

Corporate Presentation

World leader in the development and commercialization of anticancer drugs of marine origin



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Management Team

We are inspired by the sea, driven by science, and motivated to improve the lives of cancer patients by delivering novel medicines. We intend to continue to be the world leader in marine medicinal discovery, development and innovation.



D. José María Fernández, Ph.D Chief Executive Officer and Chairman of the Board



Luis Mora Managing director



Pascal Besman
Chief Operating Officer
PHM US



José Luis Moreno
Director Capital Markets
and Investor Relations



Corporate Overview

Global Fully Integrated Commercial Stage Biotech

Developing marine-inspired oncology drugs

Revenue Generating & Profitable

Revenues in 2021	€230m
EBITDA 2021	€97.7m
Cash 1H22	€250m
Market cap	€1.1Bn¹



3 Approved Oncology Products







Established European oncology sales force

Discovery Platform Strengthening Oncology Pipeline

Diversified pipeline with latestage asset and 2 early-stage assets about to enter the clinic



The Plan for Growth

On Track to Deliver Value to Shareholders

Lurbinectedin development

- Phase 3 trial with Lurbinectedin in SCLC for EU approval and confirmatory US
- Phase 3 trial with Lurbinectedin in other indications
- Potential Lurbinectedin approvals in other countries

Other drugs development

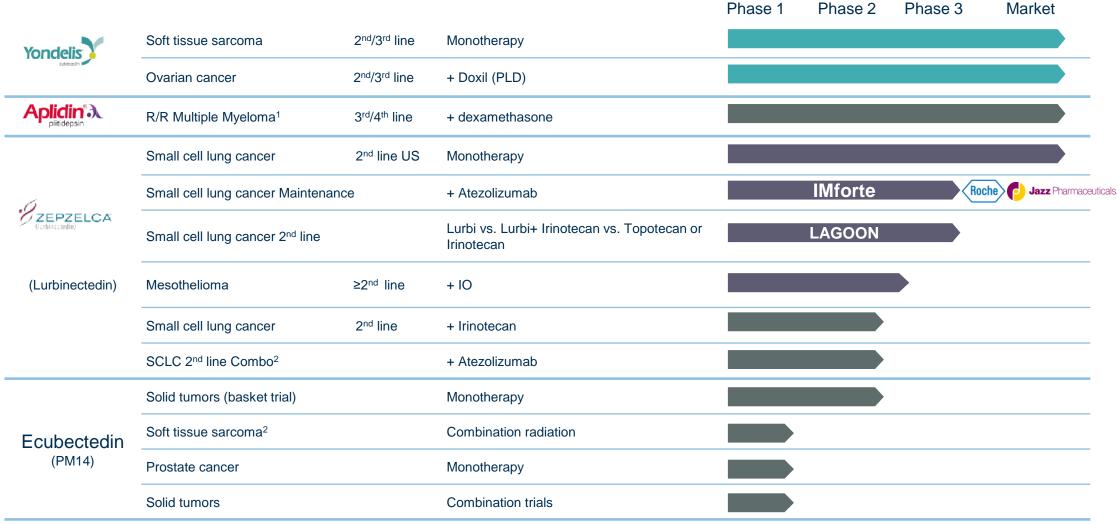
- 2 Phase 2 trials for Ecubectedin enrolling
- 2 new compounds to enter Phase 1

Corporate development

- Looking for in-licensing products to market in EU
- Profitable with robust cash position



Pipeline – Expanding our Expertise in Oncology

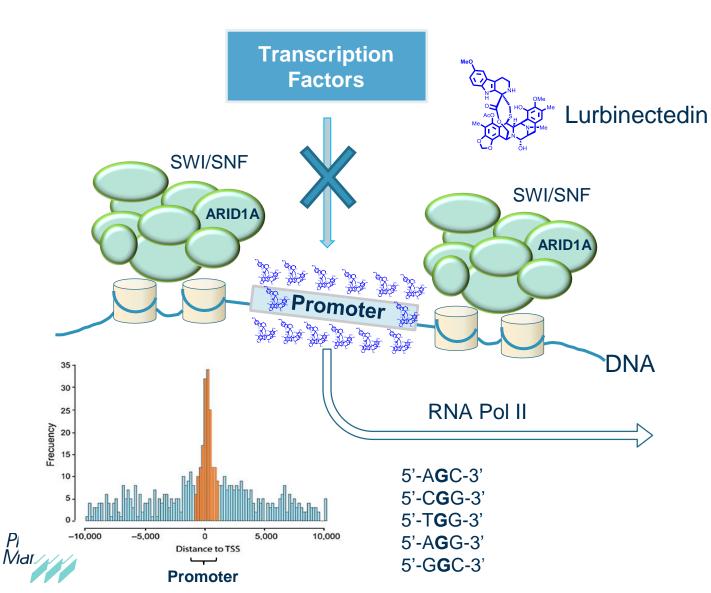




⁽¹⁾ Approved in Australia

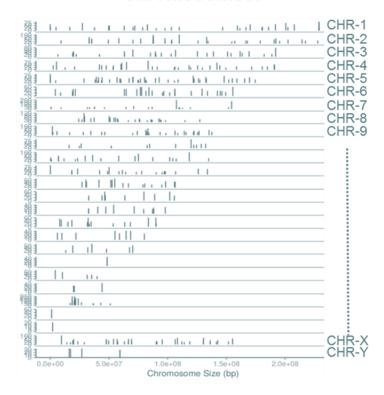
⁽²⁾ IST - Investigator Sponsored Trial

Lurbinectedin - Novel Selective Inhibitor of Oncogenic Transcription



Lurbinectedin binds preferentially within the promoter area of a selected group of genes, in triplets:

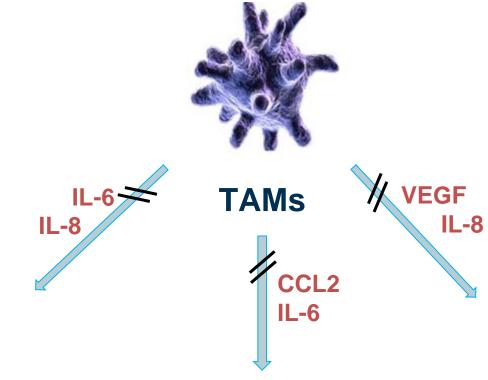
Chromosomes:



Harlow et al, 2016; Cancer Res 72: 6657-68 Harlow et al, 2019; Clin Cancer Res doi: 10.1158/1078-0432.CCR-18-3511 Santamaría et al, 2016, Mol Cancer Ther 15:2399-412

Lurbinectedin – Effects on the Immune System

Lurbinectedin depletes the presence of TAMs in the tumor and inhibits the production of certain protumoral chemokines by them



Inhibition of Tumor Cell Proliferation

Inhibition of Immune Response Activation of Immune Checkpoints Induction of angiogenesis



Belgiovine et al., 2017. Br J Can Allavena et al., 2016 Cancer Res Germano et al., 2013. Cancer Cell Germano et al., 2010. Cancer Res





1st FDA approved drug in over 24 years for Relapsed Small Cell Lung Cancer (SCLC)

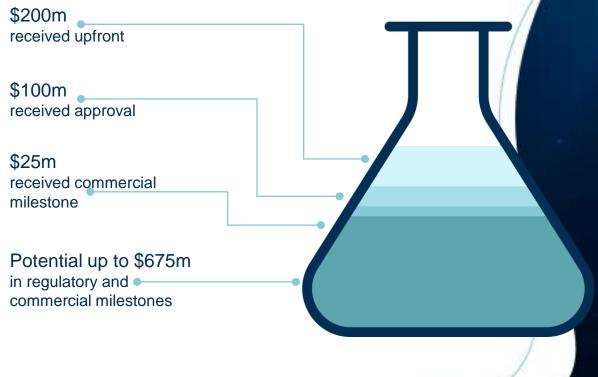
New Standard of Care in 2L SCLC in the US



Zepzelca: Transformative for PharmaMar

License agreement in the US/Canada





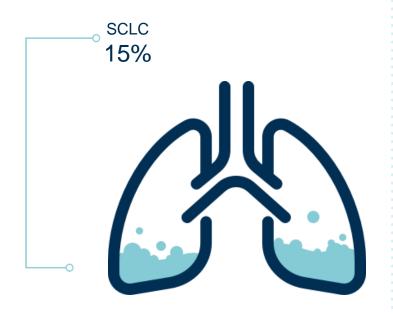
- + 2021 sales = \$46m royalties for PharmaMar
- High teens to 30% Royalties on US/Canada sales
- Initiated Phase 3 in 1L maintenance ES-SCLC in combination with Tecentriq® in collaboration with Roche

Small Cell Lung Cancer (SCLC)

An Underserved High Unmet Medical Need

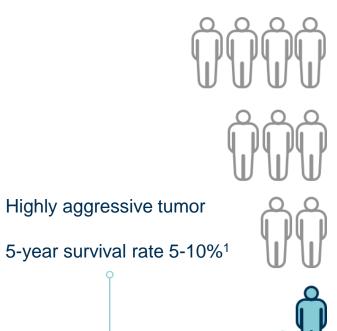
SCLC

Among all Lung Cancers

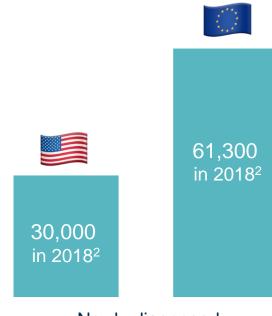


Pharma

Low survival rate at 5 years



Limited treatment options in both the US and Europe



Newly diagnosed patients each year



^{1.} http://www.cancer.gov/types/lung/hp/small-cell-lung-treatment-pdq

^{2.} Data Monitor: Small Cell Lung Cancer (SCLC) Market Spotlight, May 1 2018

Small Cell Lung Cancer (SCLC)

Development Lagging Behind NSCLC

SCLC





Zepzelca (Lurbinectedin) – The SCLC Treatment Paradigm

SCLC

Strong Positioning Opportunity





	1 st Line	2 nd Line	3 rd Line		1 st Lin	е	2 nd Line	3 rd Line	
FDA Approved	Platinum/ Etoposide +Atezolizumab or Durvalumab	ZepzelcaTopotecan (sensitive)		EMA Approved	Platinum/ EtoposideAtezolizu or Durval	e + mab	Topotecan		
		Subseque	nt Therapy				Subsequ	Subsequent Therapy	
NCCN Guidelines*1		 Bendamustine CAV³ Docetaxel Gemcitabine Irinotecan Nivo 	Oral etoposidePaclitaxelPembroRechallengeTemozolomideVinorelbine	ESMO Guidelines* ²			 Lurbinectedin CAV³ Re-challenge 		
	1st	Line	Maintenance 2 nd Line			3 rd Line			
Phase 3 Trials			Zepzelca + atezolizumab	LAGOON ⁴ RRx-001 (Data expected May 2025)		01			

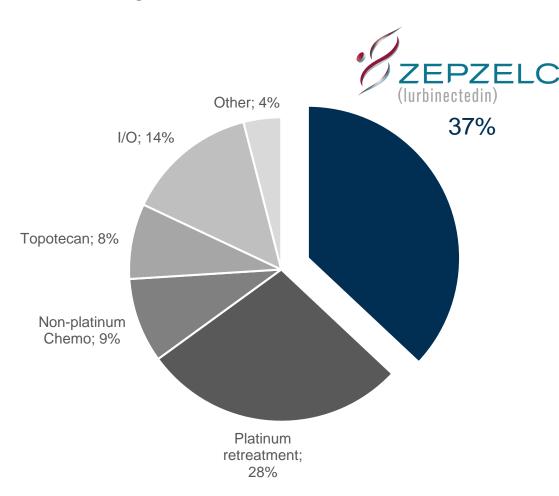


- Investigational drugs or not approved for this indication/line
- 1. NCCN guidelines v1.2023
- 2. ESMO guidelines Apr 13 2021
- B. CAV: cyclophosphamide, adriamycin and vincristine
- 4. https://clinicaltrials.gov/ct2/show/NCT05153239?term=lagoon&draw=2&rank=1

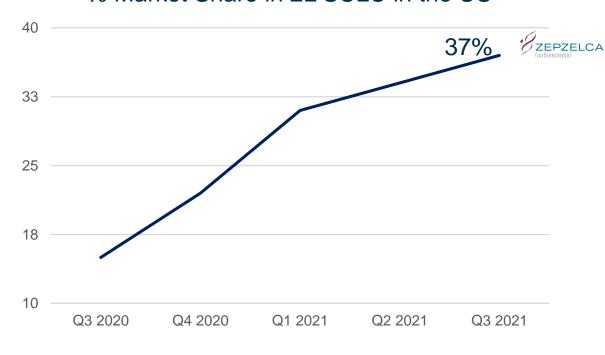
Zepzelca Already Treatment of Choice in 2L SCLC

SCLC

With Significant Room to Grow



% Market Share in 2L SCLC in the US





^{1.} Adapted from Jazz Pharmaceuticals Q3 2021 presentation

Zepzelca Demonstrated Efficacy in Sensitive <u>and</u> Resistant Small Cell Lung Cancer patients

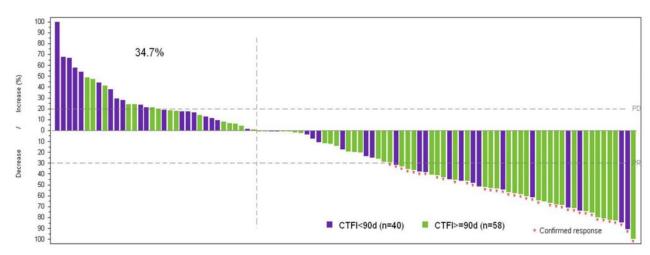




In relapsed SCLC as monotherapy under accelerated approval based on Phase 2 monotherapy data¹

	Overall (n=105)	Resistant CTFI< 90 days (n=45)	Sensitive CTFI= 90 days (n=60)
ORR (95% CI) (confirmed responses) ^	35.2% (26.2-45.2)	22.2% (11.2-37.1)	45.0% (32.1-58.4)
Duration of response (months), median (95% CI)	5.3 (4.1-6.4)	4.7 (2.6-5.6)	6.2 (3.5-7.3)
Disease Control Rate *, % (95% CI)	68.6 (58.8-77.3)		

Decrease in tumor size in 65% patients²



CFTI - Cancer Therapy-Free Interval



[^] Tumor assessments performed every 2 cycles until cycle 6 and every 3 cycles thereafter

[•] Disease Control Rate: Response or SD

^{1.} J. Trigo et V. Subbiah et al - Lurbinectedin as second-line treatment for patients with small-cell lung cancer: a single-arm, open-label, phase 2 basket trial – Lancet Oncology 2020

Zepzelca Already Treatment of Choice in 2L SCLC

SCLC

Low Rate of AEs and Manageable Hematological Safety Profile Despite Low Use of G-CSF 1,2

Safety: Related or Unknown Adverse Events

Overall (n=105)	n (%)
AEs	89 (84.8)
- Grade ≥3	36 (34.3)
SAEs	11 (10.5)
AEs leading to death	0 (0.0)
AEs	2 (1.9)
- Grade ≥3	21 (22.1*)
Dose reductions #	25 (26.3*)
G-CSF	23 (21.9)
Transfusions (red blood cells and/or platelets)	10 (9.5)

Treatment Related (or Unknown)
Adverse Events (AEs) (>5% or Gr 3-4)

	Overall (n=105)	Gr 1-2 n (%)	Gr 3-4 n (%)
Hematological AFs	Neutropenia	6 (5.7)	24 (22.9)
	Anemia	2 (1.9)	7 (6.7)
	Thrombocytopenia	2 (1.9)	5 (4.8)
	Febrile neutropenia	_	5 (4.8)
	Fatigue	54 (51.4)	7 (6.7)
	Nausea	34 (32.4)	_
	Decreased appetite	22 (21.0)	_
Non-	Vomiting	19 (18.1)	_
Hematological AEs	Diarrhea	13 (12.4)	1 (1.0)
	Constipation	10 (9.5)	
	Pneumonia	_	2 (1.9)
	Alanine aminotransferase increased *	_	2 (1.9)
	Skin ulcer	_	1 (1.0)



^{*} Per protocol: dose had to be reduced in case of grade 4 neutropenia

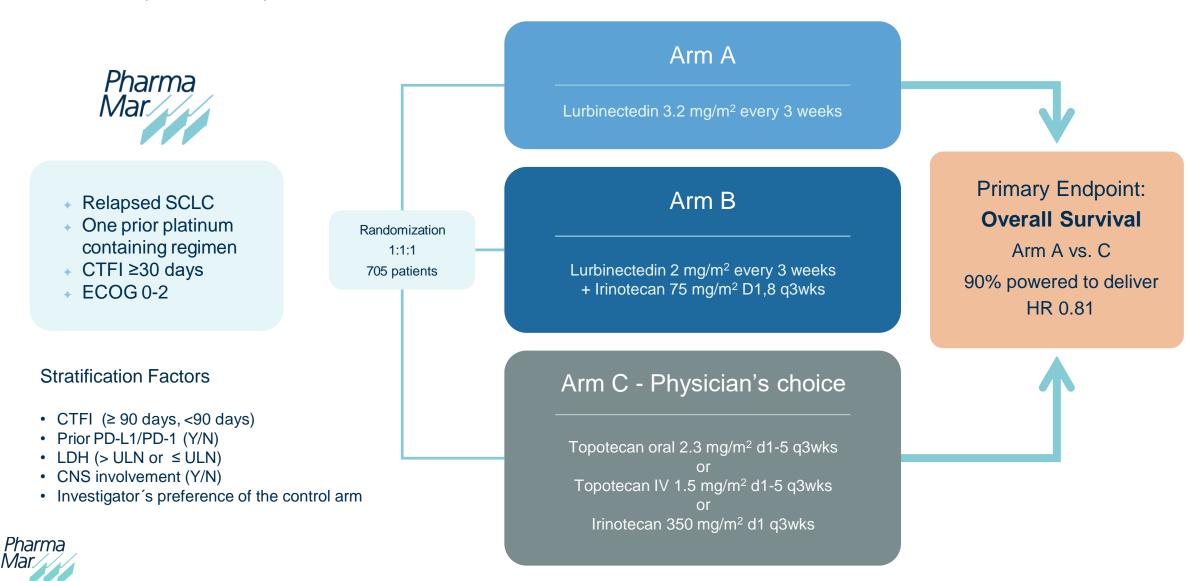
^{*} Lab abnormalities associated with a specific treatment, were considered a SAE, or were reasons for dose reduction or treatment delay

^{1.} J. Trigo et V. Subbiah et al - Lurbinectedin as second-line treatment for patients with small-cell lung cancer: a single-arm, open-label, phase 2 basket trial - Lancet Oncology 2020

^{2.} ASCO 2019, Paz-Ares et al.

Zepzelca: Pathway to 2nd line in SCLC by EMA and Full Approval by FDA

Phase 3 (LAGOON) randomized trial







1st line-Maintenance Study in SCLC

Lurbinectedin-Atezolizumab combo in relapsed SCLC (PoC trial)

- Phase I open label dose ranging trial in pts who had progressed on platinum. ECOG 0-1
- Full dose Atezo + L2.5mg/m2 (n=5) followed by L3.2mg/m2 (n=21, full dose)

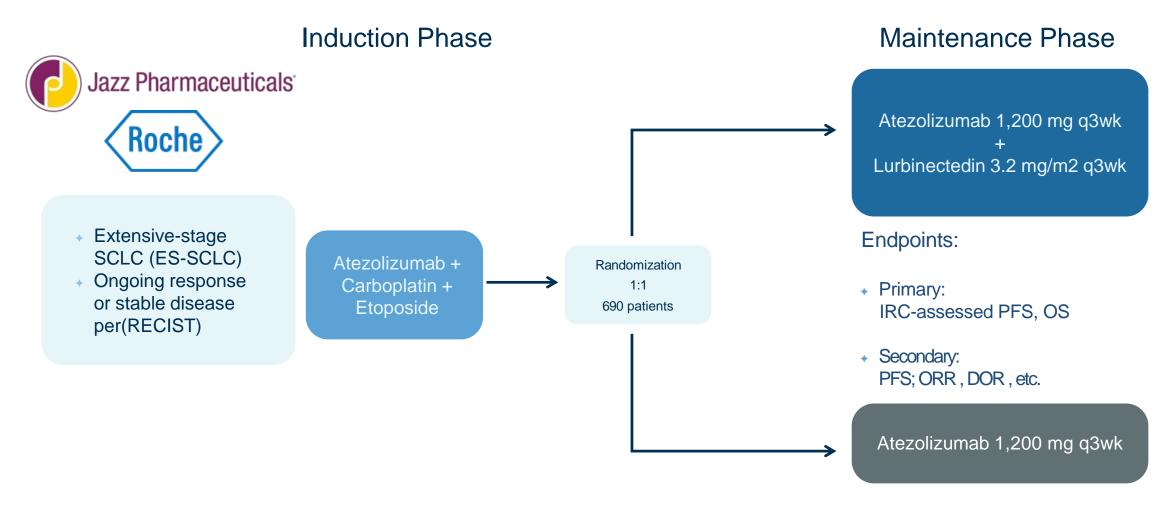
Response	N=26
CR	8% (2)
PR	50% (13)
ORR	58% (15)
SD	27% (6)
DCR	85%
PD	12% (3)
mPFS (8 censored)	4.93m



Lurbinectedin: First line positioning

SCLC

Phase 3 IMforte trial for First line-Maintenance SCLC





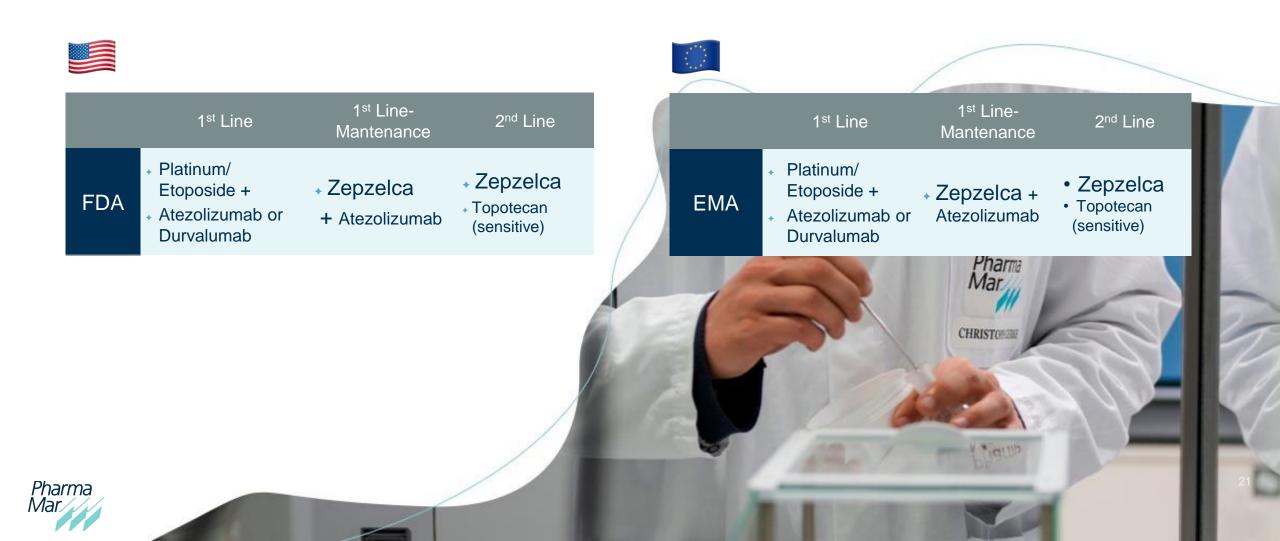
^{1.} NCT05091567

^{2.} IRC=Independent Review Committee

Strategic importance of Zepzelca Phase 3s in SCLC

Potential treatment landscape after Phase 3s

SCLC







Malignant Pleural Mesothelioma Finalizing Trial Strategy



Zepzelca (Lurbinectedin) - Relapsed Malignant Pleural Mesothelioma

MPM

A Rare Disease with limited available Therapeutic Options

Aggressively growing tumor ~ 80% of cases related to asbestos exposure



~3,000¹ patients diagnosed in the US per year





Incidence

and ~11,000 in Europe²

	1 st Line	2nd Line
EMA Approved	Pemetrexed + PlatinumNivolumab + Ipilimumab	
ESMO ⁶ Guidelines	 Pembro, Nivo or N Pemetrexed +/- PI Gemcitabine +/-rai Vinorelbine 	atinum

Phase 3 Trials

Atezolizumab⁵

Durvalumab⁵

Pembrolizumab⁵



- 1. www.cancer.org/content/dam/CRC/PDF/Public/8733.00.pdf
- 2. Daniel H Sterman, MDLeslie A Litzky, MDLarry R Kaiser, MD, "Epidemiology of malignant pleural mesothelioma" Epidemiology of malignant pleural mesothelioma UpToDate
- NCCN Category 1

- 4. NCCN Guidelines v1.2022; All recommendations category 2A except where stated
- 5. Not approved in this indication
- 6. ESMO guidelines Nov 2021
- 7. Only in IO naive patients

Zepzelca (Lurbinectedin) - PFS Benefit in Malignant Pleural Mesothelioma

Phase 2 Study¹

MPM

- 42 patients progression on 1 prior platinum based therapy
- Lurbinectedin at 3.2 mg/m² every 3 weeks until progression/toxicity (I/O allowed)



- Primary endpoint met (p=0.015)
- + mPFS 4.1 months
- + mOS 11.1 months
- + Grade 3-4 AEs (>10%):
- Neutropenia 24%
- Fatigue 17%
- Febrile neutropenia 12%

Planning Phase 3 combo with IO



European experience:

- Strong KOL connections in solid tumors
- Navigation of EU, UK and CH regulators
- Logistics in place for distribution
- Expertise in multi-language labelling
- Broad knowledge in reimbursement procedures, market access and negotiations in key European countries
- Engaged in multiple negotiations for oncology assets in EU

Leveraging Commercial Infrastructure in Europe

PharmaMar positioned as a partner of choice in Europe



18 Regional Partners for Local Distribution



infrastructure







Development and regulatory expertise





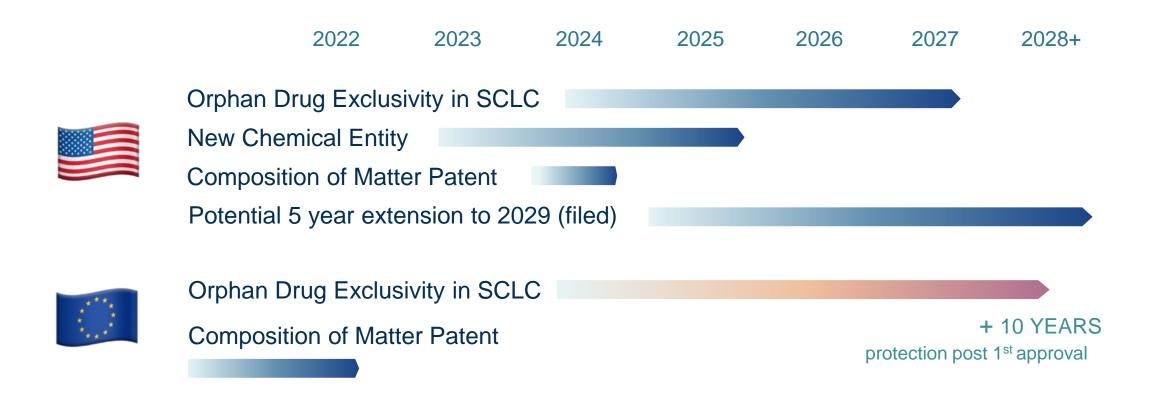






Zepzelca (Lurbinectedin) – Intellectual property

Life cycle management plans under way



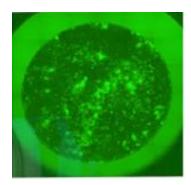






Plitidepsin in SARS-CoV-2 Patients

- SARS-CoV-2 cells co-opt EF1A from host to replicate
- Positive multi-center clinical trial
 - Safety primary endpoint met for 3 doses
 - Viral load and CRP reduced
- Pivotal Phase 3 ongoing (Neptuno / NCT04784559)



HCoV-229E infected cells







Cite as: K. M. White *et al.*, *Science* 10.1126/science.abf4058 (2021).

Plitidepsin has potent preclinical efficacy against SARS-CoV-2 by targeting the host protein eEF1A

Kris M. White^{1,2*}†, Romel Rosales^{1,2*}, Soner Yildiz^{1,2}, Thomas Kehrer^{1,2}, Lisa Miorin^{1,2}, Elena Moreno^{1,2}, Sonia Jangra^{1,2}, Melissa B. Uccellini^{1,2}, Raveen Rathnasinghe^{1,2}, Lynda Coughlan³, Carles Martinez-Romero^{1,2}, Jyoti Batra^{4,5,6,7}, Ajda Rojc^{4,5,6,7}, Mehdi Bouhaddou^{4,5,6,7}, Jacqueline M. Fabius^{4,6}, Kirsten Obernier^{4,5,6,7}, Marion Dejosez⁸, María José Guillén⁹, Alejandro Losada⁹, Pablo Avilés⁹, Michael Schotsaert^{1,2}, Thomas Zwaka⁸, Marco Vignuzzi¹⁰, Kevan M. Shokat^{4,6,7,11}, Nevan J. Krogan^{1,4,5,6,7†}, Adolfo García-Sastre^{1,2,12,13,13}†

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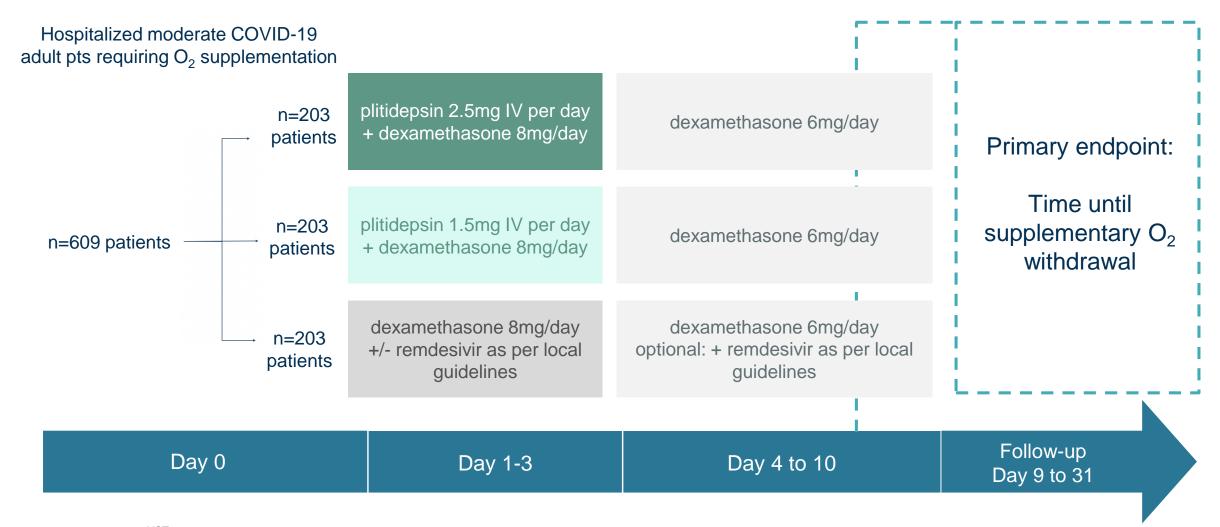
SARS-CoV-2 viral proteins interact with the eukaryotic translation machinery and inhibitors of translation have potent antiviral effects. Here we report that the drug plitidepsin (aplidin), which has limited clinical approval, possesses antiviral activity ($IC_{90} = 0.88$ nM) 27.5-fold more potent than remdesivir against SARS-CoV-2 in vitro, with limited toxicity in cell culture. Through the use of a drug resistant mutant, we show that the antiviral activity of plitidepsin against SARS-CoV-2 is mediated through inhibition of the known target eEF1A. We demonstrate the in vivo efficacy of plitidepsin treatment in two mouse models of SARS-CoV-2 infection with a reduction of viral replication in the lungs by two orders of magnitude using prophylactic treatment. Our results indicate that plitidepsin is a promising therapeutic candidate for COVID-19.



1. Sources: Zhou et al; The Nucleocapsid Protein of Severe Acute Respiratory Syndrome Coronavirus Inhibits Cell Cytokinesis and Proliferation by Interacting with Translation Elongation Factor 1α; Journal if Virology, July 2008, p. 6962–6971, and Losada et al; Translation Elongation Factor eEF1A2 is a Novel Anticancer Target for the Marine Natural Product Plitidepsin; Scientific Reports 6:35100 10/7/16

Plitidepsin in SARS-CoV-2 Patients: Phase 3 Study NEPTUNO¹

Adult Patients with Moderate Disease





1. NCT04784559

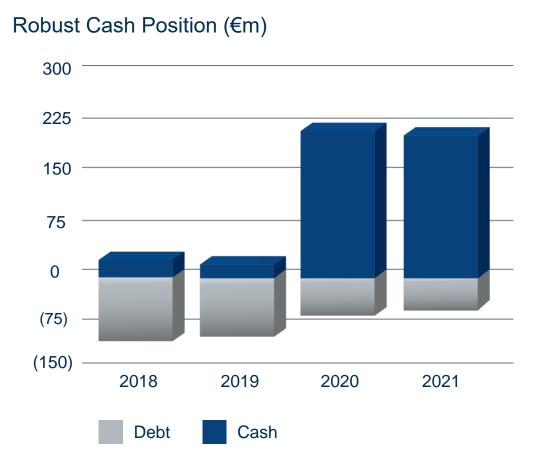
Financials

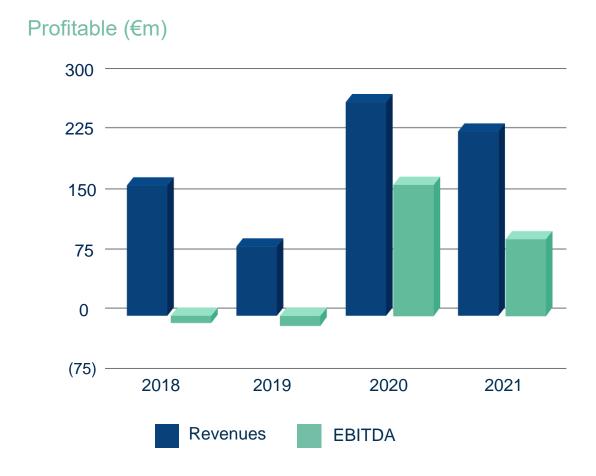




Financials

Well financed to support next stages of development









Lurbi Combo Atezo data presented at SITC	/
Zepzelca approved in additional countries UAE, Singapore, Australia, Canada	/
2 nd line Phase 3 SCLC trial initiation	/
Ecubectedin "First Patient In" Phase 2	/
Potential first Zepzelca sales milestone	/
Potential lurbinectedin approvals in other countries	/
Lurbi+Irinotecan Phase 2 update	2022 and beyond
Phase I new products in pipeline	2022
Potential in-licensing	2022
Further trials in Covid with plitidepsin	NA

Building the Next Phase of Growth





- + 2 in-licensed assets adding to revenue in Europe
- + Ecubectedin in Phase 2/3 trials
- 2 new assets in the clinic

