PRESENTATION OF Q1-2021 REPORT

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ASCELIA PHARMA – ADVANCING ORPHAN ONCOLOGY

MANGORAL

- Diagnostic drug for liver MRI in population subset
- Global Phase 3 study ongoing
- $500-600M annual addressable market with no competition

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 Mangoral

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

MANGORAL in Phase 3

ONCORAL Phase 2 ready

WITH GLOBALLY LEADING PRODUCTS AND A PROMISING PIPELINE

MANGORAL launch in the US

ONCORAL phase 2 near completion

Pipeline expansion?

2021 2022 2023

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RECENT KEY EVENTS

Q1-2020

Jan Presentation of clinical development plan for Oncoral

Mar Opening of US office in preparation for Mangoral launch

Mar Capital raise of 200 MSEK (gross proceeds) to be used for: Oncoral Phase 2 and Mangoral pre-launch activities

PORTFOLIO

MANGORAL

Liver diagnostic drug in ongoing Phase 3

ONCORAL

Daily oral chemotherapy ready for Phase 2

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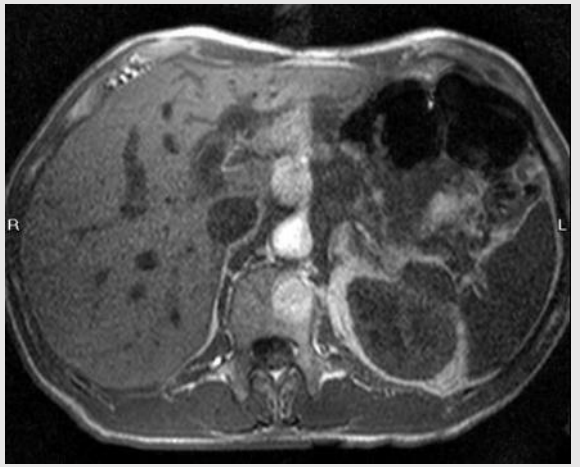
MANGORAL – LIVER MRI CONTRAST AGENT IN PHASE 3

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
- $500-600M addressable market with no competition

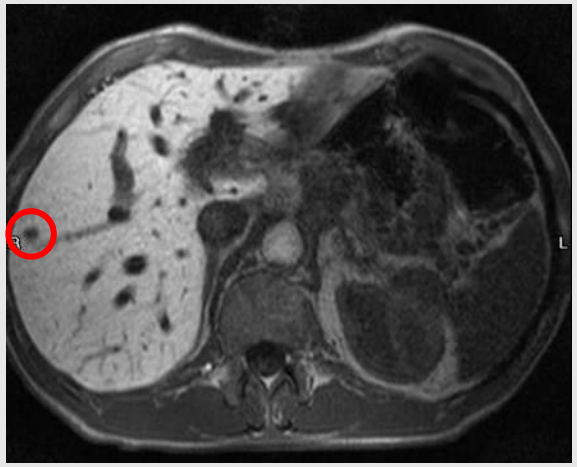
SOLID PROGRESS

- Strong clinical Phase 2 results (p-values <0.0001)
- Ongoing Phase 3 – expected completion H2-2021
- Orphan Drug Designation from FDA



Liver MRI without contrast agent

Standard of care today in target population



MANGORAL enhanced liver MRI

Liver metastasis appear with Mangoral

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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)

- Mangoral 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 + Mangoral MRI vs. Unenhanced MRI
Endpoint	**Lesion visualization** • Lesion border delineation • Conspicuity
Follow-up	Less than a week

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COMMERCIAL OUTLOOK MANGORAL

MANGORAL MARKET OPPORTUNITY AND COMMERCIAL PREPARATIONS

- **Addressable market** of **$500-600 million** with no competition
- Decision makers **understand the value** that Mangoral 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 Mangoral provides patent protection to **year 2040**

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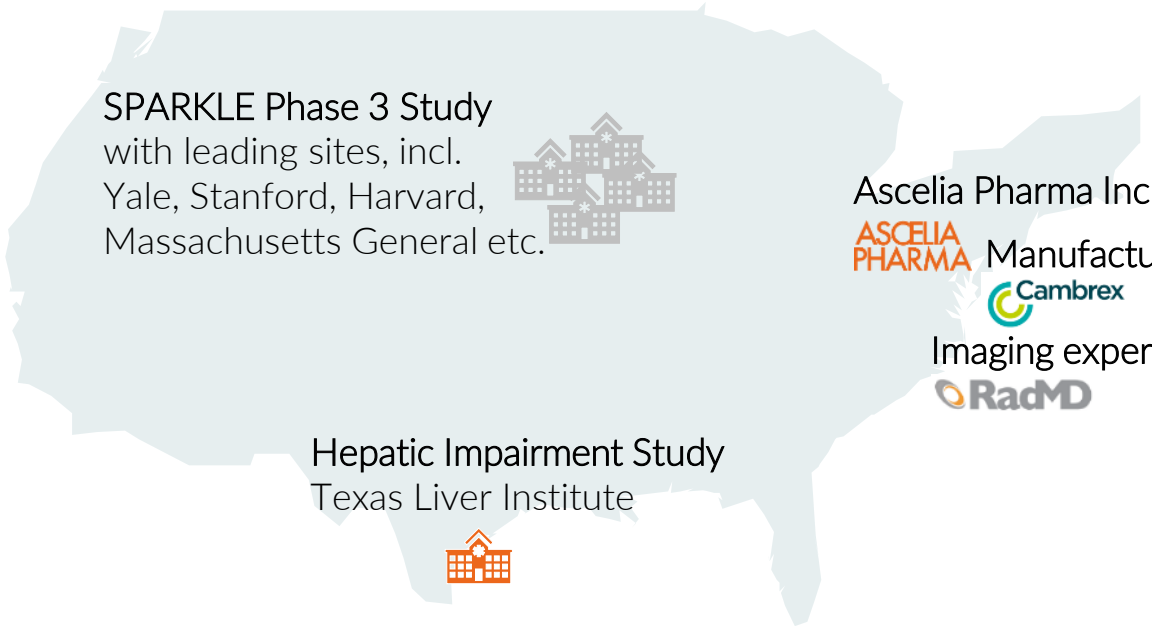
CAPTURING US MARKET VALUE WITH OWN TEAM

STRONG FOOTPRINT IN THE US



SPARKLE Phase 3 Study
with leading sites, incl.
Yale, Stanford, Harvard,
Massachusetts General etc.

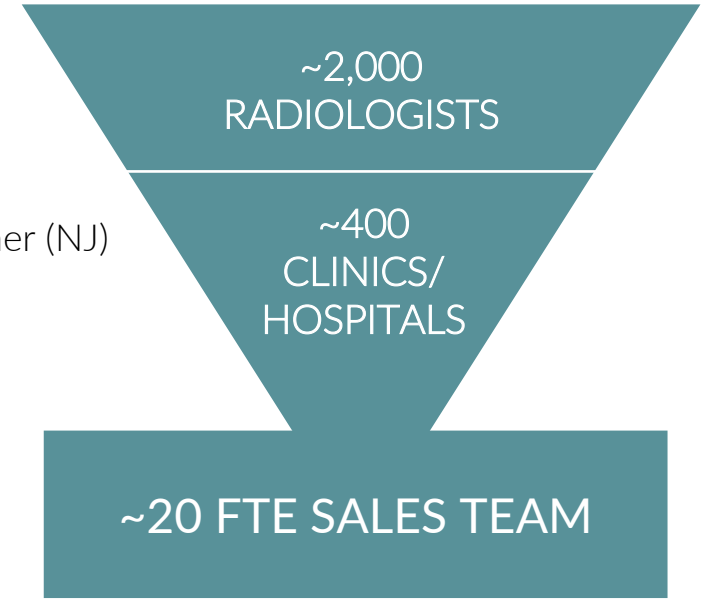
Ascelia Pharma Inc. (NJ)

Manufacturing partner (NJ)

Imaging experts (NY)

Hepatic Impairment Study
Texas Liver Institute

BUILDING AN ASCELIA US TEAM



perform regular liver MRIs in kidney impaired patients[1]

serve ~75% of kidney impaired patients[1]

reach priority decision makers

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

PORTFOLIO

MANGORAL

Liver contrast agent in ongoing Phase 3

ONCORAL

Daily oral chemotherapy ready for Phase 2

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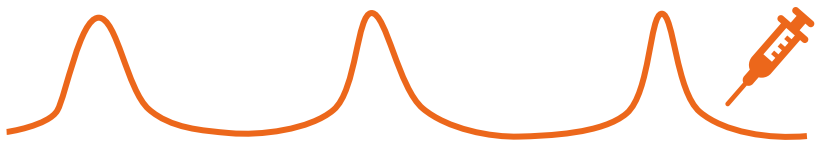
ONCORAL – IRINOTECAN CHEMOTHERAPY AS TABLET

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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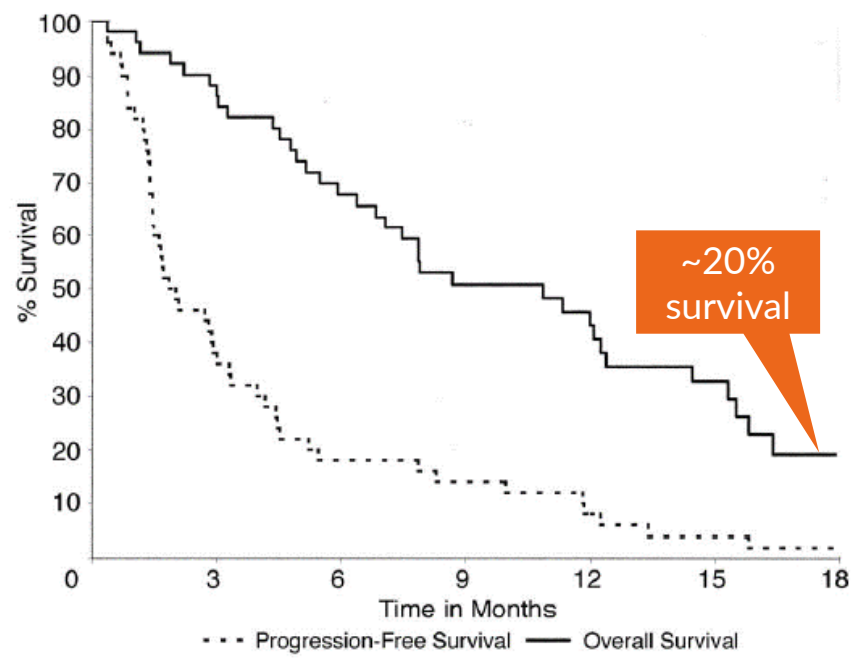
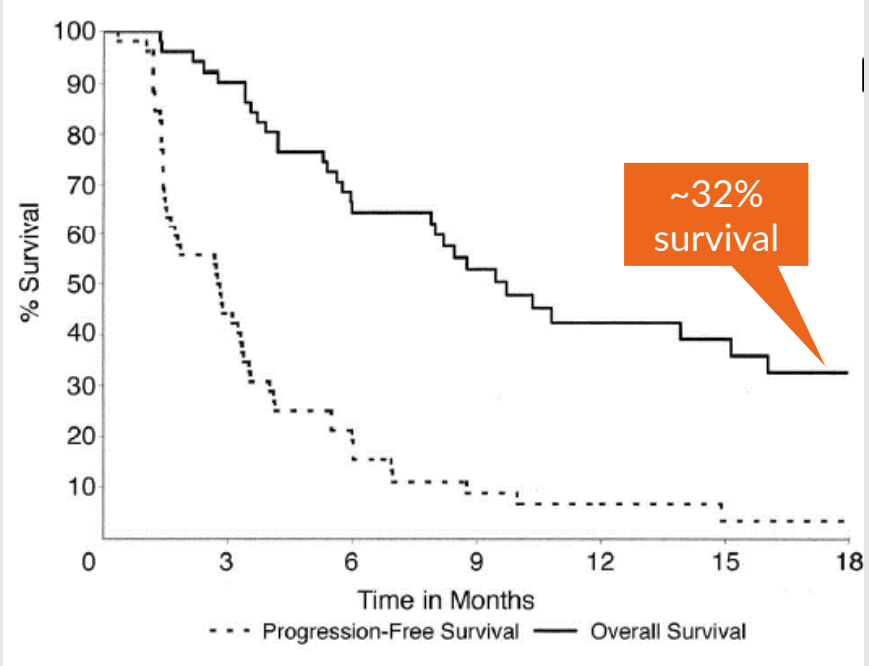
IMPROVING IRINOTECAN **EFFICACY** BY FREQUENT LOW DOSING

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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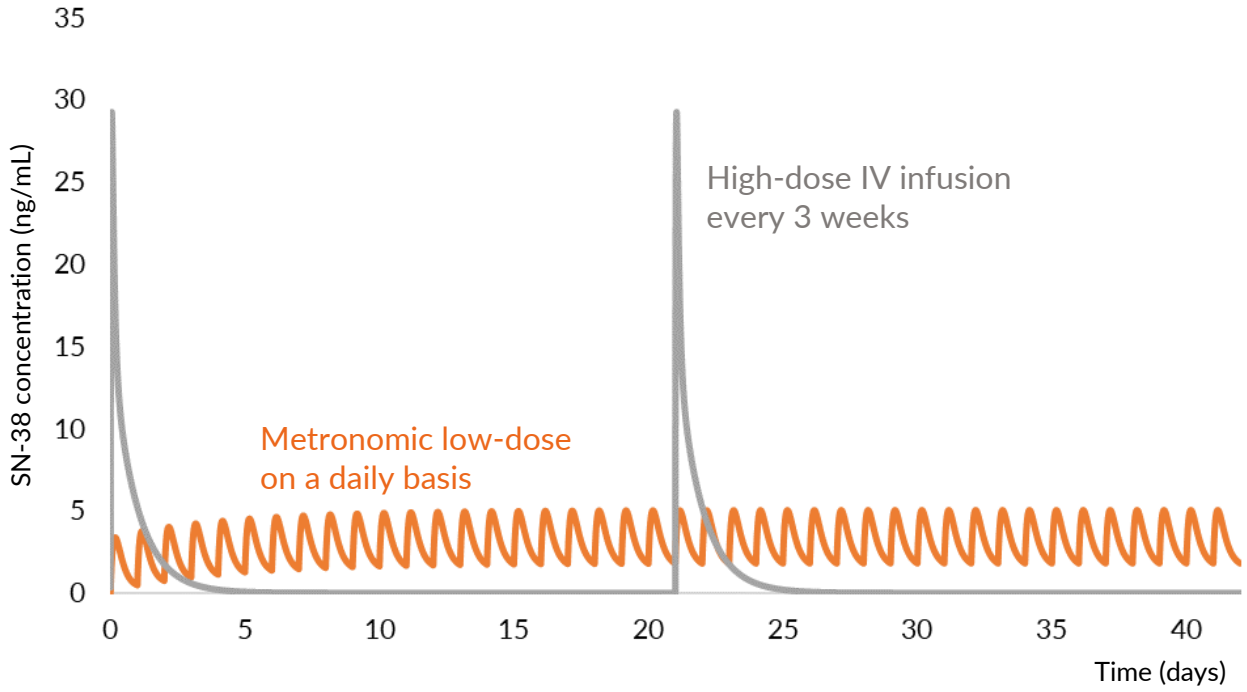
IMPROVING IRINOTECAN **TOLERABILITY** BY FREQUENT LOW DOSING

PLASMA LEVELS OF IRINOTECAN



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

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

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

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

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ONCORAL SCIENTIFIC ADVISORY BOARD

Prof Josep Tabernero, MD, PhD

Head of the Medical Oncology Department at the Vall d'Hebron Barcelona Hospital Campus, Director of the Vall d'Hebron Institute of Oncology (VHIO), and Professor of Medicine

President (2018 – 2019) of ESMO and an Executive Board and Council Member

Prof Eric Van Cutsem, MD, PhD

Professor and Division Head of Digestive Oncology at University of Leuven (KUL) and University Hospitals Gasthuisberg, Leuven, Belgium

Co-founded ESMO GI/World Congress on GI Cancer. Serves/served on the board/ committee of ESMO, ASCO, ENET, EORTC, ECCO, ESDO

Prof Jaffer A Ajani, MD

Department of Gastrointestinal Medical Oncology, Division of Cancer Medicine, The University of Texas MD Anderson Cancer Center, Houston, USA

Chairs the NCCN committee for gastroesophageal cancers

Prof Jeff Evans, MD

Professor of Translational Cancer Research and Clinical Lead of the Institute of Cancer Sciences, University of Glasgow

Member of the NCRN Upper GI Cancer Pancreatic Cancer and Gastro-Oesophageal Cancer sub-groups

Joint view that Oncoral would be an important treatment option for cancer patients, especially in later disease stages

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PHASE 2 – STUDY IN PREPARATION

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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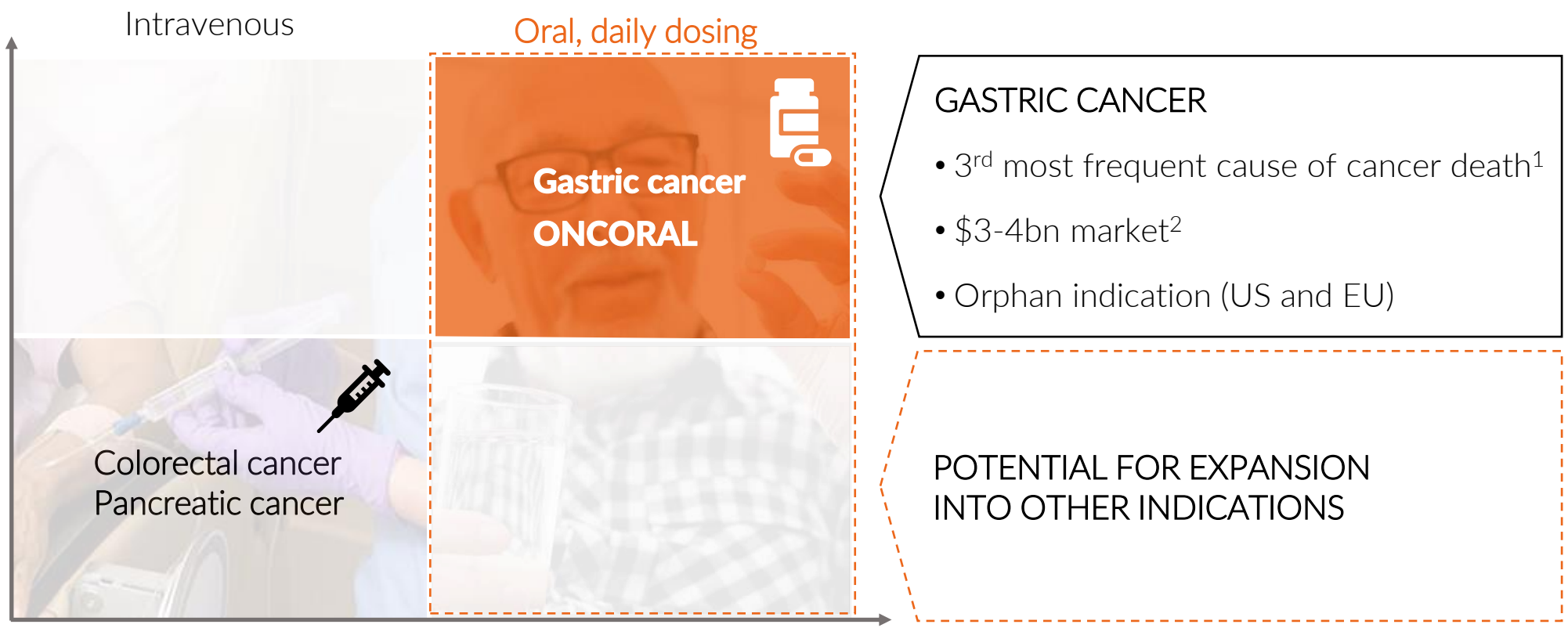
HIGH VALUE OPPORTUNITY IN GASTRIC CANCER



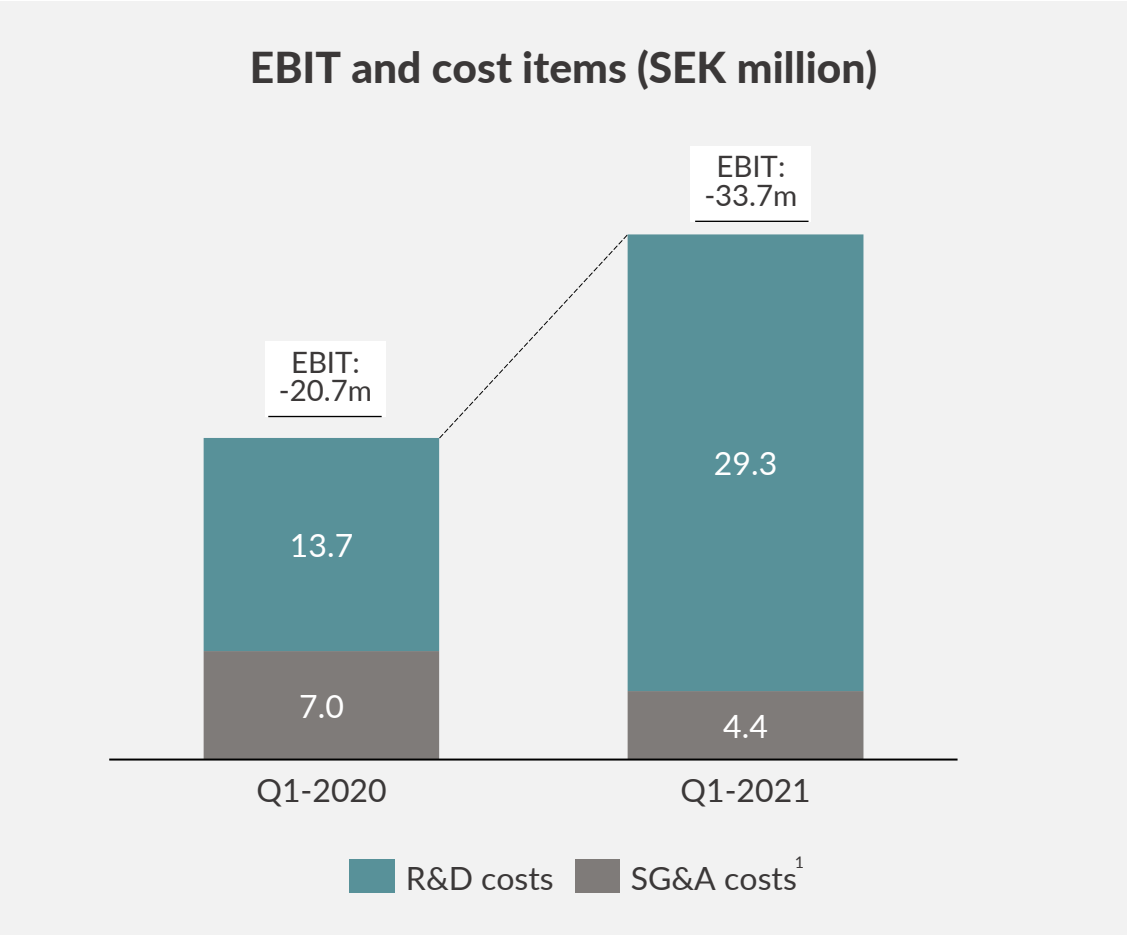
1) International Agency for Research on Cancer (IARC, 2021
2) GlobalData - Gastric and Gastroesophageal Junction Adenocarcinoma – Global Drug Forecast and Market Analysis to 2024

FINANCIALS AND PRIORITIES 2021

FINANCIAL HIGHLIGHTS Q1 2021 – OPERATING RESULTS

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

- Clinical development
- Manufacturing preparations
- Regulatory preparations



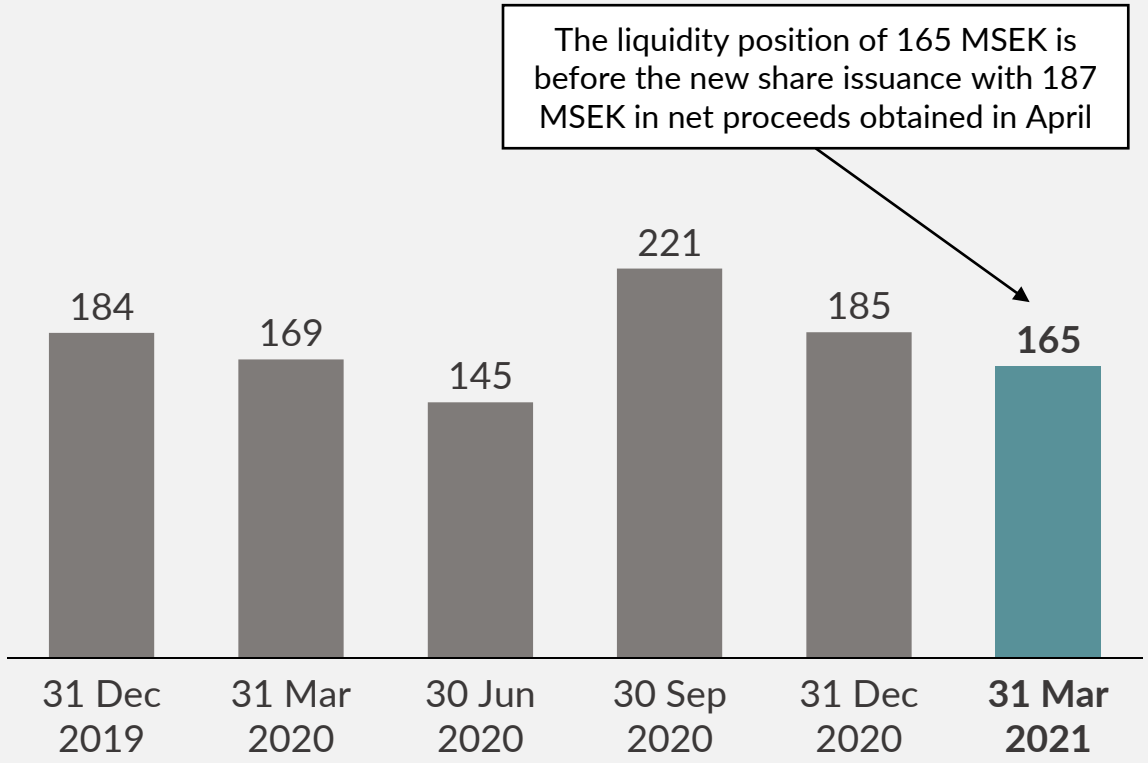
Notes:
1) Other operating income and other operating costs included into SG&A

FINANCIAL HIGHLIGHTS Q1 2021 – LIQUIDITY POSITION

Solid liquidity position:

- Liquid assets of 165 MSEK by 31 March 2021
- New share issuance of 200 MSEK with net proceeds of 187 MSEK obtained in April 2021 following EGM approval
- Liquidity mainly to be used for Mangoral clinical Phase 3 and pre-commercial activities as well as Oncoral Phase 2

Liquid assets including marketable securities (SEK million)



PRIORITIES 2021

- Complete Mangoral Phase 3 patient enrolment (top line results planned for 2H 2021)[1]
- Prepare for Mangoral launch (planned Q4-2022 – H1-2023)[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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