ADVANCING
ORPHAN
ONCOLOGY

Ticker symbol: ACE
Nasdaq Stockholm
www.ascelia.com

ASCELIA PHARMA

COMPANY PRESENTATION

May 2022

ASCELIA
PHARMA

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ASCELIA PHARMA – COMPANY HIGHLIGHTS

ADVANCING ORPHAN ONCOLOGY

- Identify, develop and commercialize novel drugs that address unmet needs in rare cancers
- Two drugs in advanced clinical development
  - **ORVIGLANCE** – in global Phase 3; FDA Orphan Drug Designation
  - **ONCORAL** – ready for Phase 2

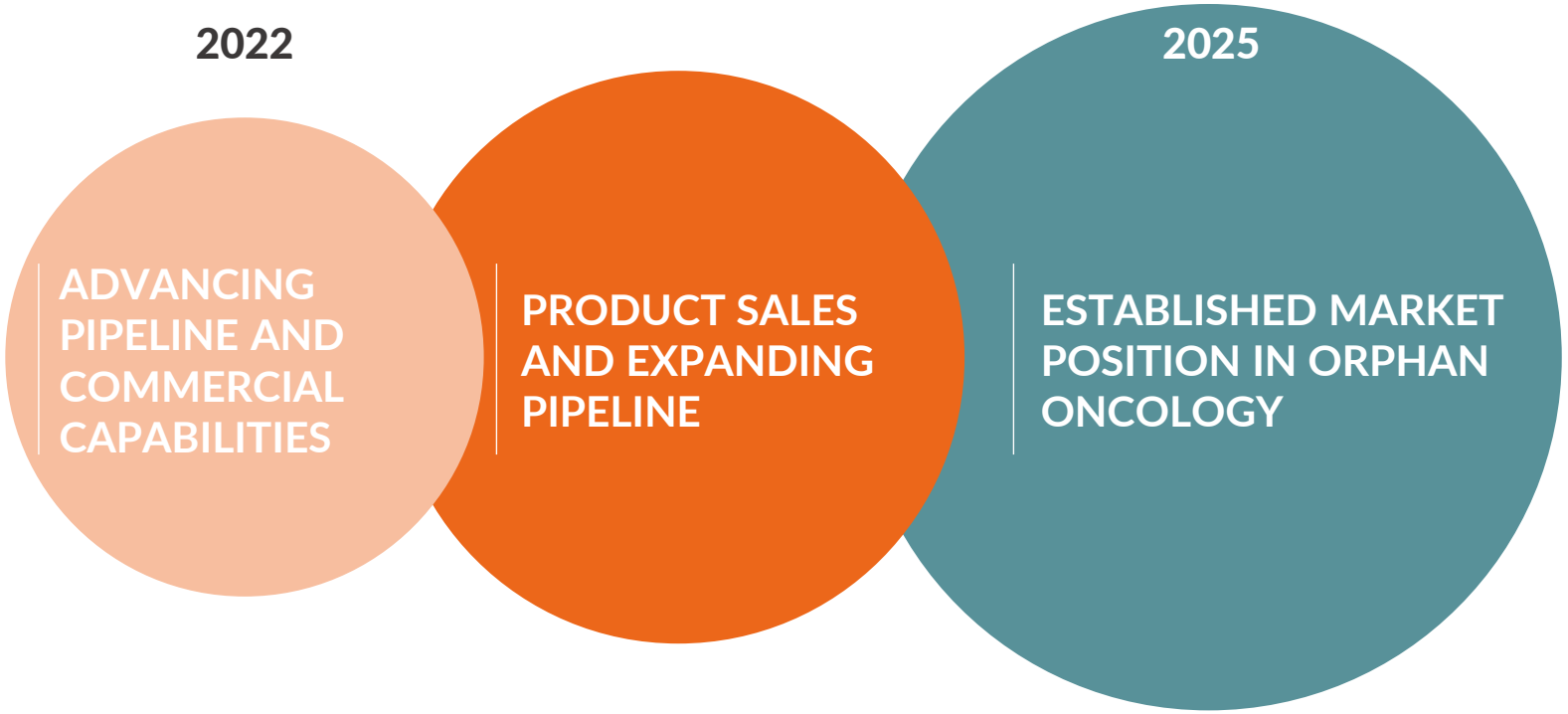
BUILDING GLOBAL CAPABILITIES

- Based in Malmö (Sweden), US affiliate in New Jersey (US)
- Solid balance sheet and financed into H2 2023
- Listed on NASDAQ Stockholm (Ticker: ACE)

CURRENT CLINICAL STAGE PIPELINE

Drug candidate	Indication	Phase 1	Phase 2	Phase 3
ORVIGLANCE	Detection and visualization of focal liver lesions	Completed		Ongoing 2020 – 2022
ONCORAL	Gastric cancer	Completed	Ready for Phase 2	
	Other solid tumors			

BUILDING VALUE AND GROWTH TRAJECTORY



- ORVIGLANCE Phase 3
- ONCORAL Phase 2 ready

- ORVIGLANCE revenue
- ONCORAL Phase 2
- Pipeline expansion

- ORVIGLANCE market leader
- ONCORAL Phase 3
- Pipeline development
- Further pipeline expansion

PORTFOLIO

ORVIGLANCE

Liver diagnostic drug in ongoing Phase 3

ONCORAL

Daily oral chemotherapy ready for Phase 2

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EARLY DETECTION OF LIVER METASTASES IS CRITICAL

LIVER METASTASES CRITICAL IN CANCER CARE

Liver metastases are common and often

- First site of metastases
- The cause of mortality

Incidence liver metastases per primary cancer [1-3]

* Metastatic breast cancer

CONTRAST ENHANCED MRI IS GOLD STANDARD

Contrast drug enhanced MRI enables

- Accurate detection and visualization
- Planning of surgery or drug treatment
- Post-treatment surveillance

1) Riihimäki, M. *et al.* Patterns of metastasis in colon and rectal cancer. *Sci. Rep.* 6, 29765; doi: 10.1038/srep29765 (2016); Journal of Pathology, 2014, 232:23-31
2) Guy diSibio and Samuel W. French (*2008*) Metastatic Patterns of Cancers: Results From a Large Autopsy Study. Archives of Pathology & Laboratory Medicine: June 2008, Vol. 132, No. 6, pp. 931-939
3) Rahbari et al. Metastatic Spread Emerging From Liver Metastases of Colorectal Cancer: Does the Seed Leave the Soil Again? Annals of Surgery: February 2016 - Volume 263 - Issue 2 - p 345–352

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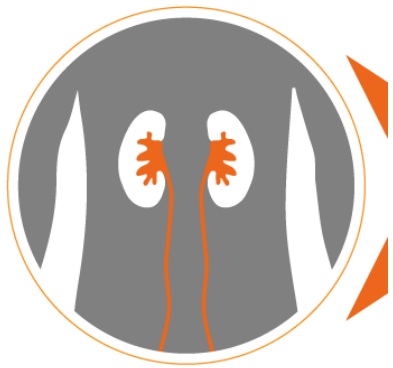
ORVIGLANCE – FILLING AN UNMET NEED IN LIVER MRI

Suspected cancer in the liver | Test kidney function | MRI contrast agent decision | Liver MRI scan



A) Healthy kidneys

MRI with gadolinium contrast agent

B) Poor kidneys

- All gadolinium contrast agents have regulatory Black Box warnings
- Risk of severe and potentially fatal side-effect (Nephrogenic Systemic Fibrosis)

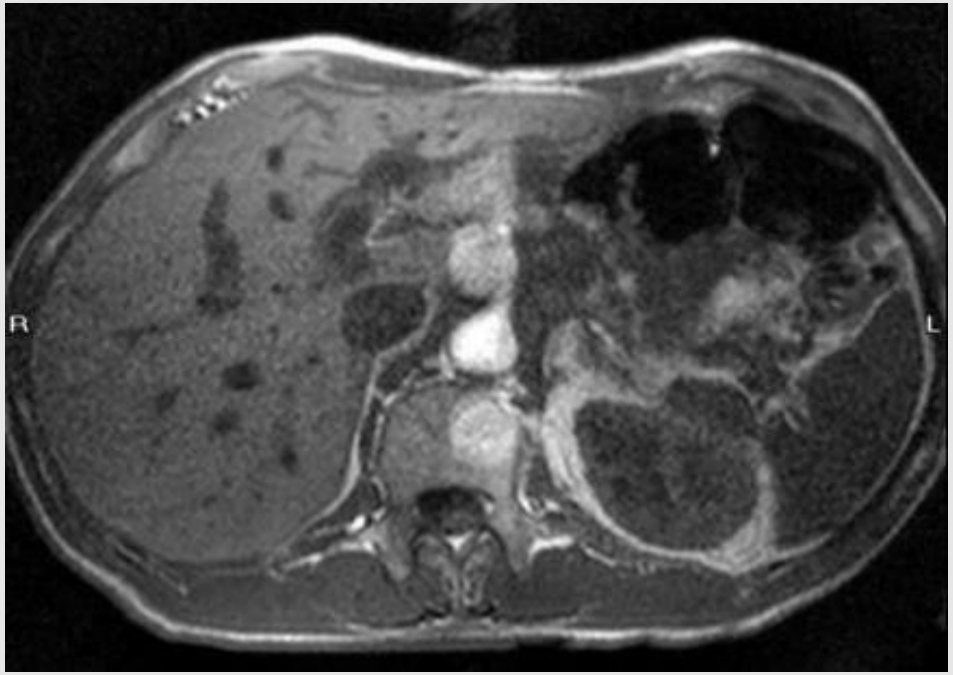
Solution:

MRI with **ORVIGLANCE** (manganese based)

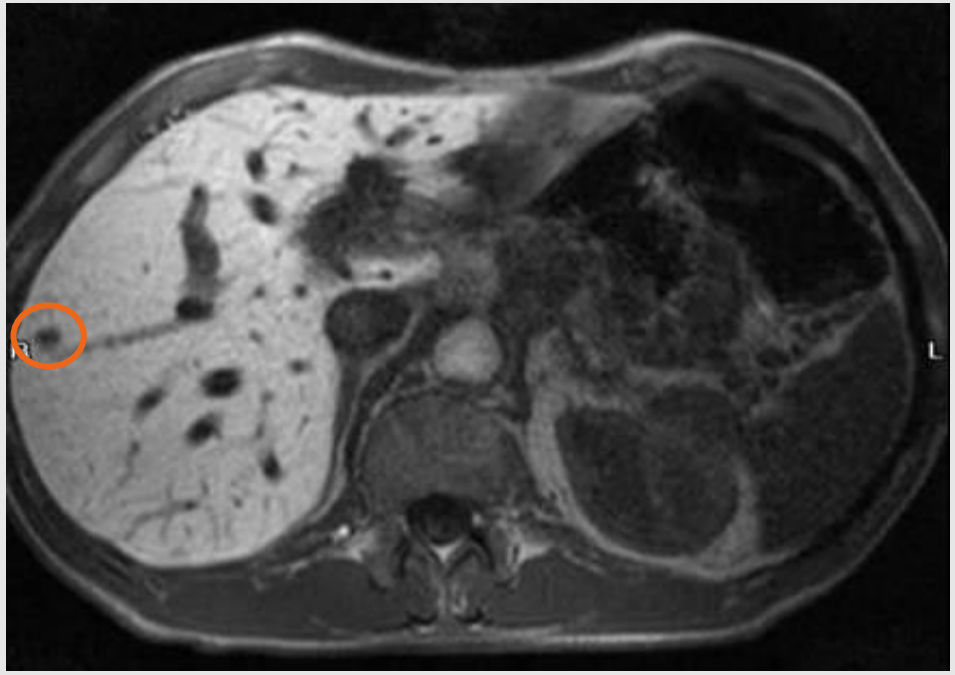
ORVIGLANCE aims to be the standard of care liver MRI contrast agent for target patients

STRONG LIVER ENHANCEMENT WITH ORVIGLANCE

PATIENT EXAMPLE FROM PHASE 2 STUDY



UNENHANCED liver MRI (without contrast agent)



ORVIGLANCE contrast enhanced liver MRI

Liver metastasis appear with Orviglance

Source: Patient with colorectal cancer. (Study CMC-P002)

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ORVIGLANCE PHASE 1 & 2 RESULTS (6 STUDIES)

Consistent strong efficacy readout and safety profile

Blind read study of all images vs. unenhanced MRI (178 persons)

- Significantly improved MRI
- 33% more lesions

- **Lesion visualization**
  - Delineation (border sharpness): **p-value <0.0001**
  - Conspicuity (contrast vs. background): **p-value <0.0001**

Proceed to Phase 3

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ORVIGLANCE ONGOING PHASE 3 STUDY – SPARKLE

Patients 	• Global study, 200 patients • Known or suspected focal liver lesions and severe renal impairment	• Around 50 sites in the US, Europe, Latin America • Working with active and new sites to accelerate enrollment
Comparator 	Unenhanced MRI + ORVIGLANCE MRI vs. Unenhanced MRI	No randomization – each patient as own control
Endpoint 	Lesion visualization • Lesion border delineation • Conspicuity	• Same endpoints as in Phase 2 • Same endpoints as for approved gadolinium agents
Follow-up 	Less than a week	Expected pivotal study patient enrollment: 2022

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STUDY COMPARING ORVIGLANCE TO GADOLINIUM

ORVIGLANCE vs. GADOLINIUM CONTRAST AGENT

- Crossover study (n=20) where Orviglance was compared against a liver specific gadolinium contrast agent (Multihance)
- Compared visualization of lesions and number of detected lesions in the liver

EFFICACY PARAMETERS AND RESULTS

Efficacy parameter	Results from three independent blinded readers
1. Number of lesions detected	3 (out of 3) detected more lesions with Orviglance
2. Size of the detected lesions	3 (out of 3) saw smaller lesions with Orviglance
3. Lesion border delineation	2 (out of 3) reported higher scores for Orviglance
4. Lesion contrast compared to liver	2 (out of 3) reported higher scores for Orviglance

Note: Please observe that the results are not statistically sufficient to conclude that Orviglance is superior to gadolinium

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November 28 to December 2

CONCLUSIONS

- → *Robust evidence of the diagnostic value that Orviglance offers*
- → *Important value message to healthcare payers and providers*
- → *Strengthens the data package to regulatory authorities*

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ORVIGLANCE PIVOTAL PROGRAM – SUPPORTING STUDIES

	Study design	Status and Results
Food Effect Study	• Crossover study in healthy volunteers • Evaluate the impact of food intake on absorption and signal intensity of Orviglance (light meal or full meal vs. fasting condition)	• Intake of light meal prior to Orviglance MRI provides similar liver image enhancement as Orviglance MRI on fasting condition • Robust image enhancement of the liver after Orviglance compared to an MRI without a contrast agent
Hepatic Impairment Study	• Sequential cohort study in patients with different degrees of hepatic impairment • Evaluate the effect of liver impairment on the safety, pharmacokinetics and pharmacodynamics of Orviglance	• Last patient visit completed in March 2022 • No serious adverse events reported • Final results expected Q2/Q3 2022

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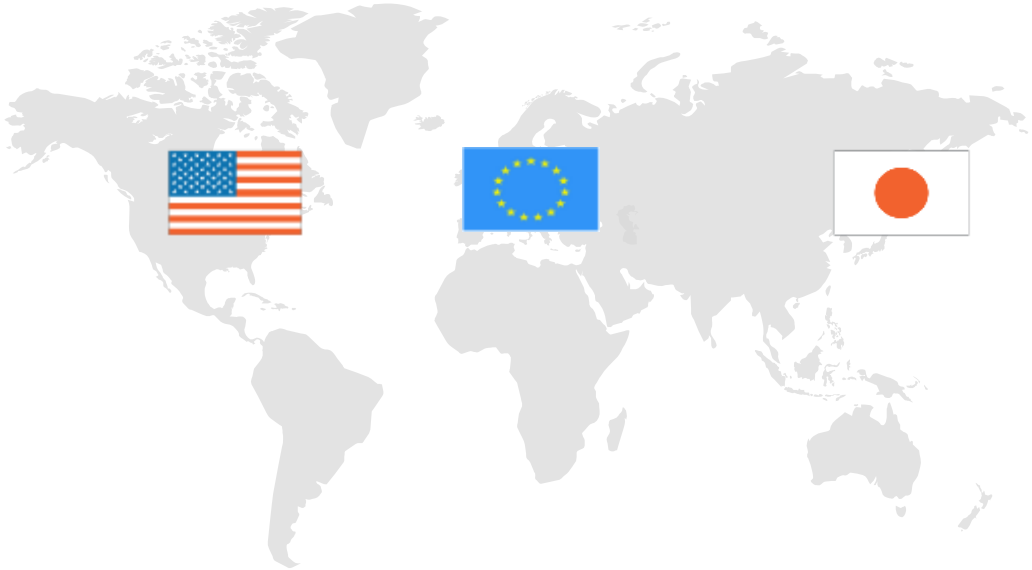
ORVIGLANCE MARKET $500-600 MILLION ANNUALLY

$500-600M ADDRESSABLE MARKET IN US, EU AND JAPAN

- Ascelia Pharma to commercialize in the US
- RoW commercialization with partners



DRIVERS

- Patients with suspected primary liver cancer or liver metastases and severe kidney impairment (~4%)
- Actual imaging procedures (real-world data)[1]
- Payer and expert input (+75 stakeholders)[2]

UPSIDES

- Other markets, e.g., China
- Annual growth of 4-5%

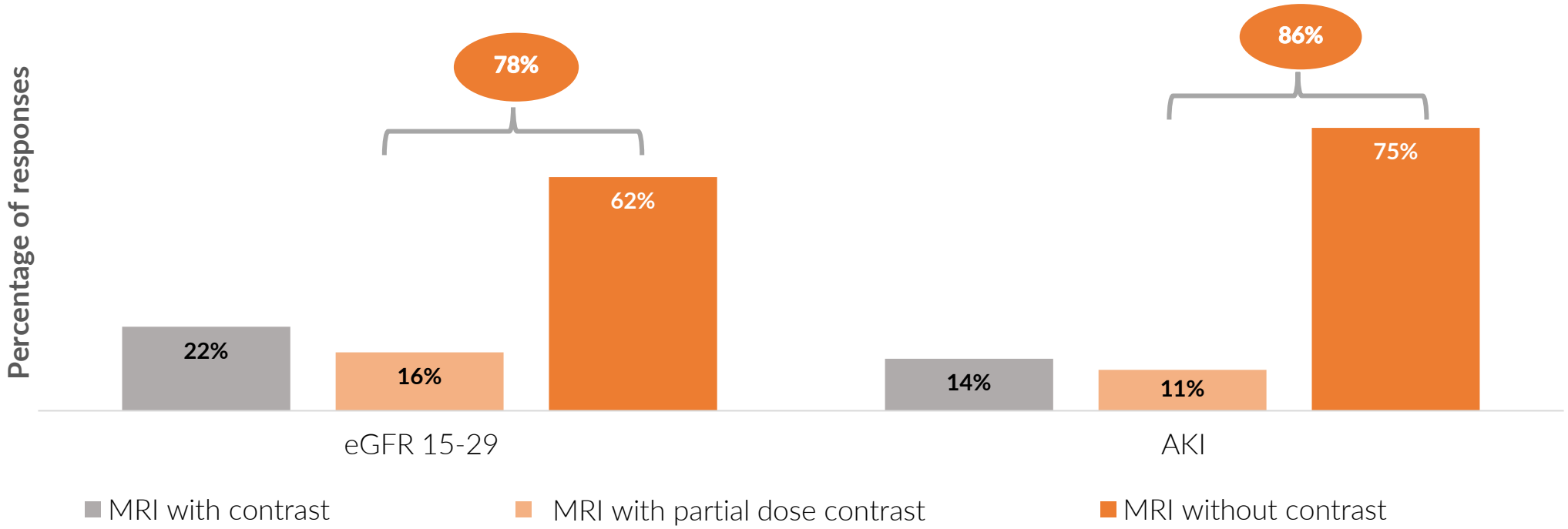
Sources:
1) Ascelia Pharma market research with Decision Resources Group, 2020
2) Ascelia Pharma market research and analyses with Revenue Reimbursement Solutions and Charles River Associates, 2020

MARKET RESEARCH MARCH 2022

– FOR ORVIGLANCE TARGET PATIENTS, US HEALTHCARE PROFESSIONALS CURRENTLY PREFER UNENHANCED MRI

78% PREFER MRI WITHOUT OR WITH PARTIAL DOSE CONTRAST FOR PATIENTS WITH LOW eGFR

… EVEN MORE FOR AKI PATIENTS



N=103 oncologist, nephrologist, and radiologist responses.
Q: Please assign priority to the imaging tests in the sequence or order in which you would recommend or perform them (shown as % split of first priority of MRI options)

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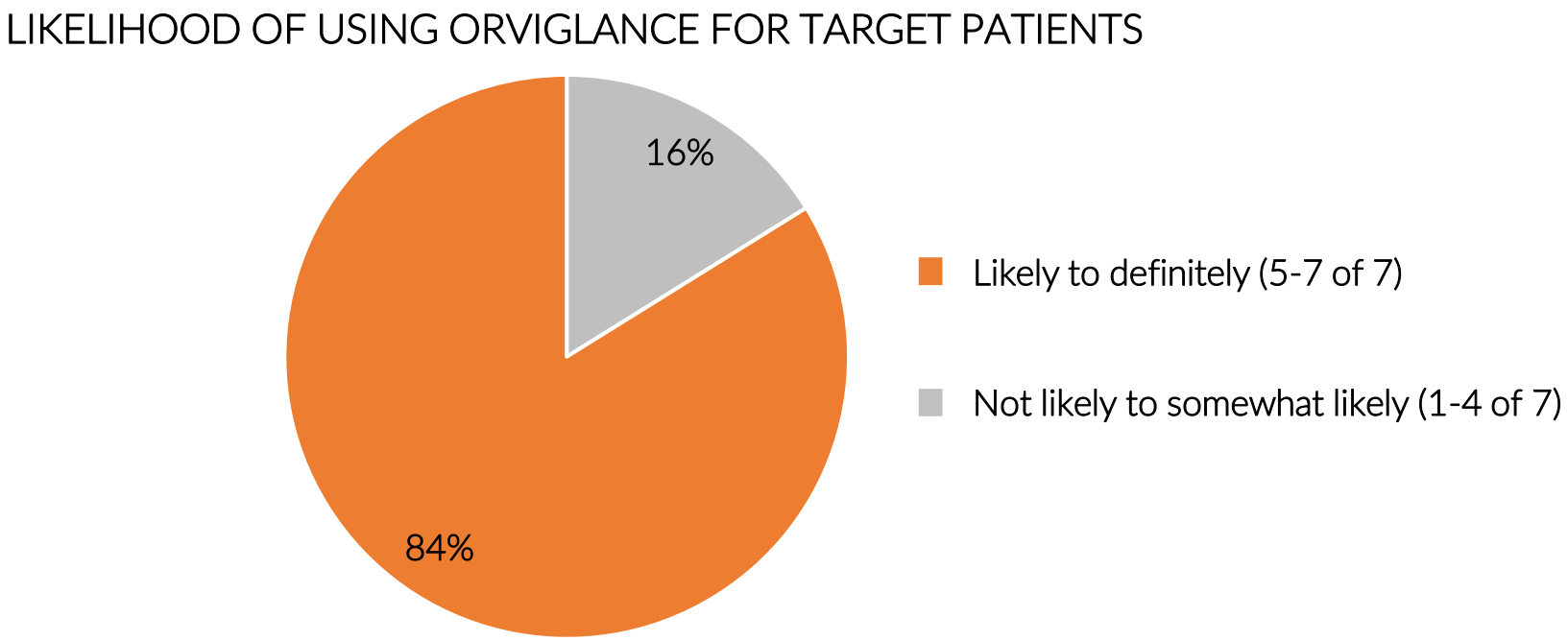
MARKET RESEARCH FROM MARCH 2022
– 84% US HEALTHCARE PROFESSIONALS SAY THEY WILL USE ORVIGLANCE



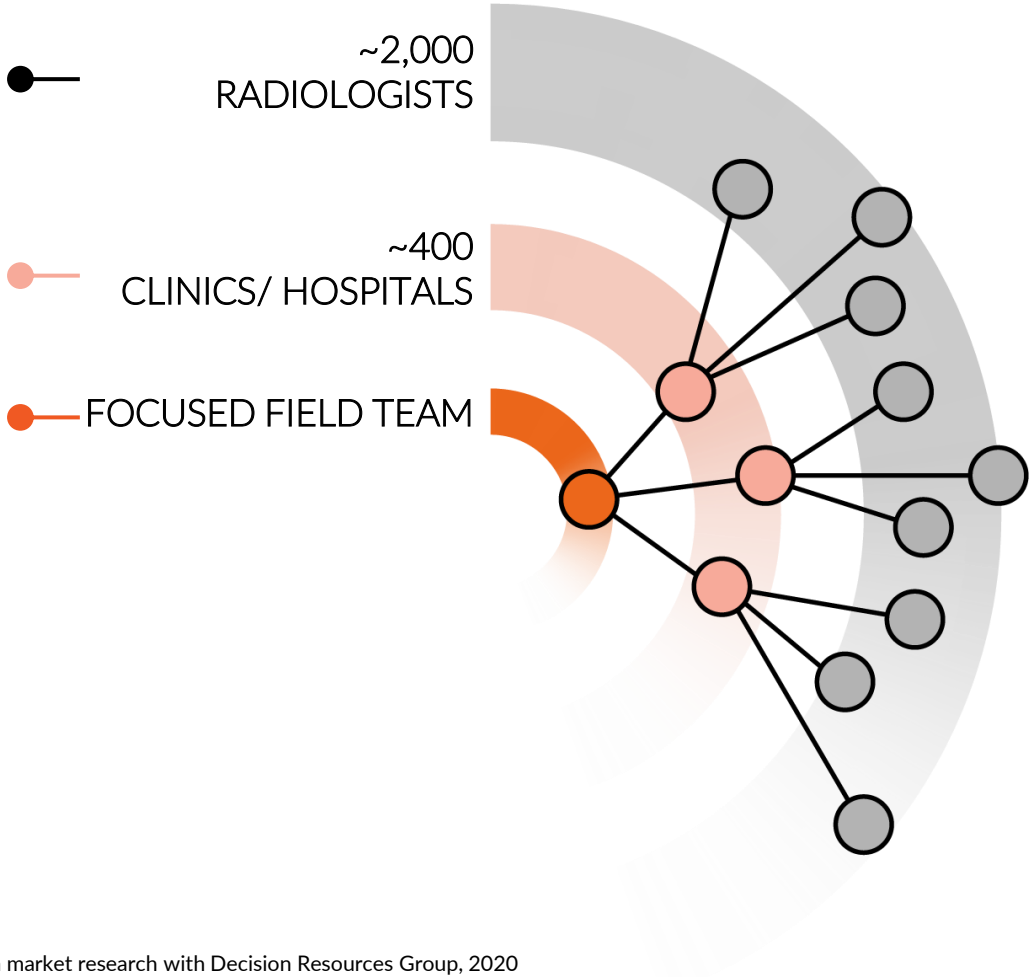
Market research for Ascelia Pharma conducted in Q4 2021/Q1 2022 by Two Labs Pharma Services
N =254 oncologist, nephrologist, and radiologist responses
Q: On a scale of 1 (not at all likely) to 7 (definitely), how likely are you to use or suggest using Orviglance for your patients?

CAPTURING US MARKET VALUE WITH ASCELIA'S TEAM

Perform regular liver MRIs in kidney impaired patients[1]

Serve ~75% of kidney impaired patients[1]

Reach priority decision makers



BUILDING ASCELIA U.S. TEAM

New Jersey office (up to 40 FTEs at launch)

Cambrex manufacturing partner in New Jersey

BUILDING OUT U.S. FOOTPRINT

SPARKLE Phase 3 study at leading US Sites including Stanford, Mass. General, Duke University, UCLA Medical Center

Sources:
1) Ascelia Pharma analysis based on market research with Decision Resources Group, 2020

PORTFOLIO

ORVIGLANCE

Liver contrast agent in ongoing Phase 3

ONCORAL

Daily oral chemotherapy ready for Phase 2

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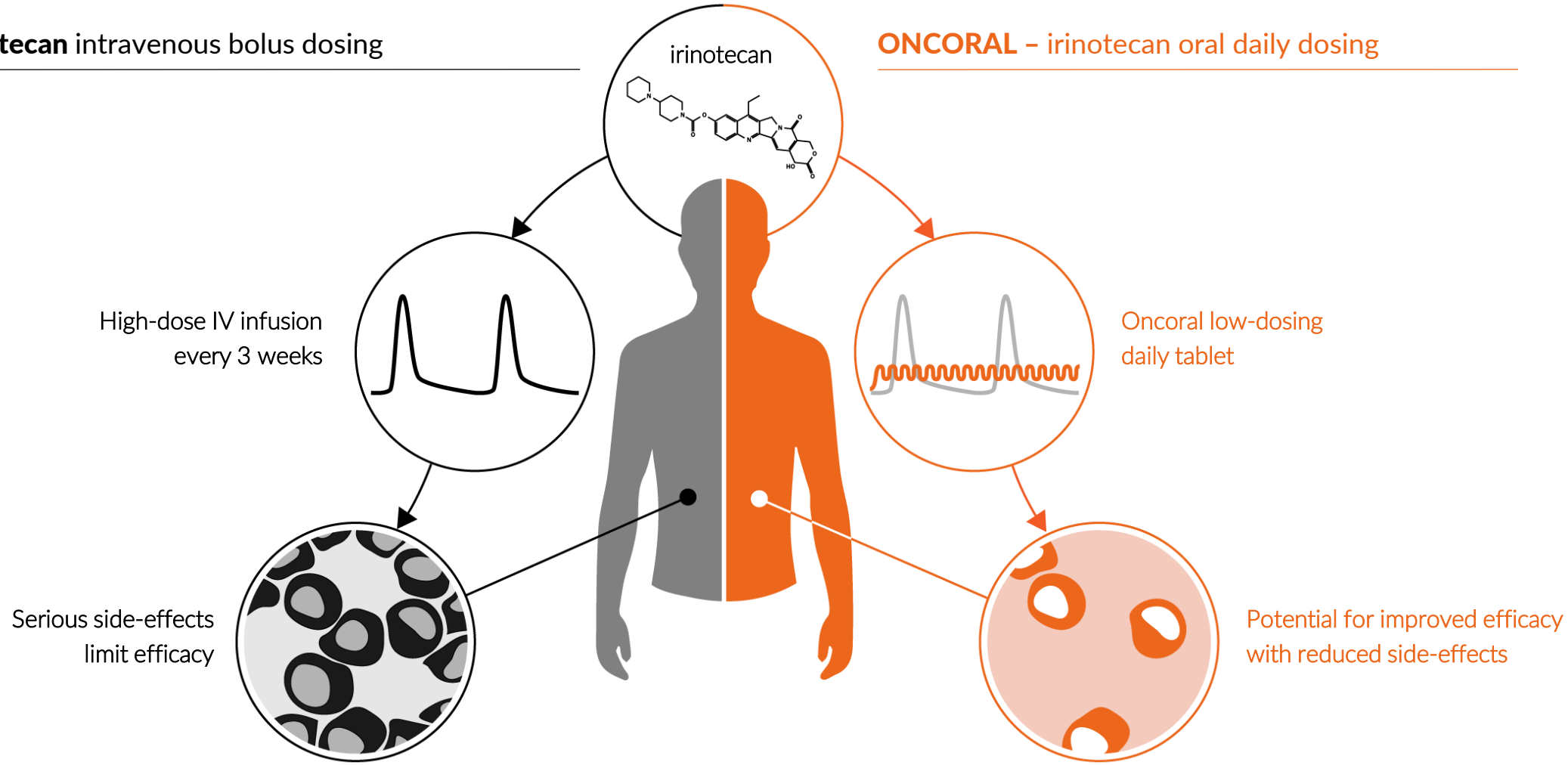
IMPROVING IRINOTECAN **EFFICACY** and **TOLERABILITY**

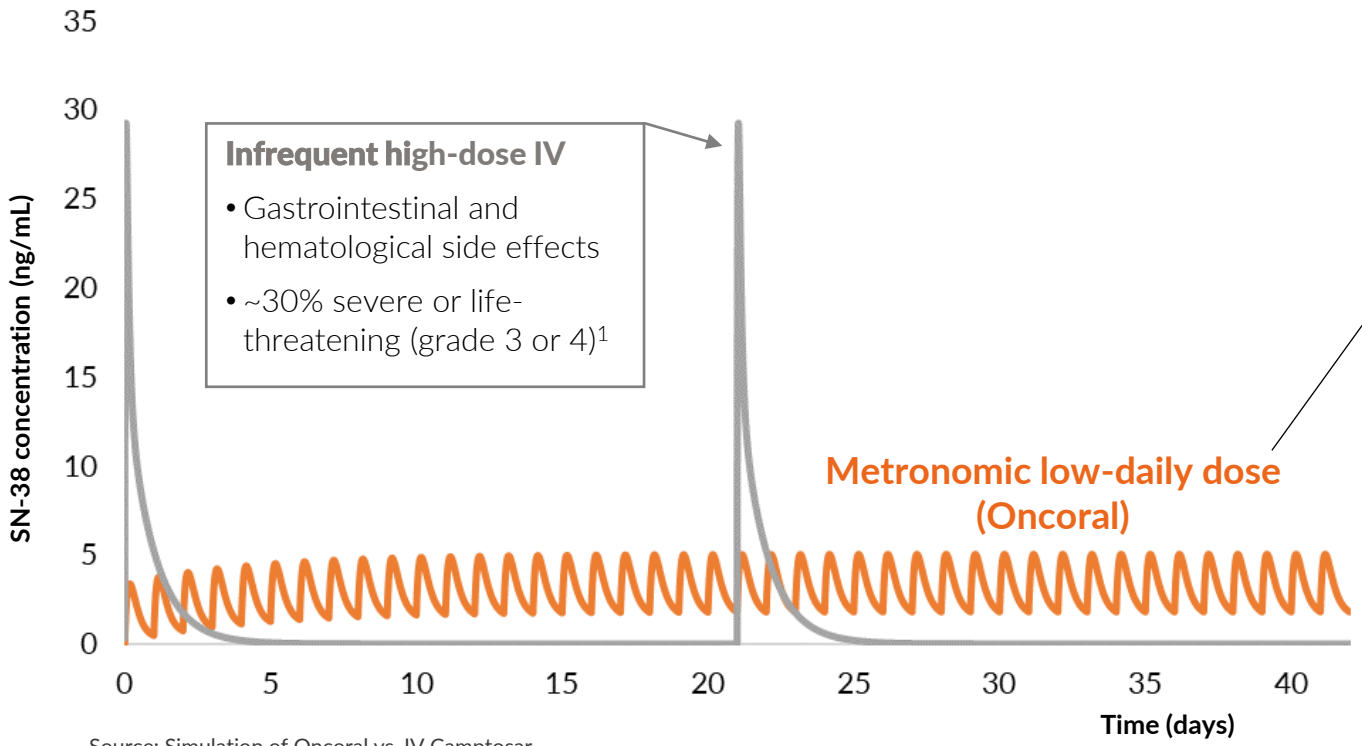
Irinotecan intravenous bolus dosing

ONCORAL – irinotecan oral daily dosing



ONCORAL PHASE 1: ENCOURAGING SAFETY PROFILE

PLASMA LEVELS OF IRINOTECAN



Source: Simulation of Oncoral vs. IV Camptosar

Frequent (metronomic) low-dose irinotecan

- Several studies show improved tolerability[2,3]
- Daily dosing – adjust quickly if acute toxicity

Oncoral Phase 1 results

- Well tolerated, no unexpected side-effects
- Hematological toxicities mild-moderate (grade 1 or 2)[4]
- Efficacy: Stable disease even in patients previously treated with IV irinotecan

1) Camptosar prescribing information 2) Furman et al 1999 3) Perez et al 2004 4) Kumler et al 2018

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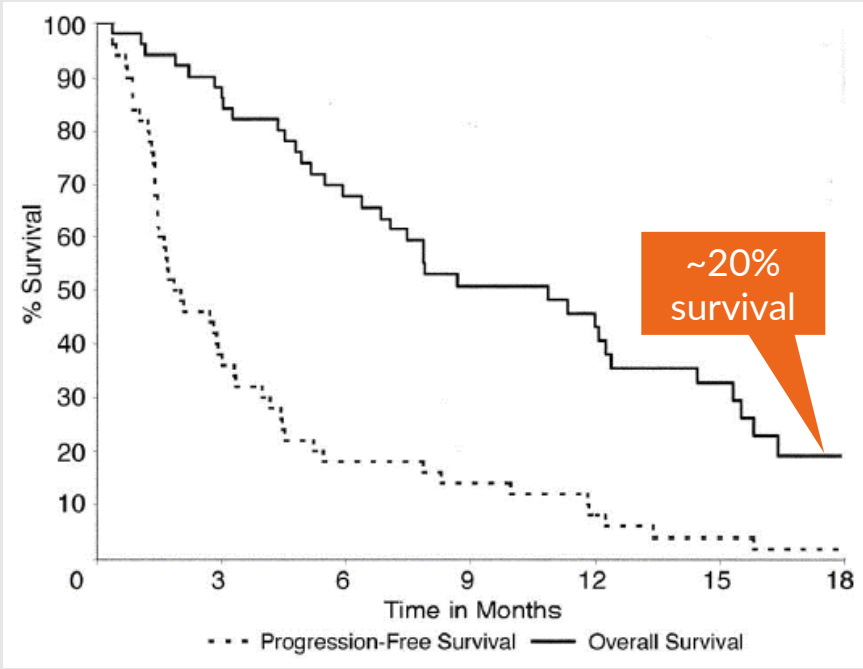
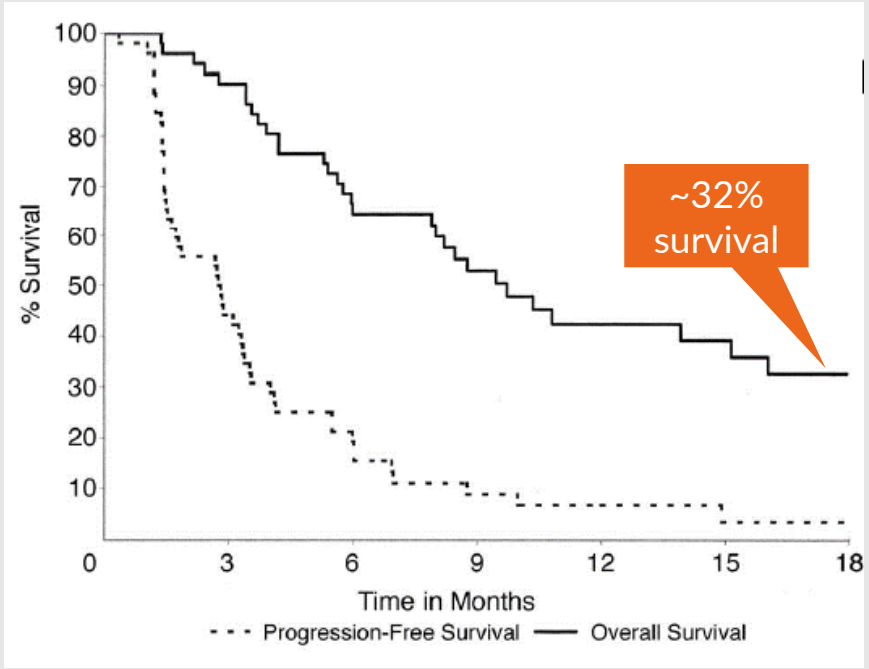
IMPROVING IRINOTECAN **EFFICACY** BY FREQUENT LOW DOSING

Overall survival: Improved from 20% (dosing every third week) to 32% (weekly dosing)[1]

Irinotecan every 3 weeks (IV)



Irinotecan weekly (IV)



Study in patients with metastatic refractory breast cancer, N=103

1) Perez et al. J Clin Oncol 2004: Randomized Phase II Study of Two Irinotecan Schedules for Patients With Metastatic Breast Cancer Refractory to an Anthracycline, a Taxane, or Both

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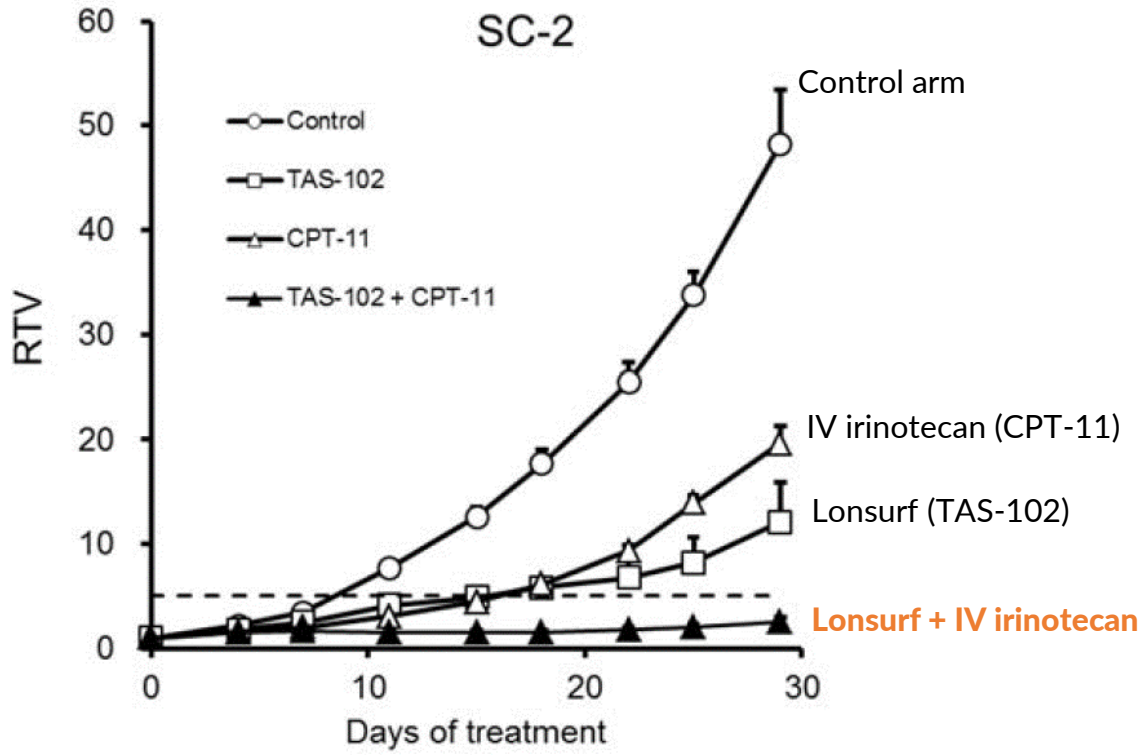
ONCORAL PHASE 2 IN GASTRIC CANCER

STRONG RATIONALE FOR GASTRIC CANCER

- Clinical guidelines recognize efficacy of irinotecan
- Potential for Orphan Drug Designation
- Potential for synergistic effect between Lonsurf and irinotecan

Efficacy study in an animal model of gastric cancer[1]
(Relative Tumor Volume, RTV)



1) Nukatsuka et al: Combination Chemotherapy Using TAS-102 and Irinotecan Hydrochloride, ANTICANCER RESEARCH 35: 1437-1446 (2015)

PHASE 2 STUDY DESIGN

STUDY DESIGN (ALL-ORAL COMBINATION STUDY)

Patients	• Around 100 patients • Metastatic gastric cancer • Randomized controlled, multicenter/multinational
Comparator	Oncoral + Lonsurf vs. Lonsurf
Endpoints	**Primary:** Progression Free Survival **Secondary:** Response rate, PK, Safety and Overall Survival data in a follow up analysis

Clinical collaboration with

TAIHO ONCOLOGY

LONSURF is approved for treatment of metastatic gastric cancer and metastatic colorectal cancer

POSTPONING START OF PHASE 2 TO FOCUS ON ORVIGLANCE

- Continued very strong belief in Oncoral as a novel oral chemotherapy
- Study start approval (IND) gained in the US in December 2021
- Study start approval gained in the UK and Spain in H1 2022
- To focus all resources on Orviglance, patient enrollment is not initiated until it can be done effectively (was planned to start Q2/Q3 2022)

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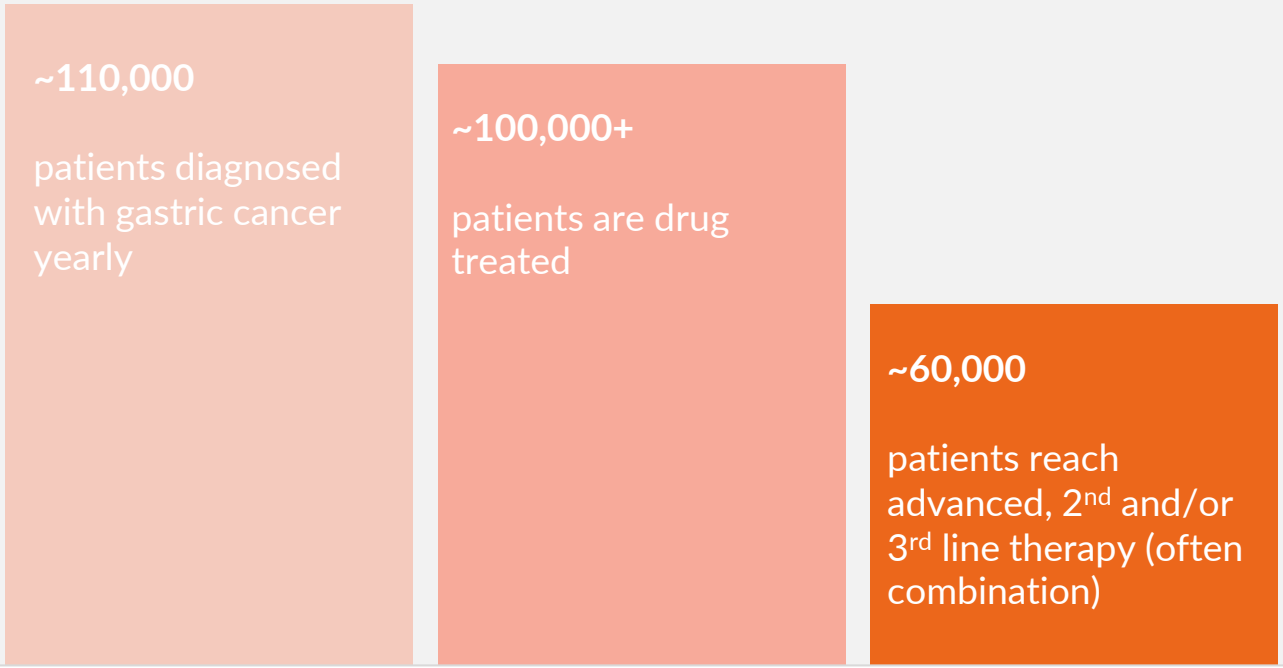
GASTRIC CANCER – A $3BN+ MARKET OPPORTUNITY

US and EU target patent population (orphan disease)



Other key market

Japan and South Korea has high prevalence and high diagnosis rates (~150,000 diagnosed patients/year)

China is the country in the world with the highest number of gastric cancer patients (~400,000 diagnosed patients/year)

…other markets (~400,000 diagnosed patients/year)

Sources:
International Agency for Research on Cancer (IARC, 2021, input from key opinion leaders and Ascelia analysis
GlobalData - Gastric and Gastroesophageal Junction Adenocarcinoma – Global Drug Forecast and Market Analysis to 2024

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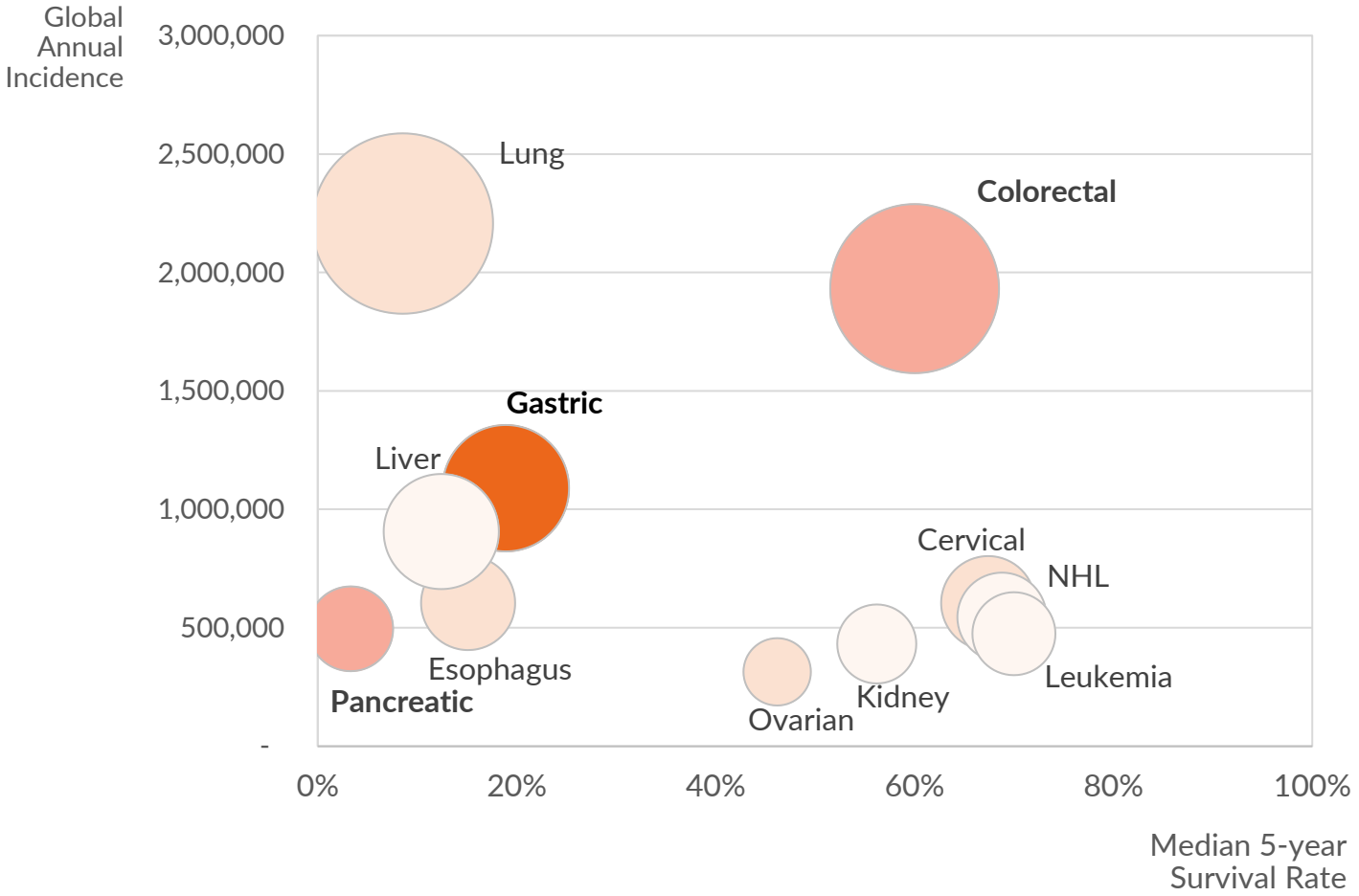
HIGH VALUE OPPORTUNITY IN GASTRIC CANCER AND EXPANSION

POTENTIAL FOR ORAL, DAILY DOSING OF IRINOTECAN[3]



- **Current focus:** Gastric cancer
  - 3rd highest cancer deaths[1]
  - Orphan opportunity (U.S. and EU)
  - $3-4bn market[2]
- **Approved indications** for IV irinotecan infusions
- Indications for which IV irinotecan infusions are clinically demonstrated & NCCN recognized
- Indications for which IV irinotecan infusions are clinically demonstrated

1) International Agency for Research on Cancer (IARC, 2021)
2) GlobalData - Gastric and Gastroesophageal Junction Adenocarcinoma – Global Drug Forecast and Market Analysis to 2024
3) Globocan 2020, WHO, Cancer Research UK

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PRIORITIES, FINANCIALS AND SUMMARY

PRIORITIES 2022

- Complete Orviglance Phase 3 patient enrollment
- Prepare Orviglance launch

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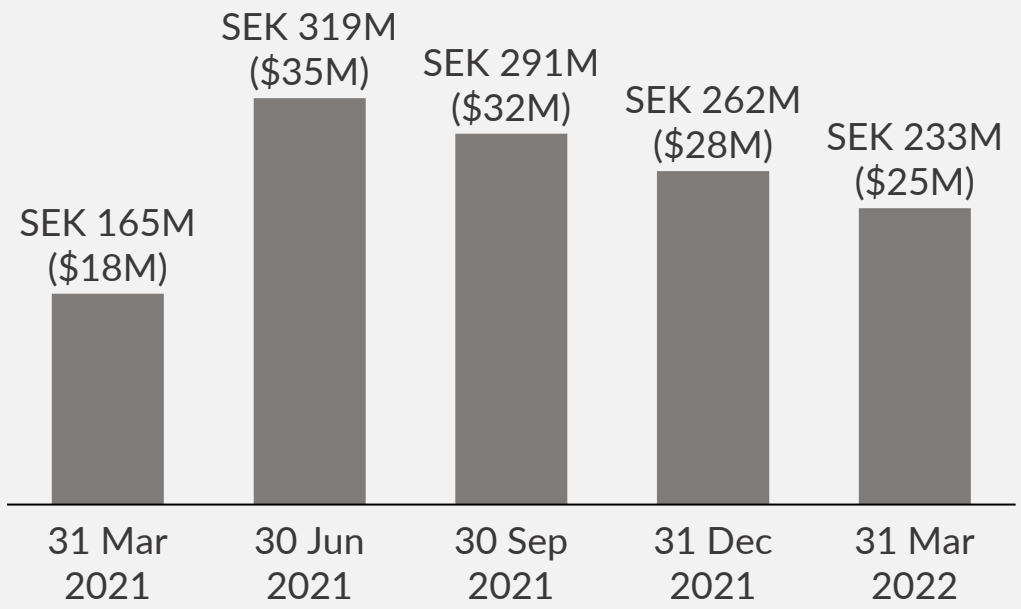
FINANCIAL HIGHLIGHTS Q1 2022 – LIQUIDITY POSITION

Solid liquidity position:

- Liquid assets of SEK 233 million ($25 million) by 31 Mar 2022
- Quarterly burn rate in recent quarters of SEK 30-35 million ($3.0-3.5 million)
- Current cash position provides financing into H2 2023

Liquidity
(million SEK and USD)



Note: Converted to USD at exchange rate USD/SEK per 31 Mar 2022 of 9.4

ASCELIA PHARMA – COMPANY HIGHLIGHTS

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BUILDING GLOBAL CAPABILITIES

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APPENDIX

EXECUTIVE MANAGEMENT

Magnus Corfitzen
Chief Executive Officer

- 20+ years experience investing, building and growing Life Science companies
- Board experience 10+ life science companies

Sunstone · McKinsey&Company · Danske Capital · VÆKSTFONDEN

Julie Waras Brogren
Chief Commercial Officer

- 20+ years experience life science. L.eadership positions at Novo Nordisk, COO of BresoTEC, Canada
- Excellent track record in global product launches and launch preparations. e.g. multi-blockbuster Victoza®

novo nordisk · BresoTEC · accenture

Carl Bjartmar
Chief Medical Officer, MD, Ph.D.

- 20+ years experience senior positions in big pharma; CMO for Wilson Therapeutics
- Outstanding track record in orphan drug development

SANOFI · genzyme · WILSON THERAPEUTICS · Lundbeck

Kristian Borbos
Chief Financial Officer

- 20 years experience finance and IR in large caps and banking (sell-side, advisory)
- Completed and lead multiple capital market transactions

Danske Bank · DONG Energy Ørsted · novozymes Rethink Tomorrow

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BOARD OF DIRECTORS

Peter Benson
Chairman

- Led the formation of Sunstone Life Science Ventures and Managing Partner 2007-2019
- Extensive experience from the Life Science sector from executive positions in Big Pharma and board member in listed companies as well as an investor
- Previous positions include: EVP and President Hospital Care at Pharmacia, VP Marketing & Sales at Kabi Pharmacia Parenterals and Head of Life Science Ventures at the Danish Growth Fund

Lauren Barnes
Director

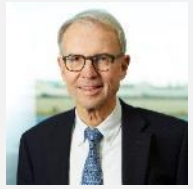
- SVP Market Access at Blueprint Medicines (listed on Nasdaq US)
- Extensive expertise and experience in pricing, market access, pre-commercialization and managed markets in particular for the US market. Involved in launch planning of more than 50 drugs
- Previous positions include: VP at Vertex Pharmaceuticals, SVP Avalere Health and led their Reimbursement & Commercialization practice. Various roles at Amgen and the agency that runs the United States Medicare Program, the Centers for Medicare and Medicaid Services

Helena Wennerström
Director

- Chief Financial Officer ViaCon Group
- Extensive finance executive experience from listed companies
- Previous position include: EVP and CFO of NASDAQ-listed Bulten AB

Prof. Hans Maier
Director

- Co-Founder and Managing Partner of BGM Associates GmbH
- Extensive big pharma experience from executive positions within Schering AG and Bayer AG
- Previous positions include: President of the Global Business Unit Diagnostic Imaging at both Schering AG and Bayer AG and part of the Executive Committee of Bayer-Schering AG



Niels Mengel
Director

- Founding Partner and CEO at Øresund-Healthcare Capital
- Extensive experience from the healthcare industry as an investor and Board member of Danish Shareholders Association
- Previous positions include: EVP at ISS World Services A/S and Director at PA Consulting Group

René Spogárd
Director

- Chairman and investor in a number of companies including JEKA Fish A/S (fish) and Bollerup Jensen A/S (chemicals) and Flexfunding
- Extensive experience from investing in the healthcare sector and board positions in a public environment
- Previous positions include: Managing Director at TNS Gallup and Director at TNS plc (London Stock Exchange)