ASCELIA PHARMA

ADVANCING
ORPHAN ONCOLOGY

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COMPANY PRESENTATION

JANUARY 2021

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ASCELIA PHARMA – ADVANCING ORPHAN ONCOLOGY

IMPROVING THE LIFE OF PEOPLE WITH RARE ONCOLOGY-RELATED CONDITIONS

CURRENT ASSETS

Mangoral

- Contrast agent for liver MRI in subset of overall population (Orphan Drug)
- Global Phase 3 study (ongoing)

Oncoral

- Novel daily chemotherapy tablet ready for Phase 2
- Focus on gastric cancer; potential in other cancer types

CAPABILITIES

People & Partners

- Strong experienced team
- World class network of global KOLs and advisors

Financial

- Fully financed to reach key value creating milestones
- Listed on NASDAQ Stockholm

A CLINICAL STAGE PORTFOLIO WITH CLEAR MARKET PATHWAY

Drug candidate	Indication	Phase 1	Phase 2	Phase 3	Filing	Market
Mangoral • Novel manganese-based imaging drug • Orphan Drug Designation (FDA) • No competing drugs • $500-600M addressable market	Detection and visualization of focal liver lesions	✓	✓	Ongoing 2020 – H2 2021	H1 2022	Q4 2022-H1 2023
Oncoral • Novel daily chemotherapy (irinotecan) • Promising phase 1 study results • Gastric cancer orphan disease	Gastric cancer treatment; expansions to other solid cancers	✓	2H 2021-2024			

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BUILDING ASCELIA PHARMA AND BUILDING VALUE

Building a commercial stage pharma company with globally leading products and a promising pipeline

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Mangoral in Phase 3
Oncoral Phase 2 ready

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Mangoral launch in the US
Oncoral Phase 2 near closing
Pipeline expansion?

2020 2021 2022 2023

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RECENT KEY EVENTS

2020

Sep	First commercial scale production of Mangoral
Oct	Raised estimate for Mangoral addressable market
Nov	Mangoral eligible for centralized EU regulatory procedure
Dec	Mangoral is as effective as gadolinium (new study)
Dec	US patent for second-generation Mangoral

2021

Jan	Presentation of clinical development plan for Oncoral

PORTFOLIO

MANGORAL

Liver MRI contrast agent in ongoing Phase 3

ONCORAL

Daily chemotherapy ready for Phase 2

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CLEAR UNMET MEDICAL NEED

TODAY

NORMAL KIDNEY FUNCTION
Gadolinium contrast agent

POOR KIDNEY FUNCTION
NO contrast agent
(regulatory black box warnings)

Severe and potentially deadly side-effects
(Nephrogenic Systemic Fibrosis)

TOMORROW

NORMAL KIDNEY FUNCTION
Gadolinium contrast agent

POOR KIDNEY FUNCTION
MANGORAL contrast agent
(based on manganese)

Mangoral aims to be the standard of care liver MRI contrast agent

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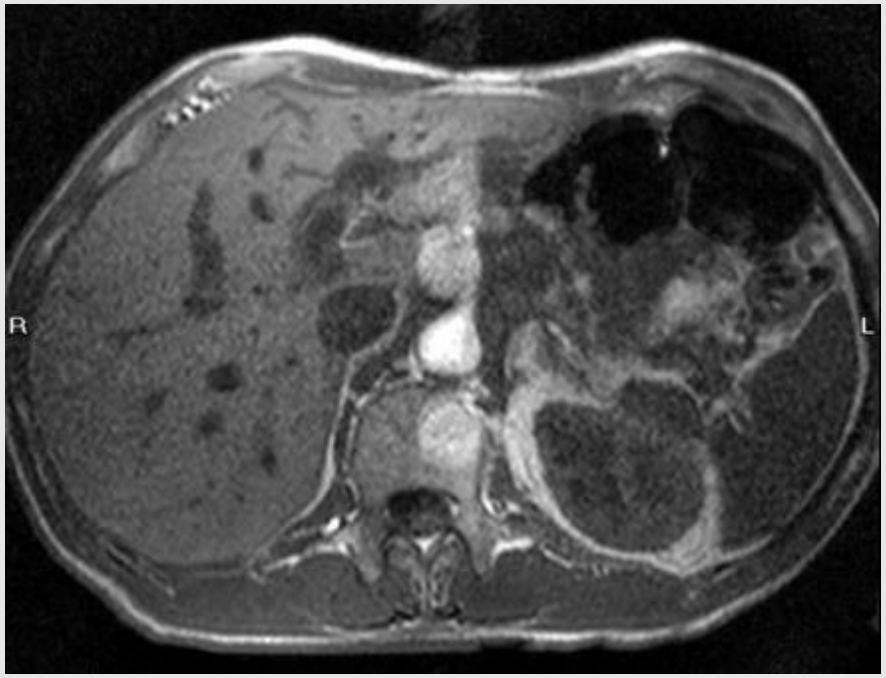
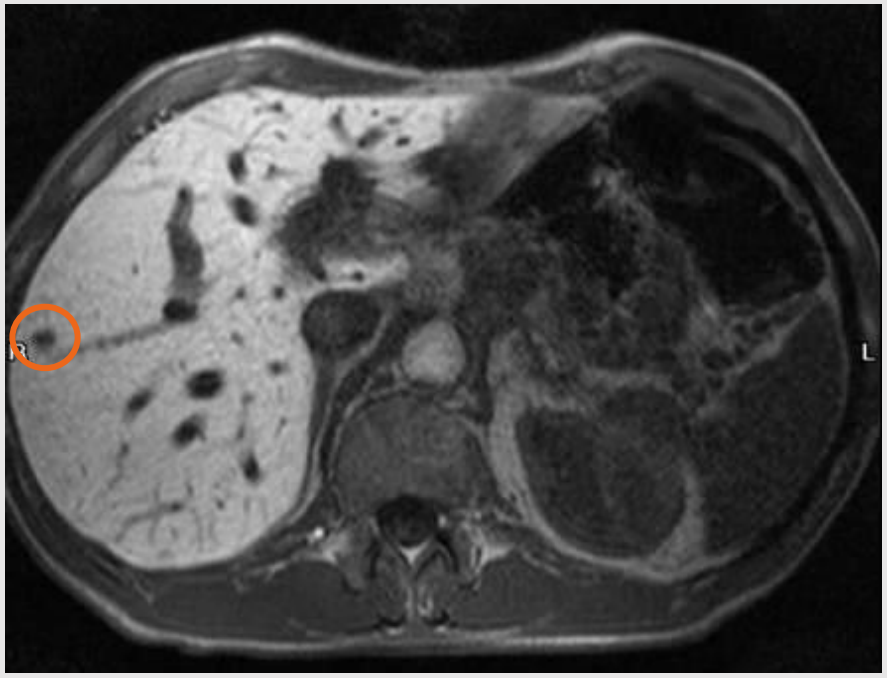
SAFE AND EFFECTIVE FOR LIVER MRI

PATIENT EXAMPLE FROM PHASE 2 STUDY



UNENHANCED liver MRI

Standard of care today in target population



MANGORAL enhanced liver MRI

Liver metastasis appear with Mangoral

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

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ONGOING PHASE 3 STUDY SPARKLE

PHASE 1 AND PHASE 2 RESULTS

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
(20 persons)

- Mangoral as effective as gadolinium

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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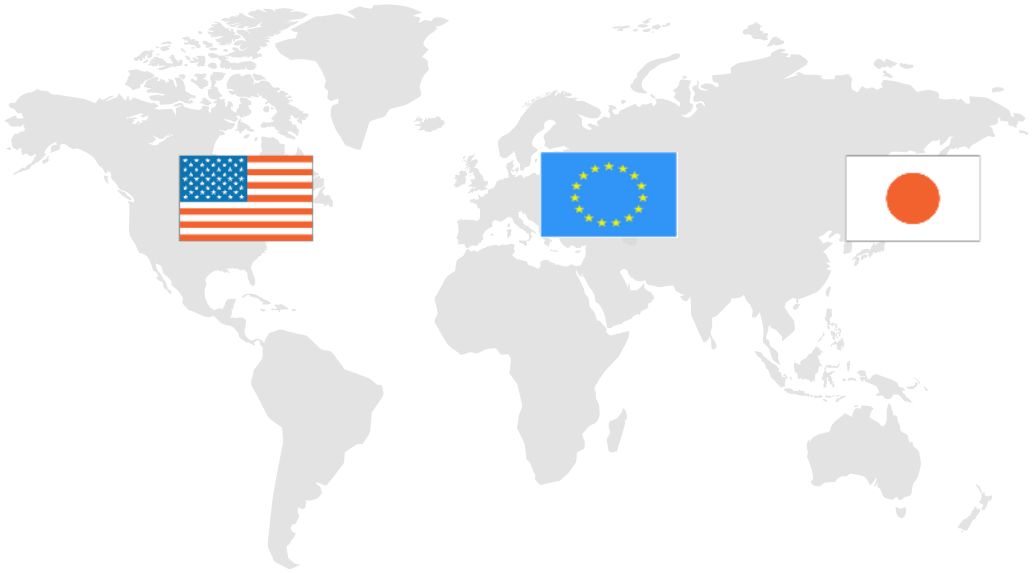
ADDRESSABLE MARKET OF $500-600 MILLION

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

- Large markets with mature clinical practices
- Clear regulatory and market access pathway



ESTIMATE BASED ON:

- Patients with primary liver cancer or liver metastases and severe kidney impairment (4% of total population)
- 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) Market research with Decision Resources Group, 2020
2) Market research and analyses with Revenue Reimbursement Solutions and Charles River Associates, 2020

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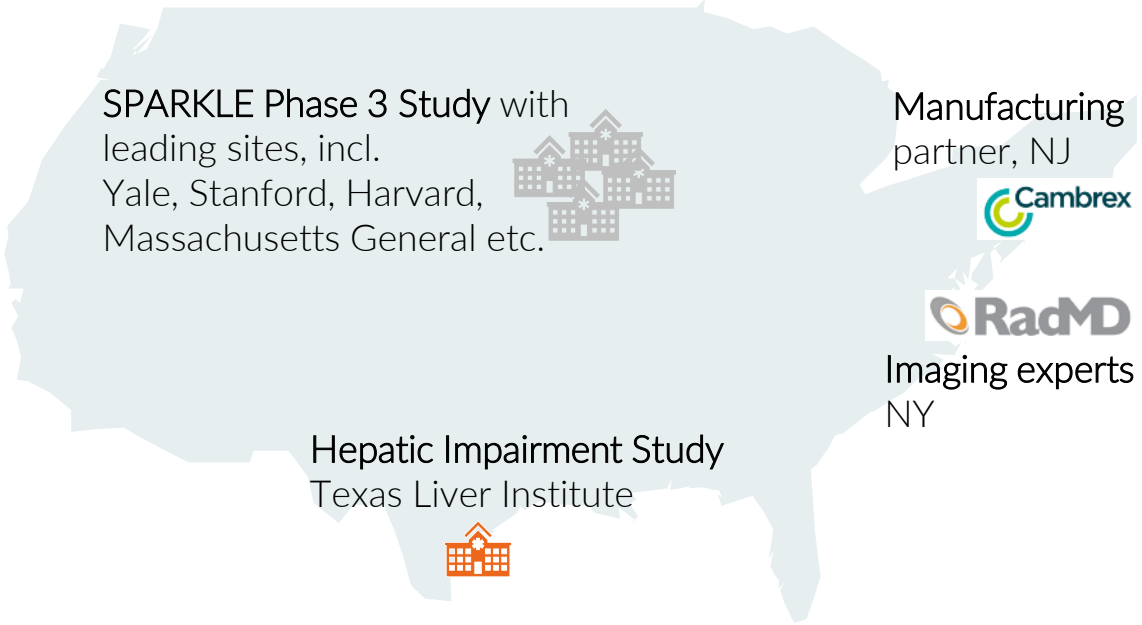
CAPTURING US MARKET VALUE WITH OWN TEAM

STRONG FOOTPRINT IN THE US



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

Manufacturing partner, NJ

Cambrex

RadMD

Imaging experts NY

Hepatic Impairment Study
Texas Liver Institute

BUILDING AN ASCELIA US TEAM

Sales team	~20 FTEs reach priority accounts & physicians
Clinic/ Hospitals	**Reachable hospitals/clinics** ~400 serve ~75% of kidney impairment patients[1]
Physicians	**Radiologists main clinical decision makers** ~2,000 radiologists perform regular liver MRIs in patients with kidney impairment[1]

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PORTFOLIO

MANGORAL

Liver MRI contrast agent in ongoing Phase 3

ONCORAL

Oral, daily chemotherapy ready for Phase 2

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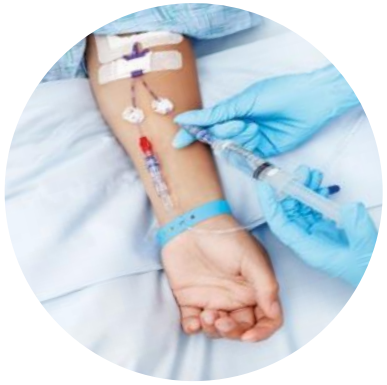
ONCORAL – IRINOTECAN AS TABLET

INTRAVENOUS BOLUS INFUSION

TODAY



IRINOTECAN IV

- Widely used chemotherapy
- Established potent anti-tumor effect

ONCORAL – ORAL, DAILY DOSING

TOMORROW

IRINOTECAN TABLET

Solid composition

Enteric coating

ONCORAL IRINOTECAN POTENTIAL

- Better efficacy
- Improved safety
- Convenient and cost effective

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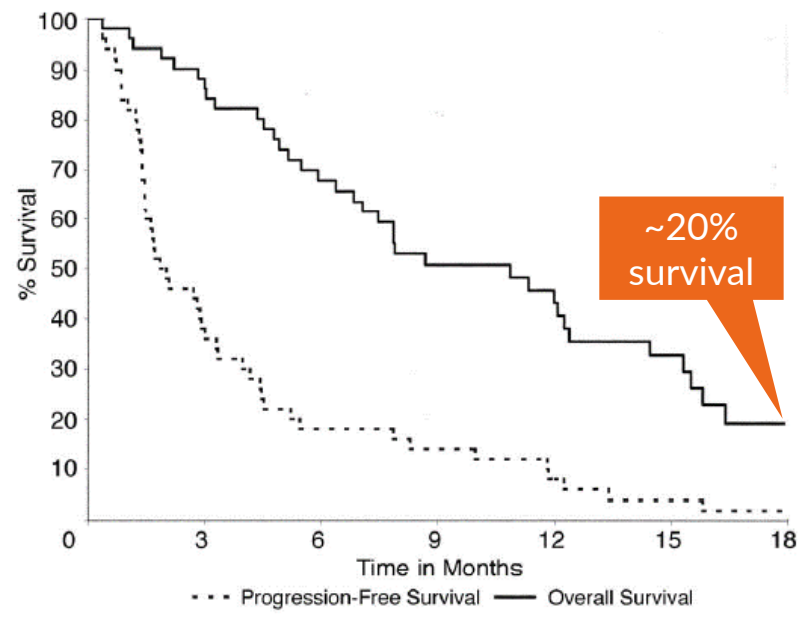
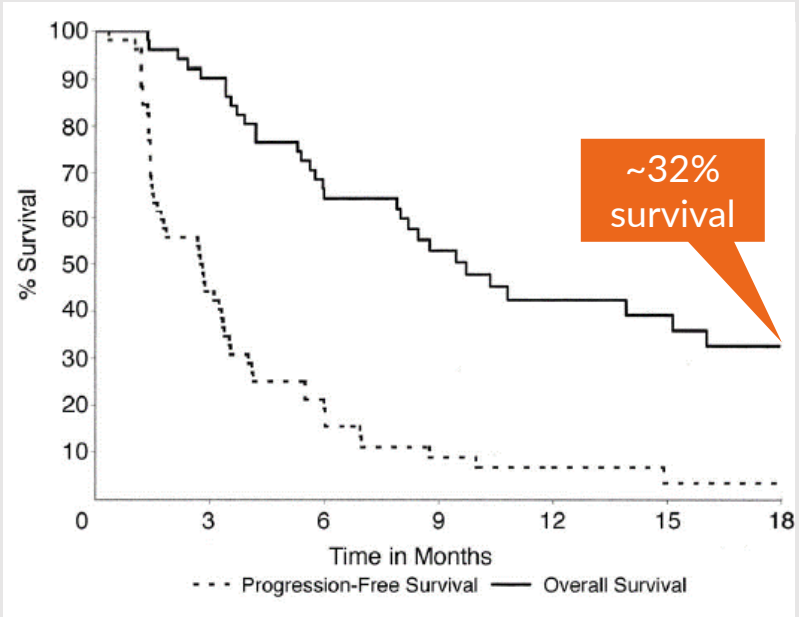
IMPROVED OVERALL SURVIVAL WITH FREQUENT DOSING

STUDY: IRINOTECAN DOSING EVERY THIRD WEEK VS. WEEKLY DOSING[1]

Every 3 weeks (IV)



Weekly (IV)



CONCLUSIONS

Overall survival improved from 20% with irinotecan dosing every 3 weeks to 32% with weekly dosing

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

ONCORAL PHASE 1

Stable disease even in patients previously treated with IV irinotecan

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 - STUDY IN PREPARATION

OBJECTIVES OF PHASE 2

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

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

FINANCIALS

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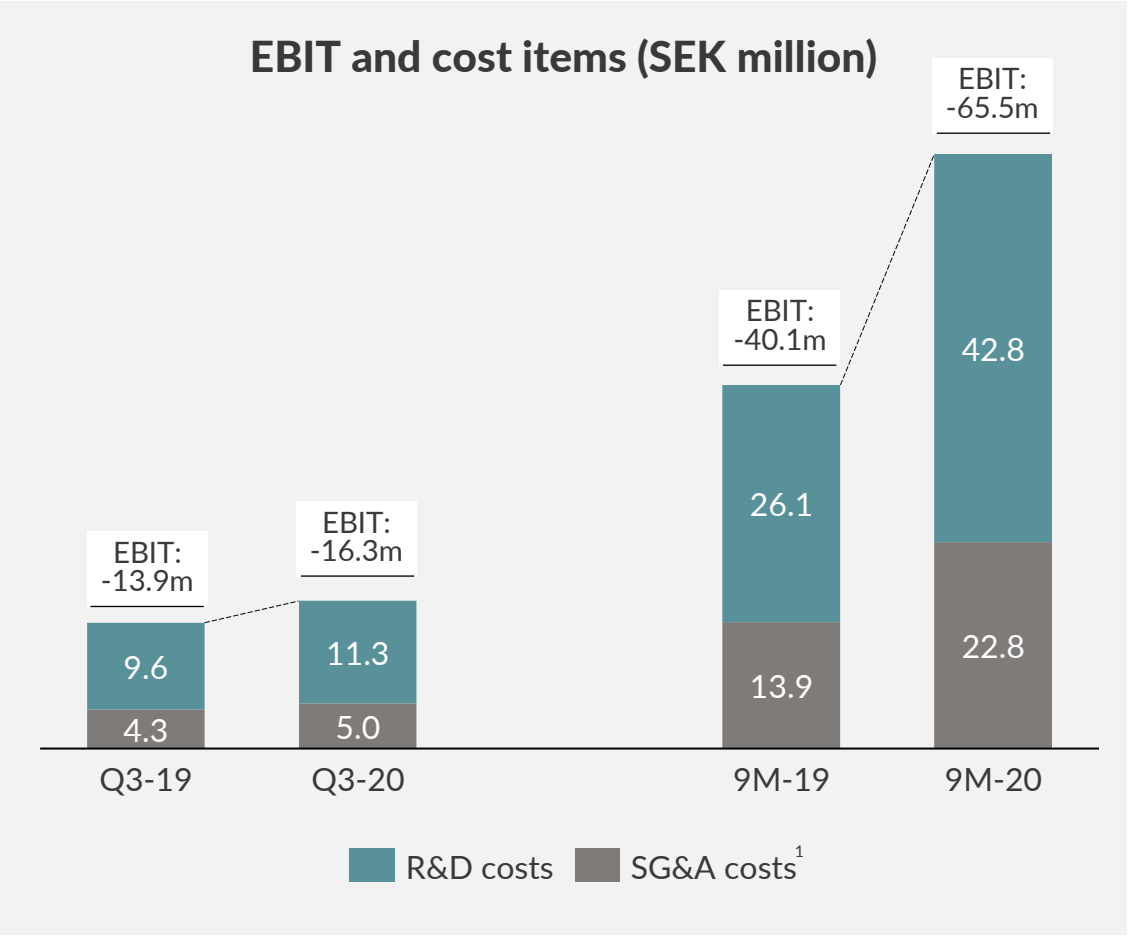
FINANCIAL HIGHLIGHTS Q3 2020 – OPERATING RESULTS

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

- Clinical development
- Manufacturing preparations
- Regulatory preparations

… And higher costs for commercial preparations for Mangoral (forming part of Selling, General & Administrative costs)



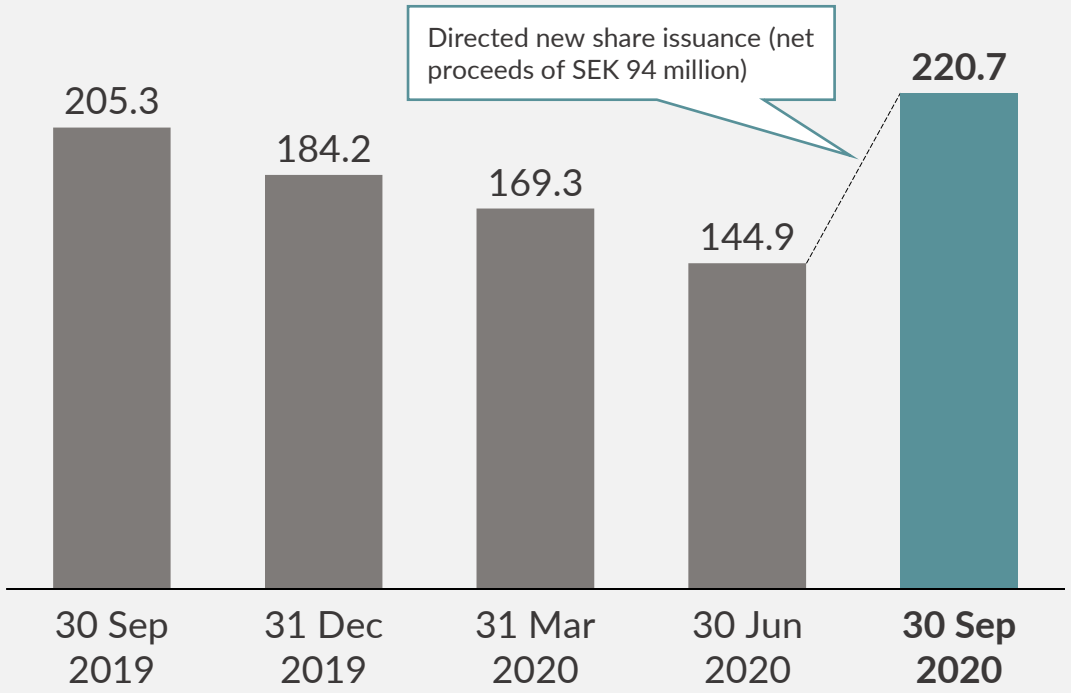
Notes:
1) Other operating income and other operating costs included into SG&A

FINANCIAL HIGHLIGHTS Q3 2020 – LIQUIDITY POSITION

Solid liquidity position:

- Liquid assets incl. marketable securities of SEK 221 million per 30 September 2020
- Liquidity strengthened by the directed share issue (funds received in July 2020)
- Liquidity mainly to be used for Mangoral clinical Phase 3 and pre-commercial activities
- The liquidity position will take Ascelia Pharma into 2022 and consequently beyond the clinical milestone with topline Phase 3 from SPARKLE, which is expected in H2-2021

Liquid assets including marketable securities (SEK million)



PRIORITIES AND SUMMARY

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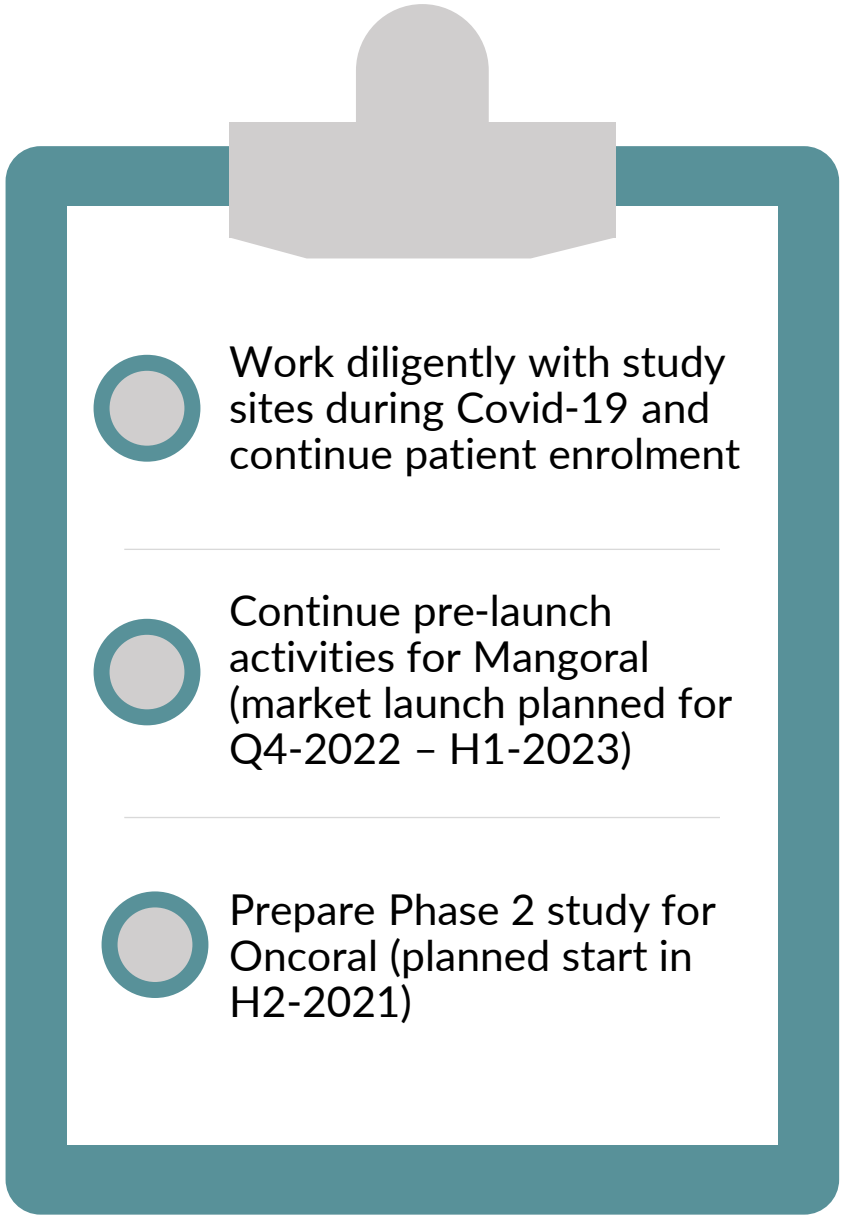
Priorities


Work diligently with study sites during Covid-19 and continue patient enrolment
Continue pre-launch activities for Mangoral (market launch planned for Q4-2022 – H1-2023)
Prepare Phase 2 study for Oncoral (planned start in H2-2021)

ASCELIA PHARMA IN SUMMARY

Ascelia Pharma (ticker: ACE) – Advancing orphan oncology

- Drugs with a clear development and market pathway
- Commercial stage capabilities underway
- Solid financial position

MANGORAL – Phase 3 non-gadolinium liver imaging drug

- $500-600 million annual addressable market with no competing drugs
- Orphan Drug Designation
- Ongoing Phase 3 – results expected H2-2021

ONCORAL – Phase 2 ready oral chemotherapy

- Oral daily dosing of irinotecan chemotherapy
- Potential for better patient outcomes and safety
- Phase 2 in gastric cancer

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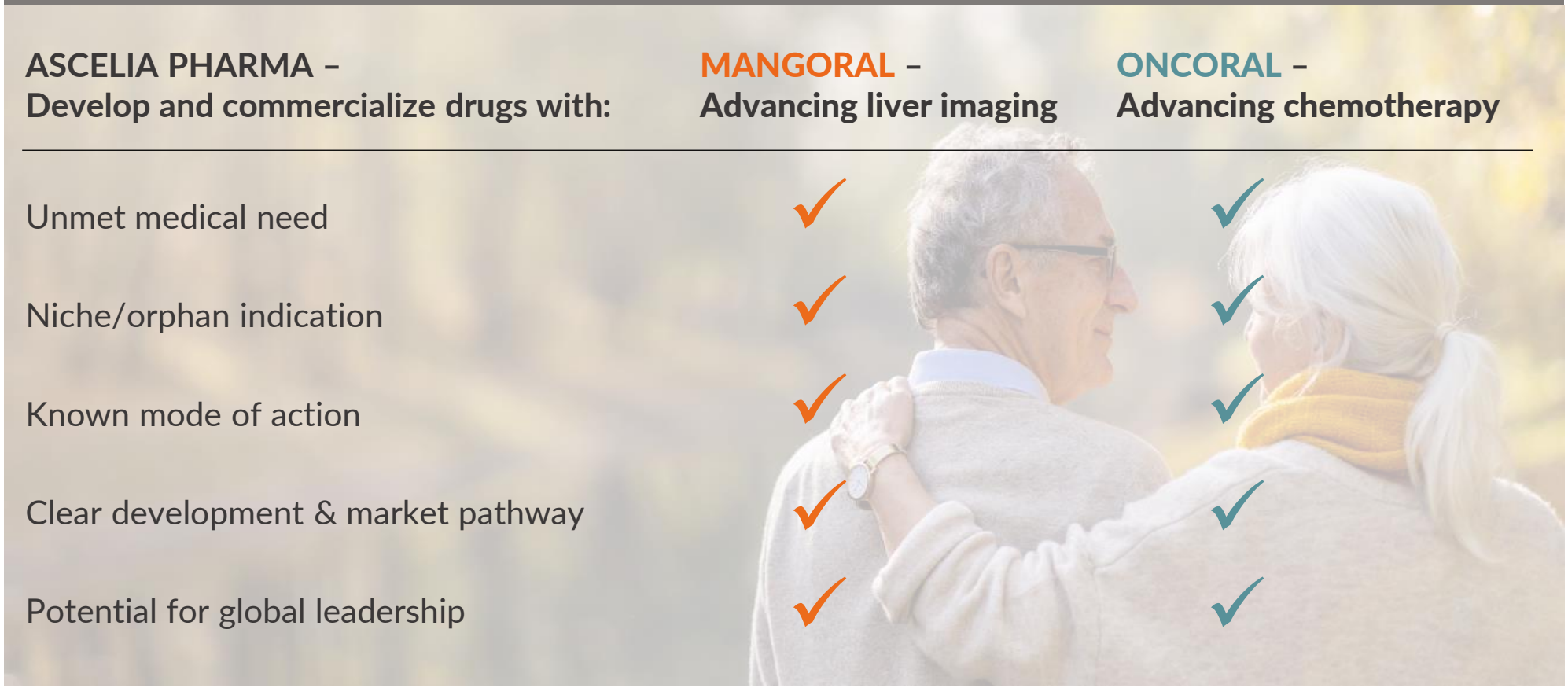
IMPROVING THE LIFE OF PEOPLE WITH RARE ONCOLOGY-RELATED CONDITIONS



ASCELIA PHARMA – **Develop and commercialize drugs with:**	**MANGORAL –** **Advancing liver imaging**	**ONCORAL –** **Advancing chemotherapy**
Unmet medical need	✓	✓
Niche/orphan indication	✓	✓
Known mode of action	✓	✓
Clear development & market pathway	✓	✓
Potential for global leadership	✓	✓