



# Avacta Therapeutics

Expanding the reach of highly  
potent cancer therapies

November 2024

# Forward-looking statements

This presentation contains forward-looking statements. Such statements include, but are not limited to, statements regarding the Company’s research, preclinical and clinical development activities, plans and projected timelines for AVA6000 and the Avacta pipeline, plans regarding regulatory filings, our expectations regarding the relative benefits of our product candidates versus competitive therapies, and our expectations regarding the therapeutic and commercial potential of our product candidates. The words “believe,” “may,” “should,” “will,” “estimate,” “promise,” “plan”, “continue,” “anticipate,” “intend,” “expect,” “potential” and similar expressions (including the negative thereof) are intended to identify forward-looking statements. Because such statements are subject to risks and uncertainties, actual results may differ materially from those expressed or implied by such forward-looking statements.

Risks that contribute to the uncertain nature of the forward looking statements include: our preclinical studies and clinical trials may not be successful; the U.S. Food and Drug Administration (FDA) may not agree with our interpretation of the data from clinical trials of our product candidates; we may decide, or the FDA may require us, to conduct additional clinical trials or to modify our ongoing clinical trials; we may experience delays in the commencement, enrollment, completion or analysis of clinical testing for our product candidates, or in the reporting of data from such clinical testing, or significant issues regarding the adequacy of our clinical trial designs or the execution of our clinical trials may arise, which could result in increased costs and delays, or limit our ability to obtain regulatory approval; our product candidates may not receive regulatory approval or be successfully commercialized; unexpected adverse side effects or inadequate therapeutic efficacy of our product candidates could delay or prevent regulatory approval or commercialization; and we may not be able to obtain additional financing.

These statements are not guarantees of future performance and undue reliance should not be placed on them. Such forward-looking statements necessarily involve known and unknown risks and uncertainties, which may cause actual performance and financial results in future periods to differ materially from any projections of future performance or result expressed or implied by such forward-looking statements.

Although forward-looking statements contained in this presentation are based upon what management of the Company believes are reasonable assumptions, there can be no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. The Company undertakes no obligation to update forward-looking statements if circumstances or management’s estimates or opinions should change except as required by applicable securities laws. The reader is cautioned not to place undue reliance on forward-looking statements.



# Avacta is a clinical stage biotech focused on the pre|CISION platform

Avacta is challenging the current drug delivery methods to expand the reach of highly potent therapeutics using peptide drug conjugates

## pre|CISION Platform

- Allows for targeted delivery of payload in the TME, sparing healthy tissue
- Generation of multiple follow-on candidates with unique features and payloads
- **pre|CISION® platform** with multiple advantages over conventional oncology ADCs

## Highly Differentiated Pipeline Targeting Multi Billion Dollar Markets

- **AVA6000** (FAP-Doxorubicin) reported strong clinical data in the Phase 1 dose escalation trial (AACR, 2024 and ESMO, 2024)
- **AVA6103** (FAP-EXd) is a pre|CISION®-enabled conjugate of the topo I inhibitor exatecan with potential Phase 1 start in 1Q 2026
- **AVA7100** is a preclinical pre|CISION®-enabled FAP-Affimer candidate
- Broad IP portfolio covering foundational pre|CISION® technology and programs

## Near-Term Milestones

- **AVA6000**: Complete Phase 1 data in 2Q25, Phase 2 initiation in 2H25
- **AVA6103**: Candidate selection in 2H 2024
- **AVA7100**: Candidate selection in 2H 2025

## Financial Position & Management Team

- AIM-listed company with cash and cash equivalents of £32.5 million as of June 30, 2024
- A process to divest the revenue-generating diagnostics division is ongoing, transforming Avacta into a pure-play therapeutics company
- Exploring opportunities for a potential dual listing on NASDAQ
- Highly experienced Management Team, Board, and Scientific Advisory Board



# The Avacta Therapeutics Leadership Team



**Christina Coughlin,  
MD, PhD**

**Chief Executive Officer  
and Head of R&D**

Chris is an oncologist and immunologist, trained at the University of Pennsylvania. She has >18 years of industry experience including >30 oncology INDs and approvals across small molecules and cell therapy in oncology.



**Simon Bennett,  
DPhil**

**Chief Business Officer**

Simon is a biochemist with more than 26 years of commercial experience in biopharmaceuticals, supporting business development and corporate development. Simon has been involved in over 80 commercial deals across geographies.



**Karen Harrison**

**Chief Operating Officer**

Karen has >30 years of experience in building successful teams and delivering all operational aspects of her teams. Karen's focus is on value creation and global reach of companies, delivering transformational operational planning.



**Michelle Morrow,  
PhD**

**Chief Scientific Officer**

Michelle has >17 years of experience in oncology research in the biotech and pharma industry. Michelle has significant experience leading discovery and preclinical research teams, including multiple INDs and approvals in oncology.



# Avacta technology unleashes powerful cancer-killing drugs selectively in the tumor

**Cytotoxic agents remain the most powerful and effective way to kill cancer cells**

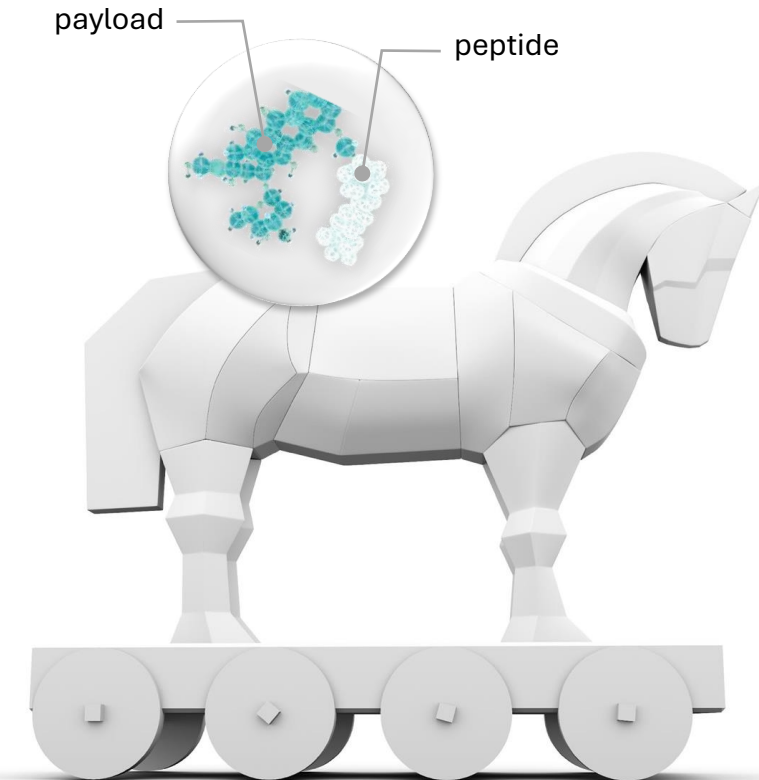
But they indiscriminately kill any dividing cells such as bone marrow, gut lining, hair follicles, skin and reproductive cells.

**Avacta technology masks cytotoxic agents in a Trojan horse that is only opened at the site of the tumor**

The hidden drug retains its power but is inert as it travels invisibly through the body, sparing healthy cells.

**Exposure of the drug requires the activity of an enzyme (protease) expressed only in the tumor microenvironment**

This enzyme concentrates the drug at the tumor site by cutting open the Trojan horse, unleashing it in its active form.



**Drugs are exposed and the lethal effect is unleashed selectively in the tumor microenvironment**

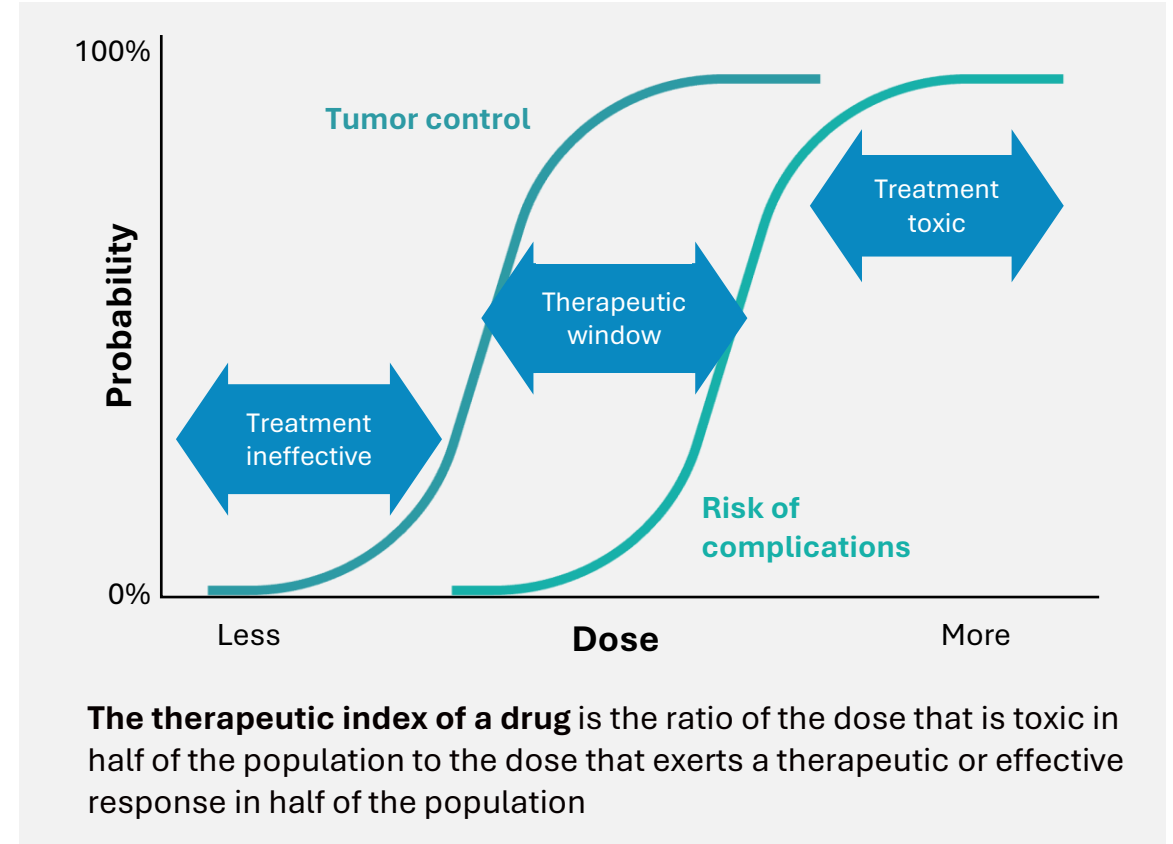
# Potent cancer drugs kill indiscriminately, causing toxicity throughout the body

**Therapeutic index challenge: Most cytotoxic drugs cause severe toxicity at the efficacious doses**

Expanding the therapeutic index of a drug requires a higher dose delivered to the tumor while in parallel sparing normal tissues from exposure

pre|CISION<sup>®</sup> medicines are designed to mask toxic effects from normal tissues by two mechanisms:

- Limiting peripheral exposure to the released (active) payload and
- Delivering high concentrations of release payload directly in the TME



Expanding the therapeutic window of cancer drugs demands innovative targeting strategies directly to the tumor

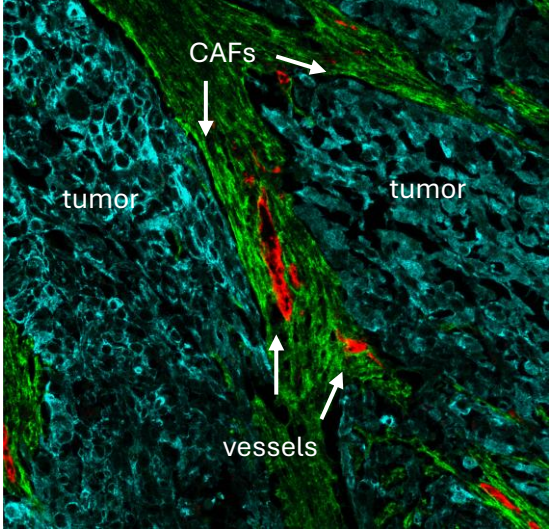
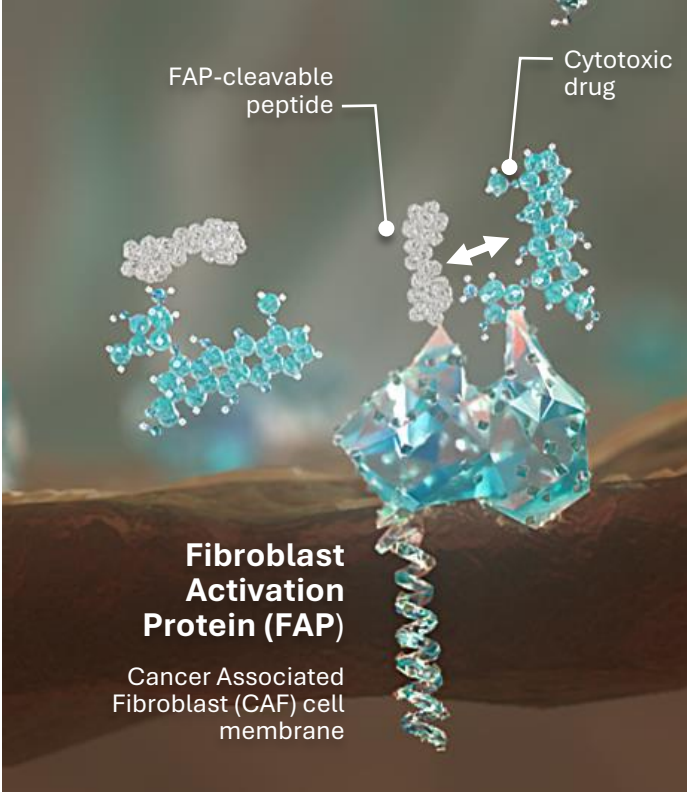


# Avacta is redefining how oncology therapeutics are targeted specifically to the tumor

pre|CISION® medicines are targeted to the tumor by means of a protease, specifically expressed in the tumor microenvironment (TME), that releases the cytotoxic agent

Fibroblast associated protein (FAP) is expressed by cancer-associated fibroblasts (CAFs) in many solid tumors with little to no expression in normal tissues

FAP is a protease with exquisite specificity for the pre|CISION linker sequence that releases the payload directly in the TME, killing tumor cells via the bystander effect

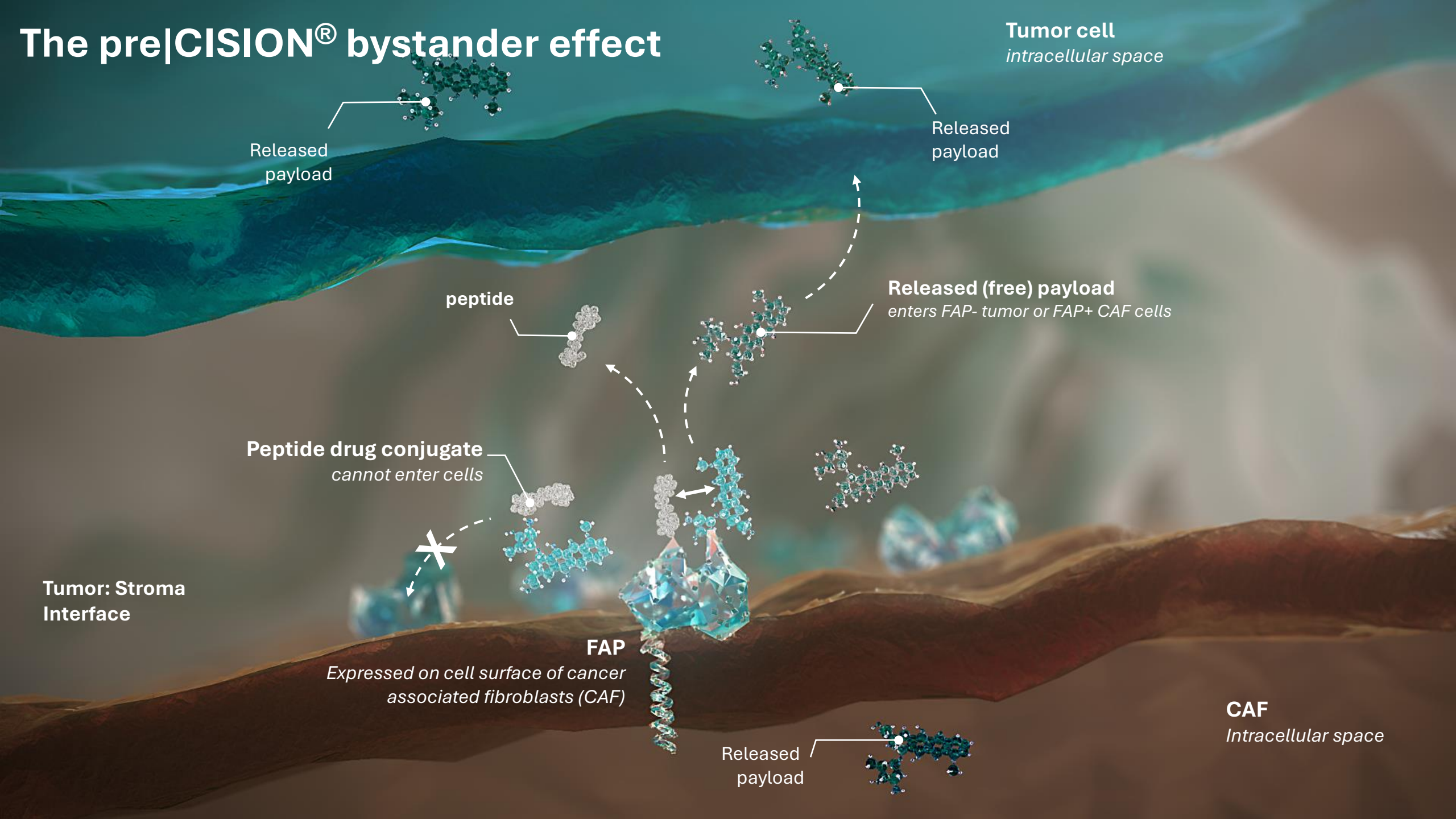


Multiplex immunofluorescence defining the tumor: stroma interface

- FAP (CAF)
- CD31 (blood vessels)
- PanCK (tumor cells)

Leveraging the FAP protease in the TME represents a new approach to deliver payloads to the tumor and spare healthy tissue

# The pre|CISION<sup>®</sup> bystander effect





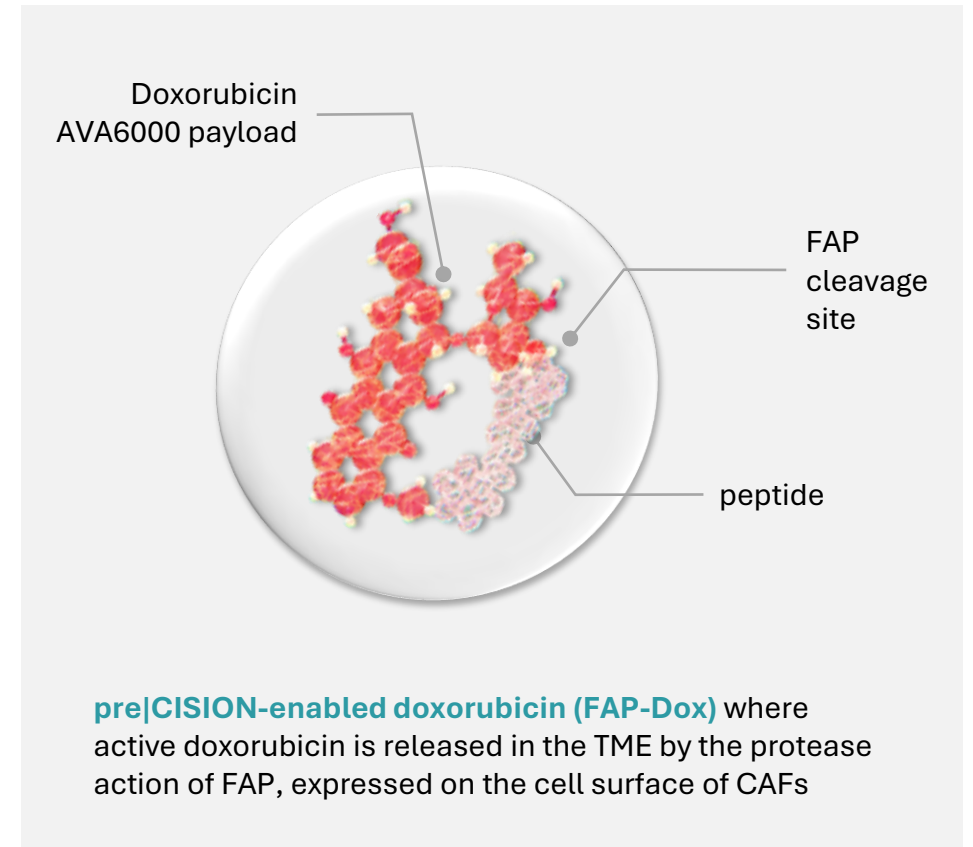
# AVA6000: Avacta technology delivers cytotoxic drugs directly to the tumor while protecting healthy tissue

**Foundational pre|CISION<sup>®</sup> platform technology in the peptide drug conjugate format is the basis of our first clinical asset, FAP-Dox (AVA6000)**

The **pre|CISION<sup>®</sup> peptide** is conjugated to a cytotoxic drug to create a **peptide drug conjugate (PDC)**, rendering the drug inert until the peptide is cleaved

## Advantages

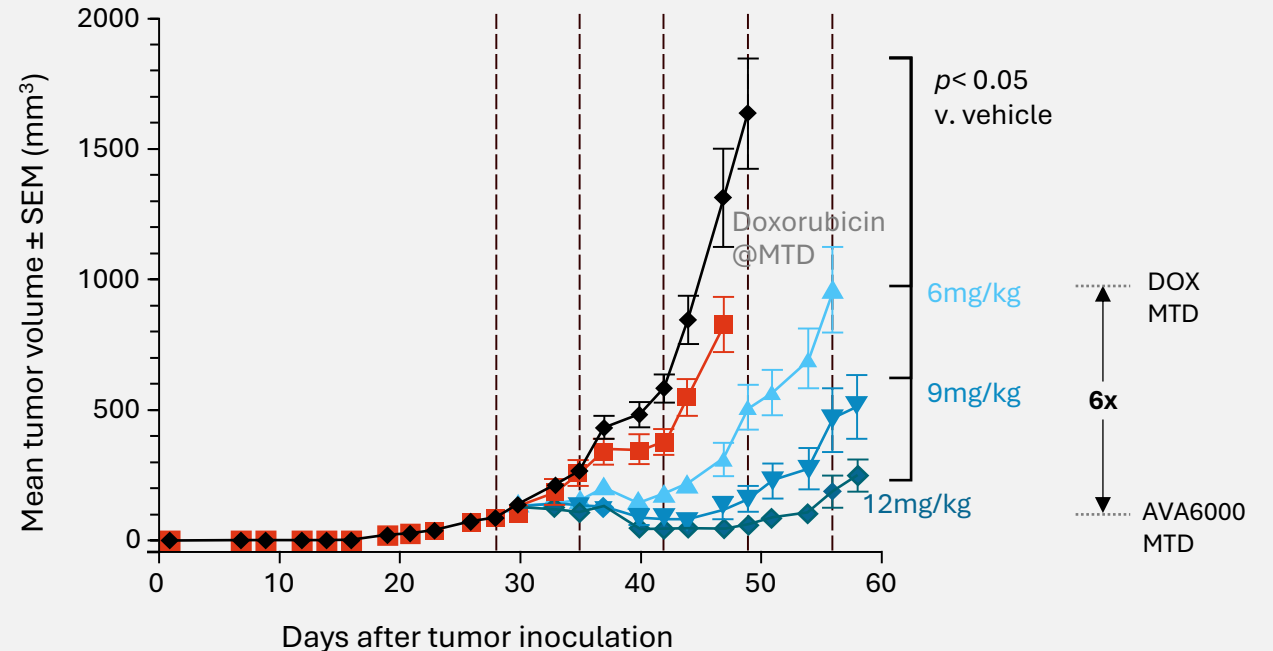
- Short plasma PK of the PDC ( $t_{1/2}$  minutes to hours)
- High tumor concentration v. plasma of released payload
- Tumor targeting is not limited by a specific moiety; effective across many FAP-positive tumor types
- Small molecule manufacturing timeline/COGMs



# FAP-enabled doxorubicin (AVA6000) demonstrates activity in a FAP-high model

- pre|CISION-enabled doxorubicin (FAP-Dox, AVA6000) results in a **6-fold increase in the MTD** versus conventional doxorubicin
  - The MTD of doxorubicin is 2mg/kg and AVA6000 is 12 mg/kg
  - Regression of established tumors observed at MTD of AVA600
- Preclinical tumor:plasma PK studies suggest that pre|CISION-enabling results in **a 10-20-fold** difference in tumor exposure v. concurrent plasma exposure across payloads

Human FAP model (HEK-hFAP) of Kidney Cancer with Significant Increase in MTD of AVA6000 versus doxorubicin



An **engineered murine model** was developed with an aggressive model of human kidney cancer (HEK) expressing human FAP (HEK-hFAP)

Leveraging the FAP protease represents a new approach to deliver payloads to the tumor and spare healthy tissue

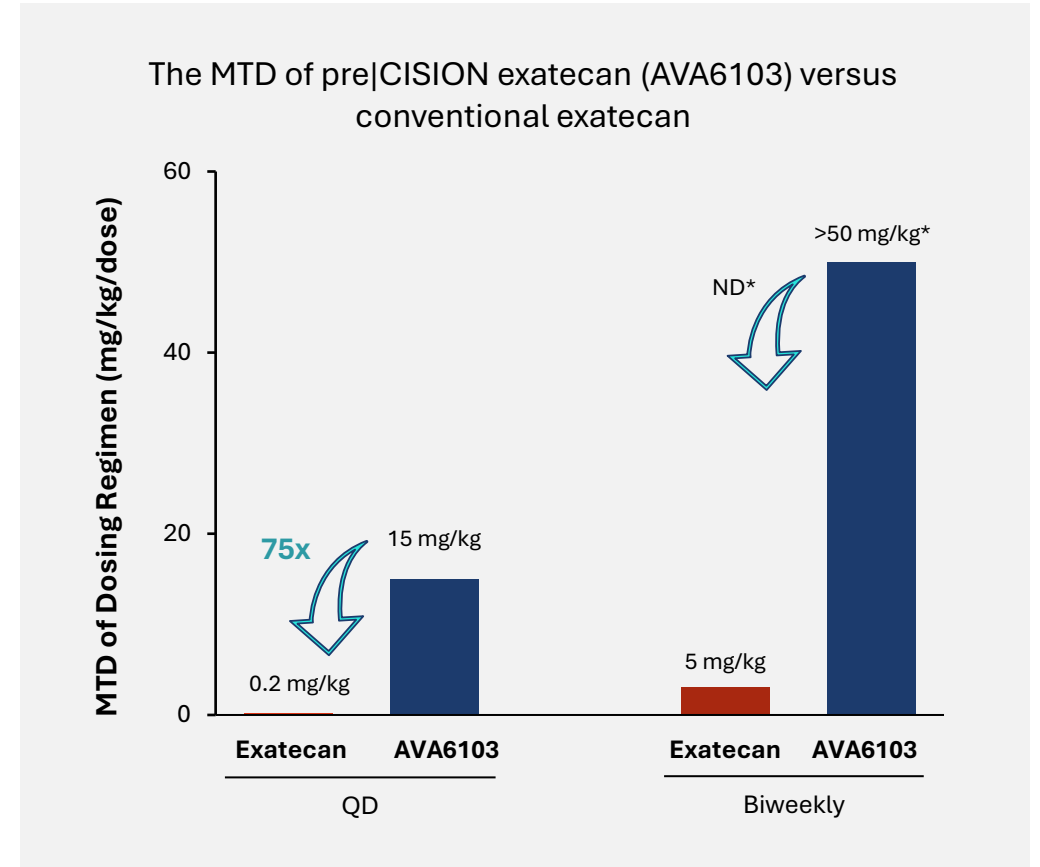
# Building on a proven foundation: Advancing our platform technology to a novel payload (exatecan)

To leverage additional payloads (exatecan) and optimize therapeutic index, the **properties of the FAP cleavable peptide have been advanced (FAP-EXd, AVA6103)**

The tumor to plasma PK is fine-tuned through deep chemistry expertise and a computational algorithm trained using *in vitro* and *in vivo* data with multiple payloads

## Advances in pre|CISION chemistry:

- 1 The capping group is modified to **extend the plasma exposure** of the conjugated PDC
- 2 **Slowing the rate of cleavage** of the drug in the TME optimizes selective delivery of the released payload only in the tumor
- 3 These changes together create a **sustained release delivery** in the TME, significantly extending the therapeutic index



\*Non-tumor bearing mice were dosed in a multi-dose format with the defined schedules using either exatecan or AVA6103 administered i.v. Maximum dose tested of AVA6103 was 50 mg/kg with no toxicity noted, thus the therapeutic index of the biweekly schedule was not determined (ND)

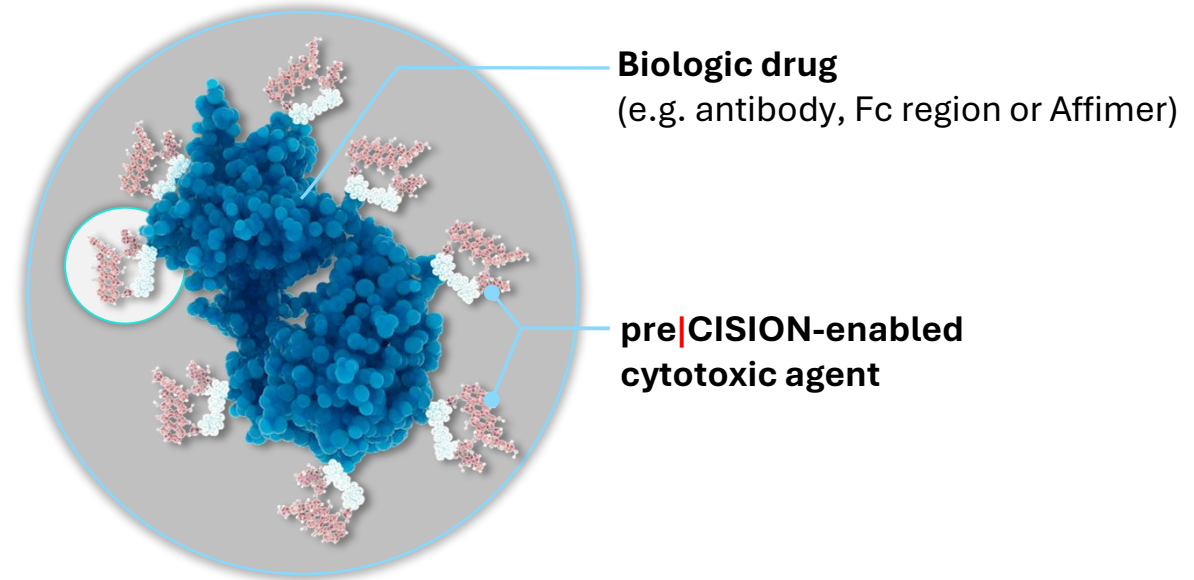
# Expanding our platform technology for greater patient impact

Combining our **tumor-selective masking technology** with a **small biologic** enhances tumor targeting and broadens the cancer indications we can address

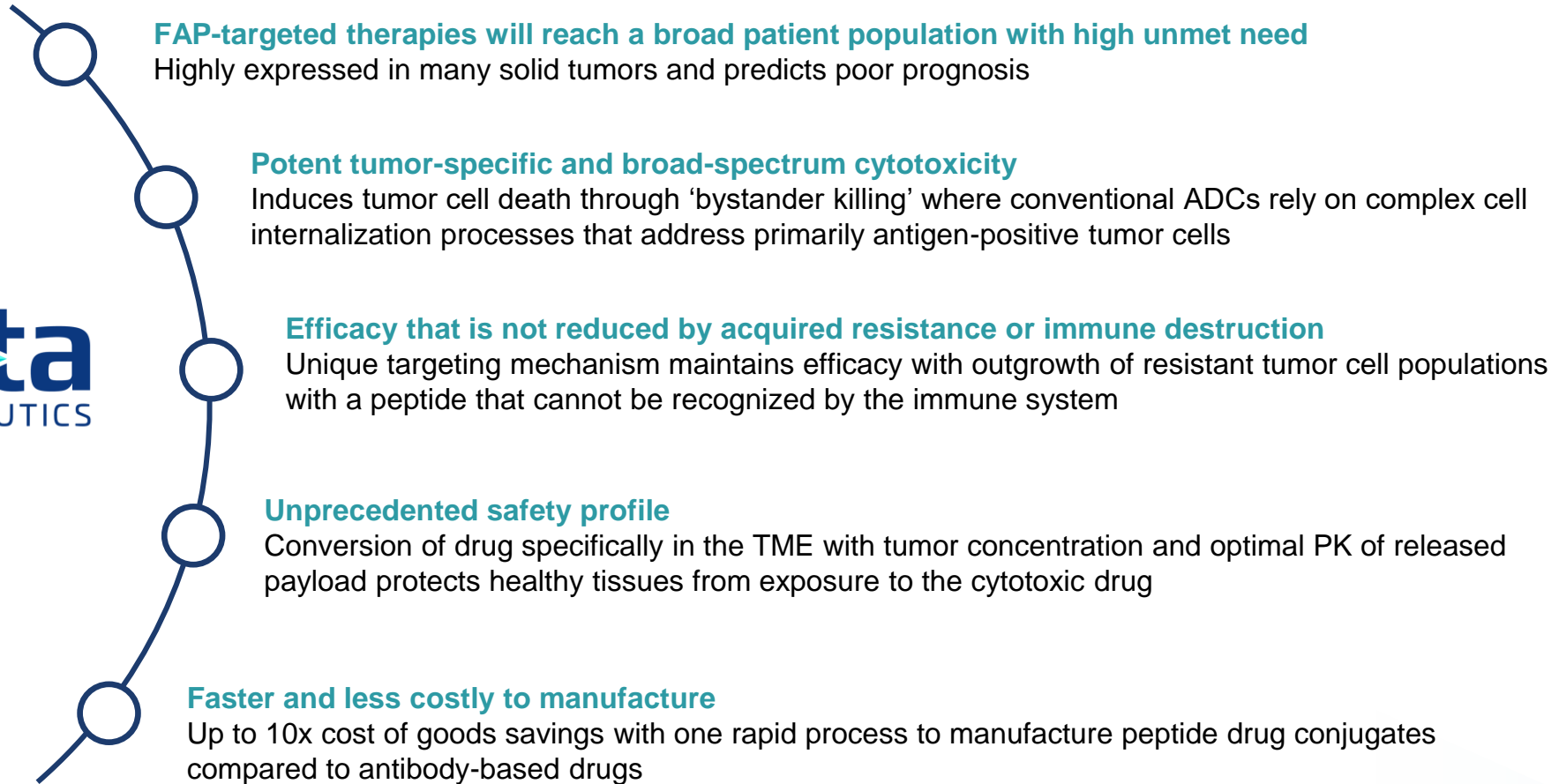
## Advances:

- Modular drug delivery system with multiple formats, variable affinities, and multiple specificities with in-house screening capabilities
- Better tumor penetration with similar antigen affinity compared to an antibody
- Significantly faster and less costly to manufacture than antibody-based drugs

The **FAP Affimer drug conjugate (AffDC)** with **pre|CISION delivery (AVA7100)** will unlock patient populations with lower expression of FAP



# Avacta's technology stands out with several unique advantages in a competitive market








# Avacta Therapeutics Pipeline

PROGRAM	PLATFORM/ WARHEAD	POTENTIAL INDICATIONS	PRECLINICAL	IND- ENABLING	PHASE 1	PHASE 2	MILESTONES	
<b>AVA6000</b>	pre CISION Doxorubicin (FAP-Dox)	Head and Neck Cancers (HNSCC, Salivary gland Ca subset)  Dedifferentiated liposarcoma  Breast cancer (TNBC/HER2+/HER2low)						Expansion FPI 2H 2024  Ph Ia/Ib data 2Q 2025 (Full Ph I)
<b>AVA6103</b>	pre CISION Exatecan (FAP-Exd)	Triple negative breast cancer (TNBC)  Gastric cancer (GC)  Small cell lung cancer (SCLC)  Pancreatic ductal adenocarcinoma (PDAC)						Candidate selection 2H 2024
<b>AVA7100</b>	pre CISION FAP Affimer (AffDC) Warhead not disclosed	Head and neck squamous cell cancers (HNSCC)  Non-small cell lung cancer (NSCLC)  Colorectal cancer (CRC)						Candidate selection 2H 2025

# pre|CISION PDCs have key advantages over conventional ADC approaches

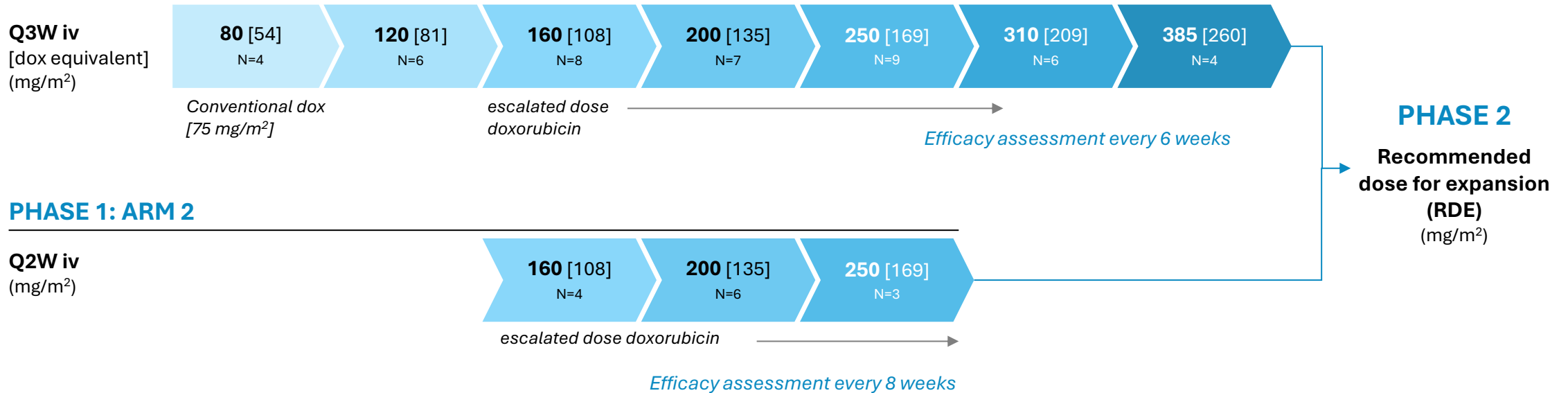
	Avacta pre CISION Peptide Drug Conjugate	v.	Conventional Antibody Drug Conjugate
 <b>Bystander mechanism of action</b>	<p><b>Extracellular warhead release</b> in the TME with limited systemic exposure</p> <p>pre CISION leverages the bystander effect to efficiently kill both FAP+ and FAP- cells</p>		<p><b>Intracellular warhead release</b> in the tumor killing antigen-positive cells</p> <p>Complex bystander effect to induce killing of antigen-negative cells</p>
 <b>Payload release</b>	<p><b>Tumor-specific warhead release</b> by the FAP-cleavable peptide linker</p>		<p><b>Non-specific warhead release</b> contributes to off-target toxicities (e.g. lung toxicity)</p>
 <b>Manufacturing</b>	<p>Small molecule timelines and costs of manufacturing</p>		<p>Complex, long and expensive manufacturing process</p>

# FAP-Dox: pre|CISION-enabled doxorubicin

Phase 1 data readouts

# AVA6000 Phase 1 trial design and patient population

## PHASE 1: ARM 1

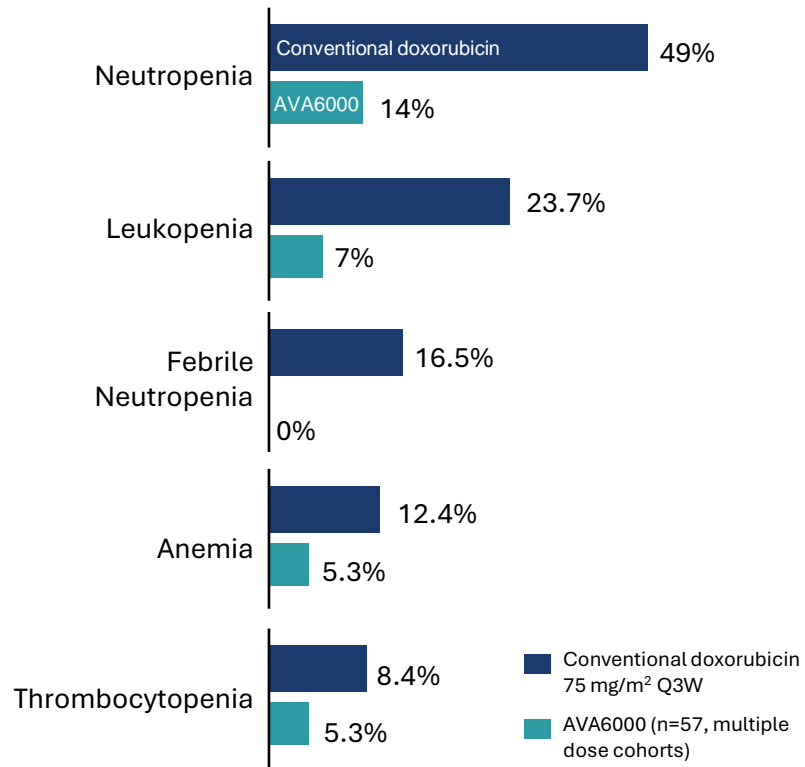


## PATIENT POPULATION AND METHODS

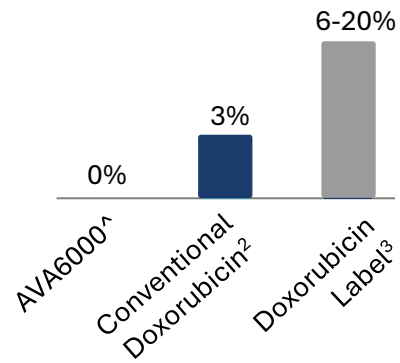
- Patients with a diagnosis of known FAP-positive cancers, including sarcoma, pancreatic cancer, colorectal cancer, head and neck cancers
- The trial includes a mix of FAP-high (universal high expression) and FAP-mid cancer indications (heterogenous expression across patients)
- Prior therapy with any anthracycline was limited to total cumulative dose of less than 350 mg/m<sup>2</sup>
- Trial analyzed for safety (primary endpoint) and efficacy (secondary endpoint by FAP<sup>high</sup> and FAP<sup>mid</sup> cancer types)

# AVA6000 has reduced hematologic, cardiac and GI toxicities compared to conventional doxorubicin

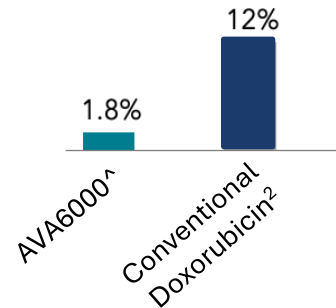
## AVA6000 reduces CTCAE Grade 3 or 4 bone marrow toxicity compared to conventional doxorubicin



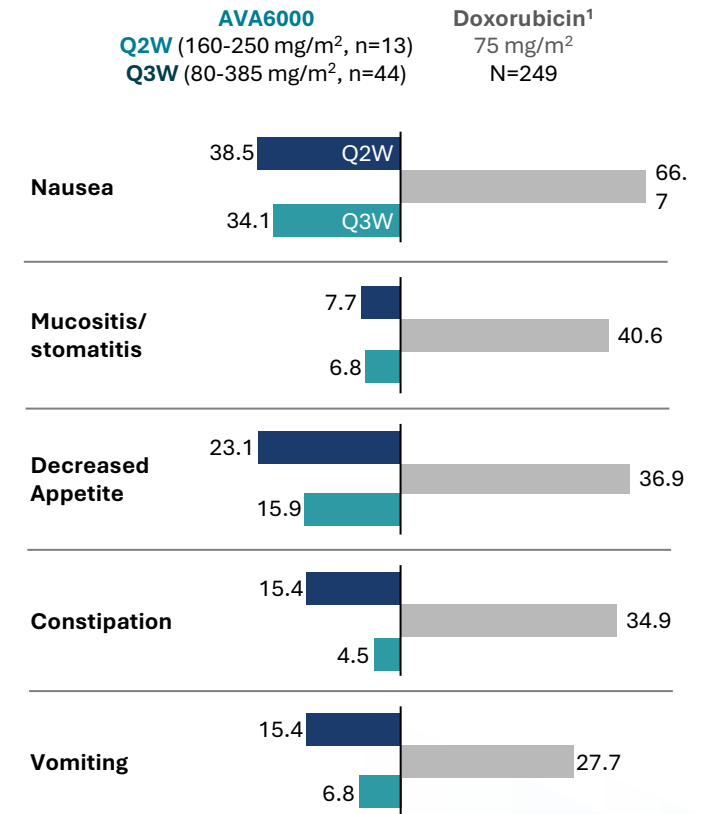
## Severe cardiac toxicity (cardiomyopathy/ cardiac dysfunction)<sup>1</sup>



## Mild cardiac toxicity (left ventricular ejection fraction dysfunction)<sup>2</sup>

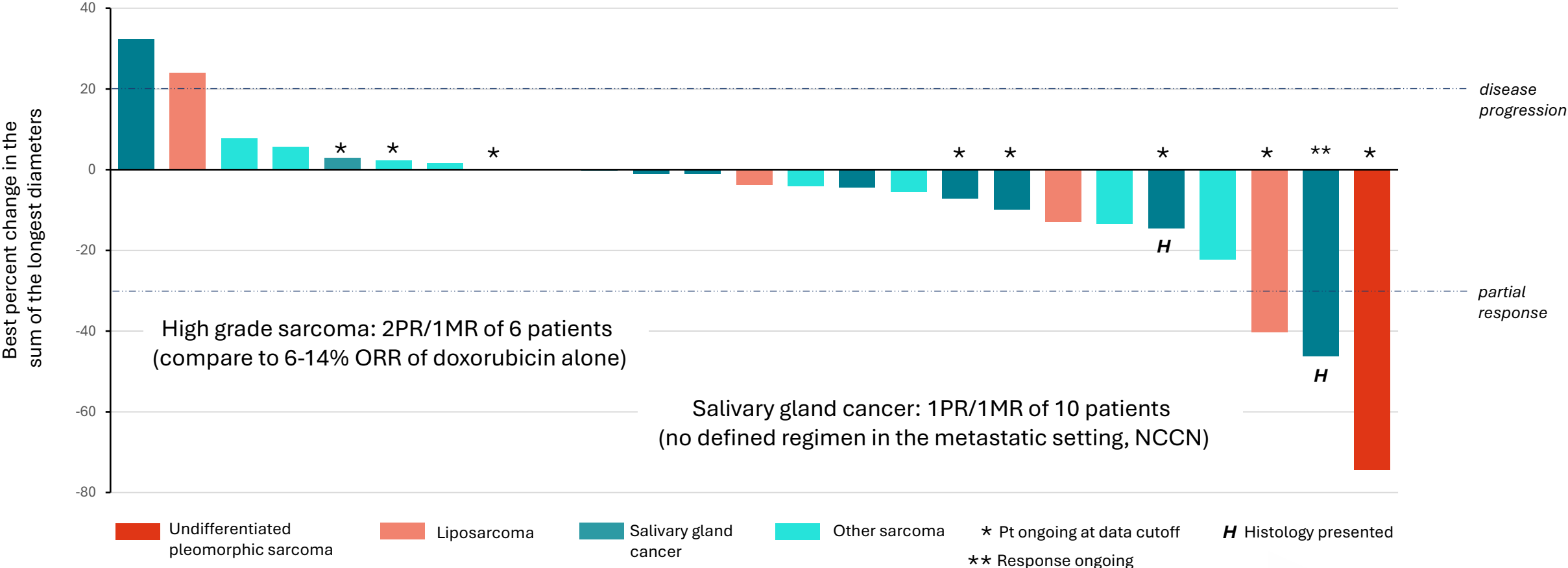


## Reduced GI toxicity comparing Q3W and Q2W shows both regimens preserve patient vitality

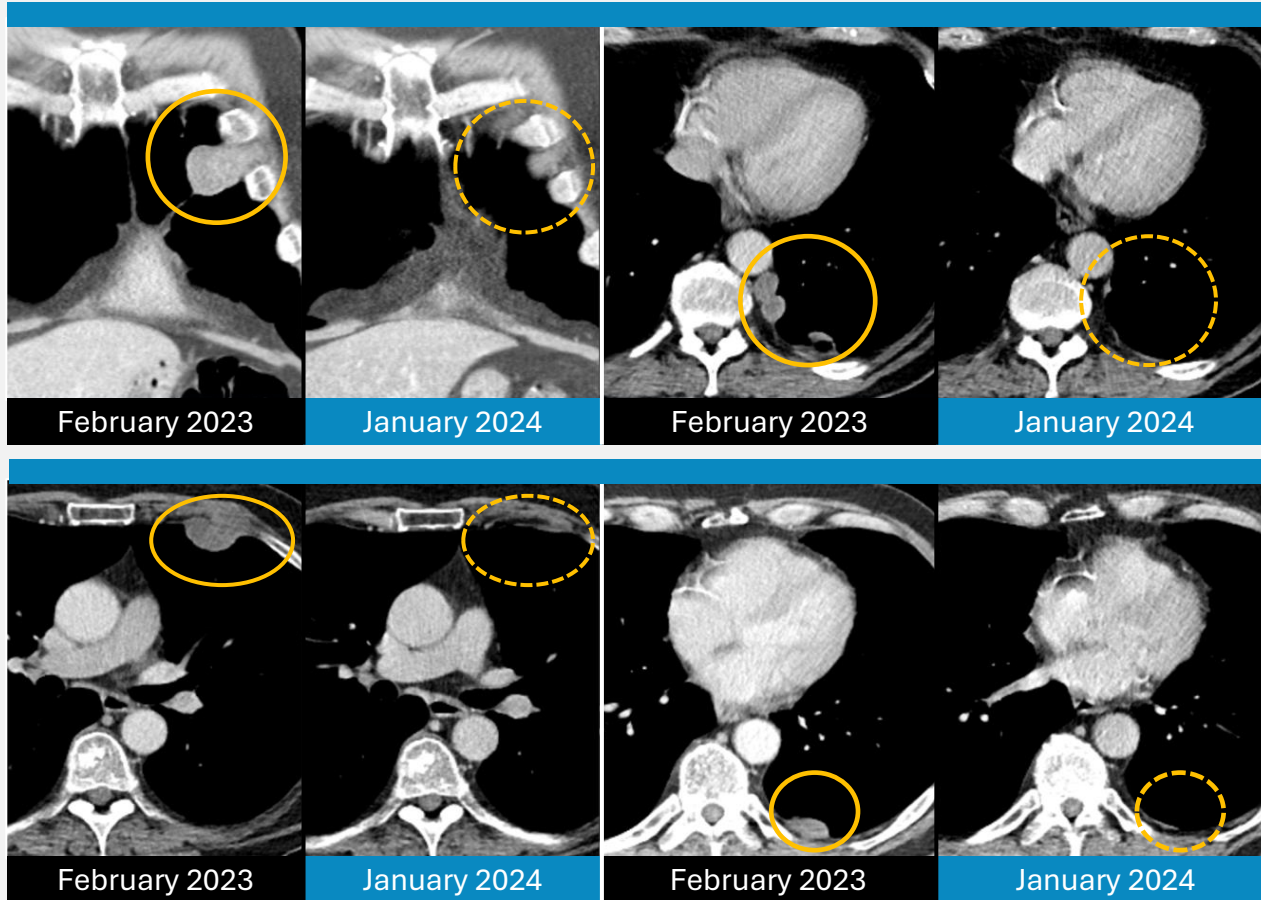




# AVA6000 results in multiple RECIST responses among patients with FAP-high cancers



# AVA6000: First case study highlights deepening RECIST response in treatment-resistance



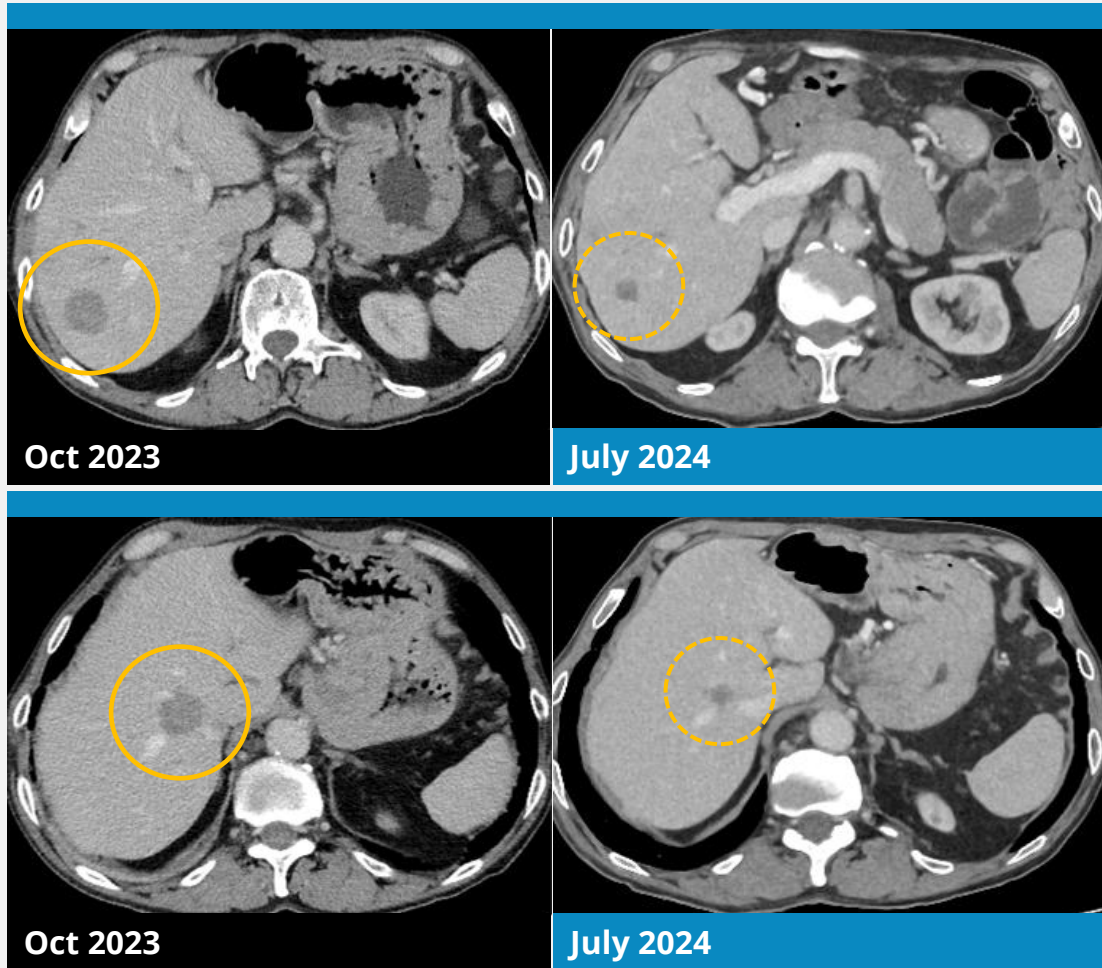
Banerji et al. 2024 AACR Annual Meeting, April 2024;  
Twelves et al. ESMO Annual Meeting, Sept 2024

## Near complete resolution of the multiple pleural metastases

- 60-year-old male patient diagnosed with a high grade undifferentiated pleomorphic sarcoma (UPS)
- Treated initially with local control measures (surgery and radiation)
- Upon developing metastatic disease, he enrolled in an immunotherapy clinical trial for 6 months until he experienced disease progression
- He then enrolled in the AVA6000 phase 1 trial in Feb 2023. Deep partial response, duration of response >55 weeks (data cutoff 19 Aug 2024)

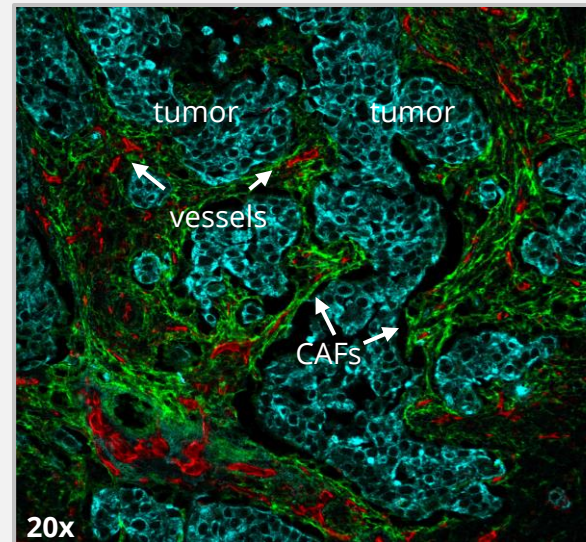
## Response continued to deepen over the course of treatment with AVA6000

# AVA6000: Second case study highlights response with FAP-negative tumor cells



## Durable RECIST response in the setting of FAP-negative tumor cells

- 79 yo male with SGC (ductal histology). Prior therapy: triptorelin/ bicalutamide followed by disease progression
- Enrolled in the AVA6000 trial (Oct 2023) in the 385 mg/m<sup>2</sup> Q3W cohort; highest level of intratumoral doxorubicin of any patient at 24 hours post-dose
- Confirmed partial response at 12 weeks; duration of response >18 weeks. Pt discontinued after reaching lifetime max of doxorubicin exposure; PR continuing in follow-up

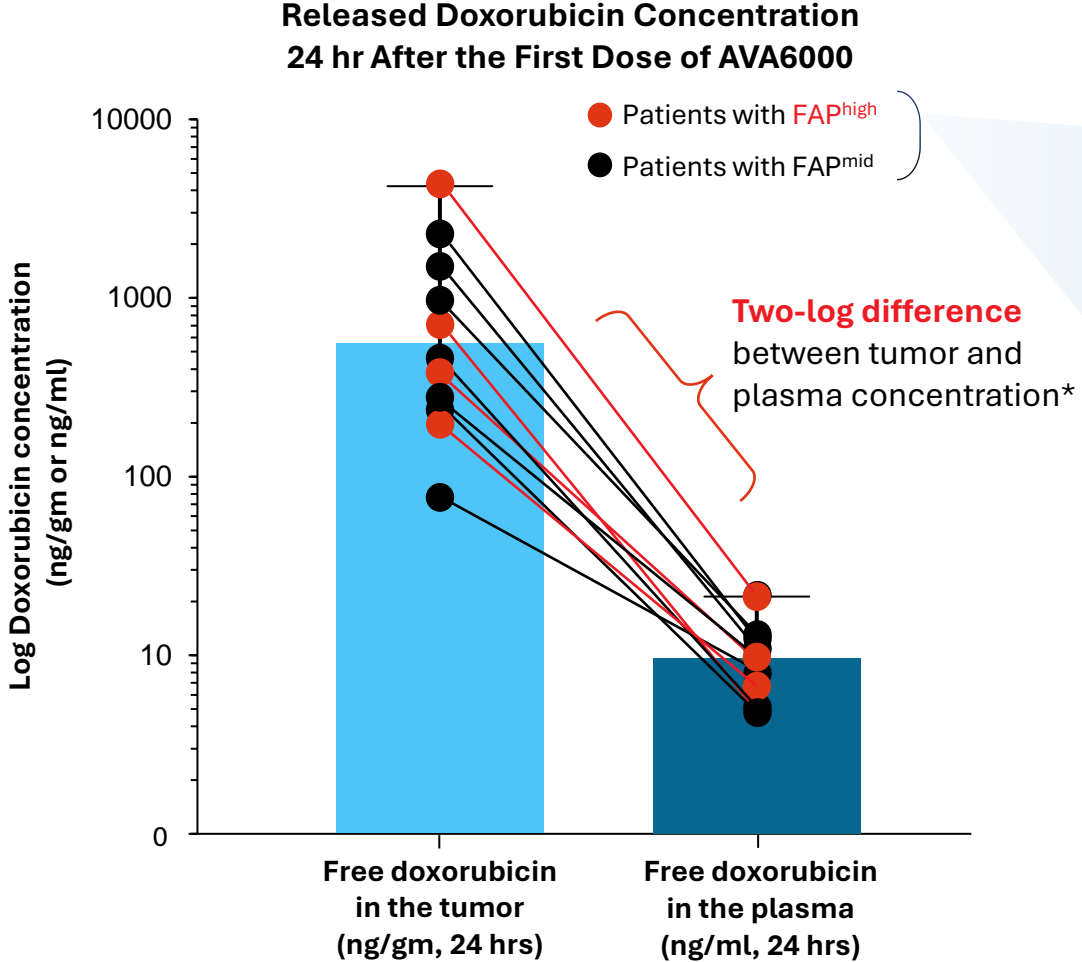


### Tumor cells are negative for FAP (aqua)

FAP-positive Cancer Associated Fibroblast (CAF) populations (green) at the tumor-stroma interface with vessels co-localized in stroma (red)

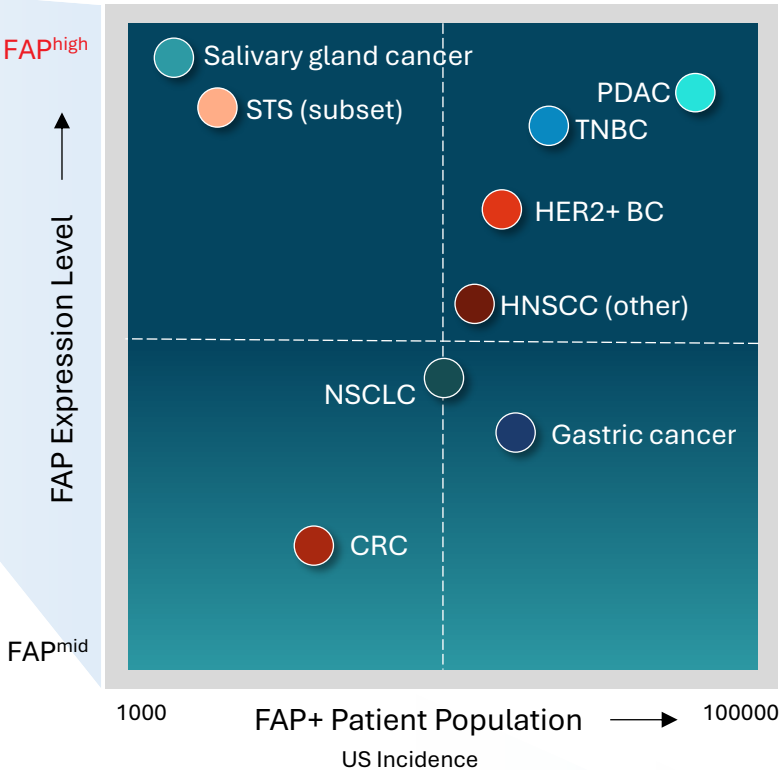
- PanCK (tumor)
- CD31 (blood vessels)
- FAP (CAFs)

# Concentration of doxorubicin in the tumor regardless of FAP level opens multiple indications



\*In contrast, traditional ADC have reported 3-8x concentration in the TME  
Banerji et al. 2024 AACR Annual Meeting

**Patient Populations Addressable by pre|CISION technology (with other payloads)**



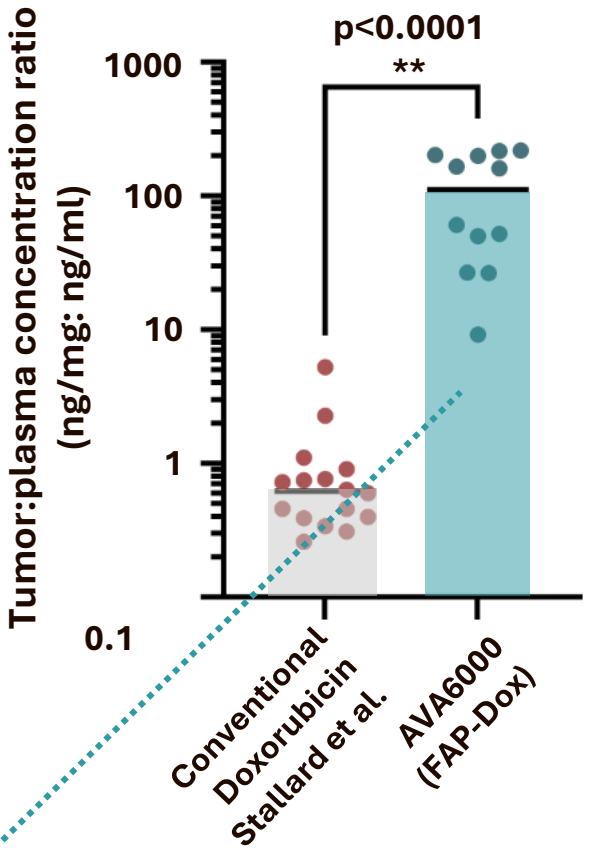
CRC: colorectal cancer, HNSCC: squamous cell cancer of the head/neck, PDAC: pancreatic ductal adenocarcinoma, NSCLC: non-small cell lung cancer, TNBC: triple negative breast cancer



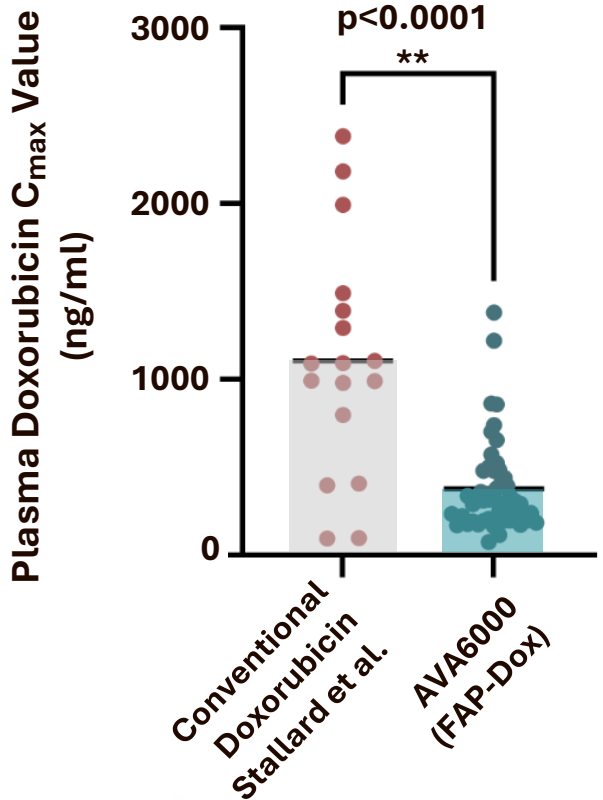
# Conventional doxorubicin demonstrates limited concentration in the TME

- The tumor concentration data with AVA6000 at 24 hours post-dose is compared with conventional doxorubicin at 1 hour post-dose, with a published study of tumor exposure with doxorubicin (25 mg flat dose)
- The ratio of tumor to plasma doxorubicin with conventional dosing is approximately 1 vs. 100 with AVA6000
- In parallel, the median C<sub>max</sub> of conventional doxorubicin in this study is higher than that observed with AVA6000

Tumor to plasma ratio of active doxorubicin after first dose



C<sub>max</sub> of doxorubicin following first dose



AVA6000 concentrates doxorubicin in the TME at 24 hours post-dose

Tumor:plasma doxorubicin concentrations compared between the Br Ca trial and AVA6000 trial where the BC trial (1 hr post-dosing, 25 mg dose) and AVA6000 trial (24 hr post-dosing), median ratio indicated. Conventional dox assessed with early biopsy timepoint (~1 hour post-dose) but after T<sub>max</sub> (20 min) where variability of tumor: plasma very high. C<sub>max</sub> of both conventional doxorubicin and released doxorubicin compared. Stats per Mann Whitney U test.

^Stallard et al. 1990. Distribution of doxorubicin to normal breast and tumour tissue in patients undergoing mastectomy. Cancer Chemother Pharmacol. 1990;25(4):286-90. doi: 10.1007/BF00684887~



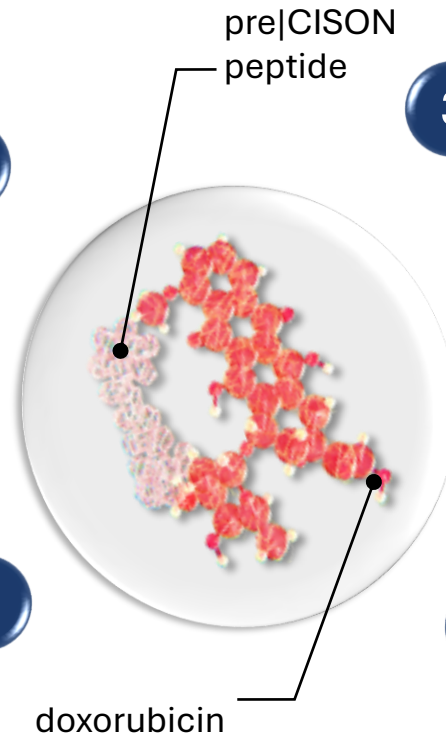
# Pre|CISION enabling results in four fundamental PK changes with doxorubicin

## 1 Reduced plasma exposure with released doxorubicin

Released doxorubicin from AVA6000 has a lower plasma C<sub>max</sub> (77.9-92.5% reduction) and lower AUC (4.8-77%) across dose levels

## 2 Enhanced tumor exposure v. conventional doxorubicin

Tumor exposure to released doxorubicin is higher at 24 hours than that seen with conventional doxorubicin at 1 hour (100:1 v. 1:1)



## 3 Significant reduction in the volume of distribution of released doxorubicin

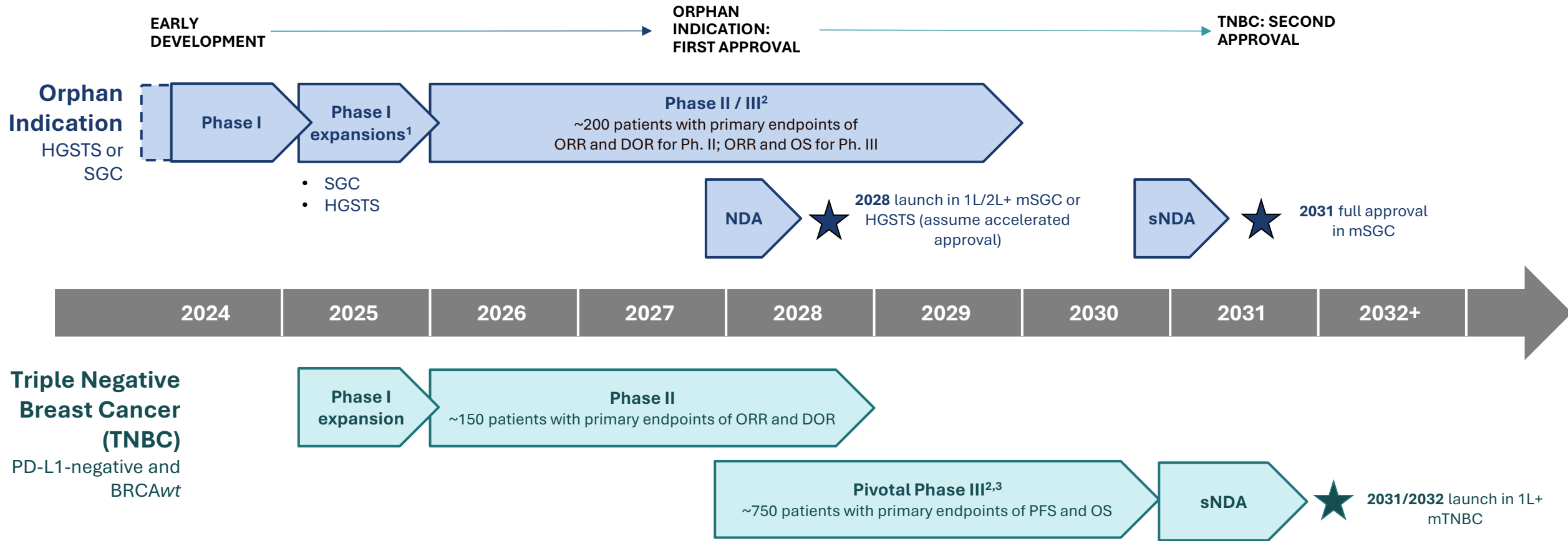
Released doxorubicin from AVA6000 demonstrates a 40% reduction in the volume of distribution v. conventional dose doxorubicin

## 4 Extended plasma half-life of released doxorubicin

The plasma half-life of released doxorubicin is extended by up to 40% compared to conventional doxorubicin

pre|CISION-enabled doxorubicin has extended tumor exposure with limited plasma and normal tissue exposure, suggesting a sustained release mechanism can be developed

# AVA6000 Clinical Development: Rapid route to market in orphan indication with TNBC to expand the label



Notes <sup>1</sup>Proposed indications include the three solid tumor types with FAP expression and demonstrated activity of doxorubicin: salivary gland cancer (SGC), high grade soft tissue sarcoma (HG-STs), and breast cancer (the TNBC subset). Phase I expansion will include 1L/2L mSGC, 1L/2L HG-STs and up to 3L PD-L1 negative 1L+ mTNBC patients; <sup>2</sup>Proposed clinical trial lengths were based on comparable trials testing ADCs in oncology (e.g., Phase I/II: NCT03742102 / NCT01848834 / NCT02447003 and Phase III: NCT02574455 / NCT02819518, CT.gov references); <sup>3</sup>Phase III trial initiation may occur before completion of Phase I/II

# FAP-EXd: pre|CISION-enabled exatecan

Peptide Drug Conjugate

# Exatecan is an ideal payload for the next evolution of the pre|CISION platform

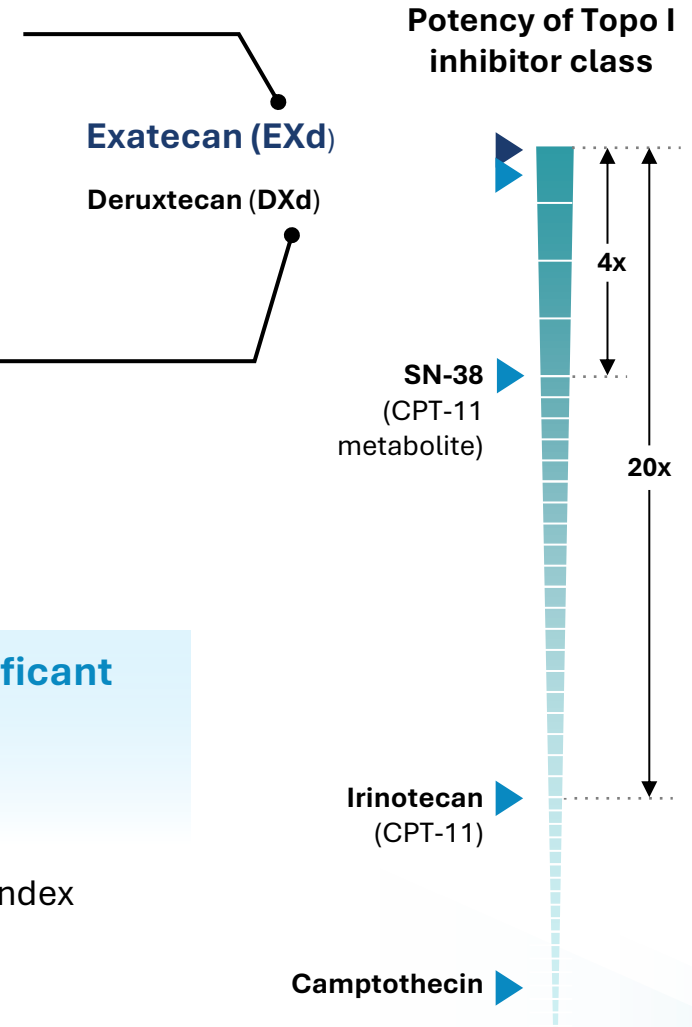
1 **Exatecan (EXd) is the most potent topo I inhibitor with single agent activity** in Ph 2 trials in several key FAP-positive indications (breast, gastric, small cell lung cancer)

2 **Deruxtecan (DXd) has similar potency but lower membrane permeability** compared with exatecan (EXd) and is a **highly successful ADC warhead**

- When attached to trastuzumab (Enhertu™), the only ADC shown to have **significant bystander effect** or anti-TROP1 (DATO-DXd)

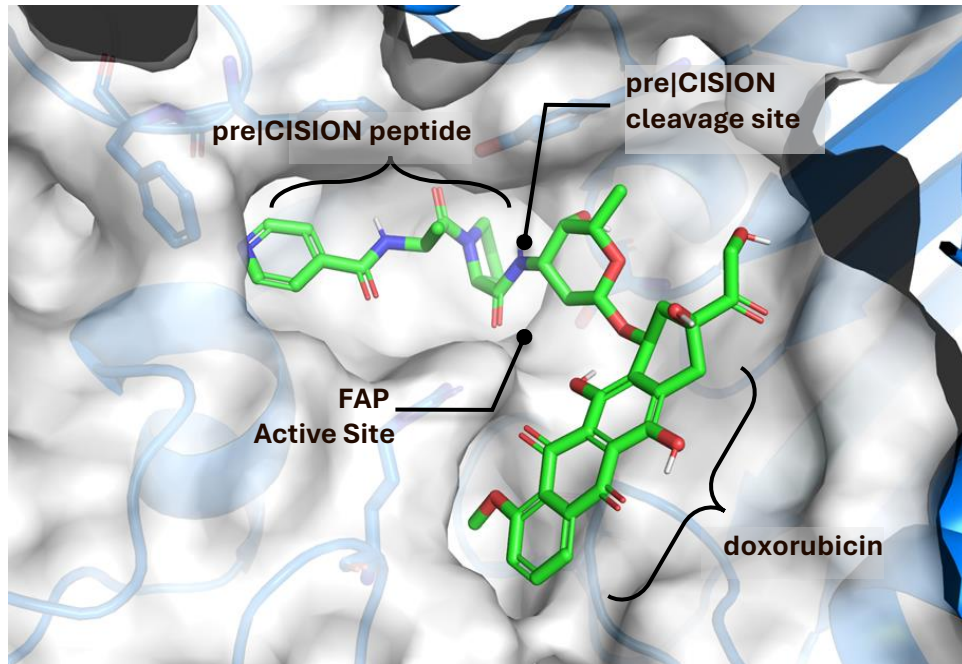
3 **Exatecan failed in the clinic due to a limited therapeutic index and significant PK issues**

- Short half-life of ~9 hours which is insufficient for the effective inhibition of the topoisomerase I enzyme
- The evolution of the preCISION platform chemistry can optimize both therapeutic index as well as the PK liability

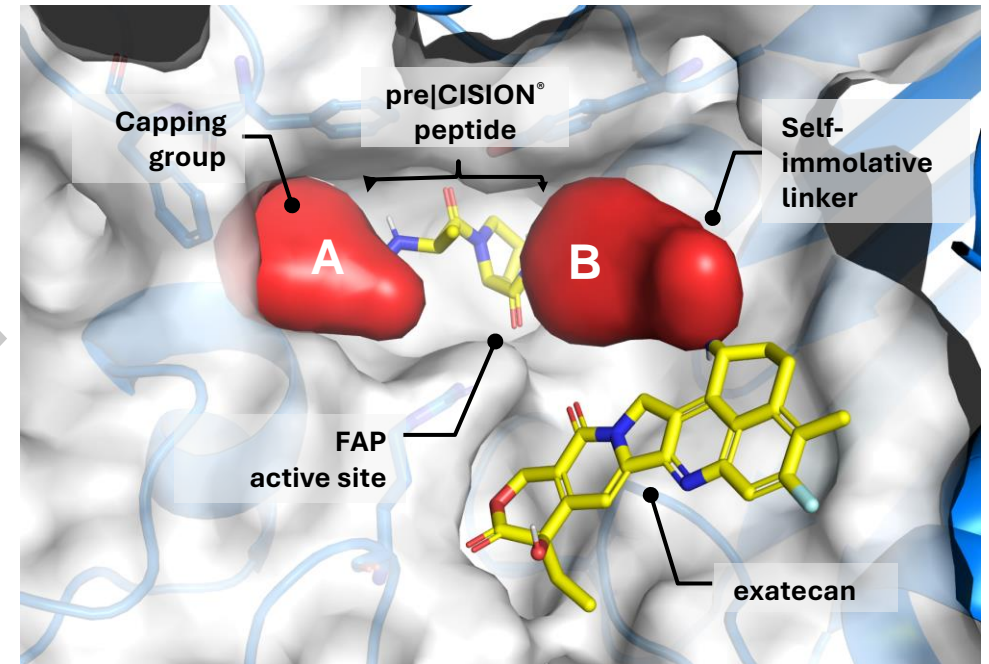


# Two key chemistry advances optimize exatecan delivery to create AVA6103

pre|CISION-Doxorubicin in the FAP Docking Model



pre|CISION-Exatecan in the FAP Docking Model



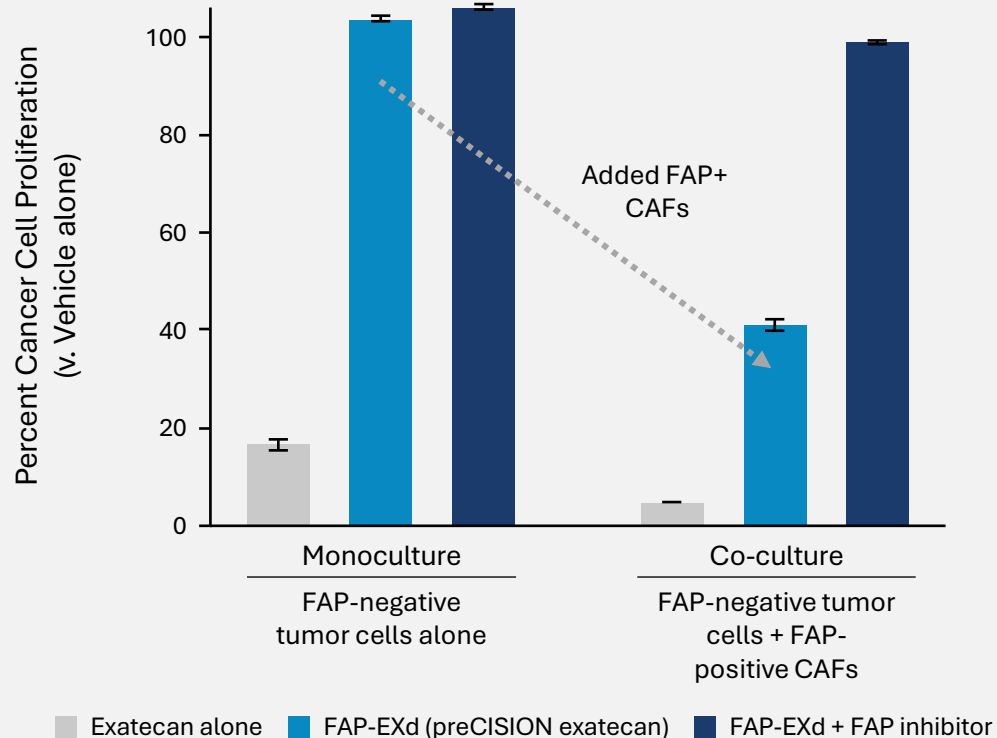
Extended plasma PK (A) of the conjugate and slowed warhead release (B) will result in a sustained release delivery mechanism in the tumor with very limited systemic exposure





# FAP-EXd (AVA6103): Effective killing of FAP-negative tumor cells in the bystander assay

FAP-Exd (AVA6103) Kills FAP-ve Tumor Cells Only in the Presence of FAP+ve CAFs

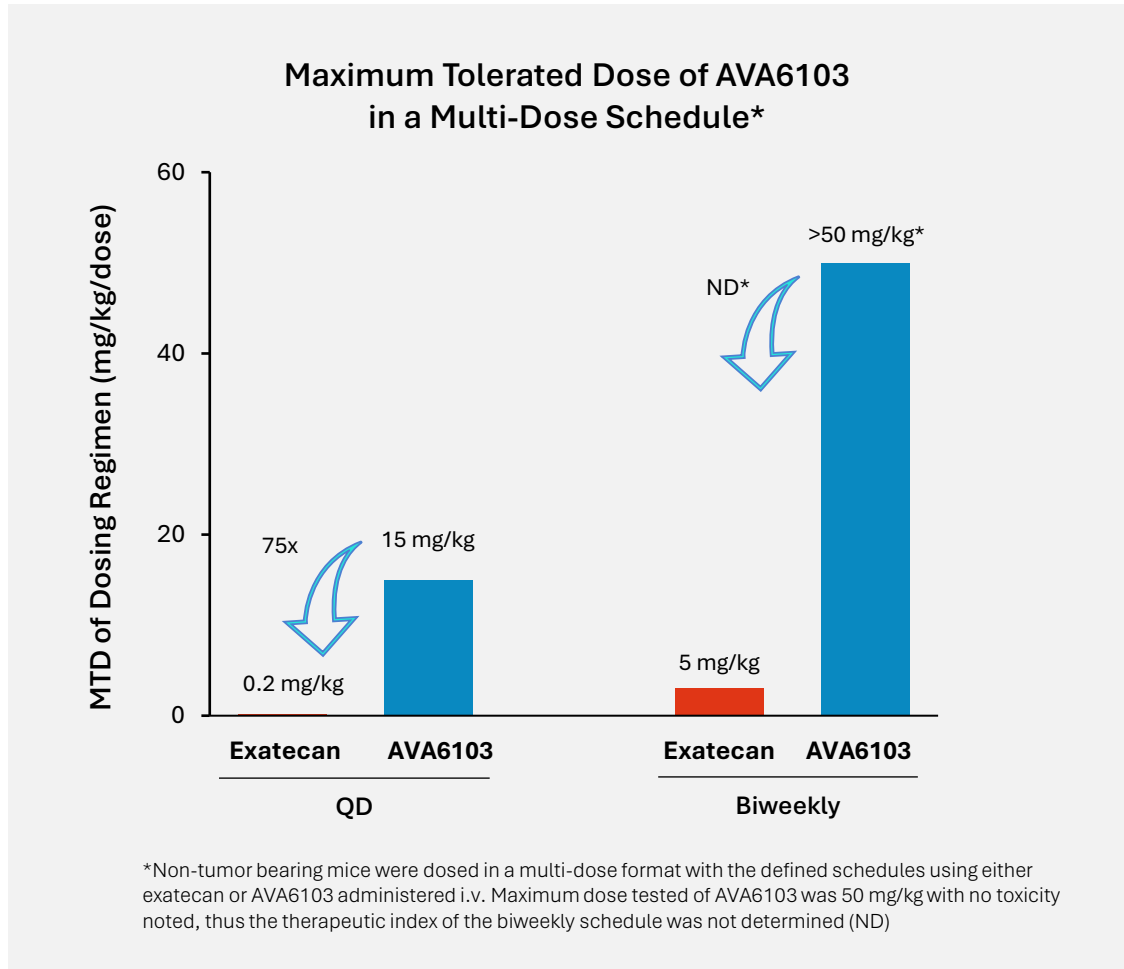


Monoculture (tumor cells alone) or co-culture with fibroblasts demonstrates FAP-specific cleavage of AVA6103-mid (0.001 $\mu$ M) at 120hr post-treatment, where Mia PaCa-2-GFP cells were plated either alone, or in combination with pancreatic fibroblasts

- In a **bystander effect** model, **pancreatic cancer cells** (PDAC, FAP-negative) were tested alone (monoculture), or in combination with **FAP+ pancreatic fibroblasts** (co-culture)
- FAP-EXd exhibits **no activity in monoculture** (PDAC, FAP-negative)
- With the **addition of FAP-positive fibroblasts**, FAP-EXd is cleaved by FAP to release exatecan, greatly reducing cancer cell proliferation (co-culture)
- The **bystander effect** is achieved with FAP-negative tumor cell death

Watts, E *et al.* EORTC-NCI-AACR Annual Meeting 2024

# Therapeutic Index: The MTD of AVA6103 Is 75-fold higher than that of conventional exatecan



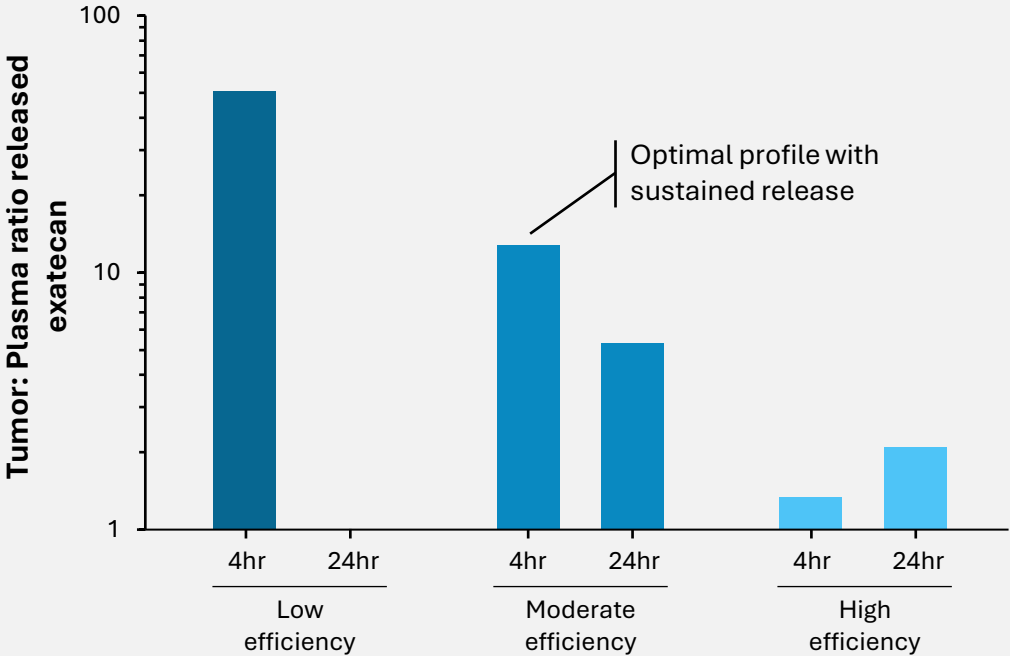
Watts, E *et al.* EORTC-NCI-AACR Annual Meeting 2024

- **Frequent exatecan dosing** in prior clinical trials was designed to optimize inhibition of the topoisomerase I enzyme
  - More frequent dosing to extend the inhibition of the topo I enzyme for a prolonged (>24 hr) period was toxic in the clinic
  - Activity was observed in the clinic with the QDx5 regimen
- To demonstrate the **MTD of AVA6103**, the molecule with the mid level of FAP efficiency (kcat/Km) was selected (AVA6103-mid)
- Dosing in the QD regimen was limited at 15 mg/kg (AVA6103) compared to the MTD of exatecan alone is 0.2 mg/kg



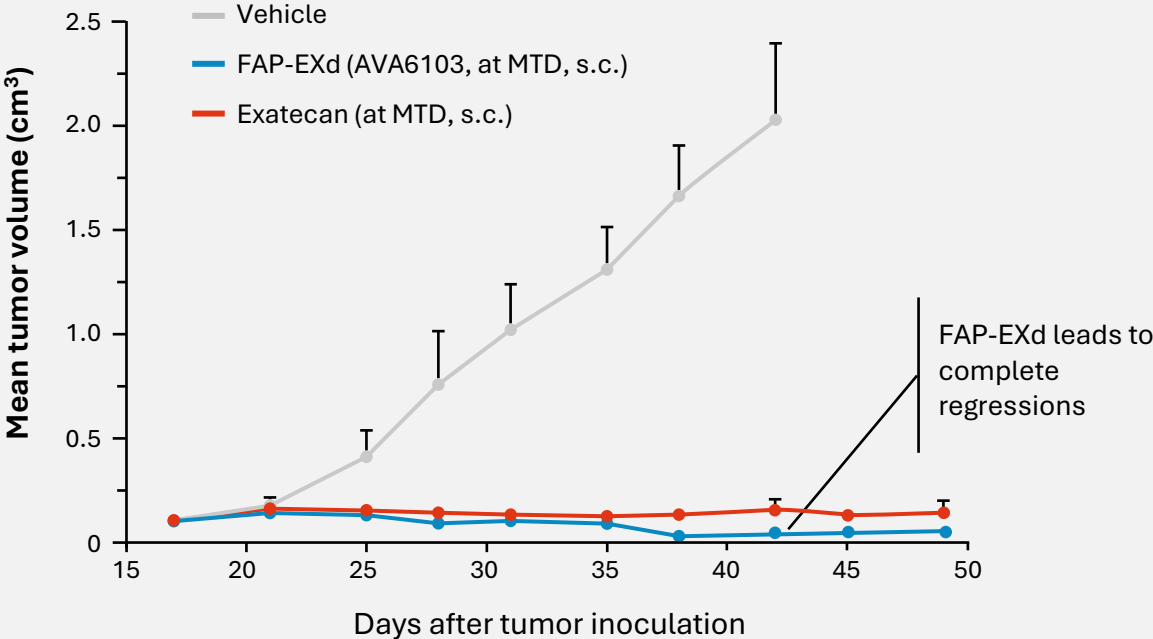
# Complete Regression of the Aggressive HEK-hFAP Tumors with FAP-EXd (AVA6103)

**Tumor: Plasma Ratio is Optimal with Moderate Efficiency (kcat/Km) AVA6103 Structure**



Released (free) exatecan warhead present intratumorally versus plasma concentration is plotted in a ratio at 4hr and 24hr when treating with three different compounds with different kcat/Km value in a patient derived xenograft (PDX) model

**Complete Regression with FAP-EXd Dosing in Established HEK-hFAP Tumors**



FAP-EXd (AVA6103) was dosed in animals bearing established HEK-FAP tumors (100 mm<sup>3</sup> tumor size at dosing). HEK-hFAP is a highly aggressive tumor model engineered to expressed human FAP




Watts, E et al. EORTC-NCI-AACR Annual Meeting 2024

# AVA6103: Phase 1 basket trial in indications with FAP expression and Topo I inhibitor sensitivity

	Triple Negative Breast Cancer (TNBC)	Gastric Cancer (GC)	Pancreatic Ductal Adenocarcinoma (PDAC)	Small Cell Lung Cancer (SCLC)
FAP Expression <sup>^</sup>	High stromal content with 50% weak and 50% strong FAP staining	High stromal content with 50% weak and 50% strong FAP staining	Very high stromal content with >80% strong FAP staining	Higher stromal content associated with poor prognosis
TopoI Inhibitor Activity <sup>^</sup>	T-DXd and exatecan (Ph 2) single agent responses	T-DXd and exatecan (Ph 2) with single agent responses	Irinotecan with activity in multiple regimens used in standard practice	Topotecan with single agent activity in this disease setting compared with CAV
Unmet Need	Monotherapy chemotherapy generally used in the PD-L1-ve setting with unmet need	Irinotecan with some activity, indication primarily sees combination chemotherapy in 1L	High unmet need; few agents approved	CPI with approvals New agents opportunity available

<sup>^</sup>Indication selection will be informed by our collaboration with Tempus AI using real-world data evidence of FAP expression and Topo I sensitivity

# AVA6103 Clinical Development Planning

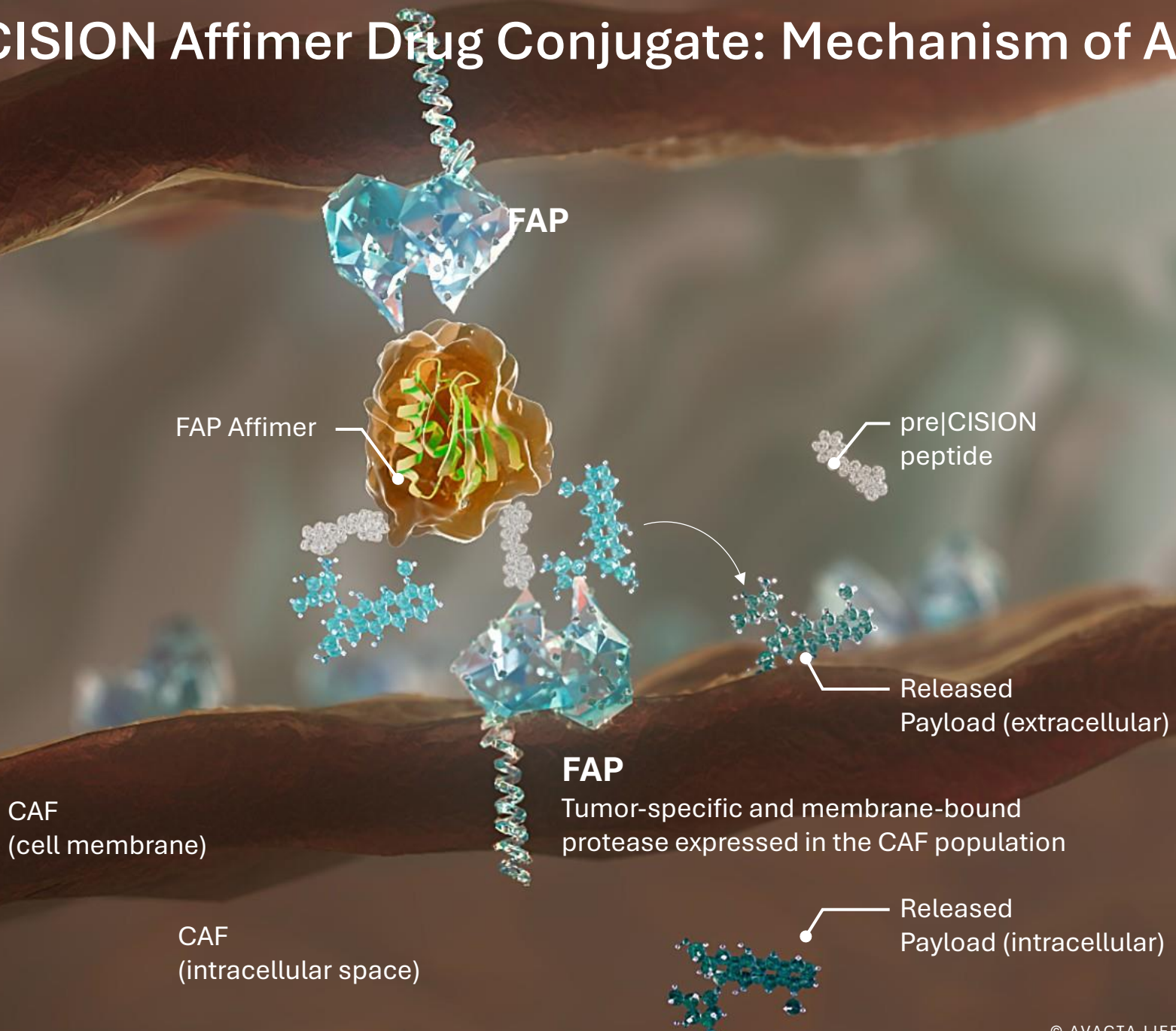
	EARLY DEVELOPMENT		LATE PHASE	LIFE CYCLE
	PHASE 1: DOSE ESCALATION	PHASE 1: EXPANSION COHORTS	PHASE 2 and 3 TRIALS	LIFE CYCLE ADDITIONAL INDICATIONS
 <b>Timing</b>	<b>Ph I escalation Initiating ~Q1 2026</b>	<b>Ph I expansions Initiating Anticipated Q1 2027</b>	<b>Anticipated 2027/2028</b>	<b>Post-approval planning</b>
 <b>Trial Designs</b>	Two dose escalation arms: Monotherapy dose escalation in basket trial with 4 FAP-positive indications: TNBC, Gastric Ca, PDAC, SCLC	Initiate RDE cohorts to assess disease-specific safety and efficacy parameters  Expansions in disease-specific cohorts to begin in 2H 2026 AVA6103 Monotherapy	Phase 2 trial of AVA6103 in selected indication based on results in expansion cohorts with Phase 3 to enroll in staggered timing  Ideally in an indication with high unmet need (multiple options)	Topo I mechanism is relevant in multiple disease settings with FAP expression and further indications can be added following the initial approval of AVA6103
 <b>Rationale</b>	Dose escalation proceeds to define the RDE at the Q3W schedule	RDE Expansions in indications with high FAP expression and sensitivity to the topo I inhibitor MOA	AVA6103 is indicated for the treatment of patients with FAP+ and topo I sensitive disease – selection of initial indication for approval based on expansion cohorts	Multiple options for further development of FAP-EXd – selection will be based on data observations in the Phase 1 and expansions

# pre|CISION Biologic Drug Conjugates:

Affimer Drug Conjugates



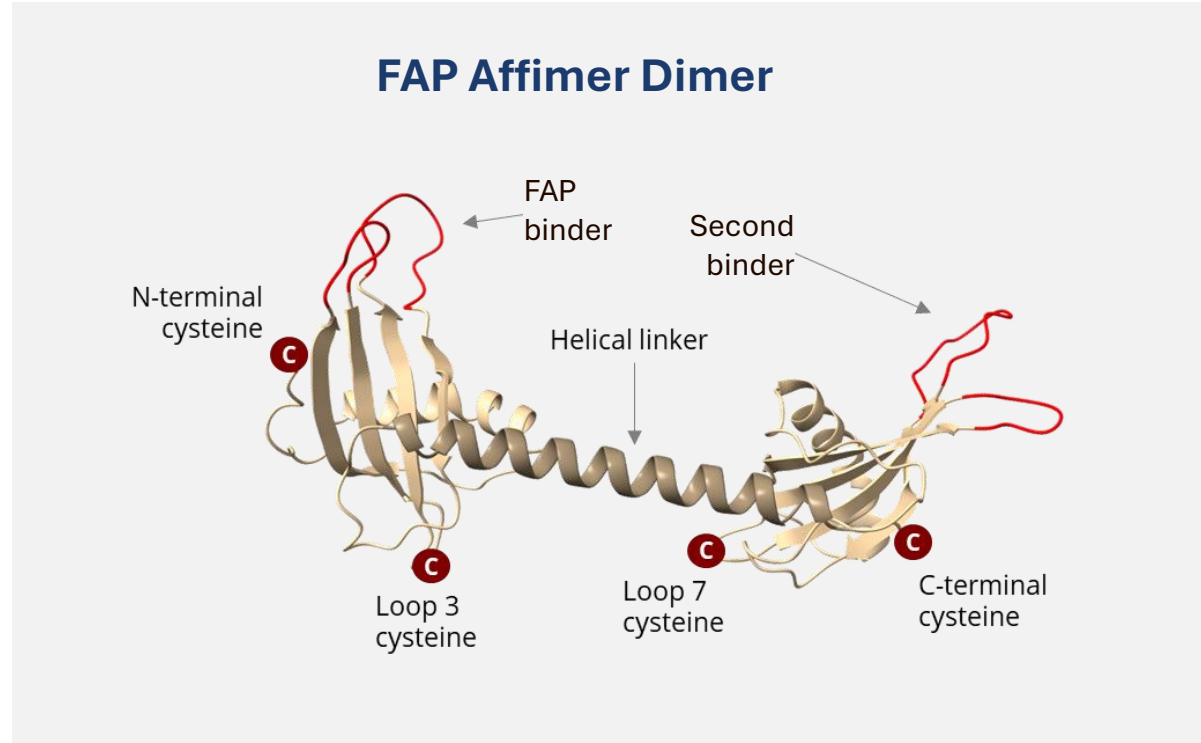
# pre|CISION Affimer Drug Conjugate: Mechanism of Action



# Affimers are engineered to optimize payload conjugation and delivery

## FAP Affimer Drug Conjugate Engineering Steps

- 1 **FAP binders** were selected for AVA7100 program inability to internalize and lack of FAP enzyme inhibition
- 2 Affimer dimers have **one or two binding specificities** (e.g., FAP and albumin) to bind a TME antigen and extend PK
- 3 Engineer the desired Affimer binding affinity with known ranges of ~10nM (monomer) to 10pM (dimer with one target antigen)
- 4 Cysteines are engineered into 4 locations in an **Affimer dimer** to enable a DAR of 4:1 with a size that is 1/5<sup>th</sup> of an antibody



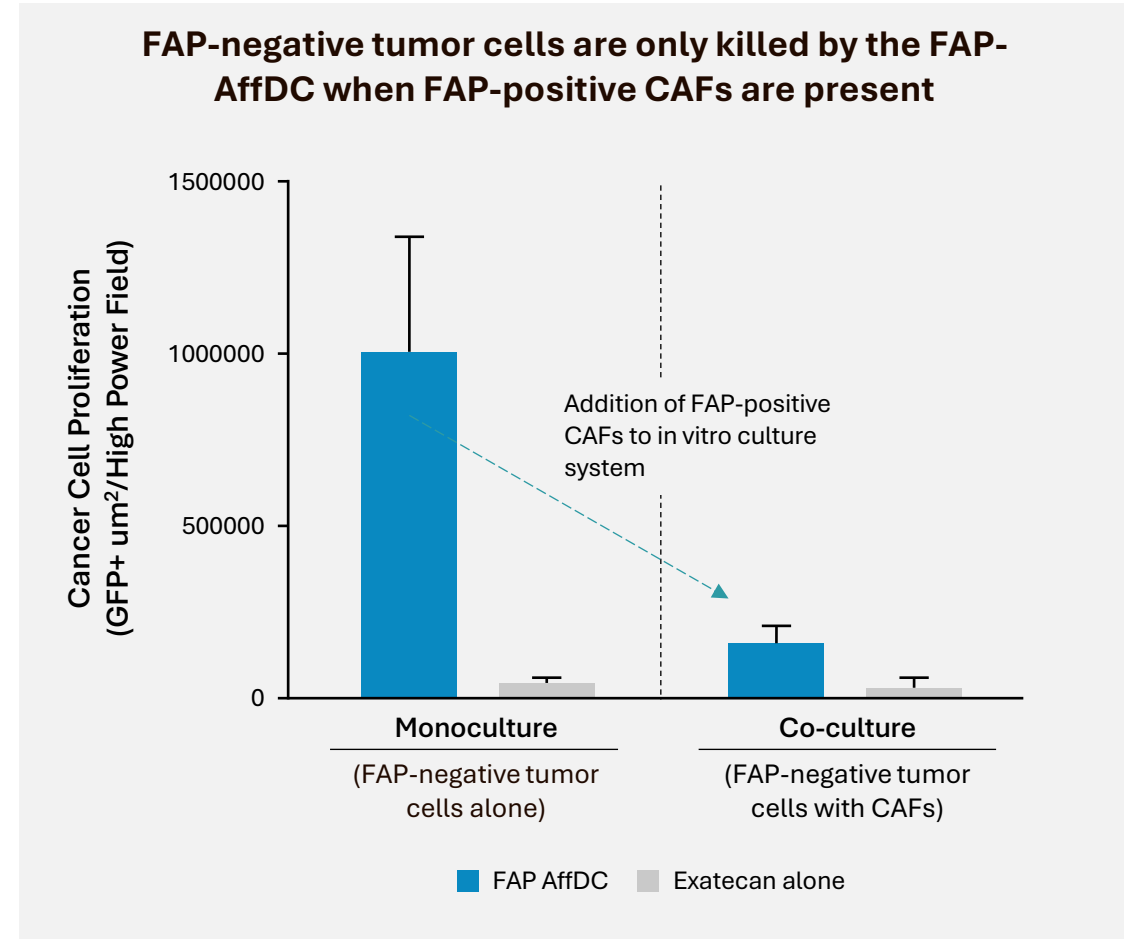
**AlphaFold** Structure of a FAP Affimer Dimer with engineered cysteines

Nobel prize winning predictive algorithm for protein structure modeling (Nobel prize awarded October, 2024)

# FAP AffDC kill tumor cells only when FAP+ CAFs are present

## FAP expression in CAFs Predicts for Response in FAP-negative Tumor Models

- The cytotoxic activity and bystander effect of the FAP pre|CISION Affimer DC (AffDC) were demonstrated in a **bystander effect *in vitro* study** with FAP-positive CAFs and FAP-negative pancreatic tumor cells (PDAC)
- FAP AffDC are **capable of killing FAP-negative tumor cells** only when FAP-positive CAFs are present. In the absence of the CAF population, the FAP AffDC are inert
- The FAP AffDC only exhibits cytotoxic activity against the FAP-negative PDAC cancer cell line when FAP-positive CAFs are present



# Seizing the market opportunity: Payloads as a commercial success

pre|CISION®-enabling results in a **significant increase in the therapeutic index** for doxorubicin with three potential indications

Exatecan has a very challenging therapeutic index, severe toxicities that limits dosing and a short half life, however there is **robust evidence for monotherapy activity**

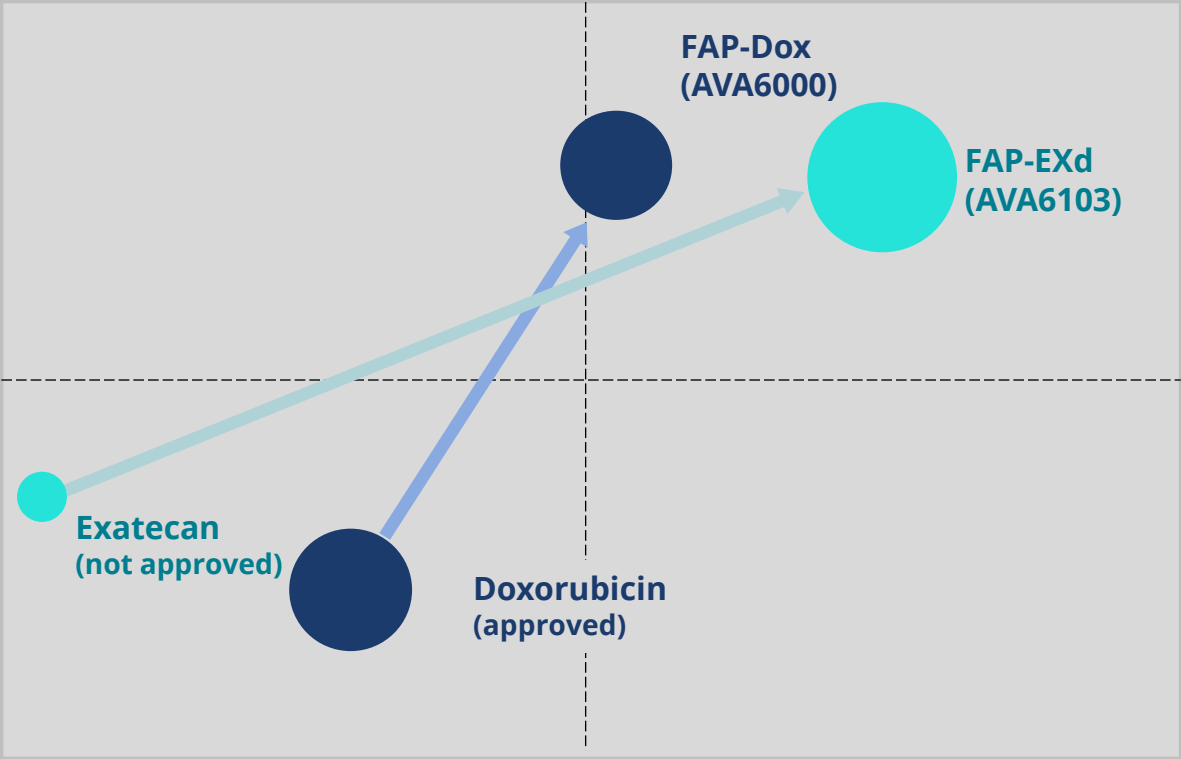
We expect **FAP-EXd (AVA6103)** to be highly active in a number of indications where there is observed activity of other topoisomerase I inhibitors (e.g. breast cancer, gastric, small cell lung cancer)

We believe that pre|CISION-enabling can transform this payload (exatecan) to a **highly successful anti-cancer drug**

High Efficacy/  
Low Toxicity

Therapeutic Index ↑

Low Efficacy/  
High Toxicity



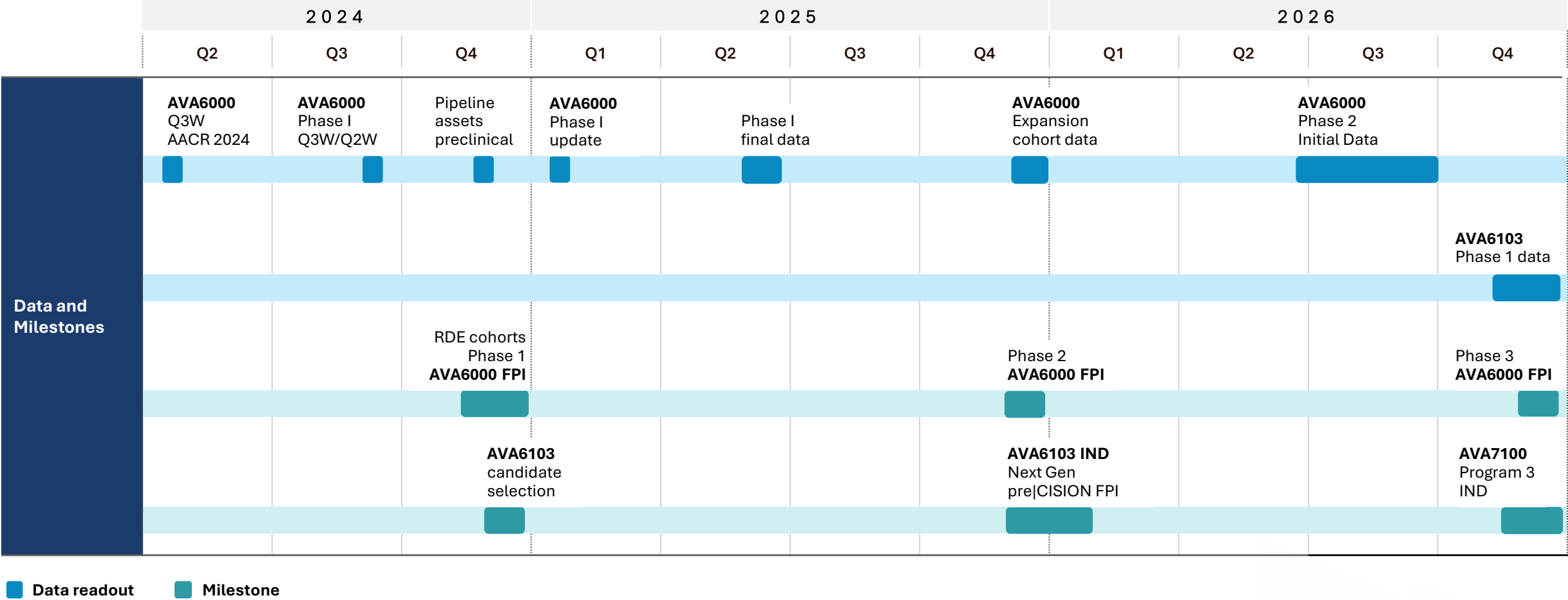
Size of bubble represents the estimated absolute patient number in the addressable population with Multiple, planned approvals in the clinical development planning tools

# Avacta Therapeutics: Milestones and Highlights

Program	Corporate Milestone	
<b>AVA6000</b> pre CISION FAP-enabled doxorubicin	Complete Q3W Dose escalation trial	✓
	Initiate Q2W Dose Escalation	✓
	Orphan Designation in Soft Tissue Sarcoma	✓
	Presentation of Q3W Dose Escalation Results (AACR 2024)	✓
	Identify RDE and Open Phase 1b Expansions in 3 Indications	2H 2024
	Present Full Dose Escalation Results	2Q 2025
	Phase 2 Trial in Selected Indication	2H 2025
Pipeline assets: pre CISION	Candidate Selection of pre CISION FAP-EXd (AVA6103) program	2H 2024
	FAP Affimer pre CISION drug conjugate (AffDC, AVA7100) candidate selection	2H 2025
Pipeline, including Affimer Drug Conjugate	Full Pipeline revealed	✓



# Avacta: Data Outputs and Milestones





# Seizing the market opportunity: Strong Intellectual Property (IP) position and laser focus

## Strong IP Position

Avacta has exclusive rights to the pre|CISION® and the Affimer® technology, including the collective IP of each individually and the combined franchise

## Laser Focus on Tx

Avacta is focused on the transition to a pure-play therapeutics Company, leveraging the clinical success of the pre|CISION® platform technology

## Broad Applicability

Avacta’s pre|CISION technology has the potential to address many solid tumor indications with high unmet need, with a substantial market opportunity

## Strong CMC Position

Our significant learnings in manufacturing has led to new IP and know-how in the platform and opens up larger trials with enhanced drug supply

Thank You



**Avacta**  
THERAPEUTICS