NUCANA

A New Era in Oncology

Corporate Presentation

February 2021

www.nucana.com

Disclaimer

Forward-Looking Statements

This presentation contains "forward-looking" statements within the meaning of the Private Securities Litigation Reform Act of 1995 that are based on the beliefs and assumptions and on information currently available to management of NuCana plc (the "Company"). All statements other than statements of historical fact contained in this presentation are forward-looking statements. Forward-looking statements include information concerning the company's planned and ongoing preclinical and clinical studies for the Company's product candidates and the potential advantages of those product candidates, including Acelarin, NUC-3373 and NUC-7738; statements concerning the potential for any future follow-up analyses by the study sponsor of the ACELARATE study of Acelarin in pancreatic cancer and the potential for any further development of Acelarin in that indication; the Company's plans to develop Acelarin in additional indications and, in particular, its plans to develop Acelarin in combination with platinum-containing agents; the initiation, enrollment, timing, progress, release of data from and results of the Company's planned and ongoing clinical studies; the impact of COVID-19 on its preclinical studies, clinical studies, business, financial condition and results of operations; the utility of prior preclinical and clinical data in determining future clinical results; the timing or likelihood of regulatory filings and approvals for any of its product candidates; the Company's intellectual property; the amount and sufficiency of the Company's cash and cash equivalents to achieve its projected milestones; and estimates regarding the Company's expenses, future revenues and future capital requirements. In some cases, you can identify forward-looking statements by terminology such as "may," "will," "should," "expects," "plans," "anticipates," "believes," "estimates," "predicts," "potential" or "continue" or the negative of these terms or other comparable terminology.

Forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause the Company's actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. These risks and uncertainties include, but are not limited to, the risks and uncertainties set forth in the "Risk Factors" section of our Annual Report on Form 20-F for the year ended December 31, 2019 filed with the Securities and Exchange Commission ("SEC") on March 10, 2020, and subsequent reports that the Company files with the SEC.

Forward-looking statements represent the Company's beliefs and assumptions only as of the date of this presentation. Although the Company believes that the expectations reflected in the forward-looking statements are reasonable, it cannot guarantee future results, levels of activity, performance or achievements. Except as required by law, the Company assumes no obligation to publicly update any forward-looking statements for any reason after the date of this presentation to conform any of the forward-looking statements to actual results or to changes in its expectations.

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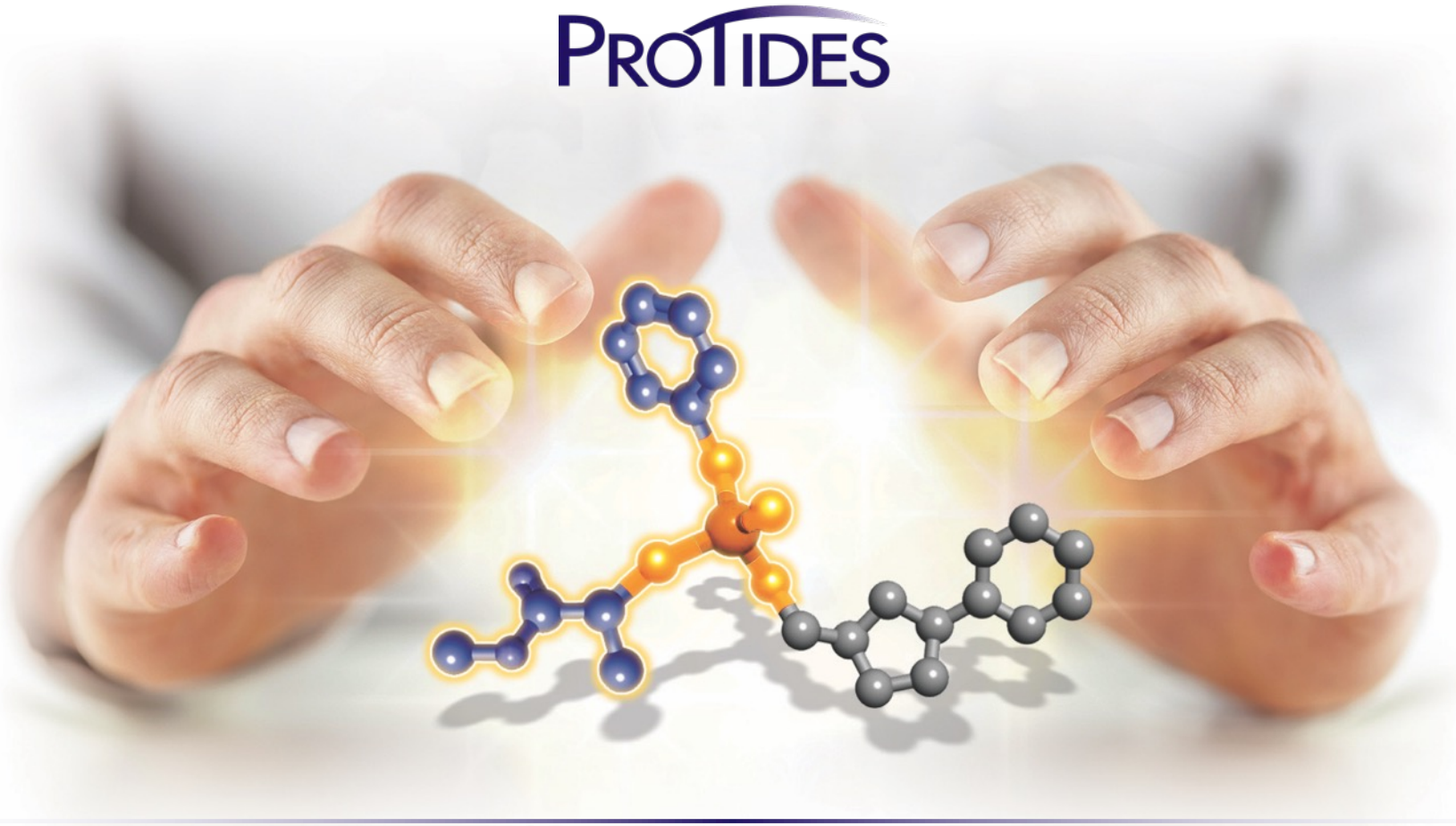
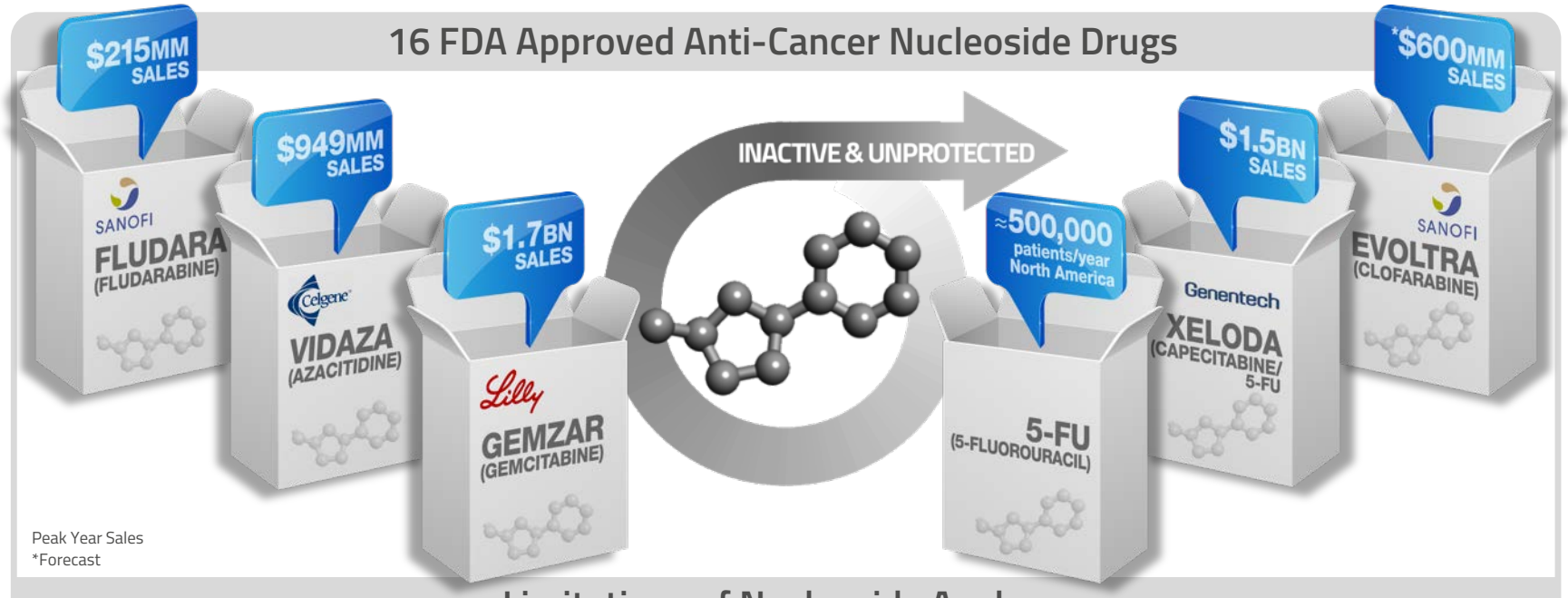
Harnessing the Power of Phosphoramidate Chemistry



A New Era in Oncology

Nucleoside Analogs: Flawed ProDrugs

16 FDA Approved Anti-Cancer Nucleoside Drugs



Peak Year Sales
*Forecast

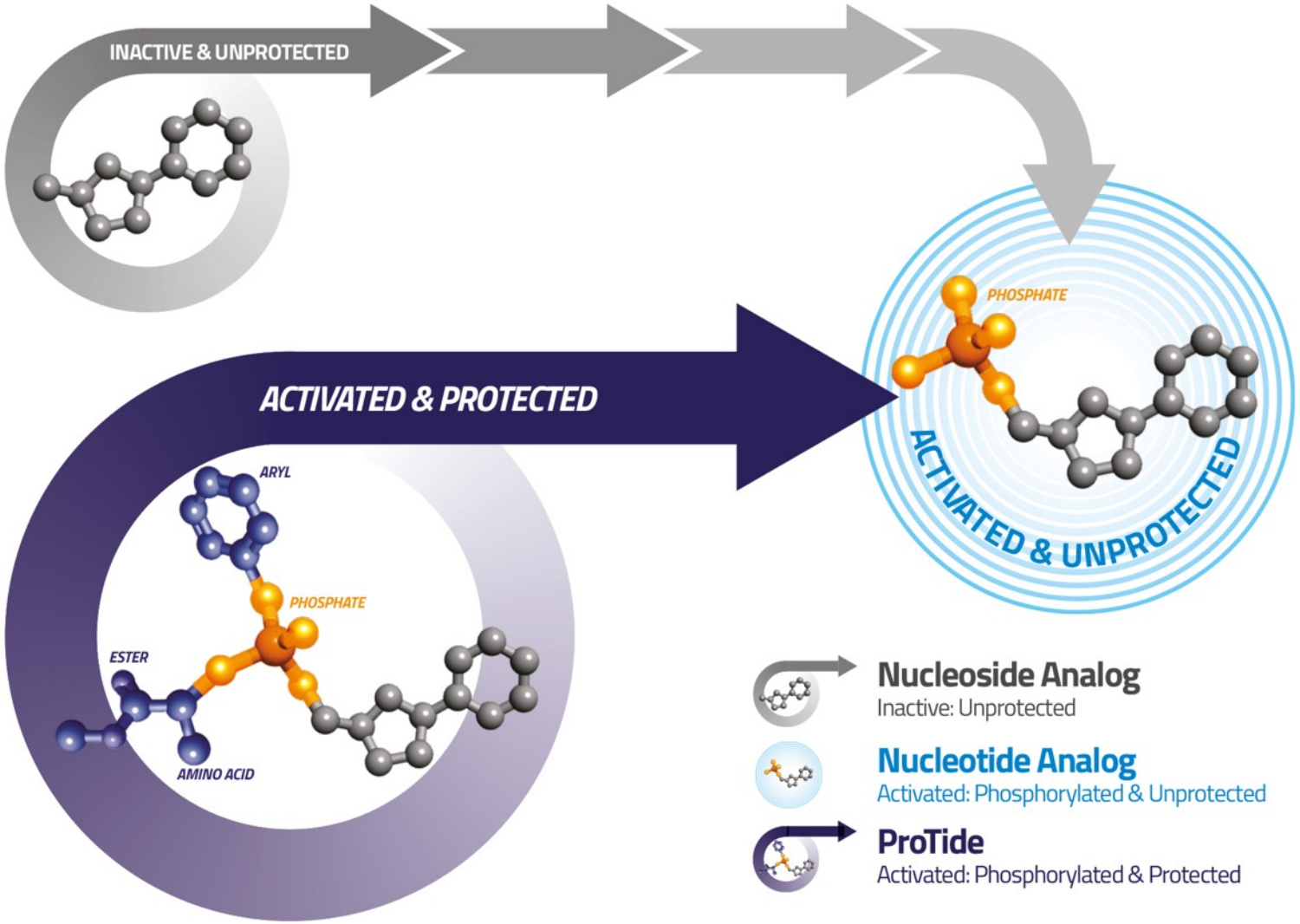
Limitations of Nucleoside Analogs

Uptake
Dependent on membrane transporters to enter cancer cells

Activation
Requires phosphorylation within cancer cells to exert anti-cancer activity

Breakdown
Subject to breakdown & generation of toxic byproducts

Transforming Nucleoside Analogs into ProTides



ProTides: A New Era In Anti-Virals

GILEAD

$63 billion*

SOVALDI® SOFOSBUVIR

Hepatitis C

$36 billion**

TAF

H.I.V.

$2.8 billion#

Veklury® remdesivir

COVID-19

Transforms Therapeutic Index

Overcomes Viral Resistance Mechanisms

* Sovaldi + Harvoni + Epclusa + Vosevi cumulative sales through June 30, 2020

** Genvoya + Descovy + Odefsey + Biktarvy + Symtuza cumulative sales through June 30, 2020

Projected 2020: The Wall Street Journal, July 30, 2020

ProTides: A New Era in Oncology

50% Overall Response Rate[1]

ACELARIN

300x More potent than 5-FU[2]

NUC-3373

185x More potent than 3′-dA[3]

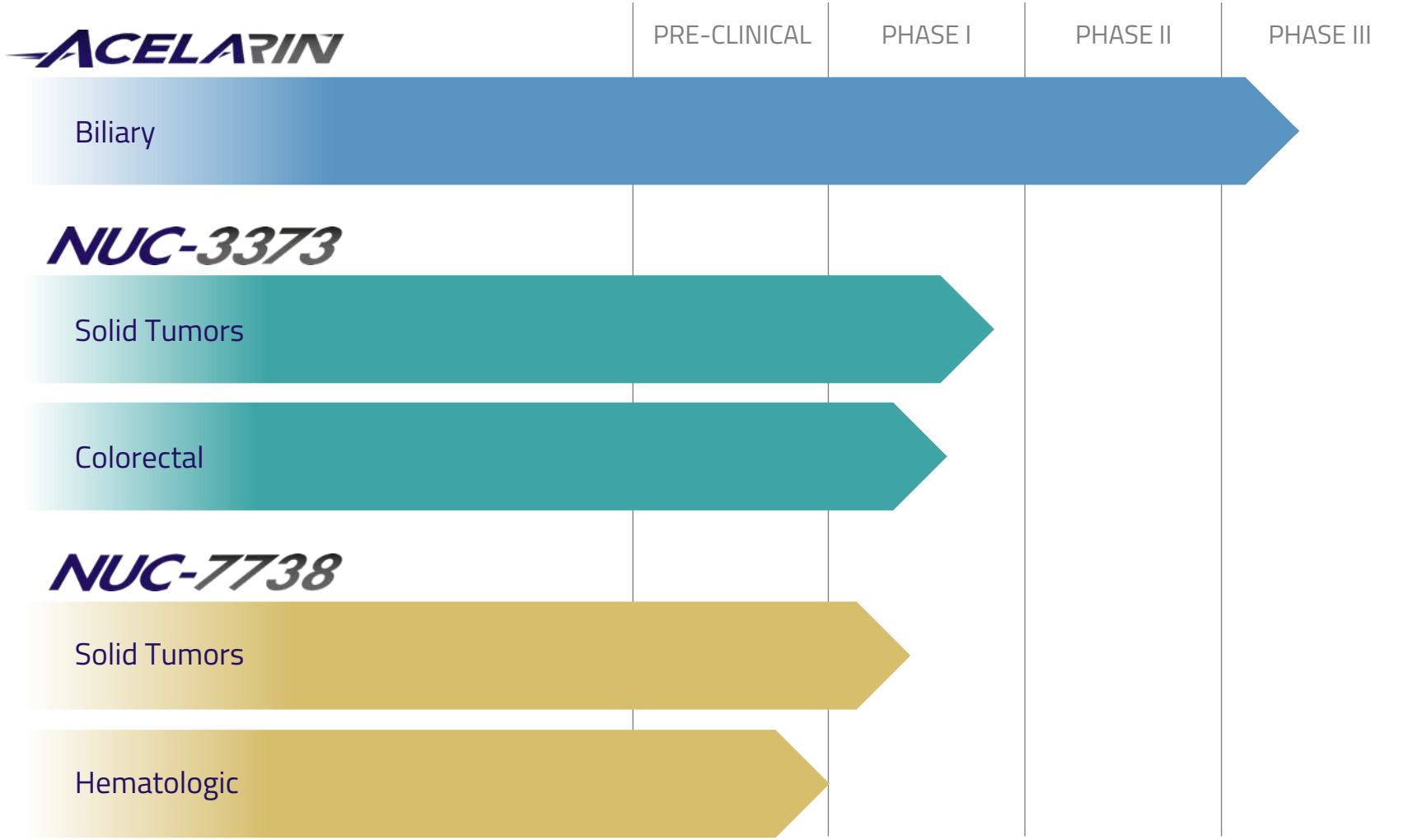
NUC-7738

Transforms Therapeutic Index

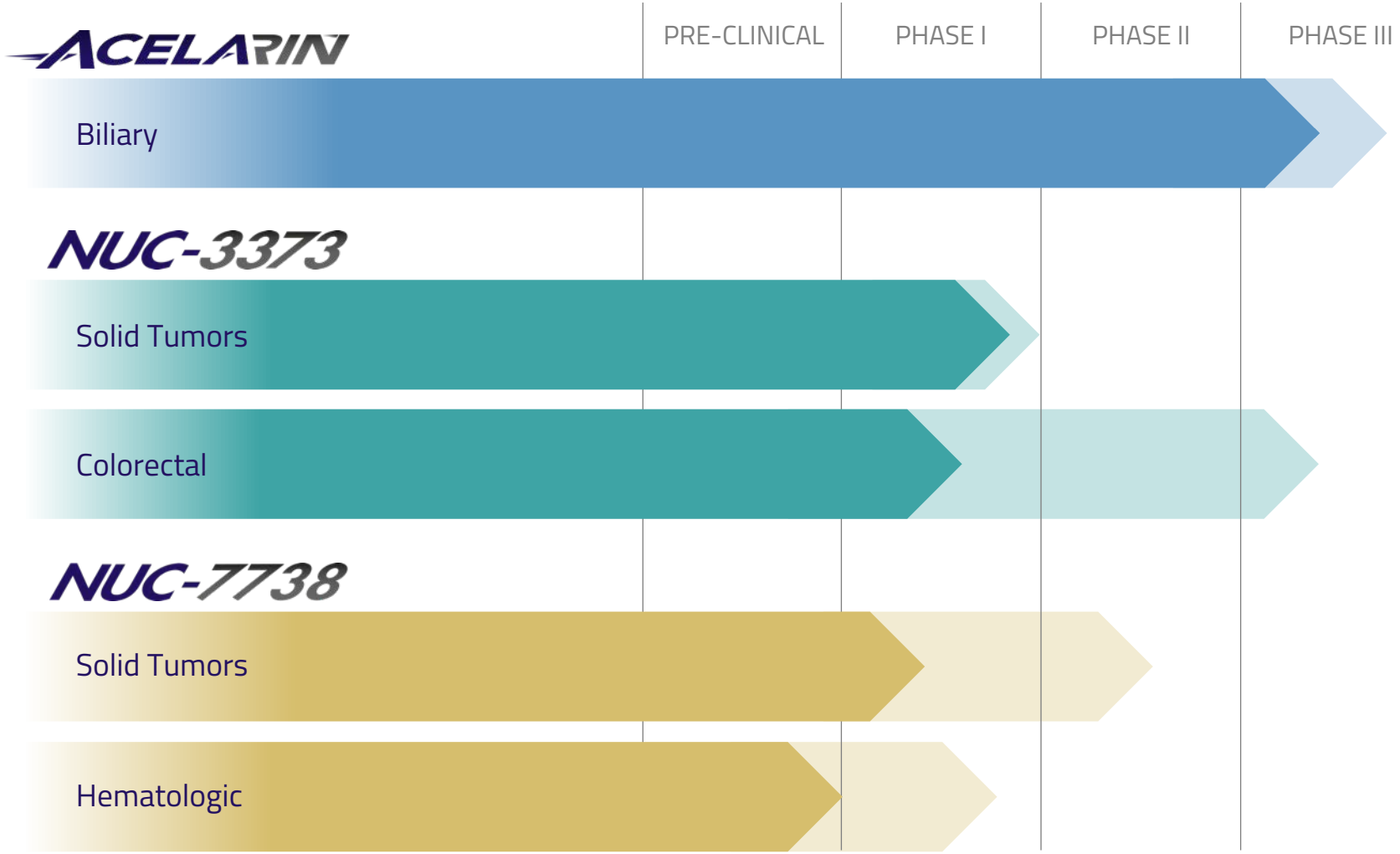
Overcomes Cancer Resistance Mechanisms

[1] Patients with advanced biliary tract cancers (n=14) - McNamara *et al* ESMO October 2018
[2] Pre-clinical data - Ghazaly *et al* ESMO September 2017
[3] Pre-clinical data – Symeonides *et al* ESMO September 2020

Development Status: Current



Development Status: Planned End 2021



Strong Balance Sheet & Multiple Inflection Points

Nasdaq NCNA

Cash & Cash Equivalents
at September 30, 2020
~$130 million[#]

Important Data Readouts
throughout
2021 & 2022

[#]Based on exchange rate of £1.00 to $1.29 at September 30, 2020

Well Capitalized to Achieve Key Milestones

ACELARIN

- Complete ongoing Phase III BTC study (NuTide:121)
- **File NDA for BTC**

NUC-3373

- Complete ongoing Phase I solid tumor study (NuTide:301)
- Complete ongoing Phase Ib CRC study (NuTide:302)
- Complete Phase Ib expansion / Phase II CRC study
- Initiate and complete Phase III CRC study
- **File NDA for CRC**

NUC-7738

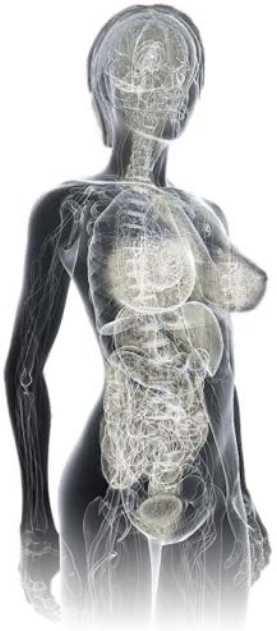
- Complete ongoing Phase I study (NuTide:701)
- Initiate and complete Phase II study

ACELARIN

A transformation of gemcitabine

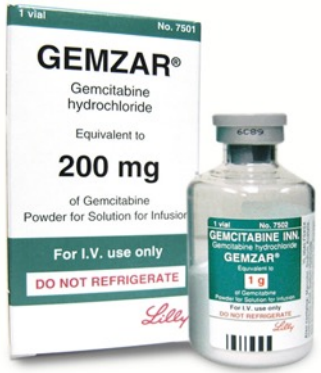
NUCANA

ACELARIN: Overview of Gemcitabine



- WHO list of essential medicines
- First approved for medical use in 1995
- Approved in pancreatic, ovarian, breast & lung
- Widely used in other cancers
- Peak annual sales of $1.7 billion

World Health Organization



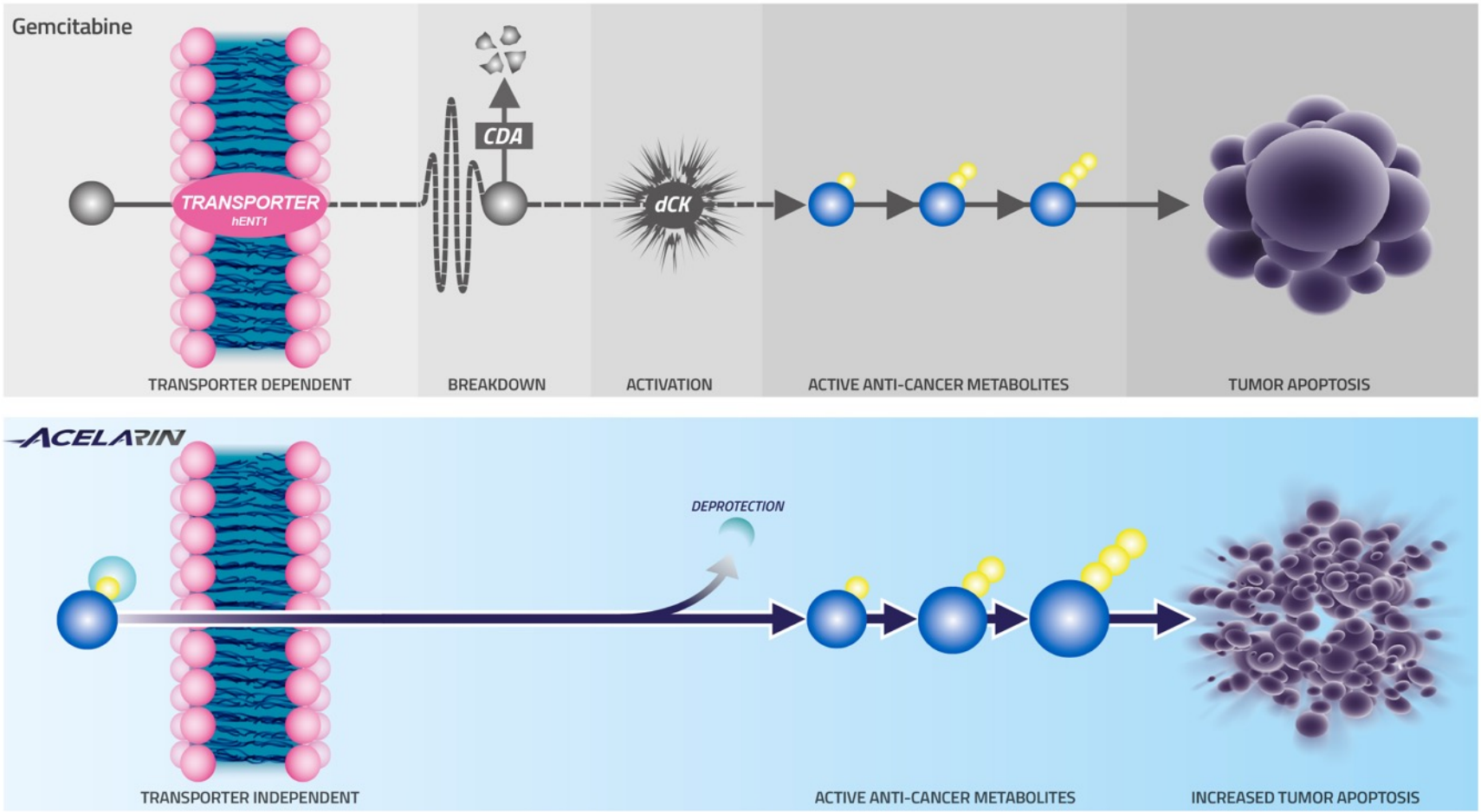
Limitations of Gemcitabine

Uptake
Dependent on membrane transporters to enter cancer cells

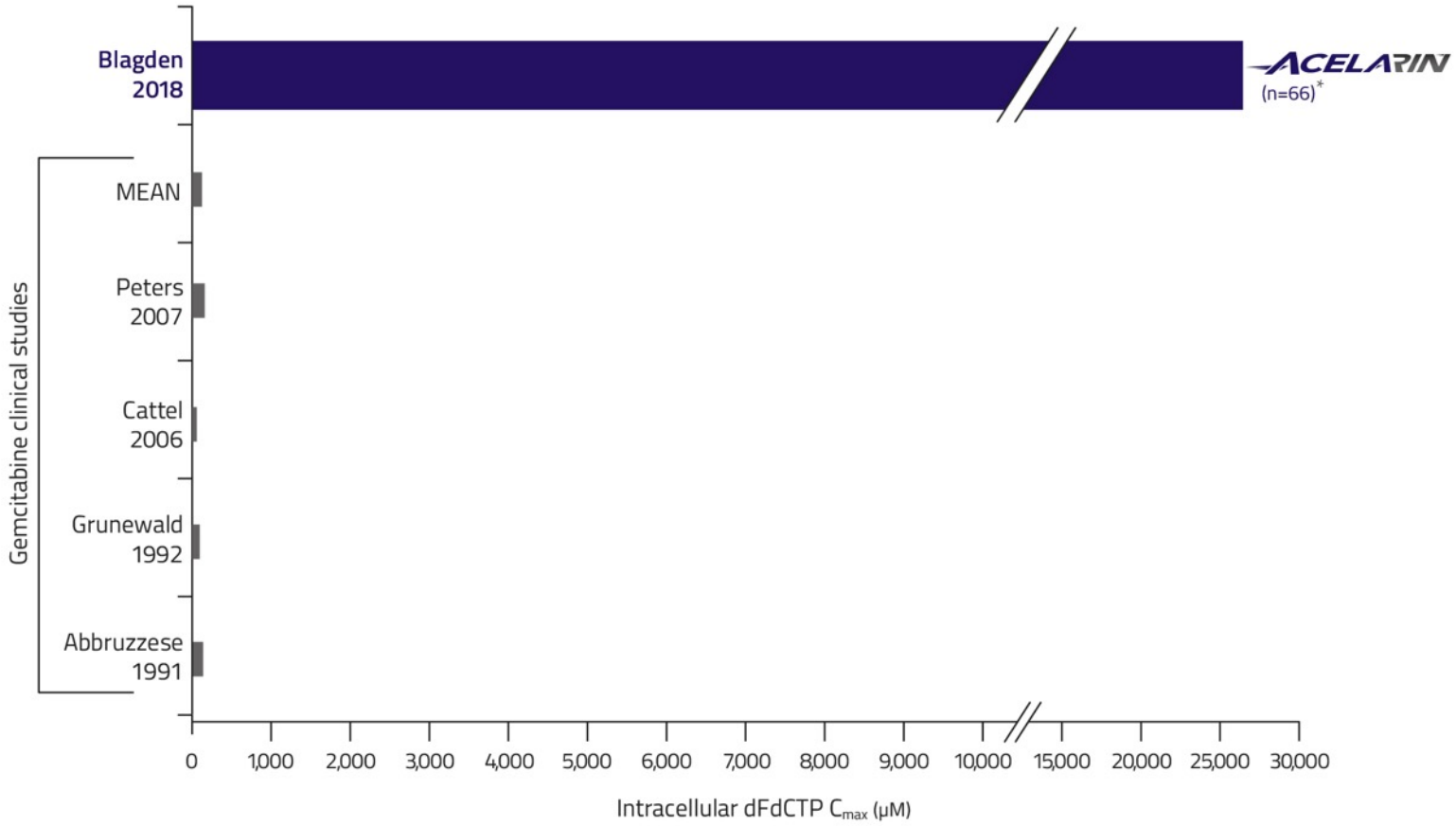
Breakdown
Subject to breakdown and generation of toxic byproducts

Activation
Requires phosphorylation within cancer cells to exert anti-cancer activity

ACELARIN: Overcomes The Key Cancer Resistance Mechanisms



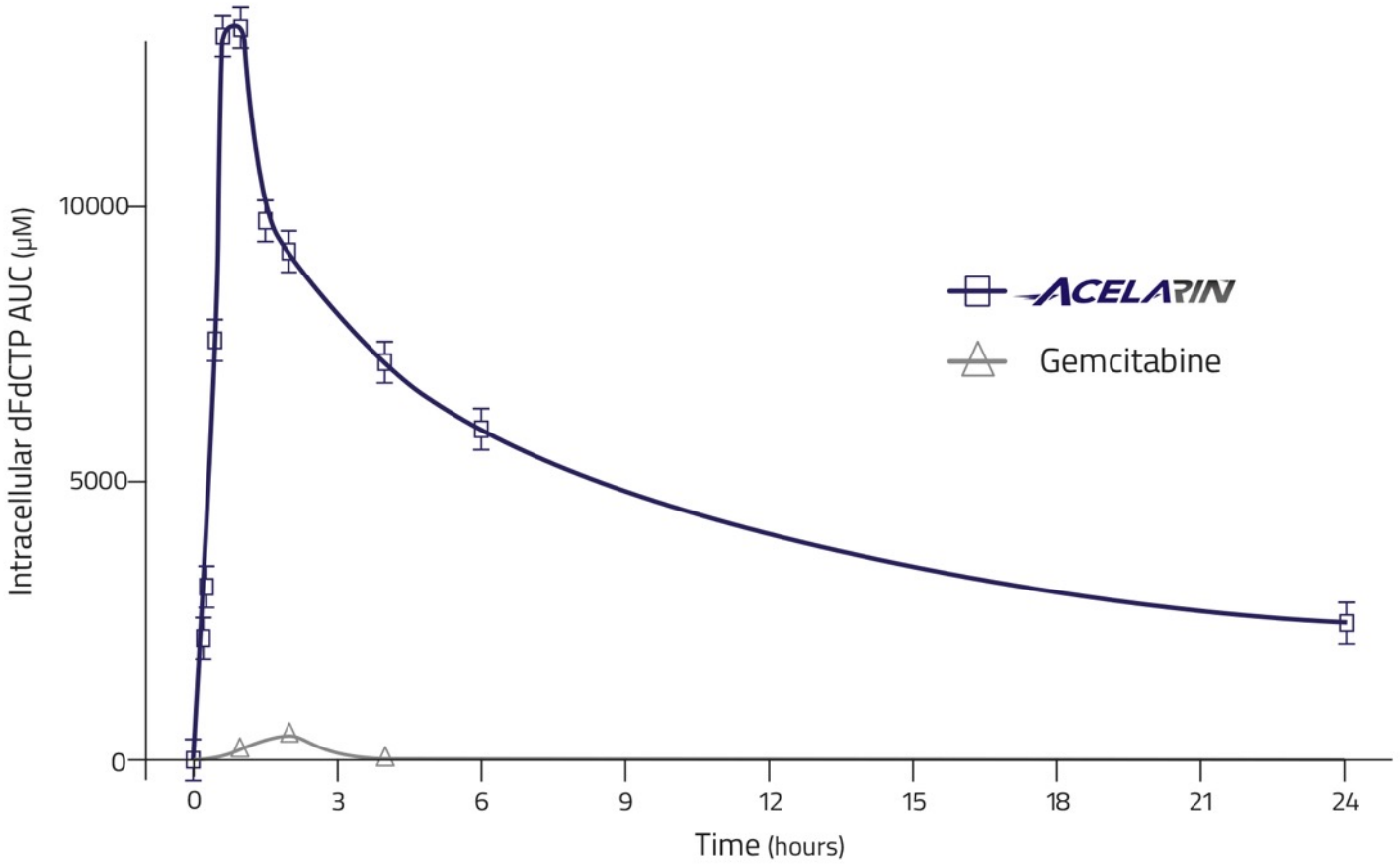
ACELARIN: Very High Intracellular dFdCTP (C_{max})



ACELARIN achieved **217x** higher intracellular levels of dFdCTP than gemcitabine

Equimolar dose comparison
*Blagden *et al* (2018). *Br J Cancer*, 119:815-822

ACELARIN: Very High Intracellular dFdCTP (AUC)



ACELARIN achieved **139x** greater intracellular AUC of dFdCTP than gemcitabine

Blagden *et al* (2015). *J Clin Oncol*; 33; Suppl Abstract ID: 2547 (ASCO poster 263, 30th May, 2015)
Cattel et al (2006). Annals Onc (supp); 17: v142-v147
Blagden *et al* (2018). *Br J Cancer*; 119:815-822

ACELARIN: Phase 1 Study (monotherapy)

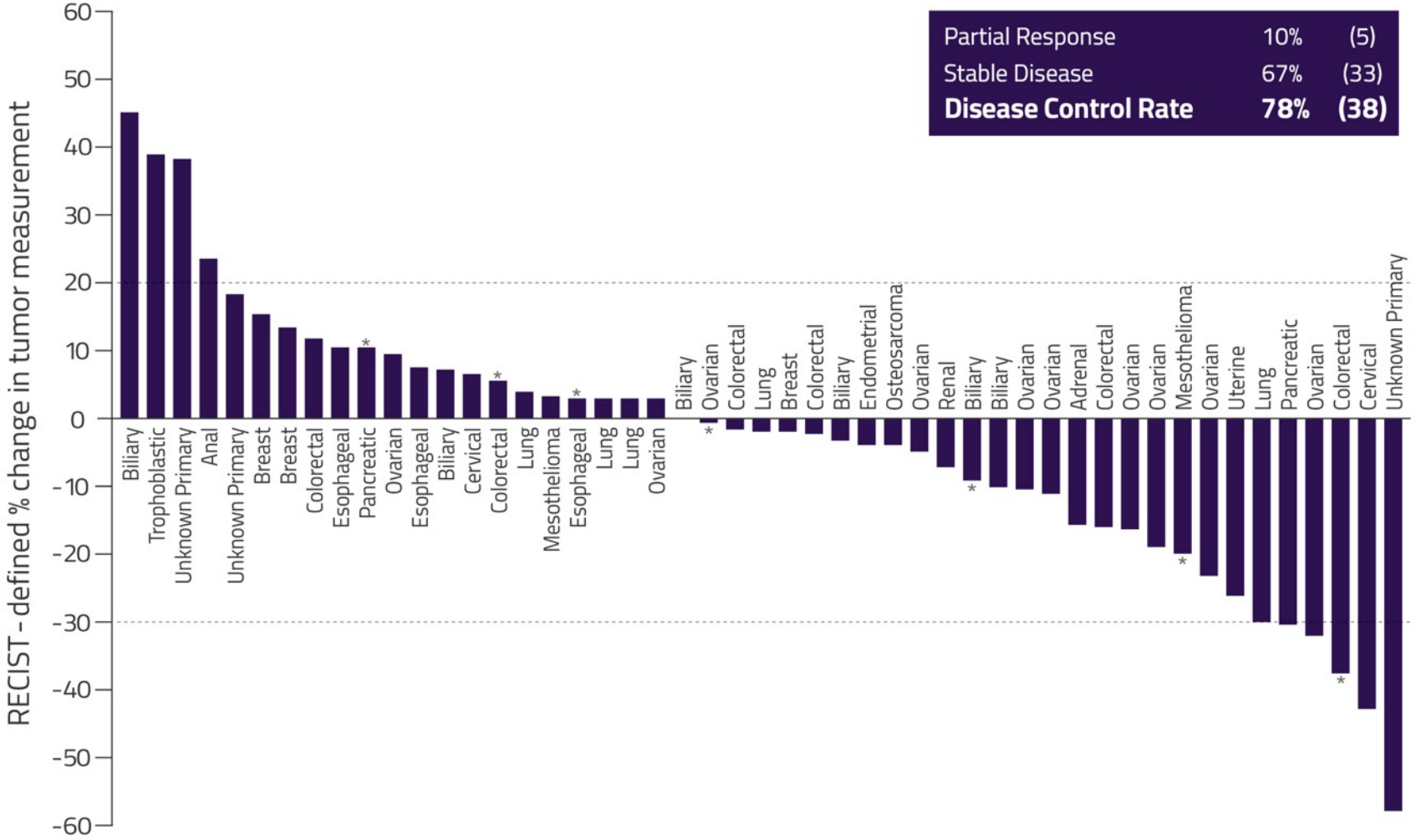
- Phase 1 dose-escalation study in patients with advanced solid tumors
- All patients had metastatic spread
- Rapidly progressing disease
- Exhausted all other therapeutic options
- Objective: Recommended Phase 2 dose

PRO-001

Number of patients	Evaluable patients (≥2 cycles)	Primary cancer types	Age (median)	Prior chemotherapy regimens
68	49	19	56 (range 20-83)	3 (range 1-10)

Blagden *et al* (2018). *Br J Cancer*; 119:815-822

ACELARIN: PRO-001 Study Best Overall Response (monotherapy)



PRO-001

Evaluable patients (n=49)
Blagden *et al* (2018). *Br J Cancer*; 119:815-822
*New Lesion

ACELARIN: Ovarian Phase 1b Study (combination)

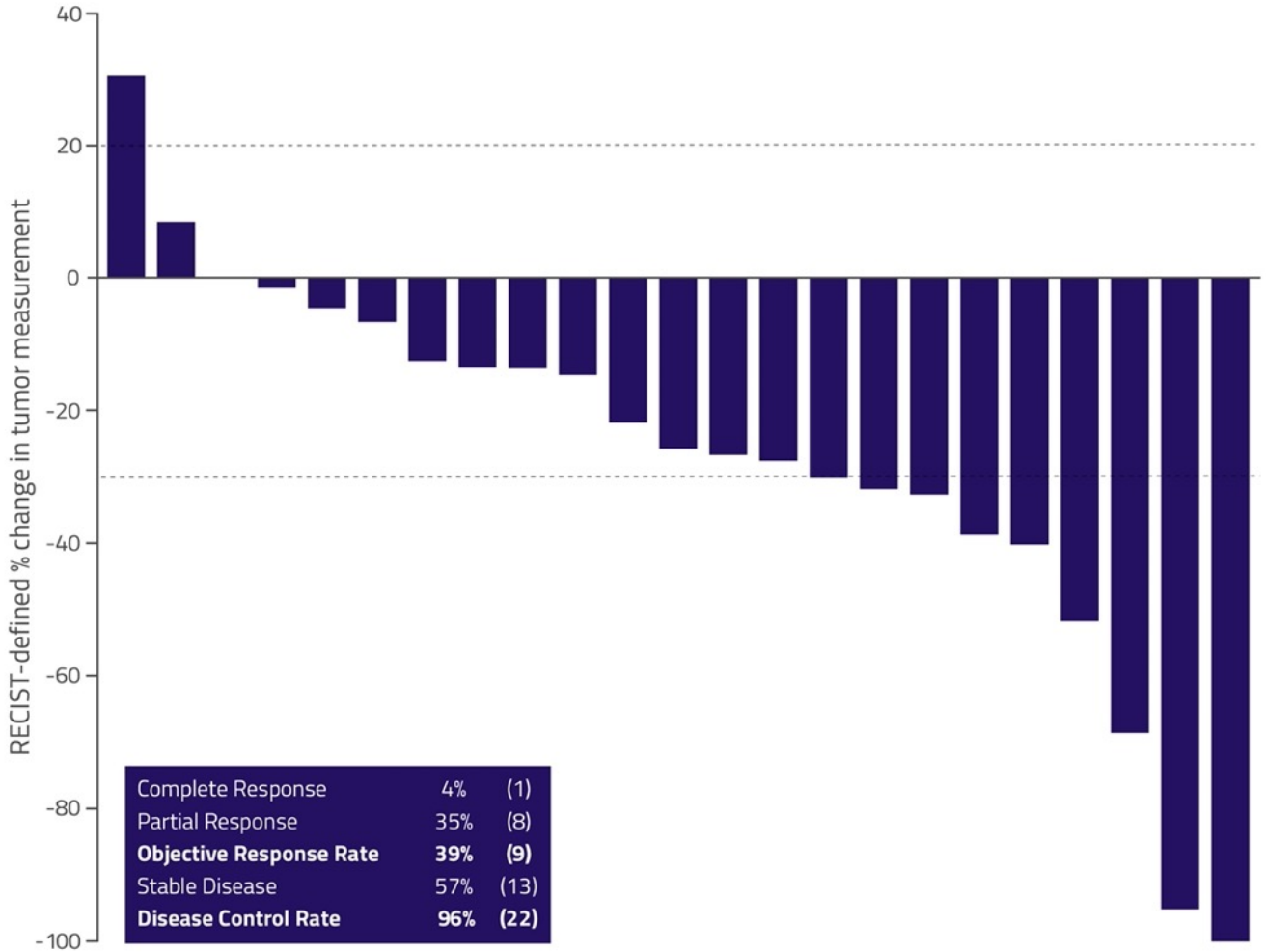
- Combination: Acelarin + carboplatin
- Dose escalation: 3 + 3
  - Acelarin: 500 mg/m^2 to 750 mg/m^2
  - Carboplatin: AUC 4 to 5
- All patients had metastatic spread
- Rapidly progressing disease
- Objective: Recommended Phase 2 dose

PRO-002

Number of patients	Evaluable patients (≥1 cycle)	Age (median)	Prior chemotherapy regimens
25	23	64 (range 37-77)	3 (range 2-6)

Blagden *et al* (2017). *Ann Oncol*; 28; Suppl 5 Abstract ID: 968P (ESMO poster 968-P, 9th Sept, 2017)
Data as of Sep 1, 2017

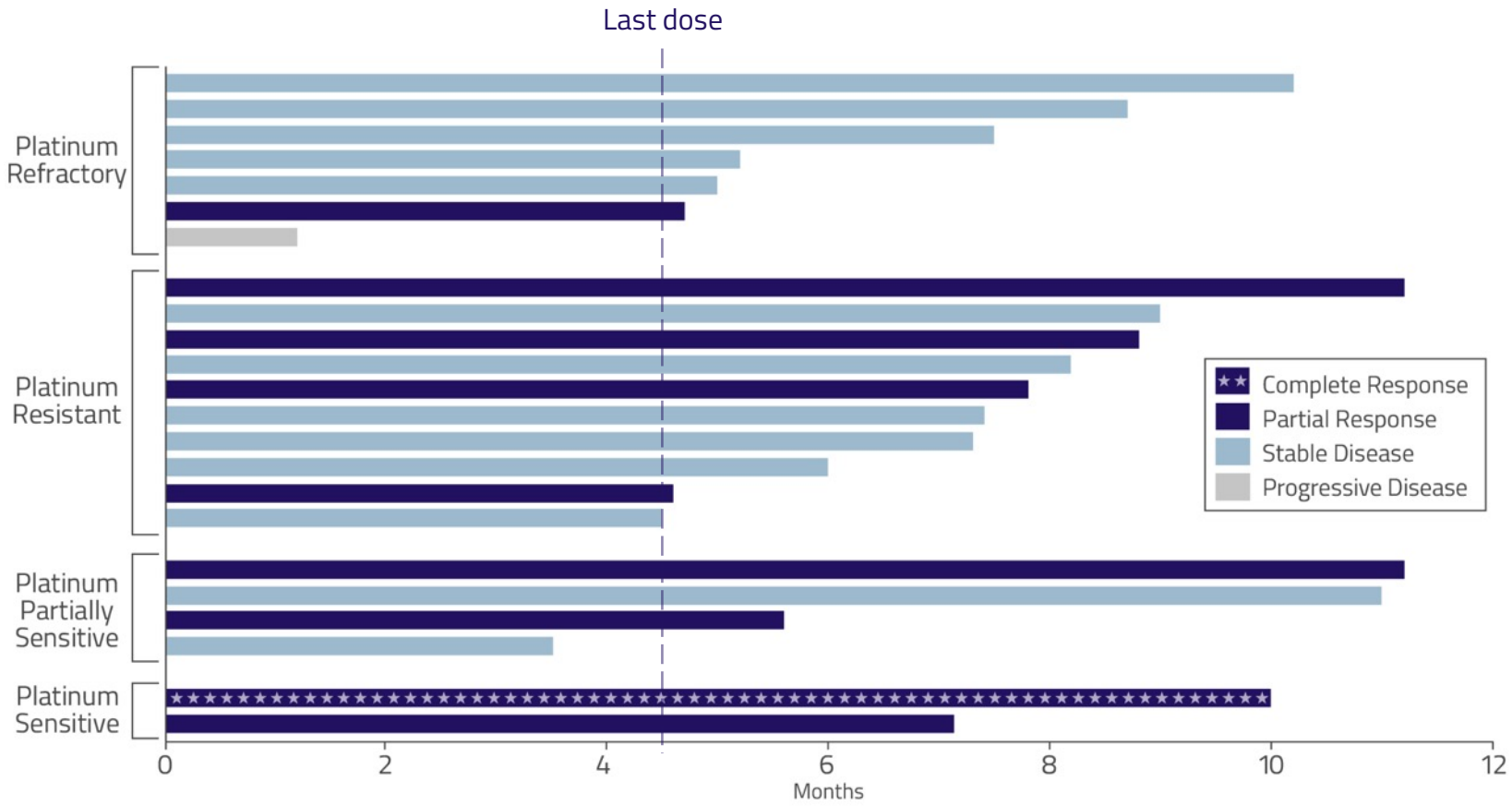
ACELARIN: PRO-002 Study Best Overall Response (combination)



Evaluable patients (n=23)
Blagden *et al* (2017). *Ann Oncol*; 28; Suppl 5 Abstract ID: 968P (ESMO poster 968-P, 9th Sept, 2017)
Data as of Sep 1, 2017

PRO-002

ACELARIN: PRO-002 Study PFS by Platinum Status (combination)



PFS 7.4 months

Evaluable patients (n=23)
Blagden *et al* (2017). *Ann Oncol*; 28; Suppl 5 Abstract ID: 968P (ESMO poster 968-P, 9th Sept, 2017)
Data as of Sep 1, 2017

PRO-002

ACELARIN: Biliary Phase 1b Study (combination)

- First-line treatment
- Locally advanced or metastatic biliary tract cancer
- Objectives: Safety & Dose Selection
  - Cohort 1: Acelarin 625mg/m^2 + cisplatin 25mg/m^2 (n=8)
  - Cohort 2: Acelarin 725mg/m^2 + cisplatin 25mg/m^2 (n=6)
  - Cohort 3: Acelarin 625mg/m^2 + cisplatin 25mg/m^2 (n=7)

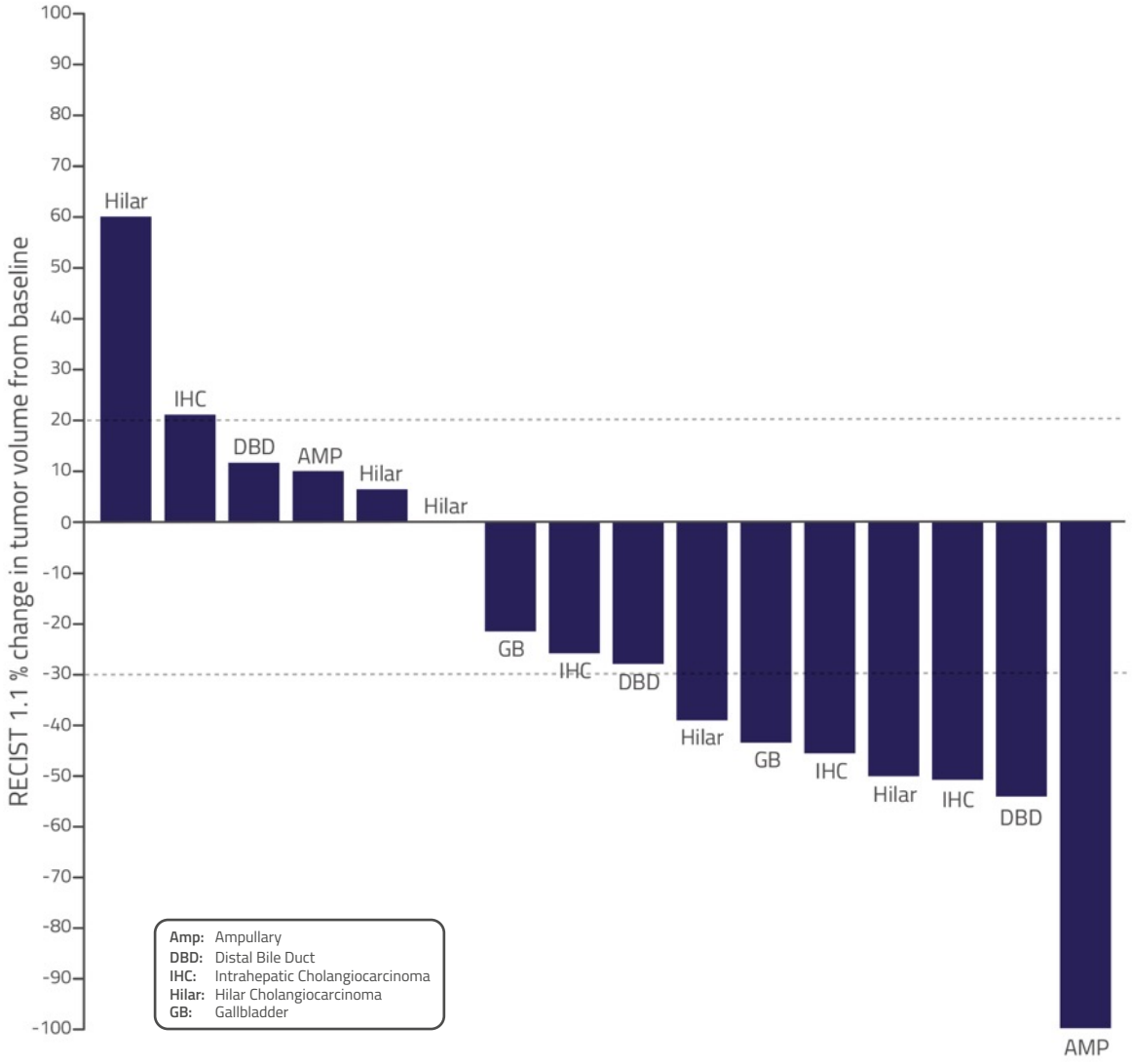
ABC-08

Number of patients	Evaluable patients*	Age (median)
21	16	61 (range 47-78)

McNamara *et al* (2020) The Oncologist;25: 1-10

* Efficacy evaluable patients: measurable disease at baseline; ≥1 cycle Acelarin; ≥1 follow-up radiographic assessment

ACELARIN: ABC-08 Best Overall Response



ABC-08

Efficacy evaluable population
McNamara *et al* (2020) The Oncologist;25: 1-10

ACELARIN: ABC-08 and ABC-02 Comparison

ABC-08 Study ACELARIN (625 & 725 mg/m^2) + cisplatin	ABC-02 Study Gemcitabine (1000 mg/m^2) + cisplatin
Complete Response 6% (1/16)	Complete Response 0.6% (1/161)
Partial Response 38% (6/16)	Partial Response 25% (41/161)
Objective Response Rate 44% (7/16)	Objective Response Rate 26% (42/161)

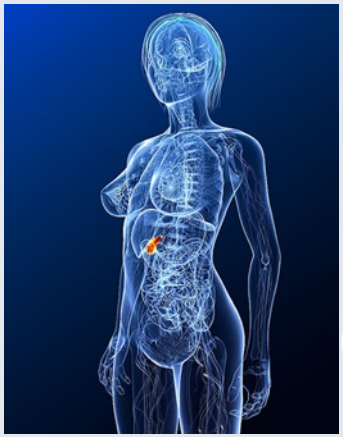
Efficacy Evaluable Population

McNamara *et al* (2020) The Oncologist;25: 1-10
Valle *et al* (2010). *N Eng J Med*; 362: 1273-1281

ABC-08

ACELARIN: Ongoing Biliary Phase 3 Study

NuTIDE 121



First-line treatment of patients with locally advanced or metastatic biliary tract cancer
(n=828)

R

ACELARIN
725 mg/m²
+
cisplatin
25 mg/m²

gemcitabine
1000 mg/m²
+
cisplatin
25 mg/m²

Follow up

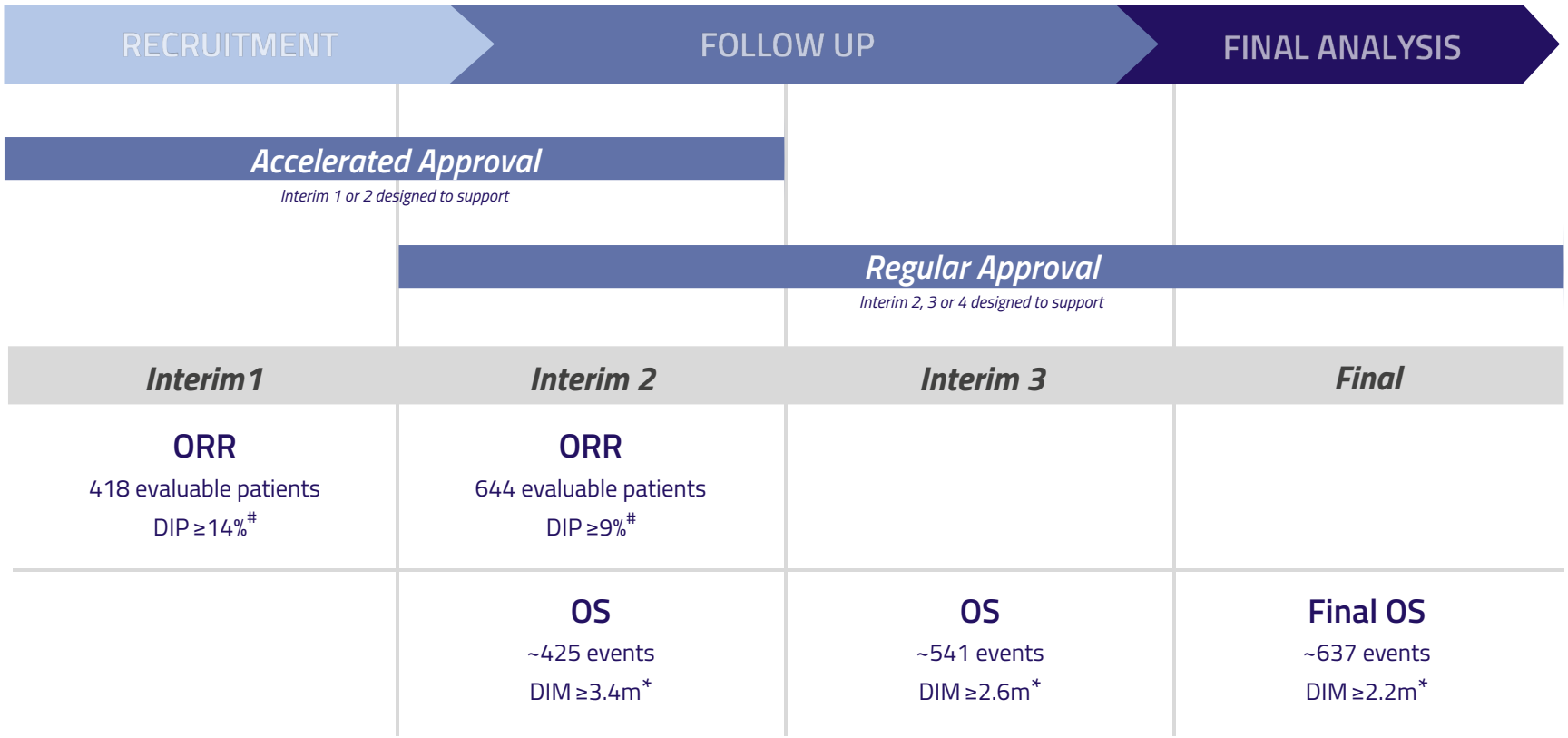
OS
ORR

Enrollment | *Treatment* | *Endpoints*

NuTIDE 121

ACELARIN: Biliary Phase 3 Study (Statistical Plan)

Primary Endpoints: OS; ORR



DIP = Difference in observed proportions (vs. an estimated 19.0%) for statistical significance. Measurable disease at baseline and ≥28 weeks follow-up.
* DIM = Difference in observed medians (vs. an estimated 11.7 months) for statistical significance.

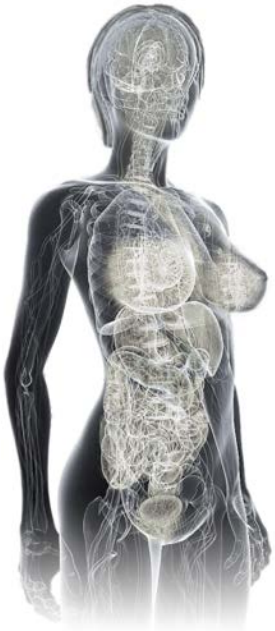
NUTIDE 121

NUC-3373

A transformation of 5-FU

NUCANA

NUC-3373: Overview of Fluorouracil (5-FU)

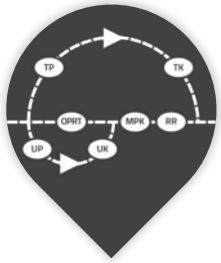


- WHO list of essential medicines
- First approved for medical use in 1962
- ~500,000 patients receive 5-FU annually in North America
- Unpredictable PK profile
- 10-15% Overall Response Rate (colorectal cancer)

Limitations of Fluorouracil (5-FU)

Breakdown
>85% breakdown by DPD, generating toxic byproducts

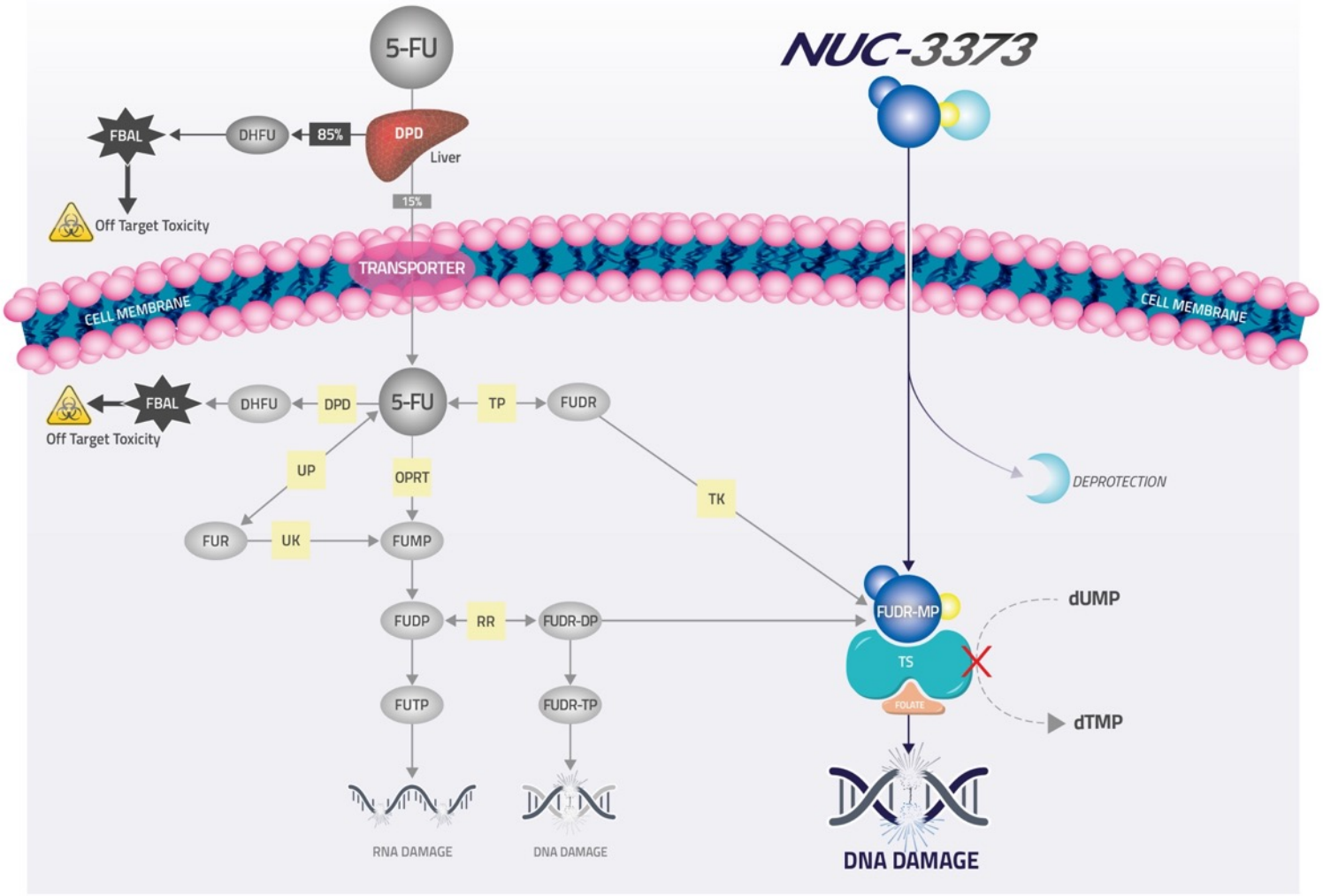
Transport
Requires active transport



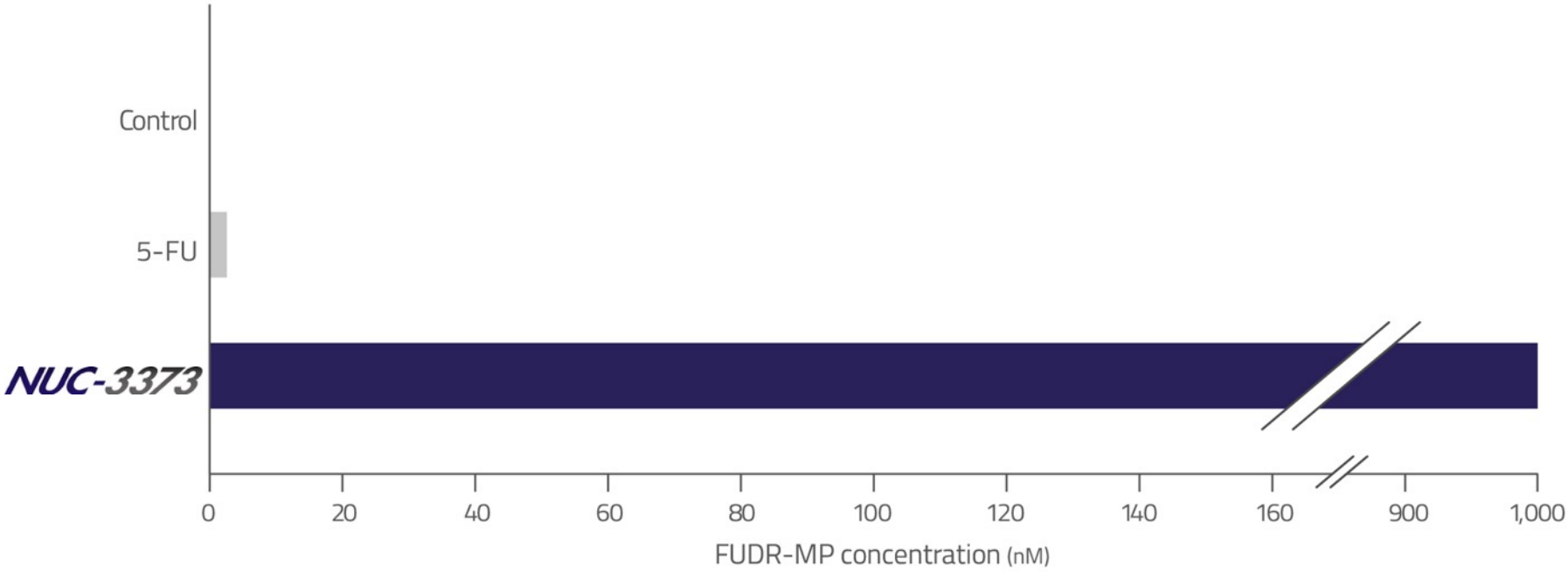
Activation
Multi-step phosphorylation process

Dosing
46-hour continuous infusion

NUC-3373: 5-FU Metabolism and Mechanism of Action Comparison



NUC-3373: Very high Intracellular FUDR-MP (pre-clinical)

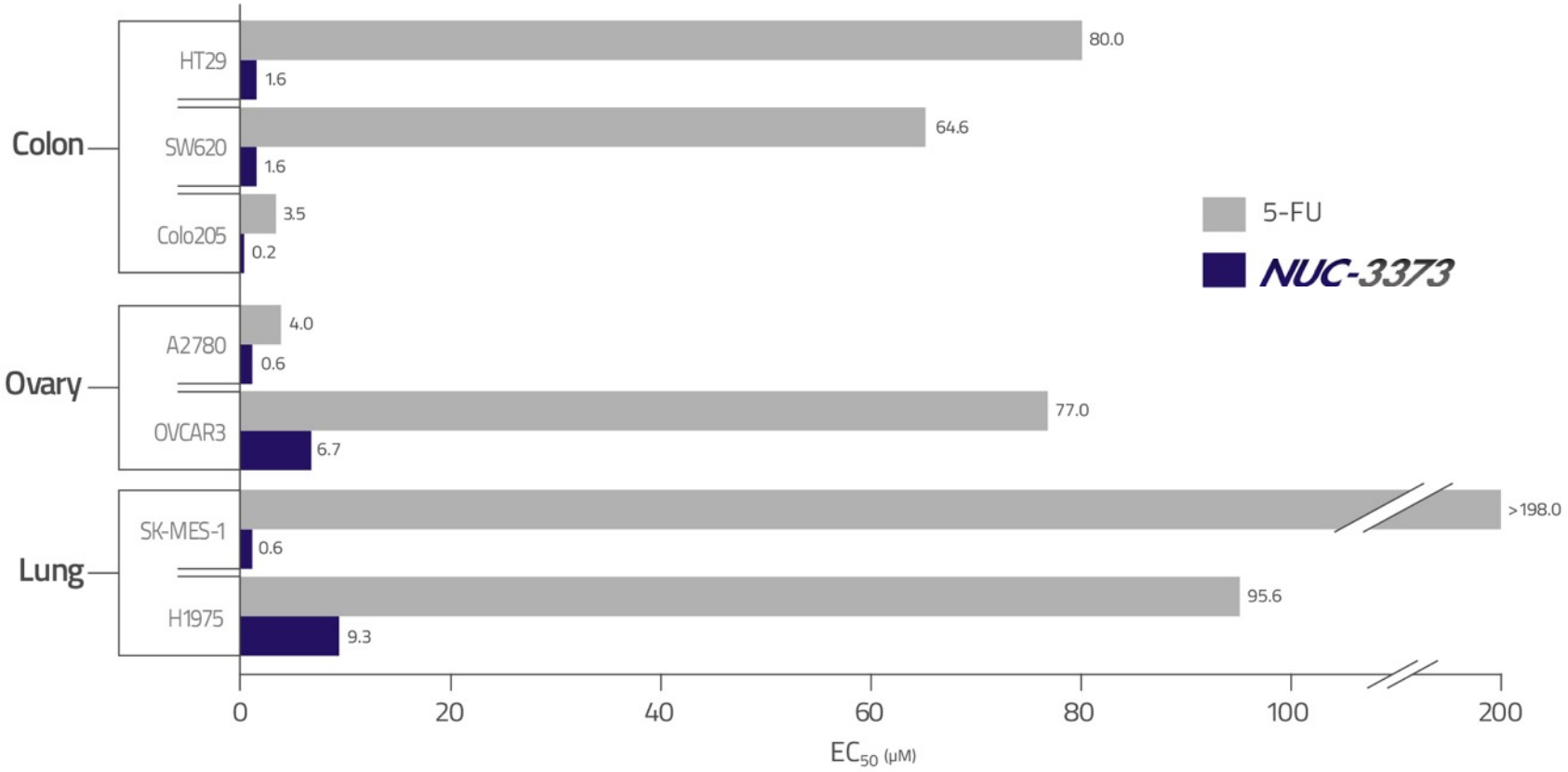


NUC-3373 generated **366x** higher levels of active anti-cancer metabolite FUDR-MP than 5-FU

Equimolar dose comparison

Ghazaly *et al* (2017). *Ann Oncol*; 25: Suppl 5 Abstract ID:385P ESMO poster 385-P, 11th Sept, 2017)

NUC-3373: Greater Anti-Cancer Activity than 5-FU (pre-clinical)



NUC-3373 had up to **330x** greater anti-cancer activity than 5-FU

Ghazaly *et al* (2017). *Ann Oncol*; 25: Suppl 5 Abstract ID:385P (ESMO poster 385-P, 11th Sept, 2017)

NUC-3373: Ongoing Phase 1 Study

- Phase 1 dose-escalation study in patients with advanced solid tumors
- All patients have metastatic spread
- Rapidly progressing disease
- Exhausted all other therapeutic options
- Objective: Recommended Phase 2 dose + schedule

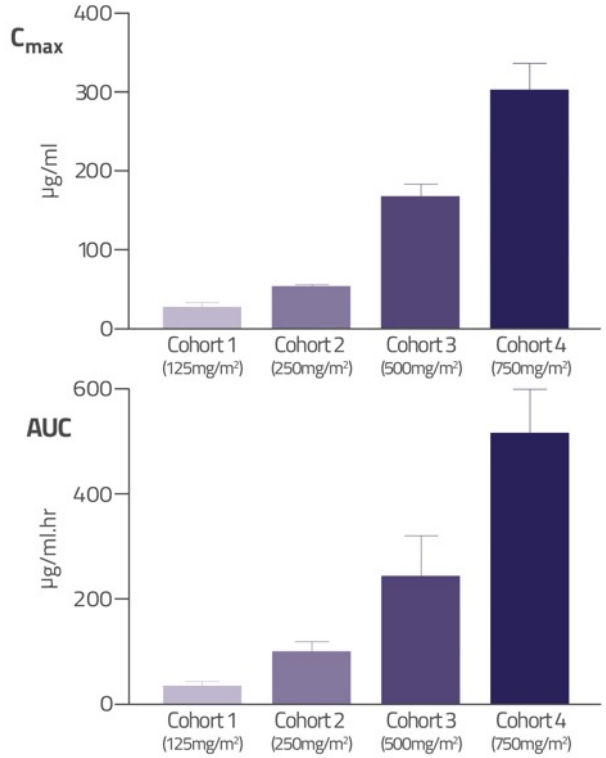
NuTide 301

Number of patients (enrolled to date)	Age (median)	Prior chemotherapy regimens
36	60 (range 21-78)	3 (range 1-6)

Blagden *et al* (2018). *Ann Oncol*; 29: Suppl 8 Abstract ID: 442TiP (ESMO poster 442TiP, 22nd Oct, 2018)
Data as of Sept 25, 2018

NUC-3373: Phase 1 Study Pharmacokinetic Profile (interim data)

Plasma NUC-3373

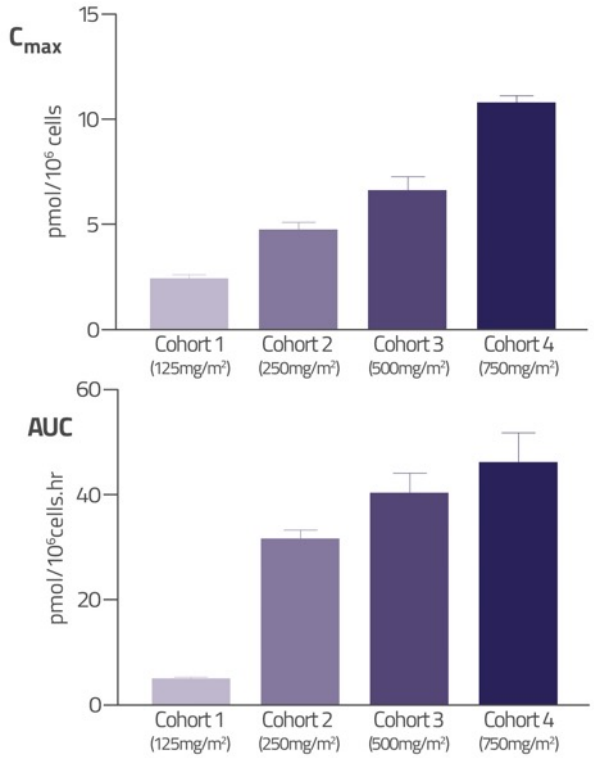


PK reproducible & linear

NUC-3373 plasma half-life 9.7 hours

Clinically insignificant FBAL levels

Intracellular FUDR-MP



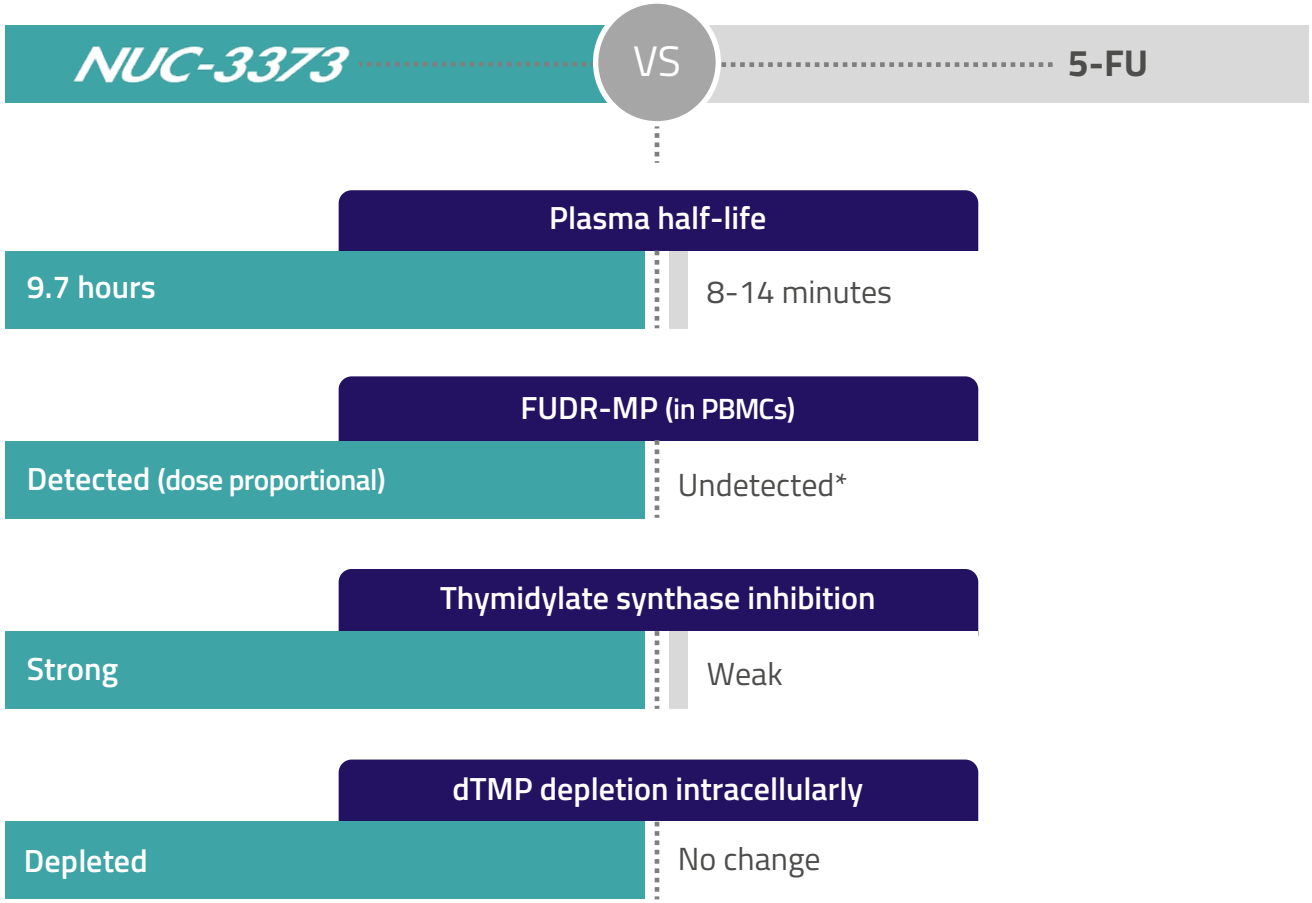
PK reproducible & linear

FUDR-MP intracellular half-life 14.9 hours

FUDR-MP still detectable after 48 hours

Ghazaly *et al* (2017). *Ann Oncol*; 25: Suppl 5 Abstract ID:385P (ESMO poster 385-P, 11th Sept, 2017)
Standard error of mean

NUC-3373: Phase 1 Study Pharmacokinetic Profile (interim data)



Ghazaly *et al* (2017). *Ann Oncol*; 25: Suppl 5 Abstract ID:385P (ESMO poster 385-P, 11th Sept, 2017)

NUC-3373: Ongoing Solid Tumor Phase 1 Study (interim data)

Metastatic Colorectal Cancer

70 years, male
6 prior lines

1) 5-FU:
based chemoradiotherapy (adjuvant)
2) FOLFIRI:
for metastatic disease
3) CAPOX:
progressed within **2 months**
4) FOLFIRI:
progressed within **8 months**
5) LONSURF:
progressed within **3 months**
6) Irinotecan:
treatment for **1 month**

NUC-3373
1,500 mg/m^2 q1w

Stable Disease:
9 months

Metastatic Basal Cell Carcinoma

55 years, male
2 prior lines

1) Vismodegib:
for **11 months**
2) Paclitaxel + carboplatin:
for **3 months**

NUC-3373
1,500 mg/m^2 q2w

Stable Disease:
10 months

Metastatic Cholangiocarcinoma

60 years, female
1 prior line

1) Gemcitabine + cisplatin:
progressed within **6 months**

NUC-3373
1,125 mg/m^2 q1w

Stable Disease:
11 months

- NUC-3373 is well-tolerated
- No hand-foot syndrome has been observed
- Grade 3 treatment-related AEs (3 transaminitis, 1 fatigue, 1 shingles)
- No Grade 4 AEs

NuTIDE 301

Blagden *et al* (2018). *Ann Oncol*; 29: Suppl 8 Abstract ID: 442TiP (ESMO poster 442TiP, 22nd Oct, 2018)
Data as of Sept 25, 2018

NUC-3373: Ongoing Colorectal Phase 1b Study

- Patients with advanced colorectal cancer
- Rapidly progressing disease
- Received ≥2 prior lines of fluoropyrimidine-based regimens
- Exhausted all other therapeutic options
- Objective: Dose + Schedule in combination with other agents

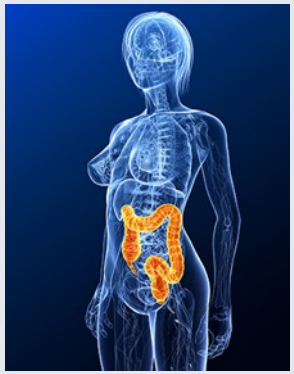
NuTIDE 302

Number of patients (enrolled to date)	Age (median)	Prior chemotherapy regimens
37	58 (range 33-75)	4 (range 2-13)

Coveler *et al* (2021). J Clin Oncol 39: Suppl 3; Abstract ID: 93 (ASCO GI poster 93, 15-17 January 2021)

NUC-3373: Ongoing Colorectal Phase 1b Study

NUTIDE 302



Patients with advanced colorectal cancer who have received ≥2 prior lines of fluoropyrimidine-based regimens

R

Arm 1a
NUC-3373 + LV (d15 onwards) q2w

Arm 1b
NUC-3373 + LV (d1 only) q2w

Arm 1c
NUC-3373 + LV q1w

LV yes

NUFOX
NUC-3373 q1w + oxaliplatin

NUFOX
NUC-3373 q2w + oxaliplatin

NUFIRI
NUC-3373 q1w + irinotecan

NUFIRI
NUC-3373 q2w + irinotecan

RP2D

NUFOX
expansion cohorts

NUFIRI
expansion cohorts

NUFOX
+ VEGF inhibitor or EGFR inhibitor

NUFIRI
+ VEGF inhibitor or EGFR inhibitor

Enrollment	Part I (recruitment complete)	Part II (recruiting)	Part III (to be initiated)

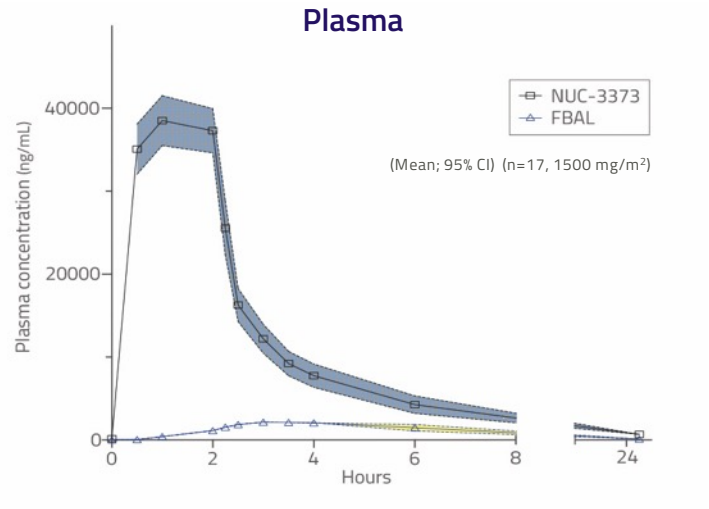
q1w: Weekly administration
q2w: Alternate weekly administration

VEGF (e.g. bevacizumab)
EGFR (e.g. cetuximab)

NUTIDE 302

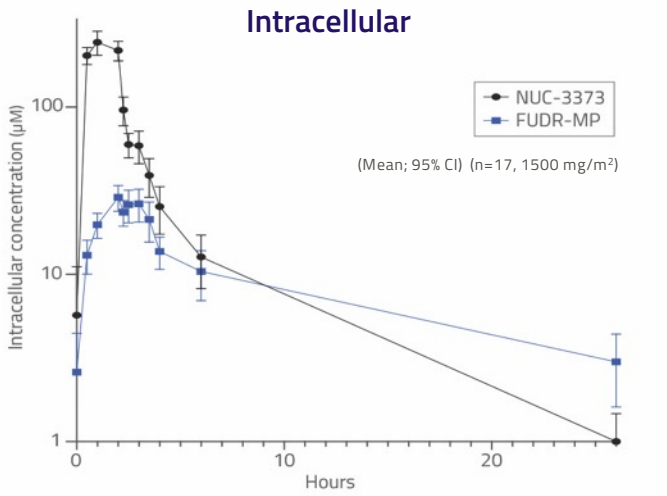
NUC-3373: Favorable PK Profile

Plasma



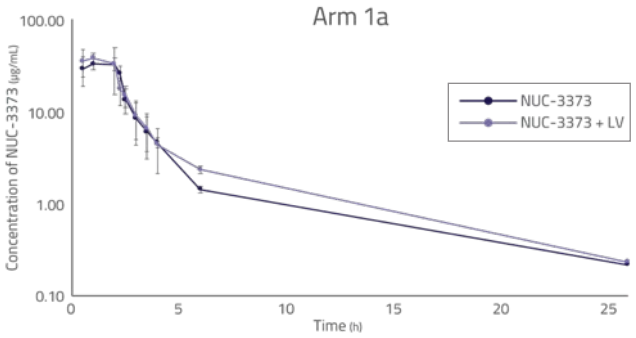
- Long half-life compared to 5-FU (6-14 hours vs 8-14 minutes)
- Large volume of distribution indicating extensive tissue absorption compared to 5-FU (190 L vs 17 L)

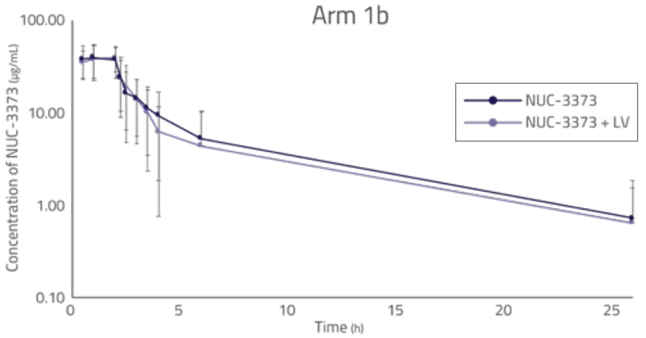
Intracellular



- High levels of FUDR-MP compared to 5-FU (31 µM vs 0.1 µM)
- Long half-life of FUDR-MP (12-20 hours)

Favorable PK profile unaffected by leucovorin





NuTIDE 302

Coveler *et al* (2021). J Clin Oncol 39: Suppl 3; Abstract ID: 93 (ASCO GI poster 93, 15-17 January 2021)

NUC-3373: Favorable Safety Profile

	NUC-3373 (n=37)		5-FU IV (n=143)		5-FU Bolus (n=593)		Capecitabine (n=596)	
	All Grades (%)	G3 or G4 (%)	All Grades (%)	G3 or G4 (%)	All Grades (%)	G3 or G4 (%)	All Grades (%)	G3 or G4 (%)
Diarrhea	**30**	**0**	**45**	**6**	**61**	**12**	**55**	**15**
Nausea	46	3	55	4	51	4	43	4
Vomiting	38	0	32	3	30	5	27	5
Mucositis/Stomatitis	**8**	**0**	**29**	**3**	**62**	**15**	**25**	**3**
Hand-foot syndrome	**0**	**0**	**13**	**1**	**6**	**1**	**54**	**17**
Dermatitis	11	0	20	0	26	1	27	1
Fatigue/lethargy	54	3	NR	NR	46	4	42	4
Anemia	24	5	91	2	79	2	80	3
Neutropenia	**0**	**0**	**48**	**13**	**46**	**21**	**13**	**3**
Elevated bilirubin	5	5	36	11	17	6	48	23
	Heavily pre-treated patients NUC-3373/LV q1w or q2w		**First-line patients** 5-FU/LV infusional days 1&2, q2w		**First-line patients** 5-FU/LV bolus days 1-5, q4w		**First-line patients** Capecitabine BID, 2wks on, 1wk off	

- Grade 4 treatment-related AE (1x elevated bilirubin)
- Grade 3 treatment-related AEs (2x elevated ALT, 1x elevated AST, 1x elevated alkaline phosphate, 1x elevated bilirubin, 1x anemia, 1x hyponatremia, 1x fever, 1x nausea, 1x fatigue)
- FUTP, the primary cause of 5-FU toxicity and a dose-limiting factor, has not been detected in NUC-3373 treated patients

NuTIDE 302

Coveler *et al* (2021). J Clin Oncol 39: Suppl 3; Abstract ID: 93 (ASCO GI poster 93, 15-17 January 2021)

NUC-3373: Colorectal Cancer Patient Case Studies

Disease Control Rate: 62% (efficacy evaluable population n=26)

NuTIDE 302

Coveler *et al* (2021). J Clin Oncol 39: Suppl 3; Abstract ID: 93 (ASCO GI poster 93, 15-17 January 2021)

NUC-3373: Ongoing Colorectal Phase 1b Study (interim data)

Colorectal Cancer

67 years, female
3 prior lines

1) CAPOX (adjuvant):
for **3 months**
relapsed 9 months post-adjuvant therapy
2) FOLFIRI:
progressed within **3 months**
3) Lonsurf:
progressed within **3 months**

RAS unknown
Target lesions: 1 (1 peritoneum)

NUC-3373
2,500 mg/m^2 q1w

40% reduction in tumor volume

Partial Response:
3.5 months

Colorectal Cancer

69 years, male
2 prior lines

Diagnosed with metastatic disease

1) CAPOX:
progressed within **2 months**
tumor **increase of 35%**
2) FOLFIRI:
progressed within **1.5 months**

RAS unknown
Target lesions: 2 (both liver)

NUC-3373
1,500 mg/m^2 q1w

28% reduction in tumor volume

Stable Disease:
5.1 months*

*patient missed 6 consecutive doses due to COVID-19 and progressed, but continued on study for a total of 8 months due to clinical benefit

Colorectal Cancer

52 years, male
5 prior lines

1) FOLFOX (adjuvant):
for **4 months**
relapsed 4 months post-adjuvant therapy
2) FOLFIRI:
progressed within **6 months**
3) Irinotecan + panitumumab:
progressed within **6 months**
4) Irinotecan + panitumumab + telaglenastat:
progressed within **6 months**
5) Nivolumab + enadenotucirev:
progressed within **3 months**

RAS wildtype; BRAF mutant
Target lesions: 3 (2 lung; 1 liver)

NUC-3373
1,500 mg/m^2 q2w

15% reduction in tumor volume

Stable Disease:
4.5 months

Graham et al (2020). Ann Oncol 31: Suppl 4: Abstract ID :464P (ESMO 2020 poster 464, 19-21 September 2020)
Coveler *et al* (2021). J Clin Oncol 39: Suppl 3; Abstract ID: 93 (ASCO GI poster 93, 15-17 January 2021)

NuTIDE 302

NUC-3373: Ongoing Colorectal Phase 1b Study (interim data)

Colorectal Cancer

47 years, male
4 prior lines

1) FOLFOX (adjuvant):
for **5 months**
relapsed 8 months post-adjuvant therapy
2) FOLFIRI: + bevacizumab
progressed within **18 months**
3) FOLFIRI + cetuximab:
progressed within **8 months**
4) Lonsurf:
toxicity within **3 months**

RAS wildtype
Target lesions: 5 (2 lymph nodes; 2 peritoneum; 1 liver)

NUC-3373
1,500 mg/m^2 q1w

Stable Disease:
5.1 months

Colorectal Cancer

57 years, male
4 prior lines

1) CAPOX (neoadjuvant/adjuvant):
for **6 months**
relapsed 2 months post-adjuvant therapy
2) FOLFIRI:
progressed within **3 months**
3) Lonsurf:
progressed within **2 months**
4) RXC004 (Wnt inhibitor):
progressed within **1 month**

RAS unknown
Target lesions: 3 (all lung)

NUC-3373
1,500 mg/m^2 q1w

Stable Disease:
3.8 months

Colorectal Cancer

67 years, female
5 prior lines

1) FOLFOX (adjuvant):
for **5 months**
relapsed 2 years post-adjuvant therapy
2) FOLFIRI:
for **5 months**
3) Irinotecan + Lonsurf + bevacizumab
for **33 months**
4) CAPOX:
progressed within **1 month**
5) Regorafenib:
progressed **within 2 months**

RAS mutant
Target lesions: 2 (1 liver; 1 abdomen)

NUC-3373
1,500 mg/m^2 q1w

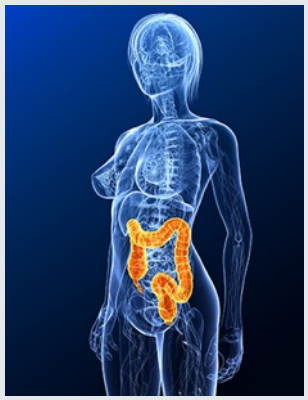
Stable Disease:
3.1 months

Graham et al (2020). Ann Oncol 31: Suppl 4: Abstract ID :464P (ESMO 2020 poster 464, 19-21 September 2020)
Coveler *et al* (2021). J Clin Oncol 39: Suppl 3; Abstract ID: 93 (ASCO GI poster 93, 15-17 January 2021)

NuTIDE 302

NUC-3373: Potential Colorectal Phase 2/3 Study

NUTIDE 323



Patients with advanced colorectal cancer who have progressed during first-line FOLFOX treatment

NUFIRI

R

NUFIRI

FOLFIRI

PFS

Enrollment | *Phase II* | *Phase III* | *Endpoint*

NUTIDE 323

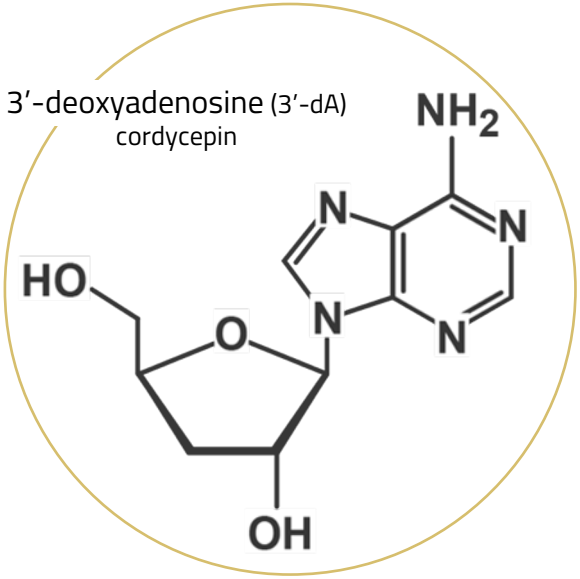
NUC-7738

A transformation of 3’-deoxyadenosine

NUCANA

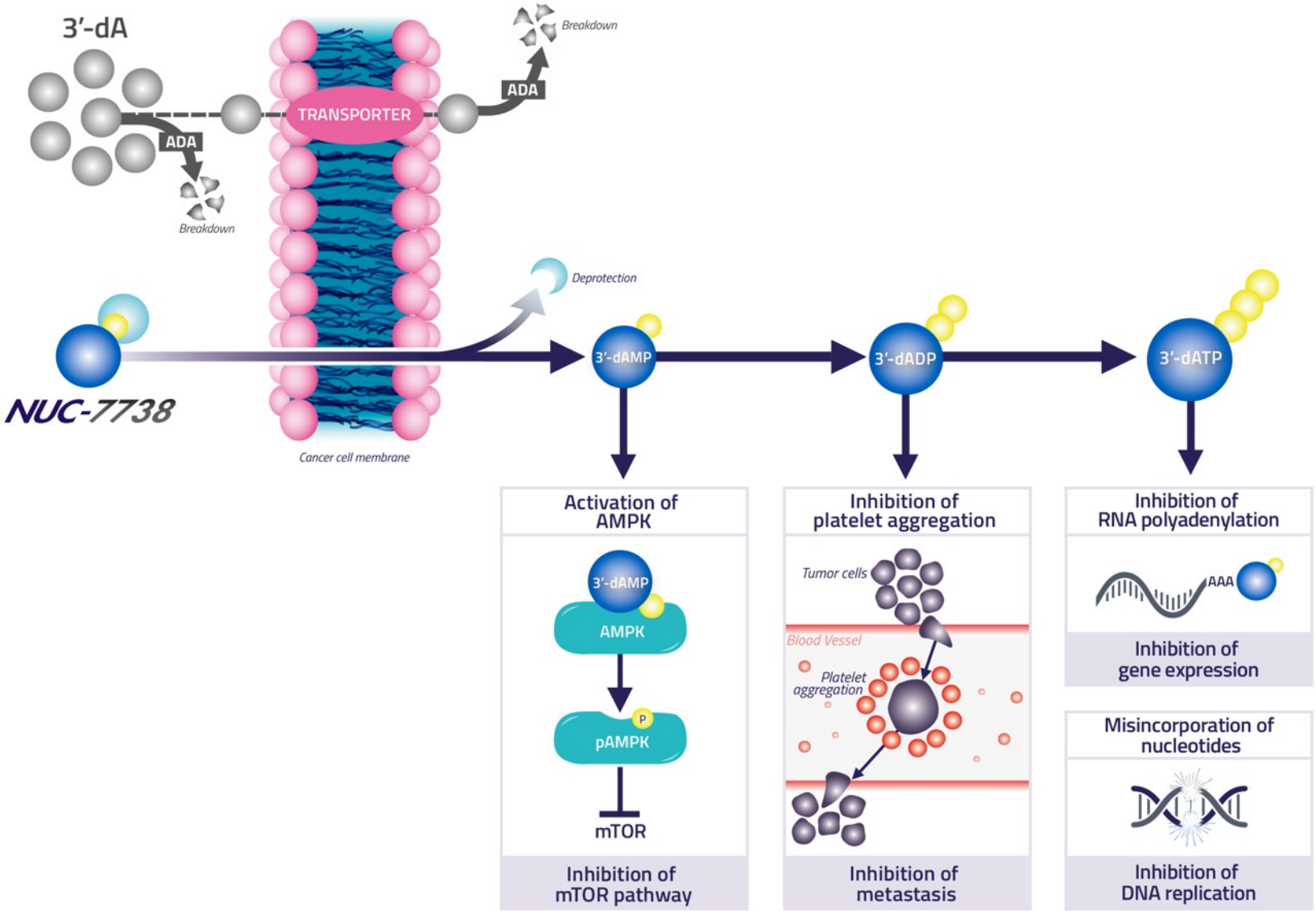
NUC-7738: Origin of 3'-deoxyadenosine

Cordycepin: A Traditional Chinese Medicine



1950: **3'-dA** isolated from ***Cordyceps sinensis***

NUC-7738: Multiple Anti-Cancer Modes of Action



NUC-7738: Ongoing Phase 1 Study

- Phase 1 dose-escalation study in patients with advanced solid tumors
- All patients have metastatic spread
- Rapidly progressing disease
- Exhausted all other therapeutic options
- Objective: Recommended Phase 2 Dose + Schedule

NuTIDE 701

Number of patients (enrolled to date)	Age (median)	Prior chemotherapy regimens
14	65 (range 47-74)	3 (range 1-5)

Symeonides *et al* (2020). Ann Oncol: 31: S501 Abstract ID: 600TiP (ESMO poster 600TiP, 19-21 September 2020)

NUC-7738: Ongoing Phase 1 Study (monotherapy)

NUTIDE 701

Patients with advanced solid tumors

1+1 Weekly

DLT

3+3 Weekly

3+3 Fortnightly

DLT

Establish RP2D + Schedule

Advanced solid tumors (n≈20)

Lymphomas (n≈12)

Enrollment | *1 + 1* | *3 + 3* | *Expansion*

NUTIDE 701

NUC-7738: Ongoing Solid Tumor Phase 1 Study (interim data)

Metastatic Melanoma

62 years, female
2 prior lines

1) Nivolumab + ipilimumab:
discontinued within **1 month**

2) CK7 inhibitor:
progressed within **1 month**

Target lesion: 1 (pelvic side wall)

NUC-7738
Starting dose 14 mg/m^2 q1w
(7 dose escalations)

Target Lesion 1: **14% reduction** in tumor volume

Treatment Duration:
15 months (ongoing)
(Stable disease for 12 months, then re-established)

Metastatic Lung Adenocarcinoma

65 years, male
2 prior lines

1) Carboplatin + pemetrexed:
progressed at **6 months**

2) Docetaxel:
progressed at **4 months**

Target lesions: 2 (both lung)

NUC-7738
Starting dose 42 mg/m^2 q1w
(4 dose escalations)

Target Lesion 1: **46% reduction** (week 8 –16)
Target Lesion 2: Positive change in character (week 8 –16)

Treatment Duration:
6 months

Predictable PK profile

- Dose proportional increase in C_{max} and AUC
- Efficient conversion of NUC-7738 to 3'-dATP

Favorable safety profile

- No Grade 3 or 4 treatment-related AEs
- No DLTs

As of 14 Aug 2020: ESMO 2020 poster data cut-off

NuTide 701

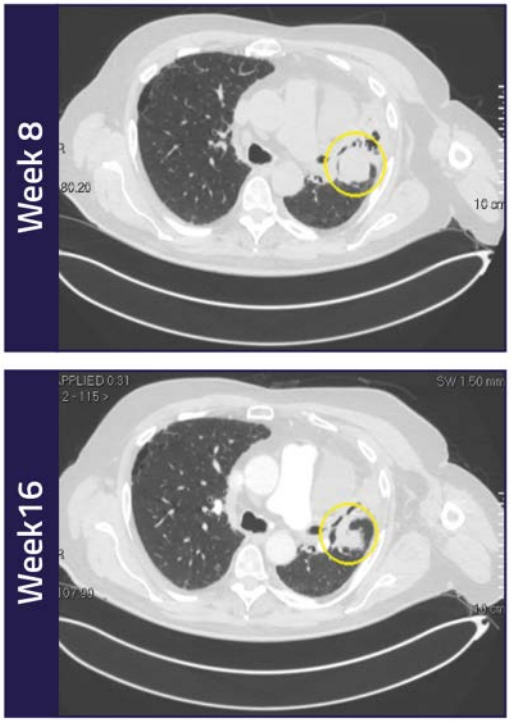
NUC-7738: Ongoing Solid Tumor Phase 1 Study (interim data)

Metastatic Lung Adenocarcinoma

65 years, male - **2 prior lines**

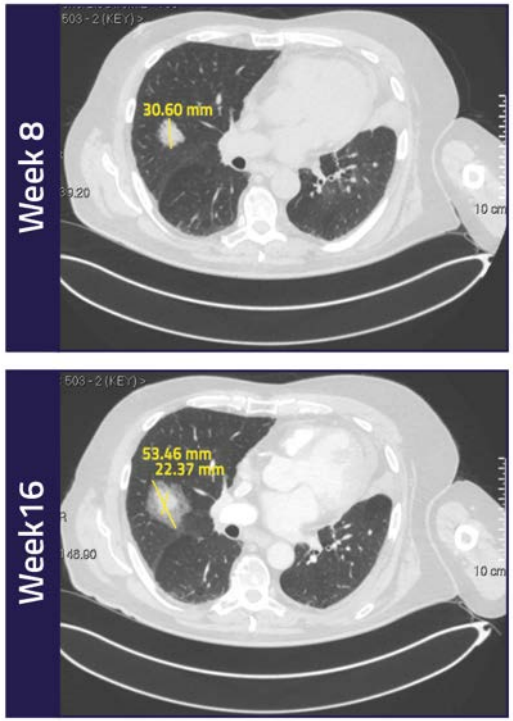
Target Lesion 1:

Encouraging signs of anti-tumor activity with a **46% reduction** in lesion between week 8 -16 (41mm to 22mm)



Target Lesion 2:

Positive change in character (week 8 -16), with a smaller dense core surrounded by a larger diffuse "ground-glass" periphery



As of 14 Aug 2020: ESMO 2020 poster data cut-off

NUTIDE 701

Strong Intellectual Property Position

Worldwide exclusive rights for all programs: **610 granted patents** and **396 pending applications***

Key Patents			
ACELARIN	**403 granted, 202 pending, including:**		
Composition of matter	*Granted (EP, US); Pending (JP)*	**2033 / 2035**	+ others
Formulation	*Granted (EP, US); Pending (JP)*	**2035**	+ others
Manufacturing process	*Granted (US), Pending (EP, JP)*	**2035 / 2036**	+ others
Use	*Granted (EP, US); Pending (JP)*	**2035 / 2038**	+ others
NUC-3373	**61 granted, 104 pending, including:**		
Composition of matter	*Granted (US, EP, JP)*	**2032**	+ others
Formulation	*Pending*	**2036**	+ others
Manufacturing process	*Pending*	**2038**	+ others
Use	*Pending*	**2037 / 2038**	+ others
NUC-7738	**48 granted, 72 pending, including:**		
Composition of matter	*Granted (EP, US, JP)*	**2035**	+ others
Formulation	*Pending*	**2036**	+ others
Manufacturing process	*Pending*	**2038**	+ others
Use	*Pending*	**2041**	+ others

*As of September 7, 2020
⁺Expiration for pending patents if granted

Key Milestones: 2021

ACELARIN	PHASE	EVENT	2021 1H	2021 2H
Biliary	Phase III	Complete recruitment for first interim analysis		X
NUC-3373				
Solid Tumors	Phase I	Data	X	
Colorectal	Phase Ib	Data	X	
Colorectal	Phase Ib expansion / Phase II	Data	X	X
Colorectal	Phase III	Initiate study		X
NUC-7738				
Solid Tumors / Hematologic	Phase I	Data	X	
Solid Tumors / Hematologic	Phase II	Initiate study		X

Investment Highlights

Improving Survival Outcomes

Focused on significantly improving survival outcomes for patients with cancer by applying our phosphoramidate chemistry technology

First-In-Class

Acelarin has achieved impressive response rates and has the opportunity for accelerated approval in front-line biliary tract cancer

Broad IP Protection

Strong IP position for all product candidates and worldwide exclusive rights

Standard of Care

NUC-3373 has the potential to replace 5-FU in colorectal cancer and other solid tumors

Significant Milestones

Numerous value inflection points throughout 2021 and 2022

Novel ProTide

NUC-7738 is a transformation of a novel nucleoside analog and has multiple anti-cancer modes of action

Experienced Team

Accomplished management team, backed by leading biotech investors

NUCANA

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