PRESENTATION OF Q2-2021 REPORT

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ASCELIA PHARMA

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WEBCAST:
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Link webcast:
Ascelia Pharma Q2 Report 2021 (streamfabriken.com)

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ASCELIA PHARMA – ADVANCING ORPHAN ONCOLOGY

ORVIGLANCE (MANGORAL)

- Diagnostic agent for liver MRI in population subset
- Global Phase 3 study ongoing
- $500-600M annual addressable as the only gadolinium-free agent

ONCORAL

- Oral daily chemotherapy – initial focus on gastric cancer
- Phase 2 to start H2-2021

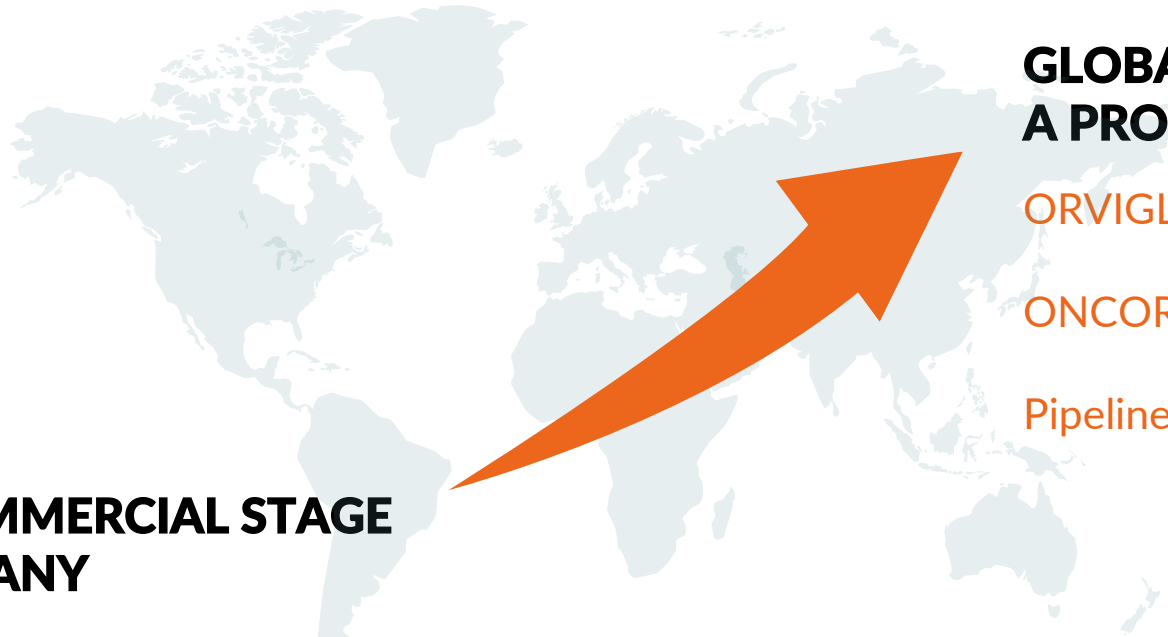
BUILDING GLOBAL CAPABILITIES

- Global network of KOLs and advisors
- Driving approval and commercialization of Orviglance

SOLID FINANCIAL POSITION

- Financed to reach key value creating milestones
- Listed on NASDAQ Stockholm

BUILDING ASCELIA PHARMA AND BUILDING VALUE



BUILDING A COMMERCIAL STAGE PHARMA COMPANY

ORVIGLANCE (MANGORAL) in Phase 3

ONCORAL Phase 2 ready

GLOBALLY LEADING PRODUCTS AND A PROMISING PIPELINE

ORVIGLANCE (MANGORAL) launch in the US

ONCORAL Phase 2 near completion

Pipeline expansion

2021 2022 2023

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RECENT KEY EVENTS

Key events Q2-2021

Apr EGM approval of new share issuance

Key events after the quarter

Aug FDA conditionally accepted Orviglance® as the brand name for Mangoral

Aug Abstract for Orviglance comparison study to gadolinium accepted as an oral paper presentation at the world's largest radiology conference RSNA

Aug Covid-19 extends recruitment period for SPARKLE study with up to 6 months into H1 2022 (previously H2 2021)

ORVIGLANCE – THE BRAND NAME FOR MANGORAL

Brand name approved by FDA and EMA

- In August 2021, the FDA conditionally accepted Orviglance* as the proposed brand name for manganese chloride tetrahydrate (Mangoral)
- The name Orviglance was developed in accordance with FDA's guidance for the submission and evaluation of proprietary names
- The name selection included a research study of healthcare practitioners across the U.S. to ensure accurate prescription and safety interpretation of the name
- EMA has earlier also approved the brand name

** Trademark is registered in Europe and several other markets and submitted for registration in the US.*

ORVIGLANCE COMPARISON STUDY TO BE PRESENTED AT RSNA

Upcoming oral paper presentation at RSNA 2021

- Orviglance comparison study to a gadolinium-based contrast agent accepted as an oral paper presentation at the world's largest radiology conference RSNA
- RSNA conference to be held November 28 – December 3 in Chicago, Illinois
- Endpoints and evaluation criteria in the study same as in the ongoing Phase 3 study SPARKLE

RSNA® 2021
REDEFINING RADIOLOGY
November 28 to December 2

Results of the comparison study showed that:

1. Orviglance enhanced MRI was as effective as gadolinium for visualization of focal liver lesions (in fact, 2 out of the 3 independent readers reported higher scores for Orviglance)
2. Orviglance enhanced MRI provides improved diagnostic efficacy compared to MRI without a contrast agent using identical endpoints as in the ongoing pivotal Phase 3 study SPARKLE

→ *Robust evidence of the diagnostic value that Orviglance offers*

→ *Strengthens the data package to the regulatory authorities*

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COVID-19 CONTINUES TO AFFECT RECRUITMENT IN SPARKLE

Covid-19 impact

- Covid-19 has continued to be a challenge for clinical research globally since the outbreak early 2020
- Continued high infection rates in countries where SPARKLE is ongoing → negatively impacting study sites' ability and recruitment pace for clinical research
- Initiatives introduces to mitigate the impact from Covid-19 including the addition of clinical study sites

Extending estimated recruitment timeline

- In the context of the Covid-19 situation, the estimated recruitment timeline is extended up to 6 months into H1 2022 (previously H2-2021)

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PORTFOLIO

ORVIGLANCE (MANGORAL)

Liver diagnostic drug in ongoing Phase 3

ONCORAL

Daily oral chemotherapy ready for Phase 2

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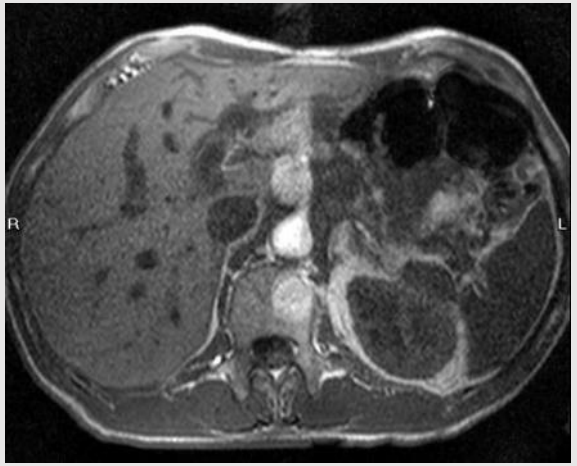
ORVIGLANCE (MANGORAL)– PHASE 3 LIVER MRI CONTRAST AGENT

NOVEL LIVER MRI CONTRAST AGENT

- Diagnostic drug for use in liver MRI scan to detect cancer
- Targeting patients at risk of potentially fatal side-effect from the current contrast agents on the market
- $500-600 million addressable market with Orviglance as the only gadolinium-free agent

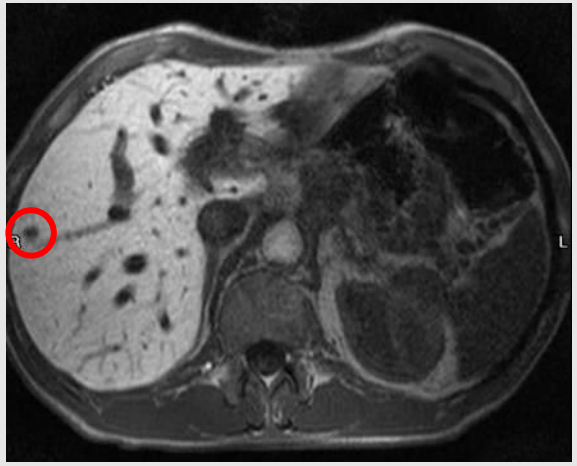
SOLID PROGRESS

- Strong clinical Phase 2 results (p-values <0.0001)
- Ongoing Global Phase 3 study
- Orphan Drug Designation from FDA



Liver MRI without contrast agent

No metastases visible



ORVIGLANCE enhanced liver MRI

Liver metastasis appear with Orviglance

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ONGOING PHASE 3 STUDY SPARKLE

PHASE 1 AND PHASE 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**

Re-read study vs. gadolinium contrast agent (GBCA)
(20 patients)

- Orviglance lesion visualization as effective as GBCA

PHASE 3 STUDY (ONGOING)

Patients	Global study, 200 patients No randomisation – each patient as own control
Comparator	Unenhanced MRI + Orviglance MRI vs. Unenhanced MRI
Endpoint	**Lesion visualization** • Lesion border delineation • Conspicuity
Follow-up	Less than a week

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COMMERCIAL OUTLOOK ORVIGLANCE

ORVIGLANCE MARKET OPPORTUNITY AND COMMERCIAL PREPARATIONS

- **Addressable market** of **$500-600 million**
- Decision makers **understand the value** that Orviglance provides
- **Launch preparations progress** with a strong case for own commercialization in the US
- **US office** opened in New Jersey
- **US patent** for second-generation Orviglance provides patent protection to **year 2040**

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CAPTURING US MARKET VALUE WITH OWN TEAM

perform regular liver MRIs in kidney impaired patients[1]

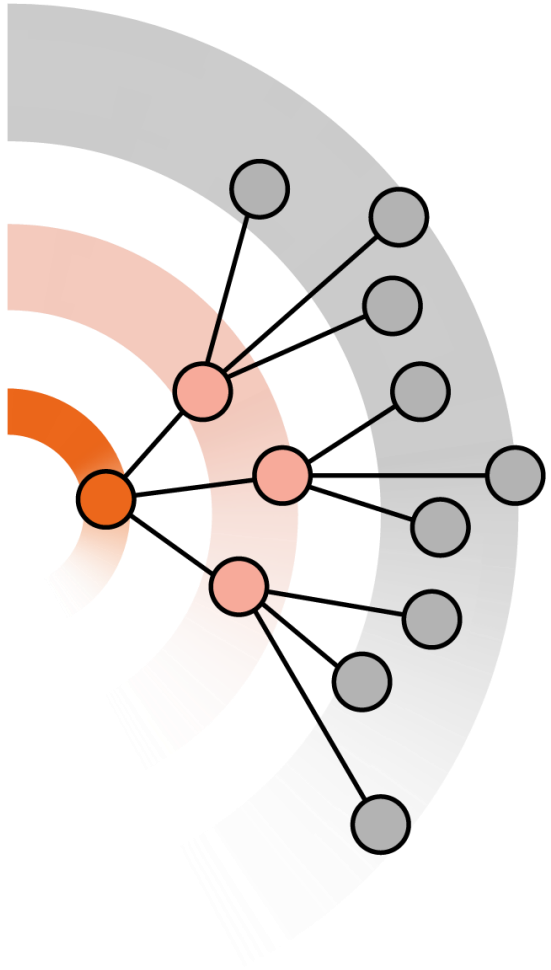
serve ~75% of kidney impaired patients[1]

reach priority decision makers

~2,000 RADIOLOGISTS

~400 CLINICS/ HOSPITALS

~20 FTE SALES TEAM



BUILDING AN ASCELIA U.S. TEAM

NJ offices

Cambrex manufacturing partner
RadMD imaging experts

BUILDING OUT U.S. FOOTPRINT

Sparkle Phase 3 study
at leading US sites

Sources:
1) Market research with Decision Resources Group, 2020

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PORTFOLIO

ORVIGLANCE (MANGORAL)

Liver contrast agent in ongoing Phase 3

ONCORAL

Daily oral chemotherapy ready for Phase 2

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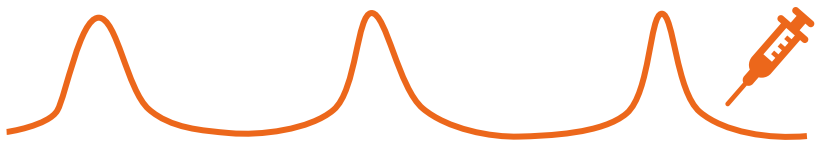
ONCORAL – IRINOTECAN CHEMOTHERAPY AS TABLET

TODAY – IV BOLUS INFUSION



- Widely used chemotherapy
- Established potent anti-tumour effect

UNMET NEEDS

- Toxicity and gastrointestinal side-effects common
- Sub-optimal compromise between tolerability and efficacy

TOMORROW – ONCORAL (ORAL, DAILY)

- Novel tablet formulation
- Enteric coating of active ingredient

POTENTIAL

- Improved efficacy driven by pharmacokinetic/dynamic profile
- Improved tolerability due to lower peak exposure with less severe side effects and manageable toxicity with flexible dosing

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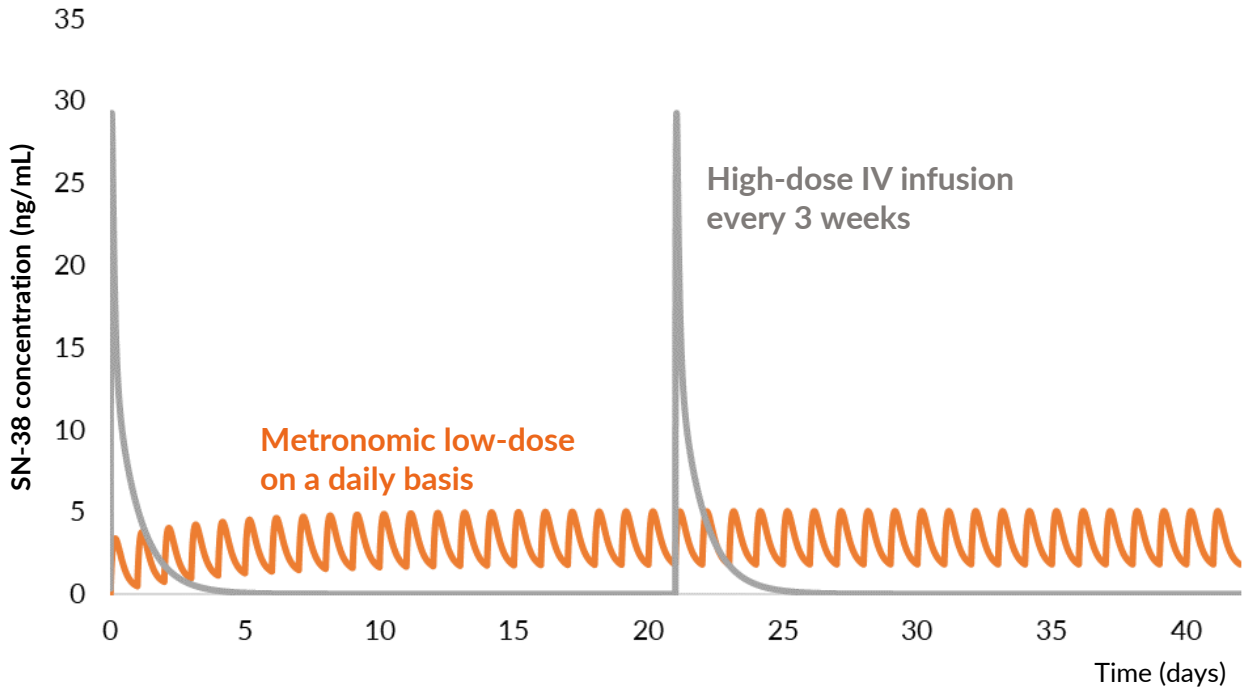
ONCORAL – WELL TOLERATED SAFETY PROFILE

PLASMA LEVELS OF IRINOTECAN



Source: Simulation of Oncoral vs. IV Camptosar performed by Pkxpert AB

Oncoral Phase 1 results

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

Infrequent high-dose IV irinotecan

Gastrointestinal and haematological side effects, ~30% severe or life-threatening (grade 3 or 4)[1]

Frequent (metronomic) low-dose irinotecan

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

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

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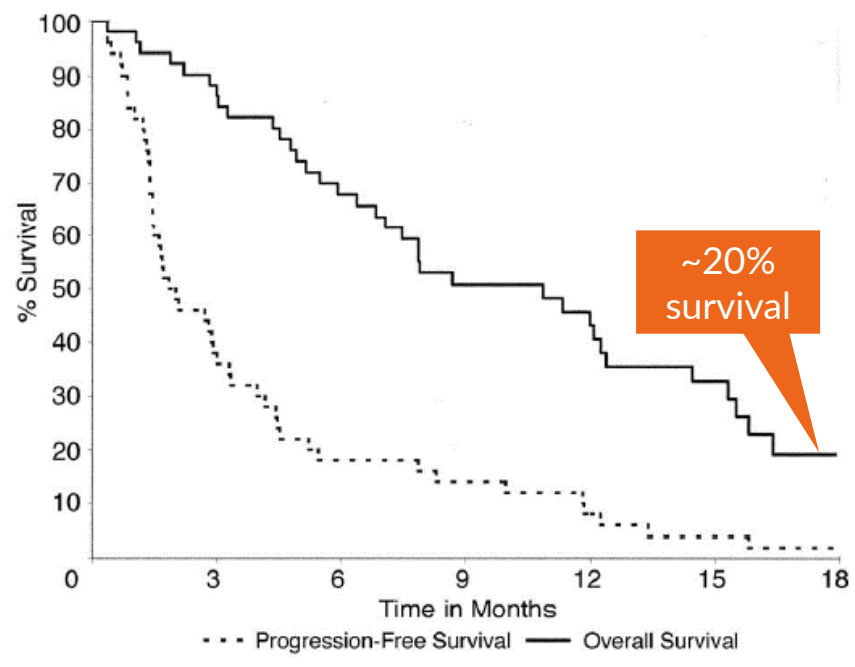
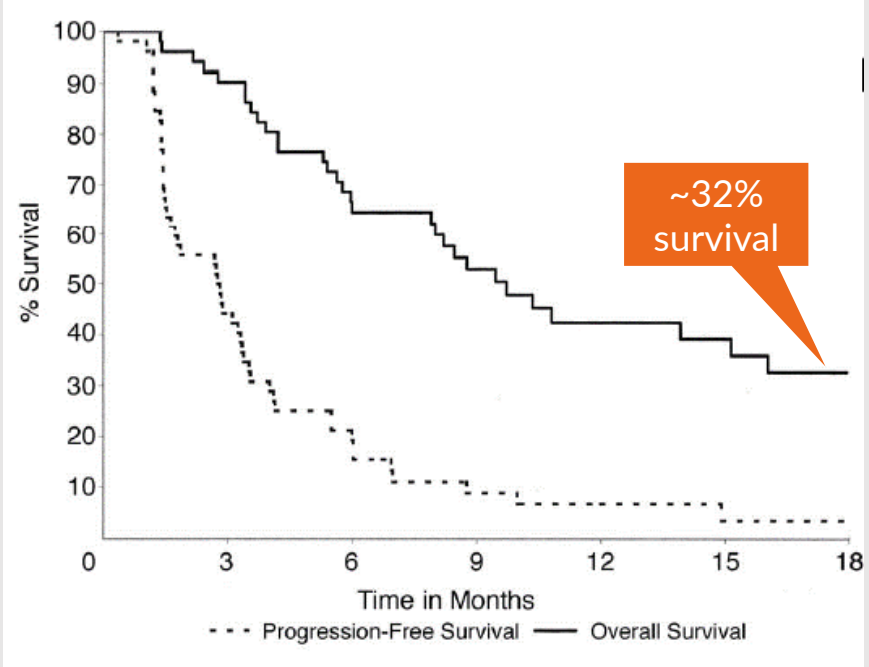
IMPROVING IRINOTECAN **EFFICACY** BY FREQUENT LOW DOSING

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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PHASE 2 – PREPARING TO START

OBJECTIVES OF PHASE 2

- Clinical proof-of-concept in metastatic gastric cancer
  - Potential orphan drug designation
  - Clinical guidelines support efficacy of irinotecan
- Compelling Phase 2 data package for further development
  - Potential for subsequent label expansion to other solid tumor indications

STUDY DESIGN

Type of study	Randomized controlled, multicentre, multinational study: Oncoral + Standard of Care vs. Standard of Care
Endpoints	**Primary:** Progression Free Survival **Secondary:** Response rate, PK, Safety and Overall Survival data in a follow up analysis
No. of patients	Approximately 100 patients
Study period	H2 2021 – 2024

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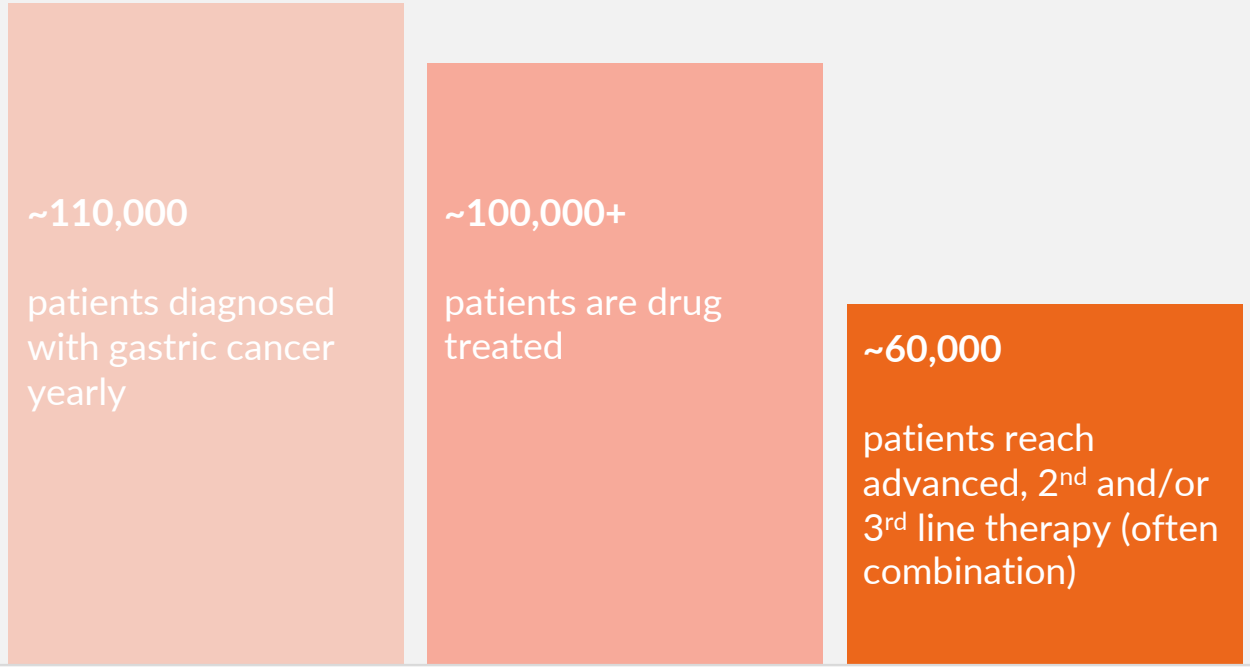
GASTRIC CANCER – A $3BN+ MARKET OPPORTUNITY

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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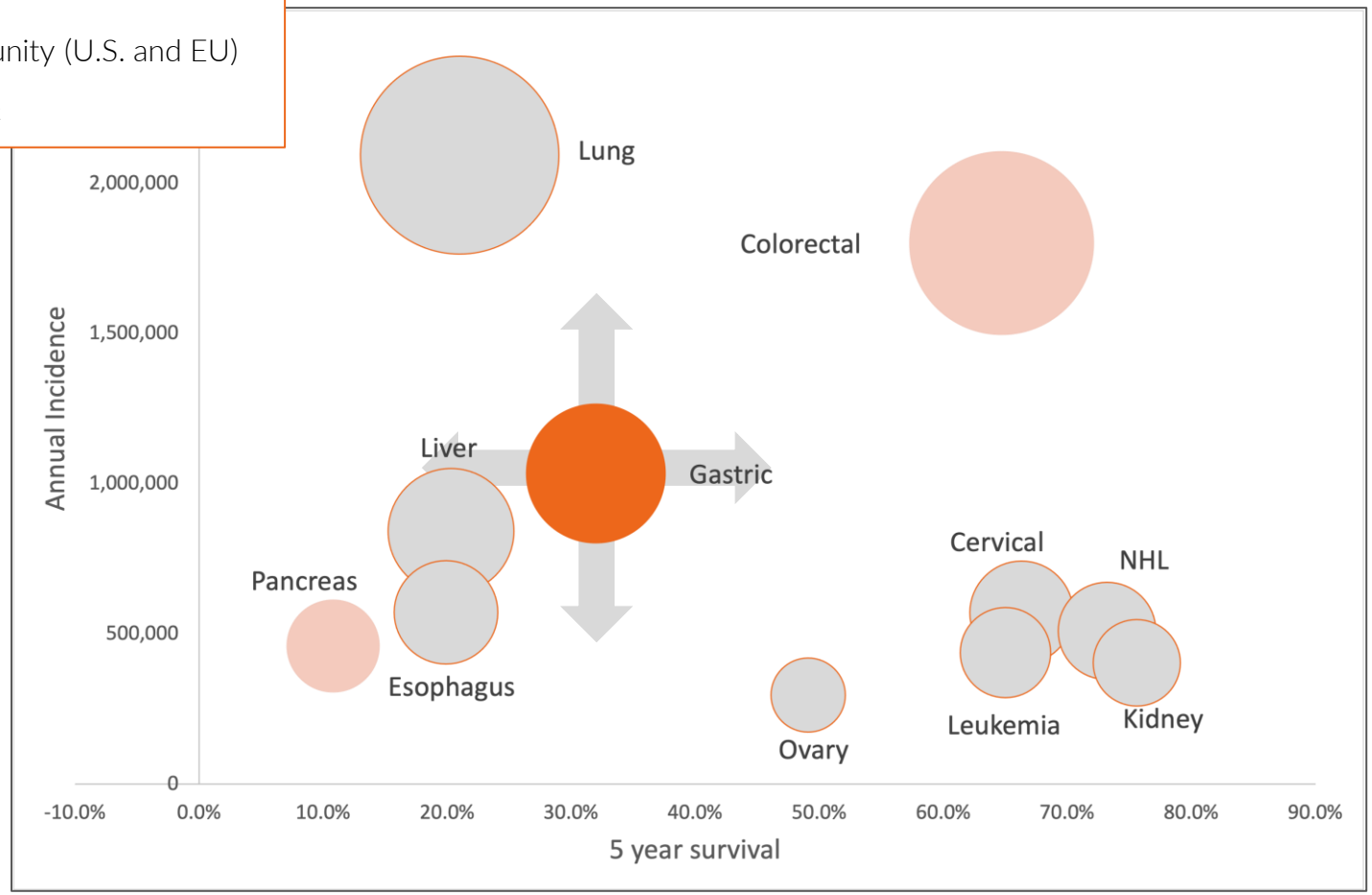
HIGH VALUE OPPORTUNITY IN GASTRIC CANCER AND EXPANSION

GASTRIC CANCER

- 3rd highest cancer deaths[1];
- Orphan opportunity (U.S. and EU)
- $3-4bn market[2]

Potential for oral, daily dosing of irinotecan



	Clinically demonstrated	NCCN recognized
Lung	✓	✓
Colorectal	Approved	
Gastric	✓	✓
Liver	✓	
Esophagus	✓	✓
NHL	✓	
Pancreatic	Approved	
Leukemia	✓	
Kidney	✓	
Cervical	✓	✓
Ovarian	✓	✓
Bone, Bile duct, CNS	✓	✓

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

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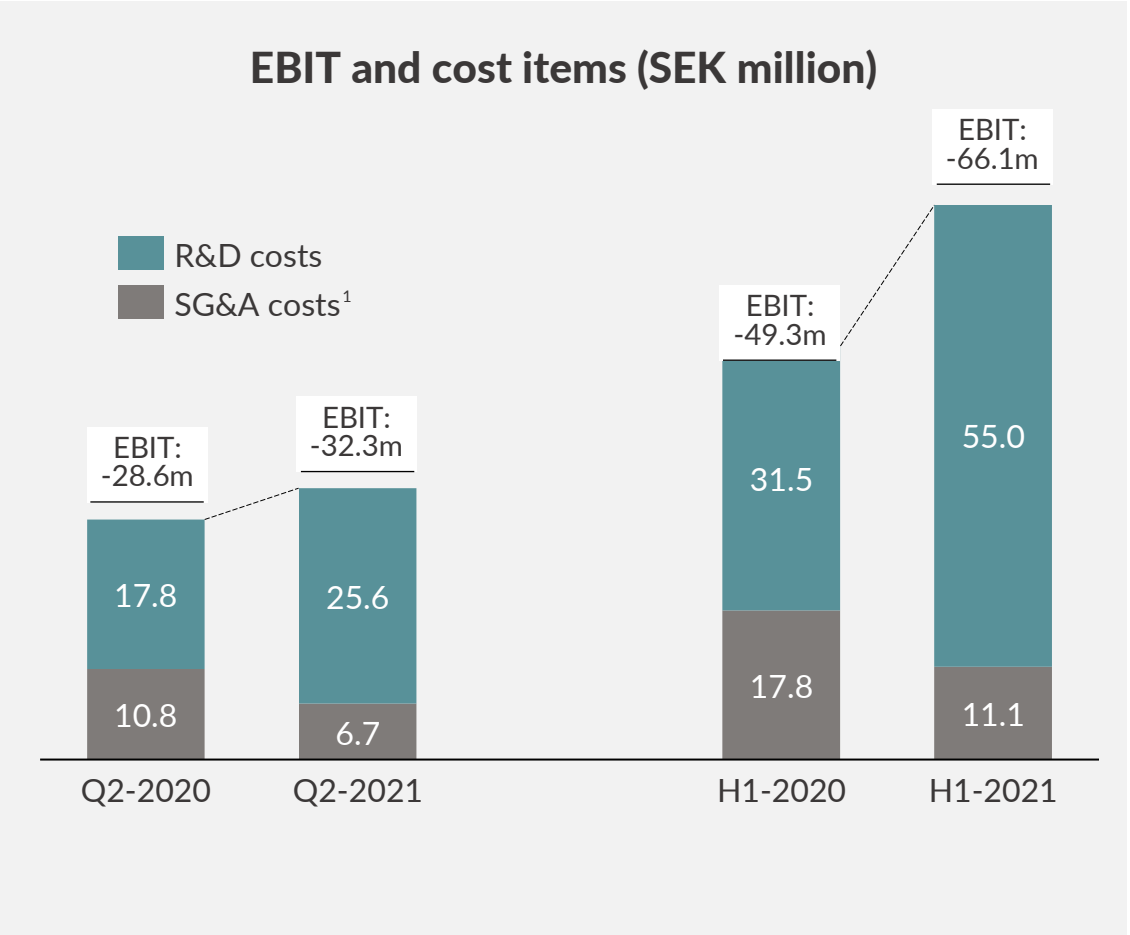
FINANCIALS AND PRIORITIES

FINANCIAL HIGHLIGHTS Q2 2021 – OPERATING RESULTS

Increased operating loss y/y mainly driven by higher R&D activity for Orviglance Phase 3 study:

- Clinical development
- Manufacturing preparations
- Regulatory preparations

- Also higher R&D costs y/y due to Oncoral Phase 2 preparations



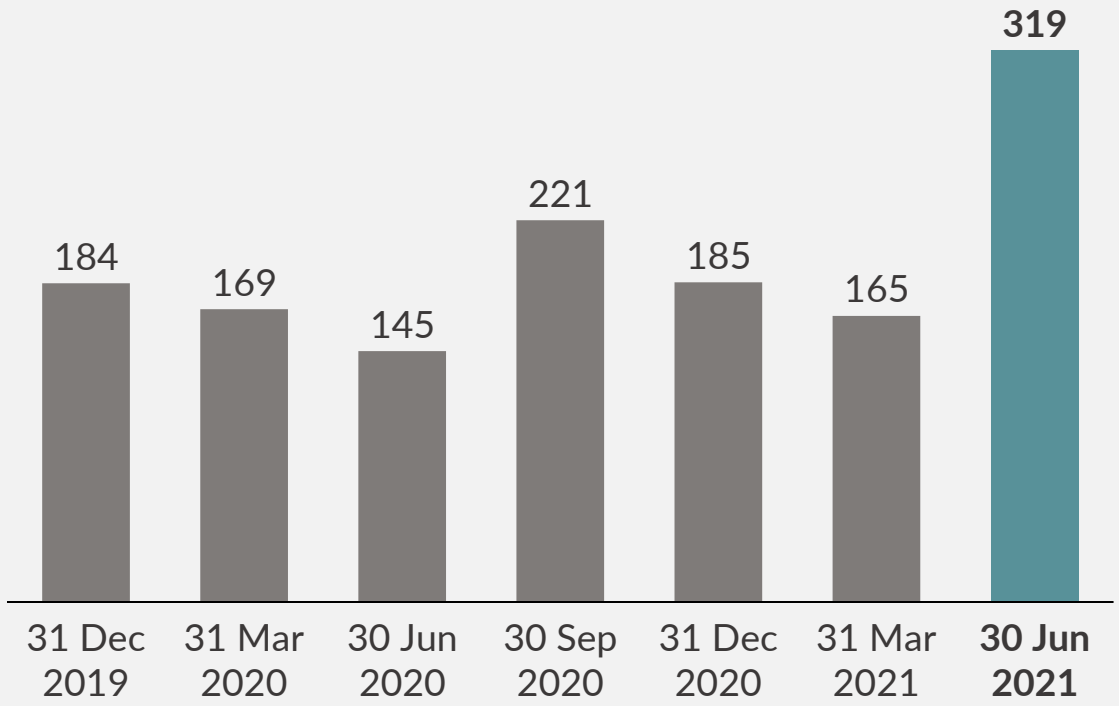
Notes:
1) Other operating income and other operating costs added to SG&A

FINANCIAL HIGHLIGHTS Q2 2021 – LIQUIDITY POSITION

Solid liquidity position:

- Liquid assets of 319 MSEK by 30 June 2021
- Liquidity strengthened in Q2-2021 from new share issuance of 200 MSEK (net proceeds of 187 MSEK)
- Current cash position provides financing well into 2023
- Liquidity mainly to be used for ongoing Phase 3 study SPARKLE, pre-commercial activities as well as Oncoral Phase 2 study

Liquid assets including marketable securities (SEK million)



PRIORITIES

- Complete Orviglance Phase 3 patient enrolment (timeline could be extended into H1-2022)[1]
- Prepare for Orviglance launch (planned for H2-2023)[1]
- Initiate Phase 2 study for Oncoral (planned start in H2-2021)

1) Timelines incorporate the currently assessed impact from Covid-19. An extended Covid-19 situation may further affect timelines.

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