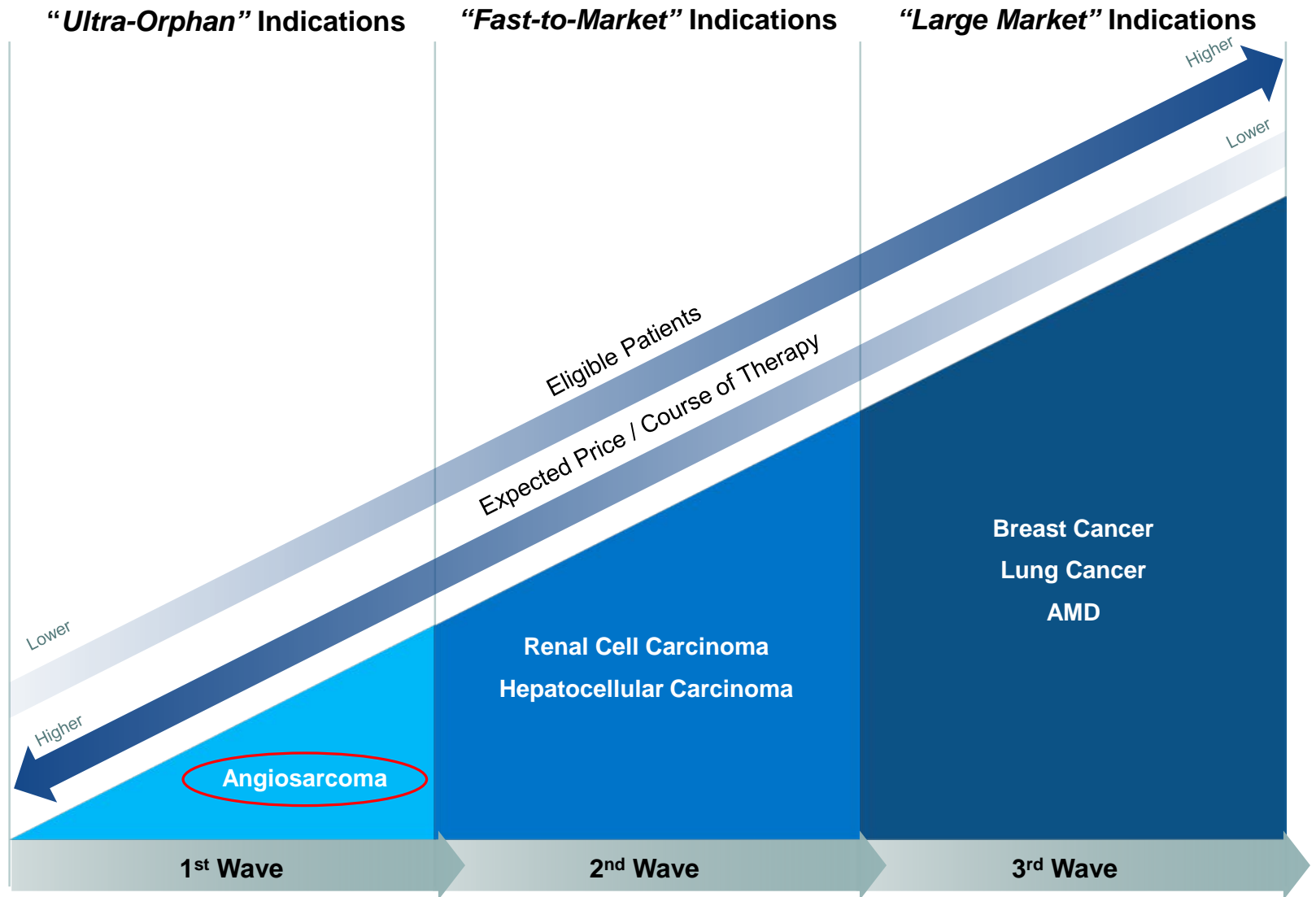


Figure for illustrative purposes only.

Lead Indication: Angiosarcoma

- 5-year survival rate < 12% highlights the aggressive nature of the tumor compared to a 5-year survival rate of ~ 56% for all soft tissue sarcoma¹
- ~ 600 cases annually in the US and 1,200 in Europe; greater incidence in Asia²
- About 50% of patients present with a primary cutaneous lesion
 - Risk factors: prior radiation exposure and chronic sun exposure
- Treatment with chemotherapy (taxanes or doxorubicin) in the front line setting is associated with PFS of ~ 5 months and OS < 1 year³
- Treatment with VEGF inhibitors in the second line setting is associated with PFS of 1.8 - 3.8 months and OS < 1 year
- Market size estimated at >\$150M in US/EU assuming premium pricing similar to the price of oncology therapeutics approved in other orphan indications⁴

¹www.cancerresearchuk.org

²Surveillance, Epidemiology, and End Results Program, NCI, www.seer.cancer.gov; RARECARE database, www.rarecare.eu

³Penel et al, JCO 2008; Italiano et al, Cancer 2012

⁴TRACON estimate

Profile of Unmet Need in Initial Pivotal Indication: VEGF Inhibitors Have Limited Activity in Angiosarcoma

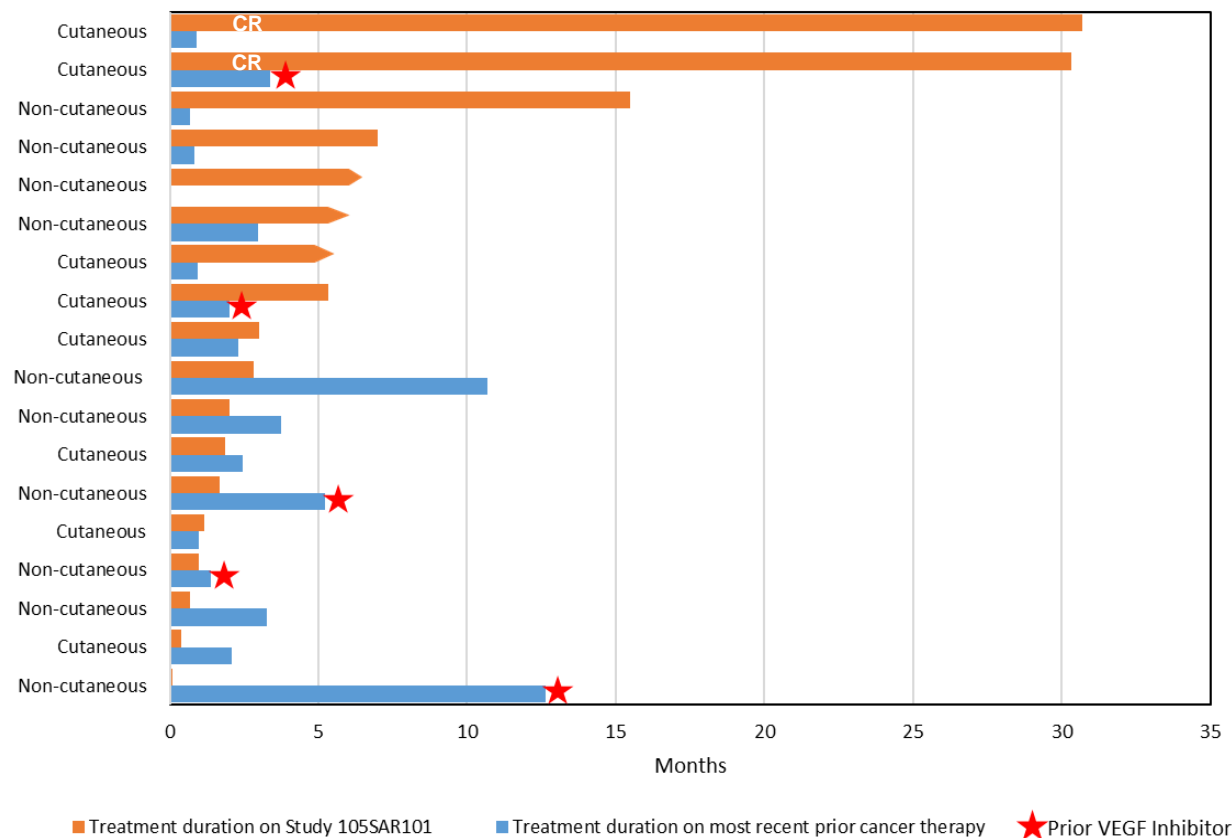
VEGF Inhibitor	Study	Patient Population	Activity
Votrient ^{®1}	Retrospective analysis (CTOS 2016)	Angiosarcoma (n = 40)	<ul style="list-style-type: none"> • ORR = 20% (No CRs) • PFS = 3.0 months • OS = 9.9 months
Votrient	Retrospective analysis (ASCO 2014)	Soft tissue sarcoma, including 6 angiosarcoma patients	<ul style="list-style-type: none"> • No CR's
Nexavar [®]	Single agent study (Maki 2009)	Angiosarcoma (n = 37)	<ul style="list-style-type: none"> • ORR = 14% (1/37 CR) • PFS = 3.8 months
Nexavar	Single agent study (French sarcoma group)	Angiosarcoma (n = 41)	<p><u>Cutaneous angiosarcoma</u></p> <ul style="list-style-type: none"> • ORR = 15% (2/26 CR) • PFS = 1.8 months <p><u>Visceral angiosarcoma</u></p> <ul style="list-style-type: none"> • ORR = 13% (No CRs) • PFS = 3.8 months
Avastin [®]	Single agent study (Agulnik 2013)	Angiosarcoma (n = 23)	<ul style="list-style-type: none"> • ORR = 9% (No CRs) • PFS = 3.0 months

¹ Votrient is the only VEGF inhibitor approved for the treatment of soft tissue sarcoma based on the superior PFS versus placebo (4.6 versus 1.6 months) in the Phase 3 PALETTE study.

TRC105 + Votrient is Active in Angiosarcoma in Phase 1b/2 Trial

- mPFS in 13 VEGF inhibitor-naïve patients is 7.8 months, which compares favorably to the mPFS of single agent Votrient of 3.0 months in angiosarcoma patients
- Combination well-tolerated; data presented at CTOS 2017

Study Duration of 9 Angiosarcoma Patients Treated with TRC105 + Pazopanib in the Original Phase 1b/2 Trial and 9 Patients in the Expansion Cohort



*Treatment duration is calculated from date of first dose to date of last dose
 *Last response assessment used as date of progression for ongoing patients to calculate mPFS

Data as of November 2017

TRC105 + Votrient Phase 1b/2 Observations

Patient #1 off study (due to AE) after 30+ months with ongoing CR



Day 0

Day 48

Data as of November 2017

Patient #2 maintained a CR for 28+ months



Day 0



Day 37

Patient #3 remained on treatment for 16 months



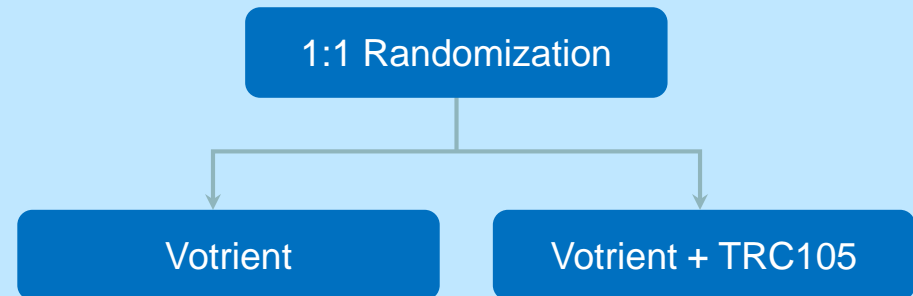
Day 0



Day 84

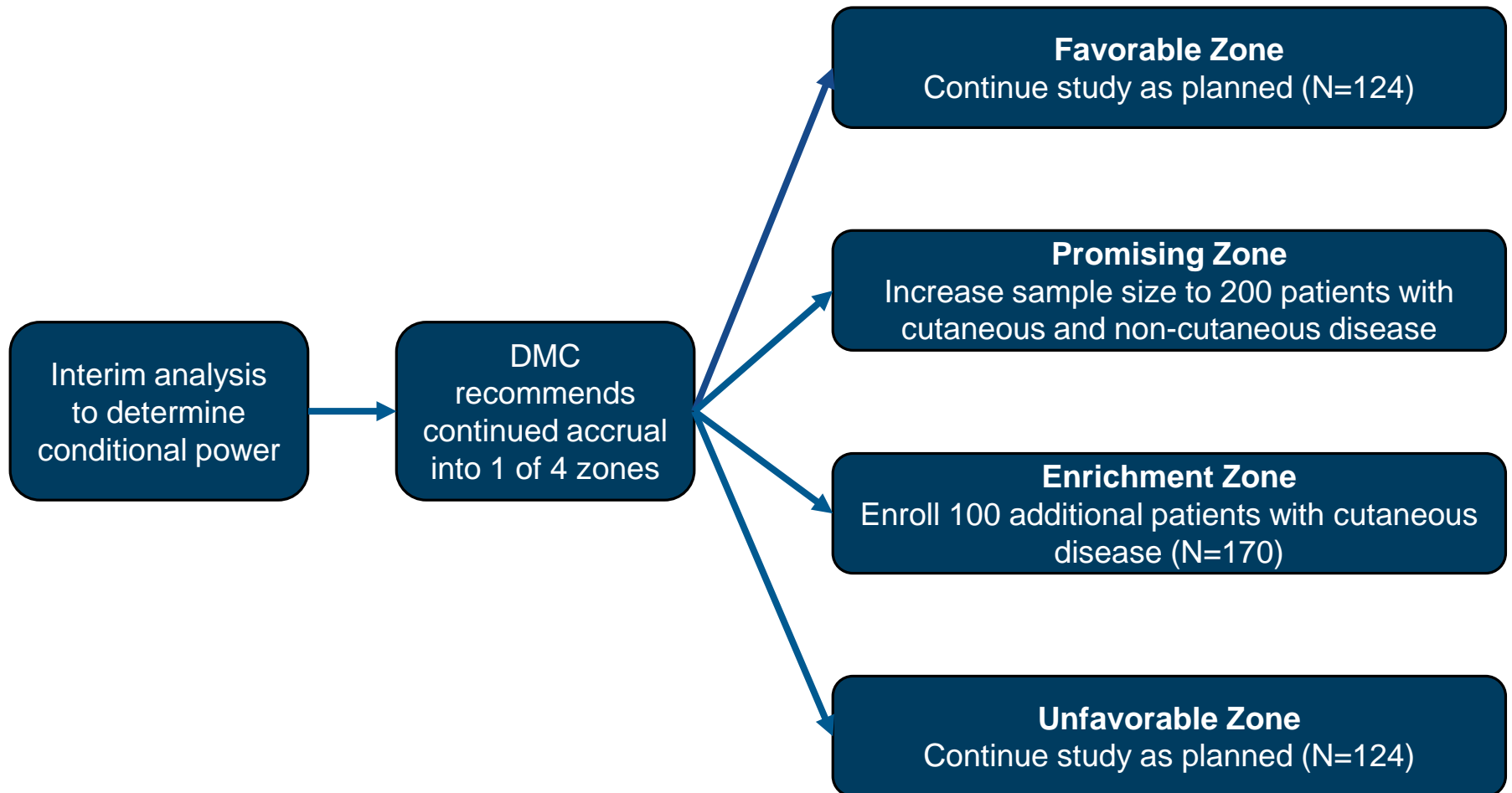
Phase 3 TAPPAS Trial in Angiosarcoma

- Primary Endpoint: PFS
- Independent blinded central review
- Key Secondary Endpoints: ORR, OS
- Key eligibility
 - Age \geq 12
 - Unresectable angiosarcoma
 - Measurable disease by RECIST 1.1
 - No prior treatment with VEGF inhibitor
 - No more than 2 prior lines of treatment
 - ECOG PS 0-1
- Strata
 - Cutaneous vs Non-cutaneous
 - Prior chemotherapy: 0 vs 1 or 2
- N=124-200 (Adaptive design)



Phase 3 TAPPAS Trial in Angiosarcoma

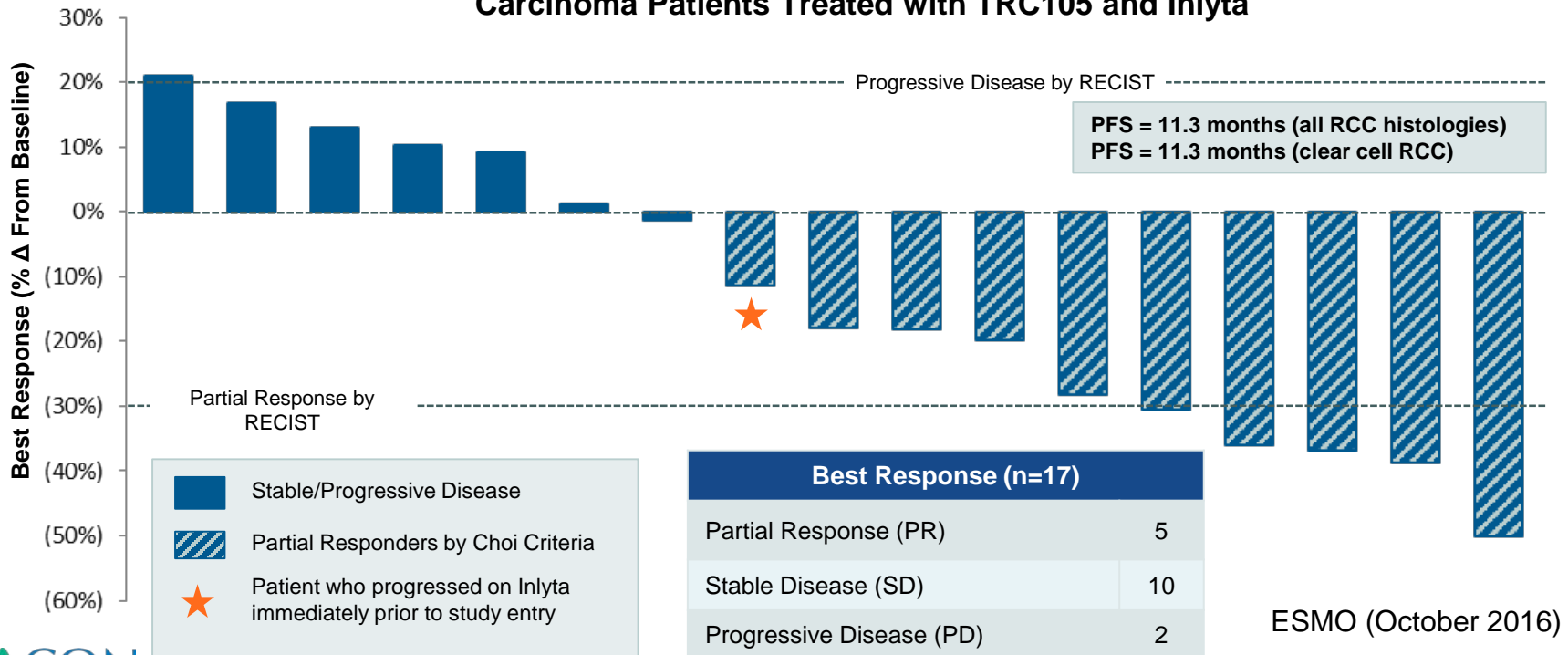
Adaptive design recognized as most innovative clinical trial of 2017. Allows for sample size re-estimation or enrichment of cutaneous disease at the time of the interim analysis expected in 2H 2018.



TRC105 + Inlyta[®] in Renal Cell Carcinoma

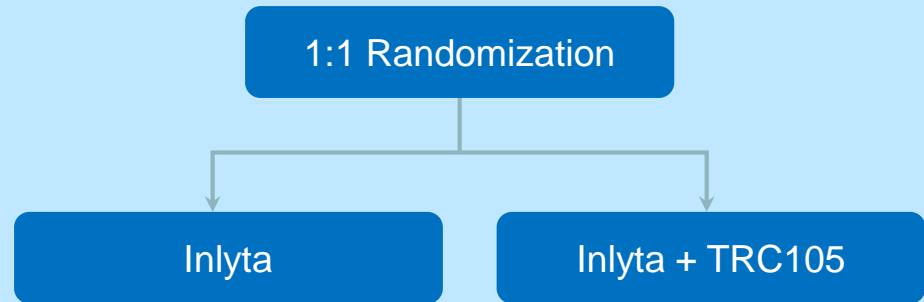
- 18 patients treated in a Phase 1b clinical trial who failed at least one VEGF inhibitor
- Partial response rate by RECIST of 29% (4 of which were in the fourth line setting)
 - Exceeded partial response rate of Inlyta following VEGFR TKI treatment in the Inlyta Phase 3 AXIS trial of 11%
- Improved activity in clear cell (including 4 RECIST PRs) and exploratory analysis indicated two biomarkers (baseline TGF- β R3 and osteopontin) correlated with activity
- Median PFS in clear cell RCC of 11.3 months
 - Exceeded PFS of Inlyta following VEGFR TKI treatment in the Inlyta Phase 3 AXIS trial of 4.8 months

Maximum Percentage Change in Target Lesion Size in Renal Cell Carcinoma Patients Treated with TRC105 and Inlyta



Phase 2 TRAXAR Trial in Renal Cell Carcinoma

- Primary Endpoint: PFS by RECIST 1.1
- Independent blinded central review
- Key eligibility
 - Advanced or metastatic clear cell RCC
 - Measurable disease by RECIST 1.1
 - Progression following 1 prior VEGF inhibitor
 - 1 prior mTOR inhibitor allowed
 - 1 prior immunotherapy allowed

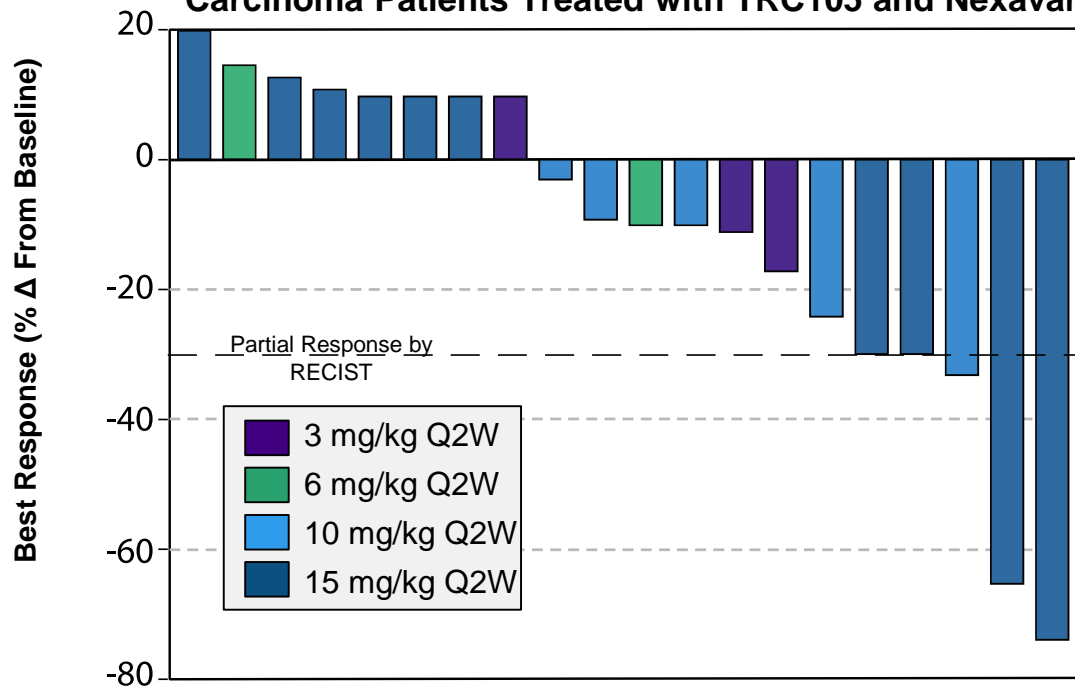


Fully enrolled (N=150) event driven trial with data expected mid 2018

TRC105 + Nexavar in Hepatocellular Carcinoma

- Final data from NCI Phase 1/2 study published in *Clinical Cancer Research* in May 2017 - partial response rate by RECIST of 25% across all 4 dose levels; partial response rate of 33% for patients treated at two highest doses (10 or 15 mg/kg TRC105)
 - Exceed partial response rate of Nexavar in Phase 3 pivotal studies of 2 - 3%
 - Median OS of 15.5 months exceeded median OS of Nexavar in its pivotal Phase 3 of 10.7 months
- Multicenter Phase 2 trial in up to 33 patients is enrolling to confirm response rate
 - Interim data presented at GI ASCO (January 2018) showing partial responses in 2 of first 8 evaluable patients and greater than 50% AFP reductions in 3 of 8 patients
 - Full data expected at GI ASCO January 2019
- Late stage development in HCC to be led by Ambrx in China

Maximum Percentage Change in Target Lesion Size in Hepatocellular Carcinoma Patients Treated with TRC105 and Nexavar



Clinical Cancer Research (May 2017)

TRC105 + Opdivo® in Lung Cancer

- Endoglin is a TGF- β co-receptor expressed on fibroblasts and myeloid derived suppressor cells (MDSCs), a cell type not addressed by checkpoint inhibition
 - TGF- β signaling implicated as a primary means of tumor immune evasion that complements checkpoint inhibition and tumor mutational burden
- TRC105 potentiates the activity of PD-1 inhibition in syngeneic mouse tumor models
 - Publication in preparation from Leiden University
- TRC105 is being studied with Opdivo in second line non-small cell lung cancer in a Phase 1 trial
 - Opdivo single agent response rate¹ in this setting is 20%
 - Correlation between response and MDSC content of tumors will be assessed

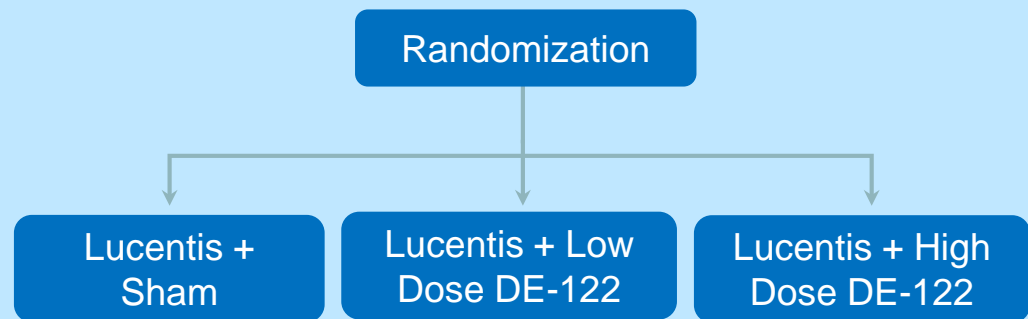
Development in AMD Partnered with Santen

- Failed Phase 2 and 3 studies from Ophthotech and Regeneron leaves substantial opportunity for a superior MOA to build on VEGF inhibition in wet AMD; regulatory path confirmed; substantial commercial opportunity
- Santen, a global ophthalmology company with \$1.8 billion in annual revenue, leads global development and commercialization efforts for DE-122 (ophthalmic formulation of TRC105) in wet AMD and other eye diseases
- Deal terms
 - \$20 million received thus far
 - Santen pays all development costs
 - Up to \$145 million in additional milestone payments
 - Royalties in the high single digits to low teens

Clinical Development of DE-122 in wet AMD

- Phase 1/2 PAVE trial results presented February 10, 2018 at the Angiogenesis, Exudation and Degeneration meeting at Bascom Palmer Eye Institute
 - No serious adverse events
 - Stable best corrected visual acuity
 - No observed vitreous haze
 - 8 out of 12 subjects demonstrated signs of bioactivity with improved macular edema compared to baseline by Optical Coherence Tomography
- Phase 2a AVANTE randomized controlled trial assesses efficacy and safety of intravitreal injections of DE-122 in combination with Lucentis compared to Lucentis monotherapy in patients with wet AMD - data expected 2019

- Primary Endpoint: Best Corrected Visual Acuity following six monthly intravitreal injections
- Double masked
- N=51



TRC102: Reversing Resistance to Chemotherapy

- Small molecule designed to reverse resistance to chemotherapy and complement poly ADP-ribose polymerase (PARP) inhibitors
- Inhibits base excision repair, a dominant pathway of DNA repair that allows for resistance to alkylating chemotherapy (e.g., Temodar[®]) and antimetabolite chemotherapy (e.g., Alimta[®])
- Ongoing clinical development funded by NCI

Combination	Well Tolerated	Signs of Activity in Phase 1b/2	Ongoing Development
TRC102 + Alimta (Published in <i>Investigational New Drugs</i> , 2012)	√	Stable disease in some patients with squamous cell lung cancer, a tumor type where Alimta is inactive	Phase 2 trial with Alimta in mesothelioma
TRC102 + Fludara (Published in <i>Oncotarget</i> , 2017)	√	Partial response and stable disease in some patients previously treated with Fludara	
TRC102 + Temodar (Presented at ASCO 2017)	√	Partial responses in some patients with lung, KRAS+ colorectal and ovarian cancer; induced biomarkers of DNA damage Rad51, pNbs1, and/or γ-H2AX	Phase 2 expansion cohorts added in lung, colorectal, and ovarian cancer; Phase 2 trial with Temodar in glioblastoma

Deal with Janssen

- TRC253 and TRC694 in-licensed from Janssen
 - TRC253 is an antagonist of the F877L and other AR mutations that are resistance mechanisms for Xtandi® and ARN-509 (apalutamide)
 - TRC694 is a selective inhibitor of NF-kB-inducing kinase (NIK)
- TRACON was chosen because of our efficient product development platform
- \$5M equity investment made by JJDC

TRC253

- Janssen has rights to re-acquire TRC253 following Phase 1/2 for \$45M
 - Additional potential milestones of \$137.5M and low single digit royalty
- If kept by TRACON, we would owe regulatory and commercial milestones of up to \$45M and a low single digit royalty to Janssen

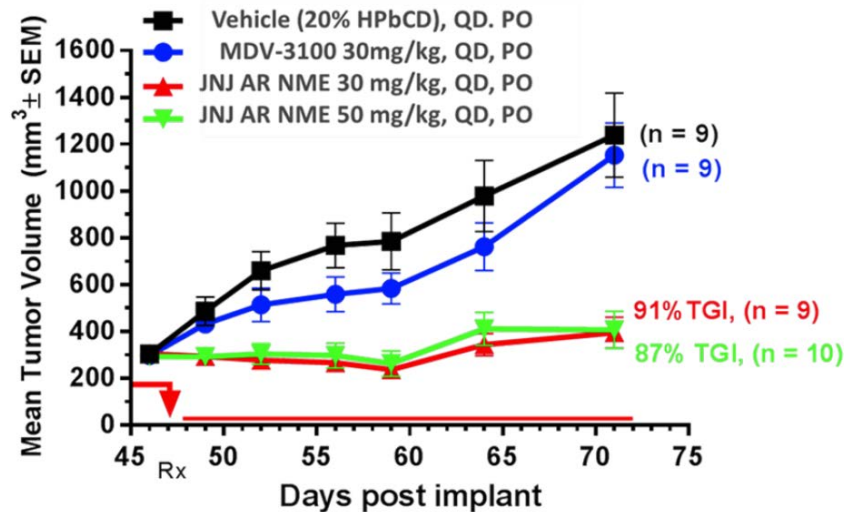
TRC694

- Janssen has a right of first negotiation for TRC694 following Phase 1
- TRACON will owe development and regulatory milestones of up to \$60M and low single digit royalty

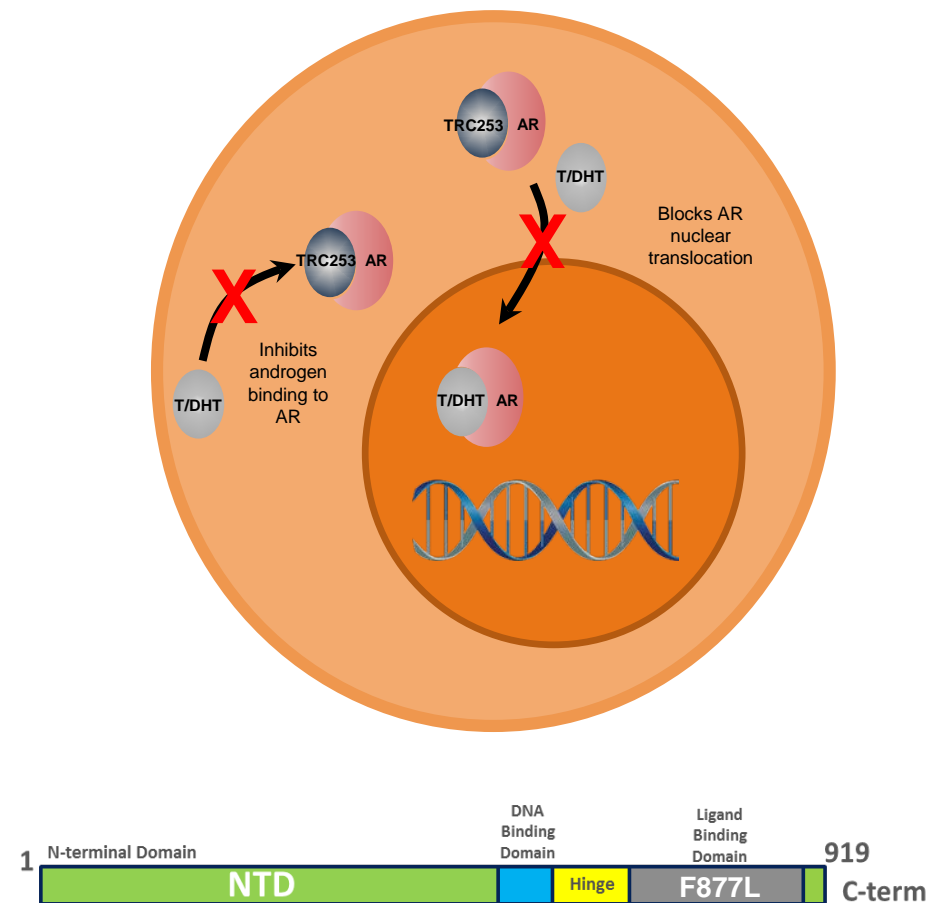
TRC253: Novel Androgen Receptor (AR) Mutant Inhibitor

- Designed to treat AR resistant prostate cancer
 - Occurs in ~10% of mCRPC cases
- Active against wild-type AR and many clinically relevant ligand binding domain mutants
- Clear path to POC in targeted population using a companion diagnostic
- Phase 1/2 trial enrolling

AR F877L-driven xenograft model

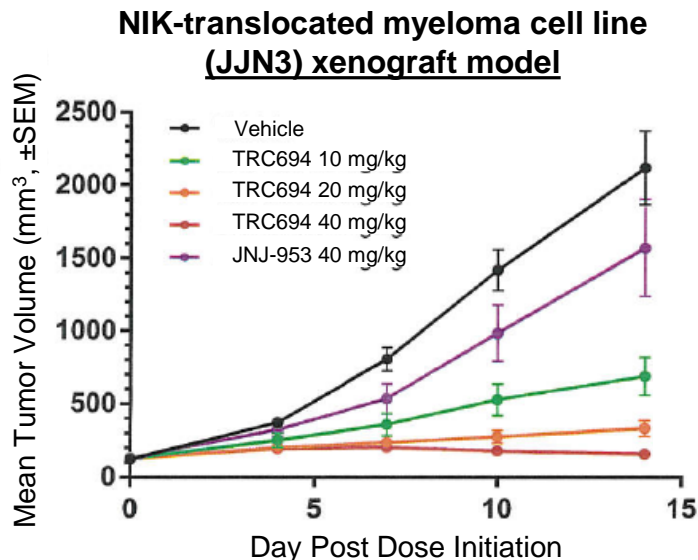


Multiple Mechanisms of Action

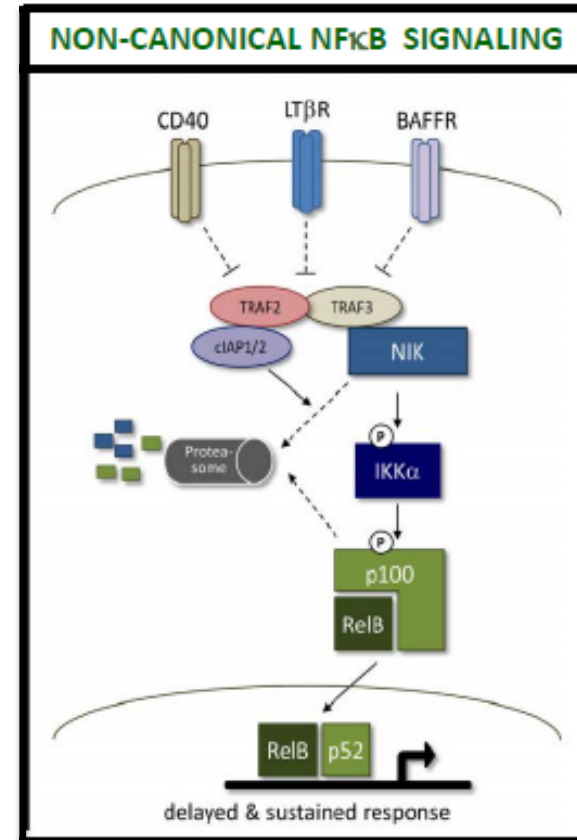


TRC694: Novel NF- κ B Inducing Kinase (NIK) Inhibitor

- NIK pathway is dysregulated in hematologic malignancies
 - Multiple myeloma (~12-20% of cases), mantle cell lymphoma (~17%), diffuse large B-cell lymphoma (~9-15%), CLL (~4% at diagnosis, higher later)
- Presented at AACR 2017
- Clear path to POC in targeted population using a precision medicine approach



NIK is Critical for Non-Canonical NF κ B Activation



Krappmann & Vincendeau, 2016

Business Development Strategy

- Leverage the TRACON Product Development Platform to develop promising oncology assets while diversifying the TRACON portfolio
- Transactions similar to the Janssen transaction where TRACON develops asset(s) to certain value inflection points in return for substantial economics and/or downstream commercial rights
- For companies with little or no development infrastructure in the US, conduct proof-of-concept clinical trials in the US in exchange for substantial economics and/or product rights in the US

Expected Milestones Across All Programs

Milestone	Expected Timing
Initial Response Data from TRC105 Phase 2 multicenter trial in HCC	1H 2018 ✓
Present DE-122 Phase 1/2 PAVE trial data in wet AMD at Angiogenesis, Exudation and Degeneration Meeting (Santen)	1H 2018 ✓
Complete dose escalation in TRC253 Phase 1/2 trial in prostate cancer	mid 2018
Top-line data from TRC105 Phase 2 TRAXAR trial in RCC	mid 2018
Interim Analysis from TRC105 Phase 3 pivotal TAPPAS trial in angiosarcoma	2H 2018
Present data from TRC105 + Opdivo Phase 1 trial	2H 2018
Full Response data from TRC105 Phase 2 multicenter trial in HCC	1H 2019
File IND and initiate Phase 1 trial of TRC694	1H 2019
DE-122 Phase 2 randomized AVANTE trial data in wet AMD	2H 2019
Janssen opt-in decision to reacquire TRC253 for \$45M + expenses following completion of TRC253 Phase 1/2 trial in prostate cancer	2H 2019
Top-line data from TRC105 Phase 3 pivotal TAPPAS trial in angiosarcoma	2H 2019

Financial Overview (as of December 31, 2017)

Ticker	TCON (NASDAQ)
Cash, Cash Equivalents and Short-term Investments	\$34.5 million
Debt – Outstanding Principal	\$8.0 million
Common Shares O/S	17.7 million
Covering Analysts	Jim Birchenough (Wells Fargo) Bert Hazlett (BTIG) Chad Messer (Needham) Maury Raycroft (Jefferies) Alex Schwartz (Stifel)

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Backup

Complementing VEGF Inhibition Represents a Substantial Potential Commercial Opportunity for TRC105

Indication	Approved VEGF Inhibitors	2016 VEGF Inhibitor Revenue ¹
2 nd Line Renal Cell Carcinoma	Inlyta	\$401 million
1 st Line Hepatocellular Carcinoma	Nexavar	\$1.0 billion ²
2 nd Line Soft Tissue Sarcoma	Votrient	~\$150 million ³
Colorectal Cancer, Lung Cancer	Avastin, Cyramza, Zaltrap, Stivarga	>\$5 billion ⁴
Wet AMD	Eylea Lucentis	\$5.2 billion \$3.2 billion

Substantial opportunity to build upon multiple established VEGF inhibitor franchises by improving patient outcomes through improved inhibition of angiogenesis

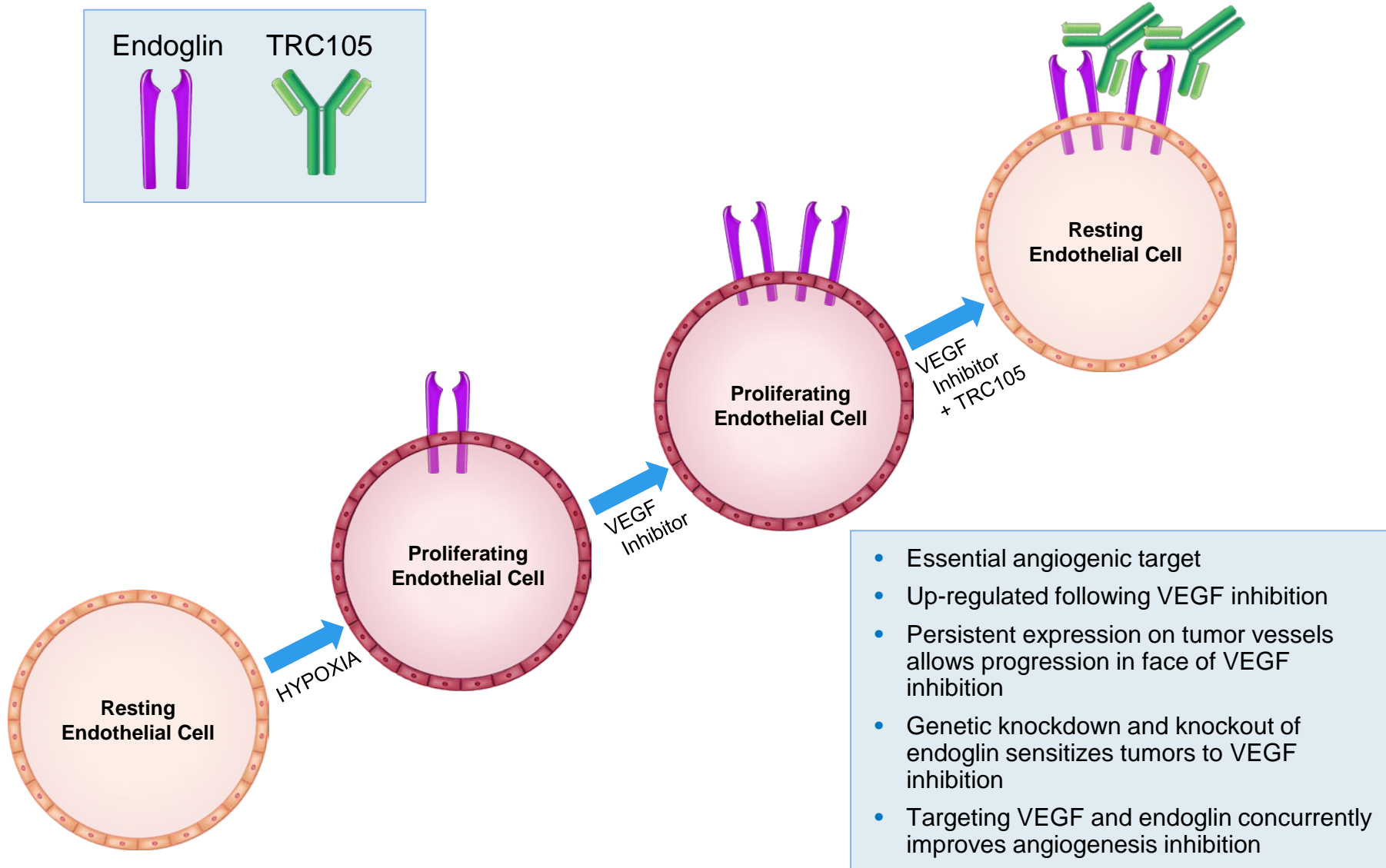
1 Company reports, SEC filings, DataMonitor.

2 Nexavar is approved in HCC, RCC and thyroid cancer. The majority of Nexavar's sales are in HCC.

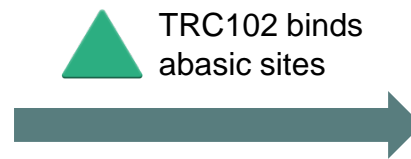
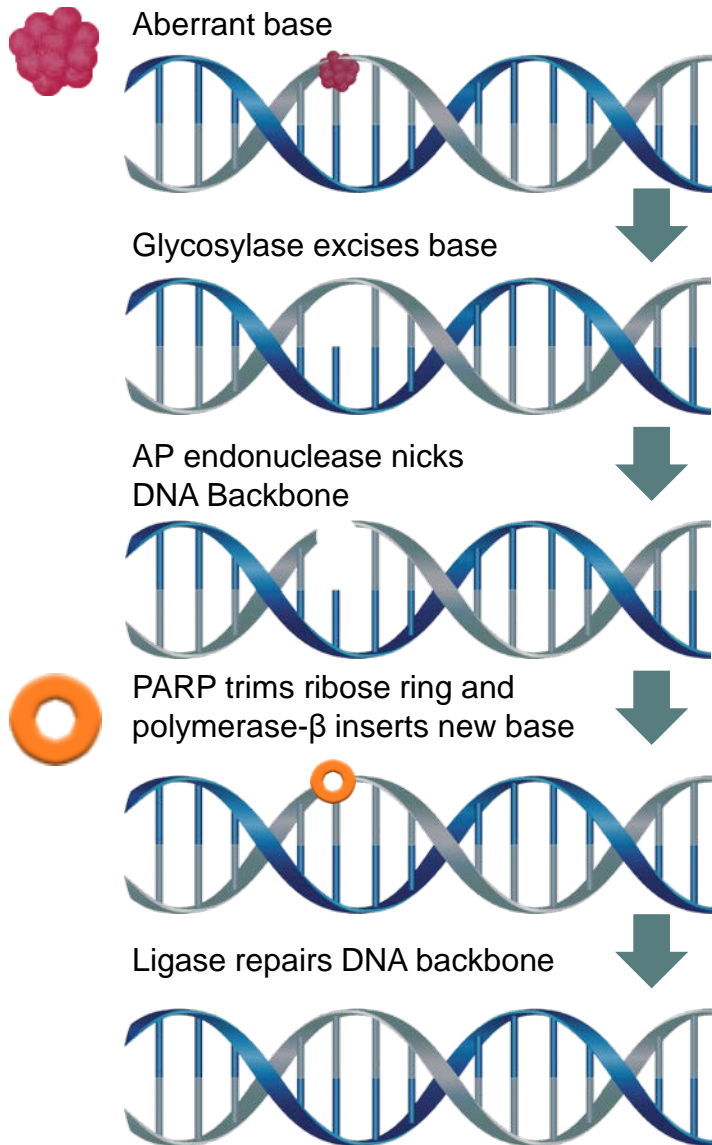
3 Votrient is approved in both HCC and advanced STS. Estimated sales for Votrient in STS (based on 2014 total sales less DataMonitor estimates in RCC).

4 Based on company estimates of sales by indication for Avastin and Cyramza.

Targeting Endoglin Complements VEGF Inhibition



TRC102: Reversing Resistance to Chemotherapy



TRC102-bound DNA is a substrate for Topoisomerase II



Apoptosis