THE TRANSFORMATION OF ONCOPEPTIDES

Jefferies Healthcare London Conference
November 18, 2020

MARTY J DUVALL
Chief Executive Officer, CEO

oncopeptides

DISCLAIMER

IMPORTANT: You must read the following before continuing. The following applies to this document, the oral presentation of the information in this document by Oncopeptides AB (the "Company") or any person on behalf of the Company, and any question-and-answer session that follows the oral presentation (collectively, the "Information"). In accessing the Information, you agree to be bound by the following terms and conditions.

The Information is confidential and may not be reproduced, redistributed, published or passed on to any other person, directly or indirectly, in whole or in part, for any purpose. This document may not be removed from the premises. If this document has been received in error, it must be returned immediately to the Company.

The Information is not intended for potential investors and does not constitute or form part of, and should not be construed as an offer or the solicitation of an offer to subscribe for or purchase securities of the Company, and nothing contained therein shall form the basis of or be relied on in connection with any contract or commitment whatsoever. This document and its contents may not be viewed by persons within the United States or "U.S. Persons" (as defined in Regulation S under the Securities Act of 1933, as amended (the "Securities Act") unless they are qualified institutional buyers "QIBs" as defined in Rule 144A under the Securities Act. By accessing the Information, you represent that you are (i): a non-U.S. person that is outside the United States or (ii) a QIB. This document and its contents may not be viewed by persons within the United Kingdom unless they are persons with professional experience in matters relating to investments falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 as amended (the "Order"), or high net worth entities falling within Article 49(2)(a) to (d) of the Order (each a "Relevant Person"). By accessing the Information, you represent that you are: (i) outside the United Kingdom or (ii) a Relevant Person.

The Information has been prepared by the Company, and no other party accepts any responsibility whatsoever, or makes any representation or warranty, express or implied, for the contents of the Information, including its accuracy, completeness or verification or for any other statement made or purported to be made in connection with the Company and nothing in this document or at this presentation shall be relied upon as a promise or representation in this respect, whether as to the past or the future.

The Information contains forward-looking statements. All statements other than statements of historical fact included in the Information are forward-looking statements. Forward-looking statements give the Company's current expectations and projections relating to its financial condition, results of operations, plans, objectives, future performance and business. These statements may include, without limitation, any statements preceded by, followed by or including words such as "target," "believe," "expect," "aim," "intend," "may," "anticipate," "estimate," "plan," "project," "will," "can have," "likely," "should," "would," "could" and other words and terms of similar meaning or the negative thereof. Such forward-looking statements involve known and unknown risks, uncertainties and other important factors beyond the Company's control that could cause the Company's actual results, performance or achievements to be materially different from the expected results, performance or achievements expressed or implied by such forward-looking statements. Such forward-looking statements are based on numerous assumptions regarding the Company's present and future business strategies and the environment in which it will operate in the future.

No representation, warranty or undertaking, express or implied, is made as to, and no reliance should be placed on, the fairness, accuracy, completeness or correctness of the Information or the opinions contained therein. The Information has not been independently verified and will not be updated. The Information, including but not limited to forward-looking statements, applies only as of the date of this document and is not intended to give any assurances as to future results. The Company expressly disclaims any obligation or undertaking to disseminate any updates or revisions to the Information, including any financial data or forward-looking statements, and will not publicly release any revisions it may make to the Information that may result from any change in the Company's expectations, any change in events, conditions or circumstances on which these forward-looking statements are based, or other events or circumstances arising after the date of this document. Market data used in the Information not attributed to a specific source are estimates of the Company and have not been independently verified.

oncopeptides

MARTY J DUVALL
PROFESSIONAL EXPERIENCE

- Executive Leadership experience from public and private companies; CEO, CCO, SVP, Global Commercial and Marketing roles
- Pharma and biotech experience across geographies; Aventis (Sanofi), MGI (Eisai), Abraxis (Celgene), Merck (MSD), ARIAD (Takeda) and Tocagen (Forte)
- Broad and deep oncology experience including; hematology (e.g. MDS, CTCL, CML, AML, MM, etc.), and solid tumors (e.g. breast, lung, prostate, H/N, gastric, GBM, etc.), biologics, small molecules, gene therapy, supportive care
- Launch experience; Taxotere (US, Europe and Asia), Abraxane (China), Dacogen (US, Europe), Sylatron (Global), Iclusig (US, Europe, Asia), Alunbrig

TAXOTERE (docetaxel) Injection
Aloxi palonosetron HCl injection
Abraxane nanoparticle albumin bound paclitaxel
Temodar temozolomide
Zolinza [vorinostat] capsule
ICLUSIG (ponatinib) tablets
GLIADEL WAFER (carmustine implant) 7.7 mg carmustine/wafer
DACOGEN decitabine for injection
Anzemet dolasetron mesylate injection/tablets
EMEND (aprepitant, MSD)
Sylatron peginterferon alfa-2b
ALUNBRIG BRIGATINIB

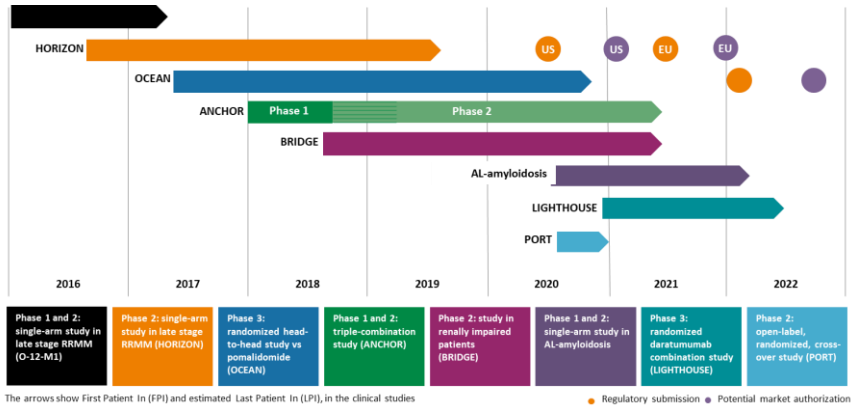
oncopeptides

ONCOPEPTIDES AT A GLANCE

TRANSFORMATION INTO A FULLY INTEGRATED BIOPHARMA COMPANY

Discovery and IND generation

- Targeted therapies for hematological diseases
- NCE:s from peptide drug conjugate platform (PDC)



Portfolio Development and Life Cycle Management

- Initial focus on $ 23 B MM market
- Broad supportive clinical program
- Priority review of melflufen
- PDUFA-date February 28, 2021

Launch investment and geographic expansion

- Ramping up for US launch
- Listed on NASDAQ Stockholm
- Market cap of ~ 1 300 MUSD
- Cash position end Q2 ~180 MUSD*

* Q3 report on November 19th

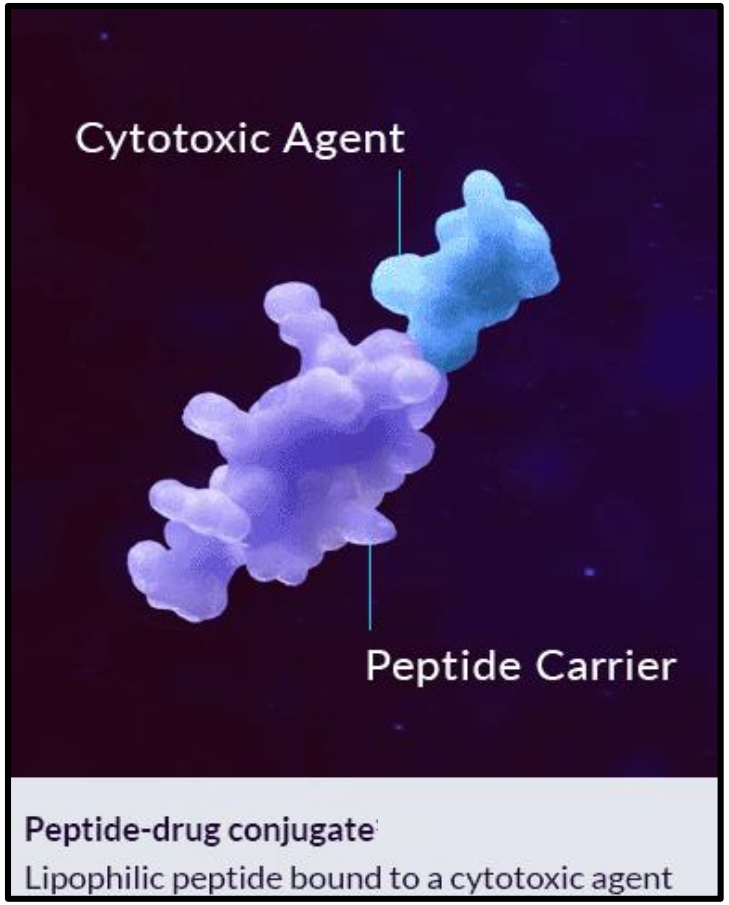
oncopeptides

ONCOPEPTIDES PEPTIDE-DRUG CONJUGATE (PDC) PLATFORM

Drug conjugates use **innovative technology** that attaches a cytotoxic agent onto a tumor-targeting element.[1]

The PDC platform allows Oncopeptides to **concentrate a toxin in cancer cells** by exploiting the difference in peptidase activity between cancer cells and normal cells.

This approach delivers more and different **cytotoxic activity to the cancer cells while protecting the healthy cells**.[2]



1. Vrettos EI, Mező G, Tzakos AG. On the design principles of peptide–drug conjugates for targeted drug delivery to the malignant tumor site. Beilstein J Org Chem. 2018;14:930-954. **2.** Oncopeptides. Annual Report 2019.

oncopeptides

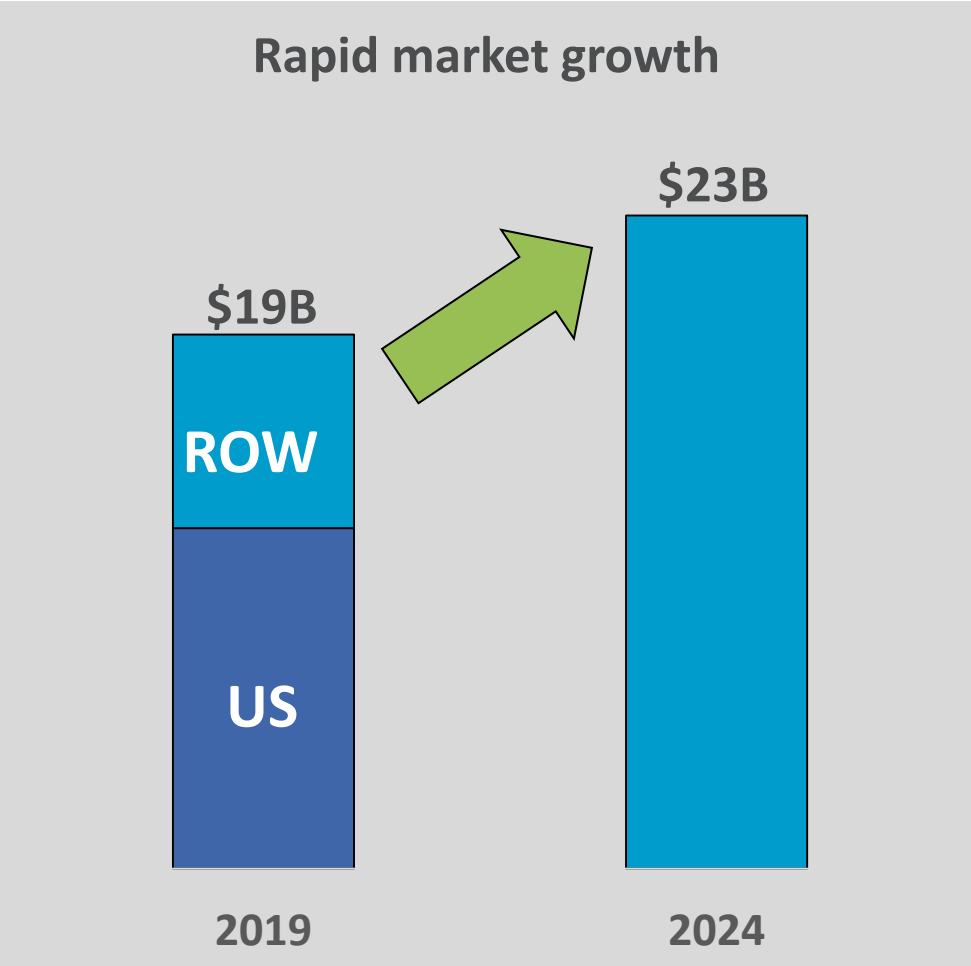
RECENT EVENTS
VALUE GENERATION AND RISK REDUCTION

MULTIPLE MYELOMA MARKET

A FAST-GROWING MARKET WITH A NEED FOR NEW TREATMENT OPTIONS

oncopeptides

MULTIPLE MYELOMA - A HEMATOLOGICAL CANCER WITHOUT CURE



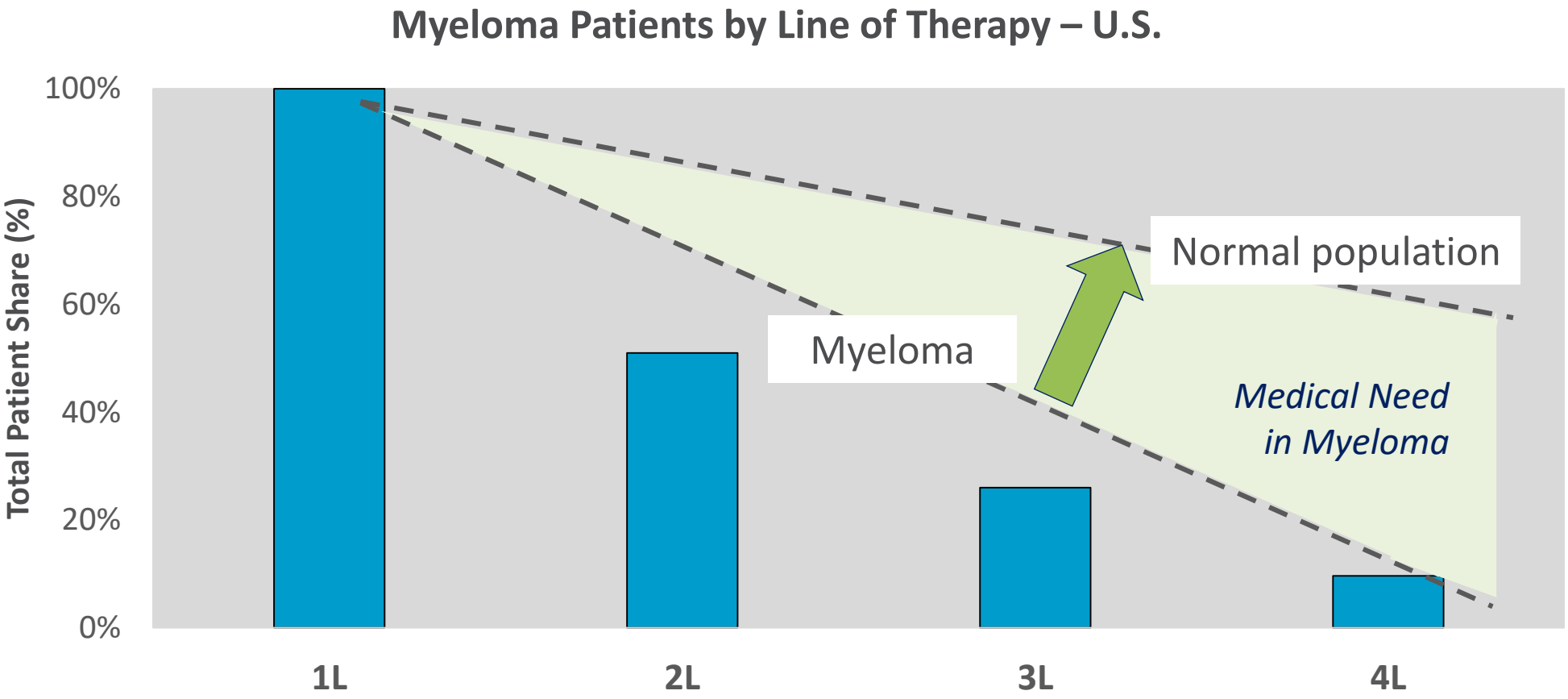
Source: IntrinsiQ and Kantar Health

Significant unmet needs remain

- Survival increasing with new drug classes
- Most patients are treated with
  - Immunomodulatory drugs (IMiD)
  - Proteasome inhibitors (PI)
  - Anti-CD38 monoclonal antibodies (CD38)
- Many get all three in combination in first two lines of therapy, inevitably developing resistance
- New classes needed to overcome resistance

oncopeptides

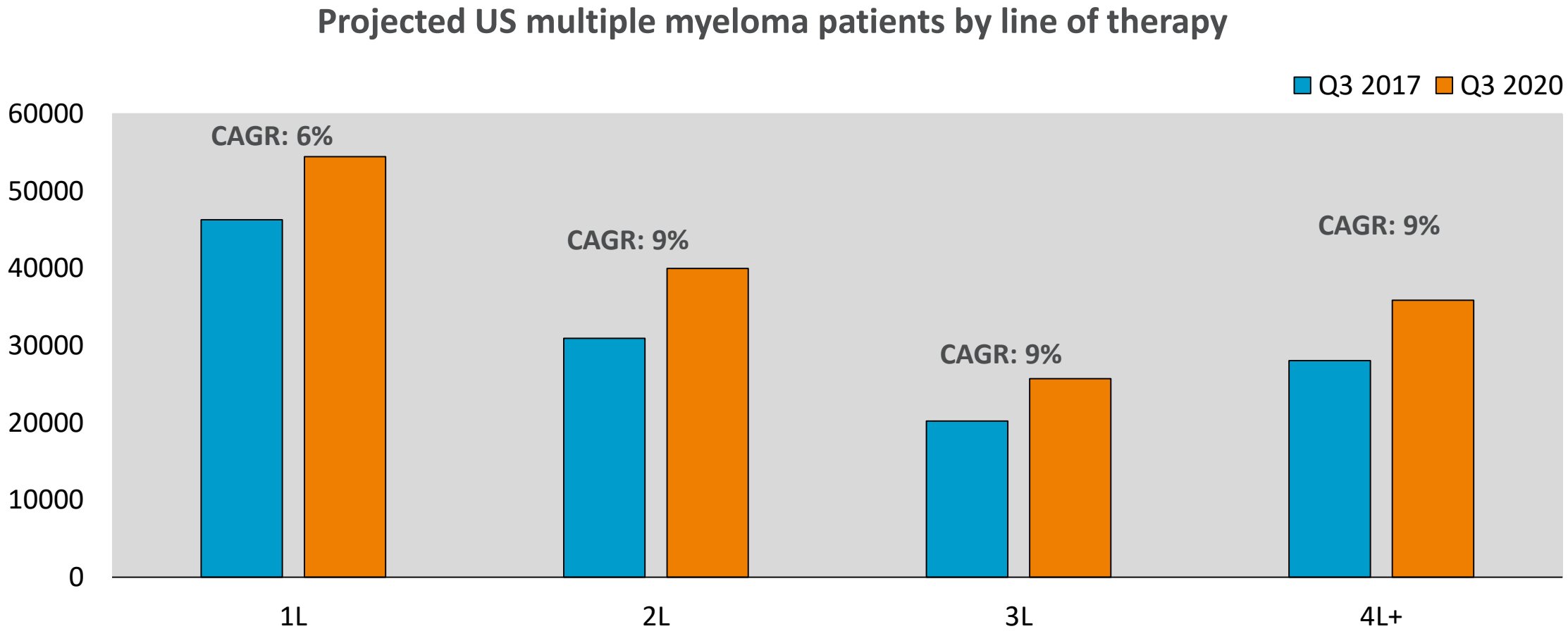
LATER LINE PATIENT POPULATION GROWS AS SURVIVAL IMPROVES



Source: Kantar Health 2019

oncopeptides

IMPROVED OUTCOMES LEAD TO FAST GROWTH IN NUMBER OF TREATED PATIENTS IN LATER LINES OF THERAPY



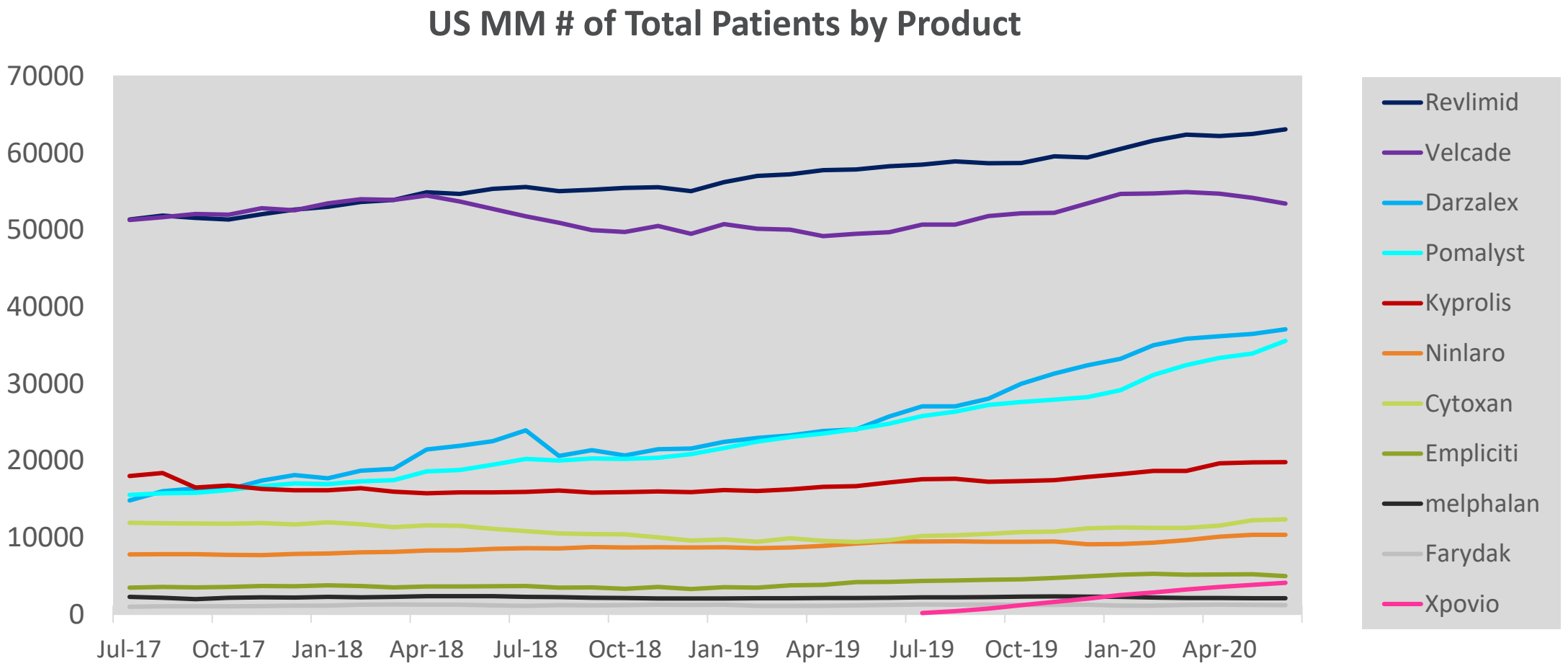
Source: Intrinsiq MAT Q3 2020

Note: 3-yr annual growth rate for 3Q2017-3Q2020

oncopeptides

NEWER PRODUCTS ON TOP OF OLDER AS SURVIVAL IMPROVES

NEED OF NEW TREATMENT OPTIONS

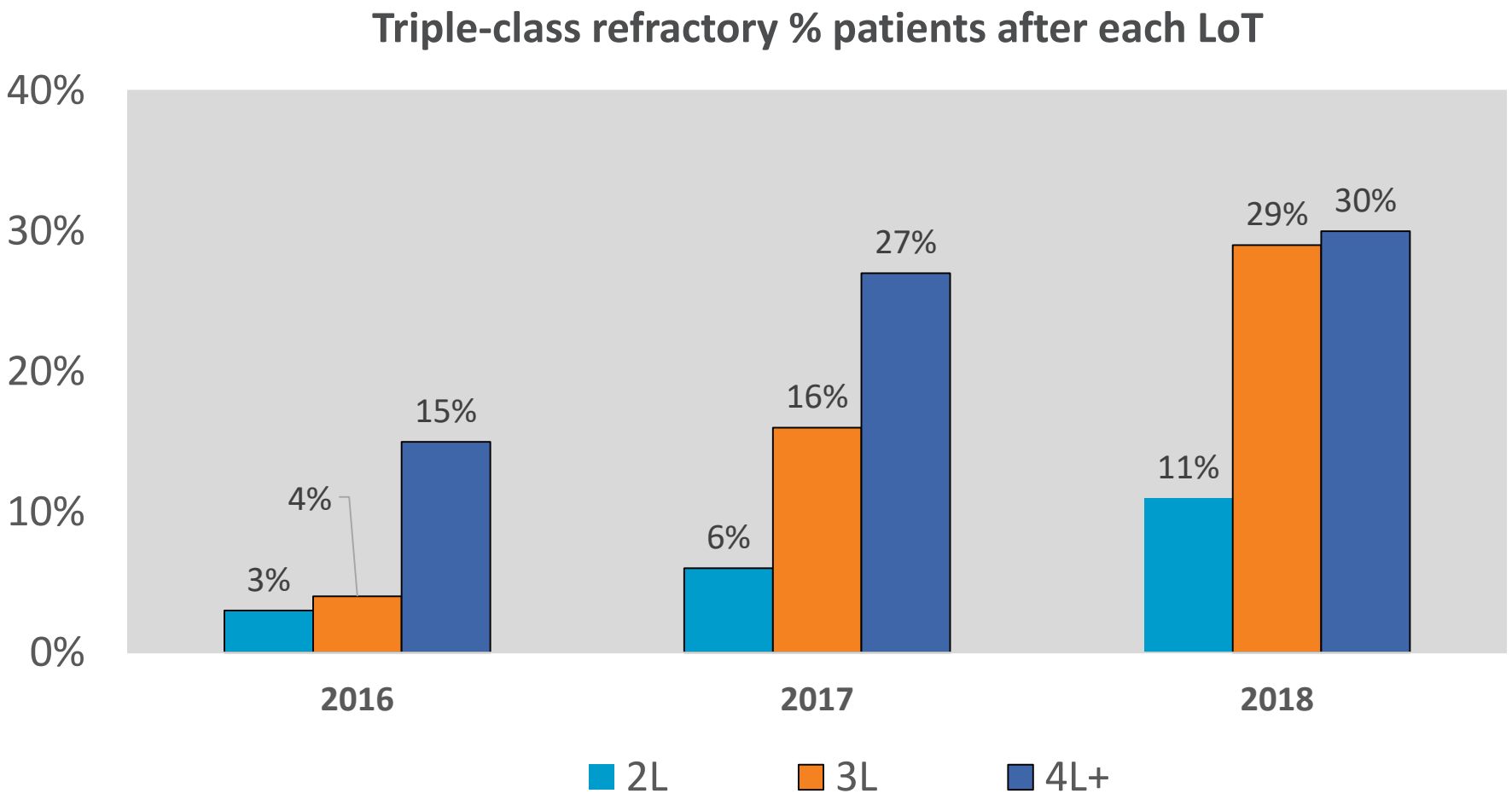


Source: Intrinsiq MAT, Jun 2020

oncopeptides

TRIPLE-CLASS REFRACTORY MULTIPLE MYELOMA

AN INDICATION WITH GROWING UNMET MEDICAL NEED



Estimated >20,000 Triple-class refractory patients in the US and growing

oncopeptides

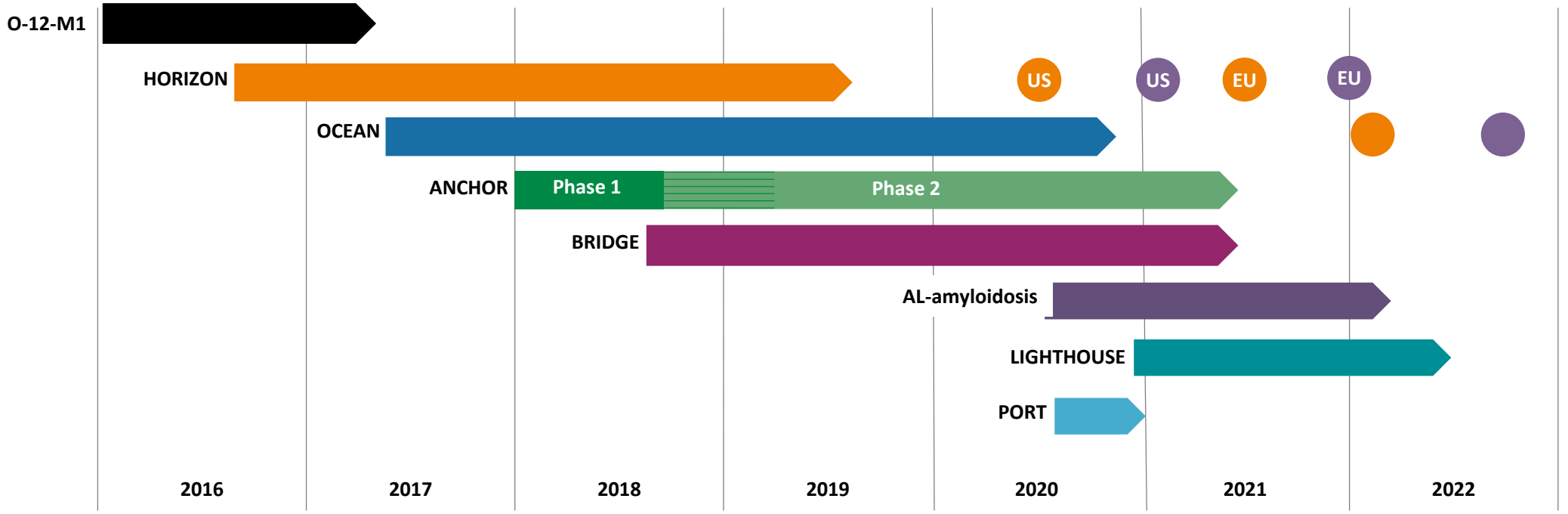
MELFLUFEN IN CLINICAL DEVELOPMENT

CLINICAL PROGRAM TO SUPPORT USE IN A VARIETY OF PATIENT POPULATIONS

oncopeptides

MELFLUFEN CLINICAL DEVELOPMENT PROGRAM

POTENTIAL TO PROVIDE DATA IN DIFFERENT PATIENT POPULATIONS



Phase 1 and 2: single-arm study in late stage RRMM (O-12-M1)	Phase 2: single-arm study in late stage RRMM (HORIZON)	Phase 3: randomized head-to-head study vs pomalidomide (OCEAN)	Phase 1 and 2: triple-combination study (ANCHOR)	Phase 2: study in renally impaired patients (BRIDGE)	Phase 1 and 2: single-arm study in AL-amyloidosis	Phase 3: randomized daratumumab combination study (LIGHTHOUSE)	Phase 2: open-label, randomized, cross-over study (PORT)

The arrows show First Patient In (FPI) and estimated Last Patient In (LPI), in the clinical studies

● Regulatory submission ● Potential market authorization

MELFLUFEN DEVELOPMENT

DESIGNED TO SUPPORT USE AFTER IMiD AND PI FAILURE

MUST HAVE CHARACTERISTICS	MELFLUFEN
Single agent +/- steroid **activity** in multi-refractory patients of >20% Overall Response Rate (ORR)	**O-12-M1** showed an ORR of 31%, **HORIZON** an ORR of 27% in multi-refractory patients
Single agent +/- steroid **approval** in refractory patients	**OCEAN** pivotal head-to-head study versus pomalidomide + dexamethasone will read out H1-22
Efficacy synergy in combination with other main myeloma drugs with good tolerability	**ANCHOR** shows excellent synergy and good tolerability with daratumumab and bortezomib (early data). Next combination study **LIGHTHOUSE** to commence shortly
No major quality of life **tolerability** issues	**Good QoL** with almost no non-hematological AEs
No **co-morbidity** limitations	No **co-morbidity** or drug-drug interactions limitations
NICE TO HAVE CHARACTERISTICS	
Easy **administration** schedule	One **30-minute infusion** every 28 days

oncopeptides

COMPETITIVE MELFLUFEN DATA

TRIPLE CLASS REFRACTORY MULTIPLE MYELOMA PATIENTS

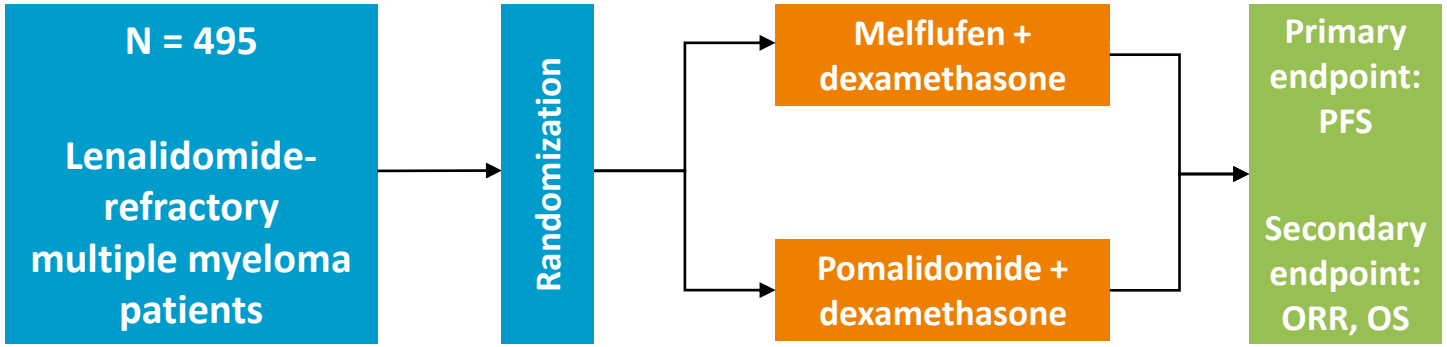
	Melflufen **Oncopeptides** **US NDA, June 30, 2020**		**Xpovio** **Karyopharm** **US approval, July 2019**		**Blenrep** **GSK** **US Approval, Aug 6, 2020**	
Number of patients studied	119		122		95	
Overall Response/Clinical Benefit Rate	26%/39%		25%/39%		31%/36%*	
mDOR / mPFS responders	5.5m / 8.5m		3.8m / 4.0m		NR/NR	
Progression-free survival	3.9 months		3.7 months		2.8 months*	
Overall survival	11.2 months		8.0 months		14.9m*	
Share of patients with EMD	42%		22%		20%*	
Serious Adverse Event Rate	51%		58%		40%	
Non-hematologic toxicity (grade 3/4) reported in >5% of patients	Pneumonia	9%	Fatigue Hyponatremia Nausea Pneumonia Diarrhea Sepsis Hypokalemia Mental status General det.	25% 20% 10% 9% 7% 6% 6% 6% 6%	Keratopathy Decreased Visual Acuity Pneumonia Pyrexia	44% 28% 7% 6%

Source: Submission for melflufen, FDA Label documents for Xpovio and Blenrep (items marked with '*' is data from DREAMM-2 as published in Lancet).

ENROLLMENT COMPLETED IN PHASE 3 OCEAN STUDY

495 PATIENTS RECRUITED – TOP-LINE RESULTS IN H1 2021

Head to head study versus Standard of Care



RRMM data from pomalidomide FDA label and O-12-M1 study

Treatment	ORR	CBR	Median PFS	Median DOR	Median OS
Melflufen + Dexamethasone	31%	49%	5.7 months	8.8 months	20.7 months
Pomalidomide+ Dexamethasone	24%	NR	3.6 months	7.0 months	12.4 months

PHASE 3 LIGHTHOUSE STUDY

CONFIRMATORY STUDY – AWAITING GO-AHEAD

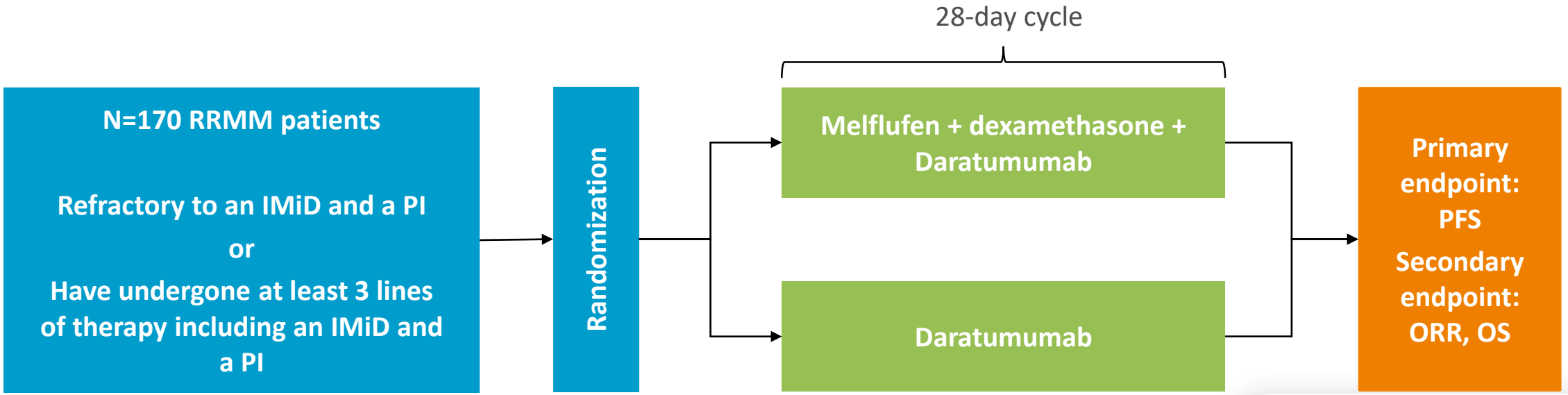
LIGHTHOUSE

Phase 3 study with melflufen in multiple myeloma

- Melflufen + daratumumab vs daratumumab randomized 2:1
- Subcutaneous version on Daratumumab

Objectives

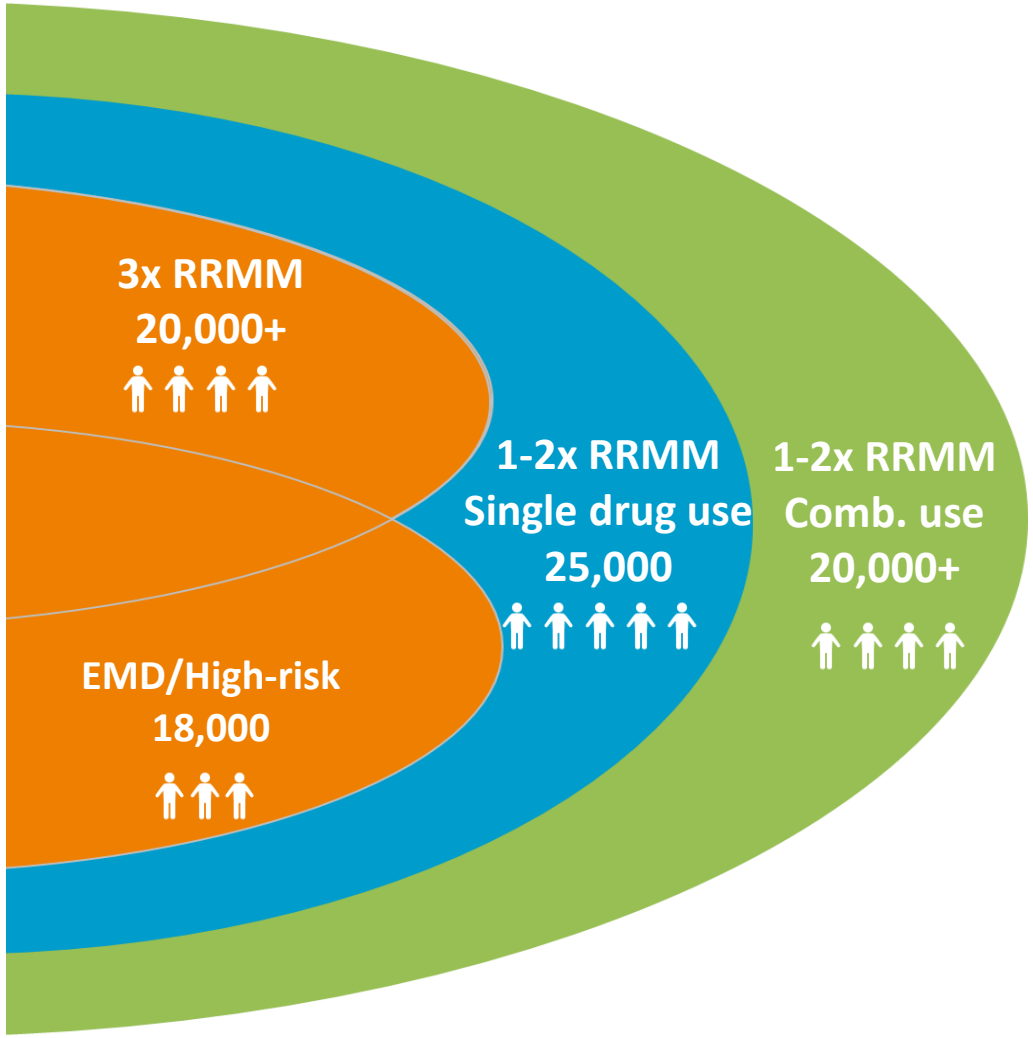
- Expand market potential – extend label for melflufen in combination with daratumumab in earlier lines
- Minimize development risk – add study that can drive approval in the EU and US



oncopeptides

SIGNIFICANT MARKET OPPORTUNITIES

US MARKET

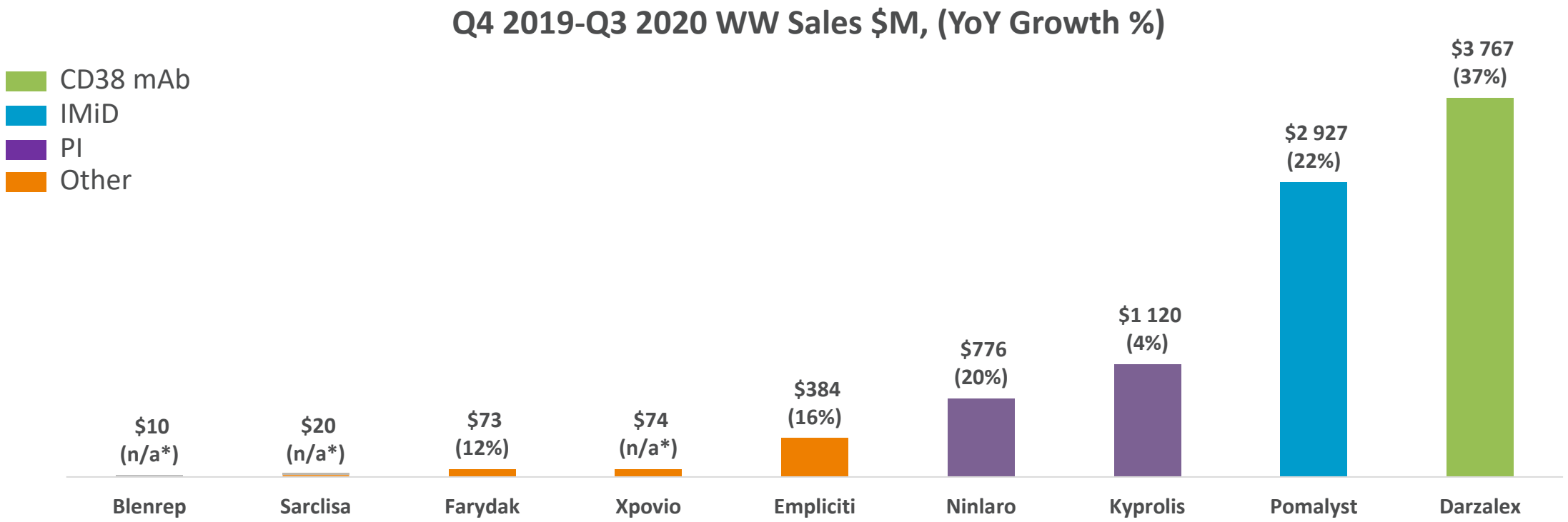


New data to drive label expansion

HORIZON	Anticipated label in triple-class refractory patients
OCEAN	Head-to-head superiority study with the most used regimen in RRMM
ANCHOR LIGHTHOUSE	Combination with PI or anti-CD38 opens up for 2L+ combination treatment

oncopeptides

EFFECTIVE RRMM DRUGS WITHOUT SIGNIFCANT SIDE EFFECTS OR COMORBIDITY LIMITATIONS HAVE SIGNIFICANT SALES POTENTIAL



	Blenrep	Sarclisa	Farydak	Xpovio	Empliciti	Ninlaro	Kyprolis	Pomalyst	Darzalex
Launch	Aug 2020	Mar 2020	Nov 2015	Jul 2019	Nov 2015	Nov 2015	Jul 2012	Feb 2013	Nov 2015
First Year Sales, $M	n/a*	n/a*	$76	$66	$153	$159	$189	$305	$592

* Newly approved products without full year sales for YoY comparison

Source: EvaluatePharma, company earnings

oncopeptides

BUILDING LAUNCH READINESS AND AWARENESS OF MELFLUFEN

PAVING THE WAY FOR A SUCCESSFUL LAUNCH

GLOBAL ORGANIZATION WITH SIGNIFICANT LAUNCH EXPERIENCE

Mohamed Ladha, General Manager US Business Unit

17 years of industry experience with extensive oncology and launch expertise

Led/built commercial functions at 7 pharma or biotech companies for in-line/ launch products

Sarah Donovan, Head of Marketing

20 years of industry experience in sales, analytics; patient advocacy, US and Global Marketing , 10 years of experience in oncology

Led and built marketing functions for launches and inline brands

Paula O'Connor, MD, Head of Medical Affairs US

17 years industry experience with 30 years oncology experience

Led Clin Dev programs at 3 companies and established MedIcal Affairs organizations at 3 companies

Experience from nearly 100 product launches in hematology and oncology

Bristol-Myers Squibb · Pfizer · MERCK · AstraZeneca · Genentech A Member of the Roche Group · Roche · Celgene · SANOFI · Takeda · EMD SERONO · genzyme · ON PHARMACE · Aventis · SeattleGenetics · EXELIS · Abraxis BioScience · MEDIVATION · CLOVIS ONCOLOGY · TESARO · Schering-Plough · Tocagen · ARIAD · AMGEN · pharmacyclics An AbbVie Company · agios

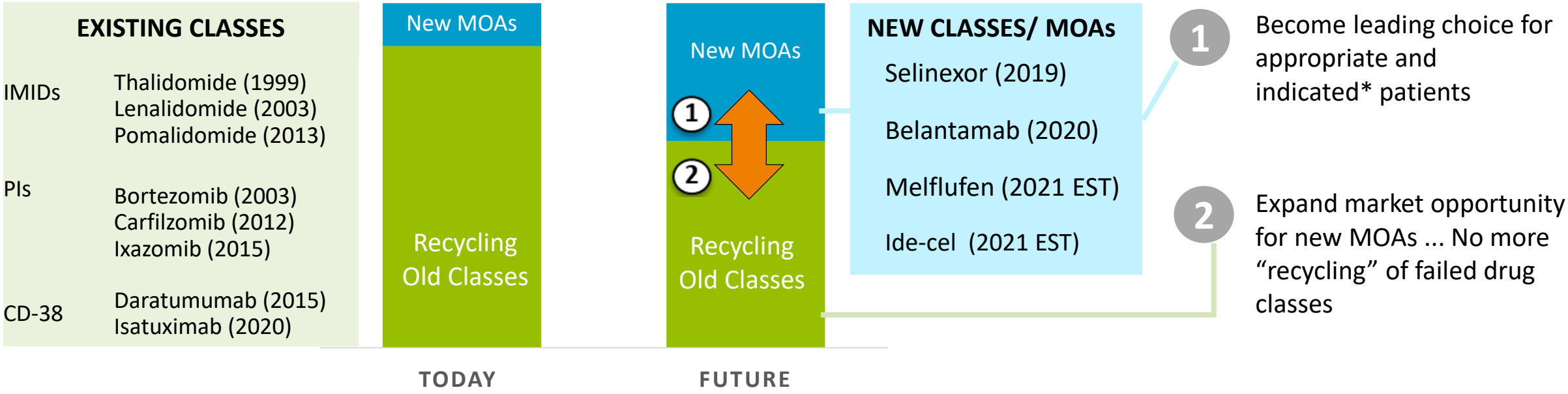
oncopeptides

BECOME A LEADING CHOICE IN TRC MM AND EXPAND MARKET

TWO-PRONGED STRATEGIC APPROACH

Driving change in today's RRMM treatment paradigm

Common Practice to "recycle" drugs within existing classes as patients progress



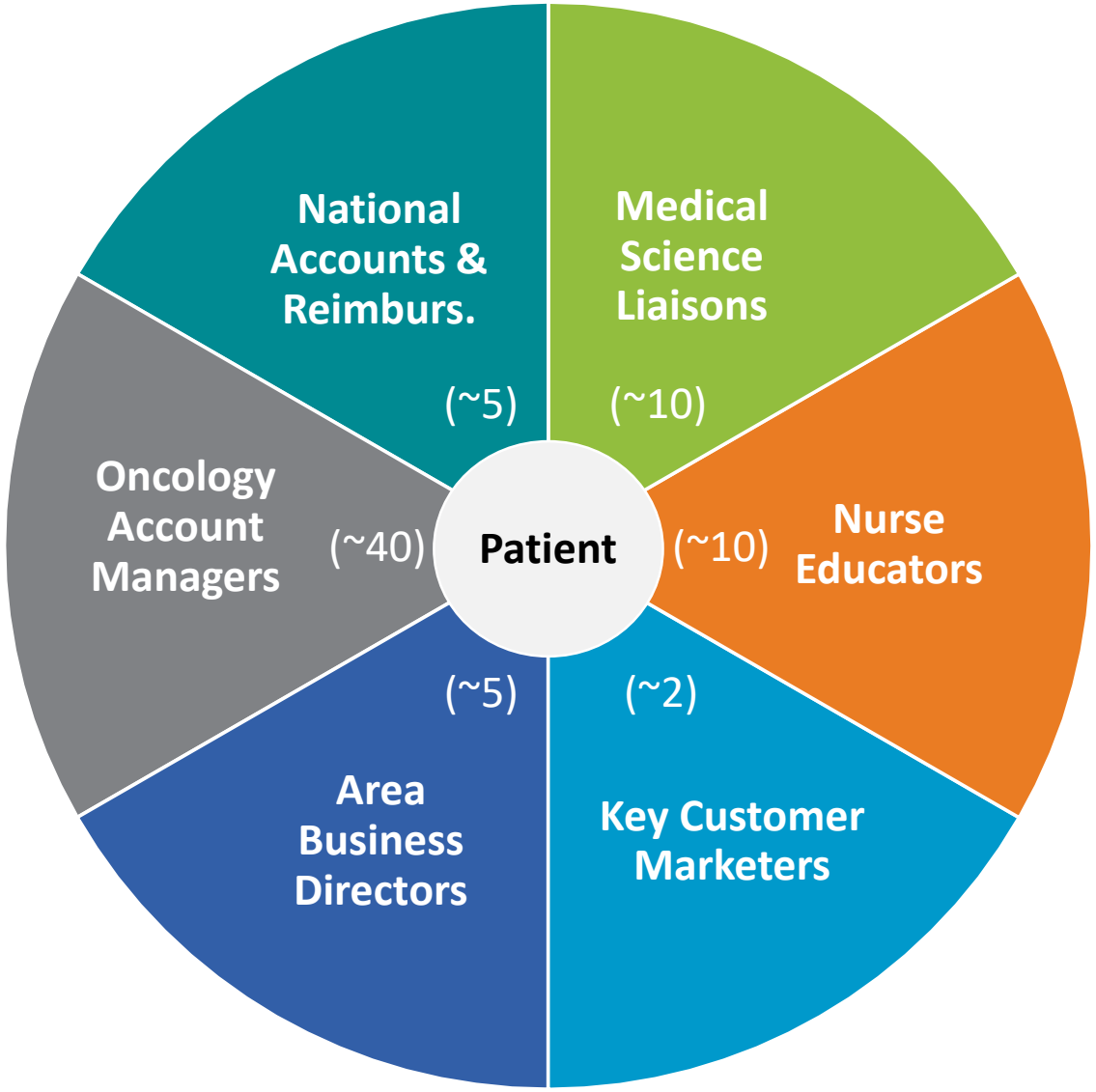
* based on final FDA approved label

Melflufen is not yet FDA approved. This presentation is confidential and for internal planning purposes only

oncopeptides

PASSIONATE TO MAKING A DIFFERENCE

A PATIENT FOCUSED ORGANIZATION



"Ensuring that every patient who potentially could benefit from melflufen gains access"

Marty J Duvall

oncopeptides

ROBUST MELFLUFEN DATA ACCEPTED BY ASH
VALIDATES THE STRENGTH OF PDC PLATFORM

8

Clinical presentations

- Oral presentation from phase 2 ANCHOR study based on late data cut
- Seven posters from HORIZON study, including:
  - Elderly patients (75 years and older)
  - High risk cytogenetics patients
  - Extra Medullary Disease patients
  - Patients with prior alkylator therapy
  - Health-related QoL analysis

4

Pre-clinical presentations

- Effect of multidrug resistance protein on efficacy in carfilzomib resistant model
- Efficacy against bortezomib-resistant myeloma models
- Inhibition of RANKL osteoclastogenesis
- Efficacy in samples from high-risk MM patients including plasma cell leukaemia

HORIZON

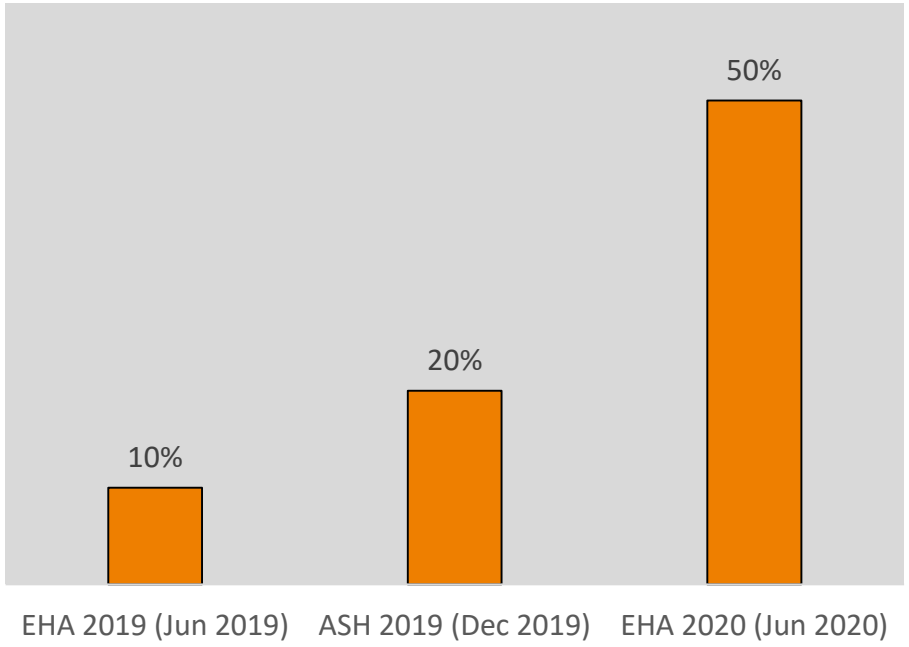
ANCHOR

oncopeptides

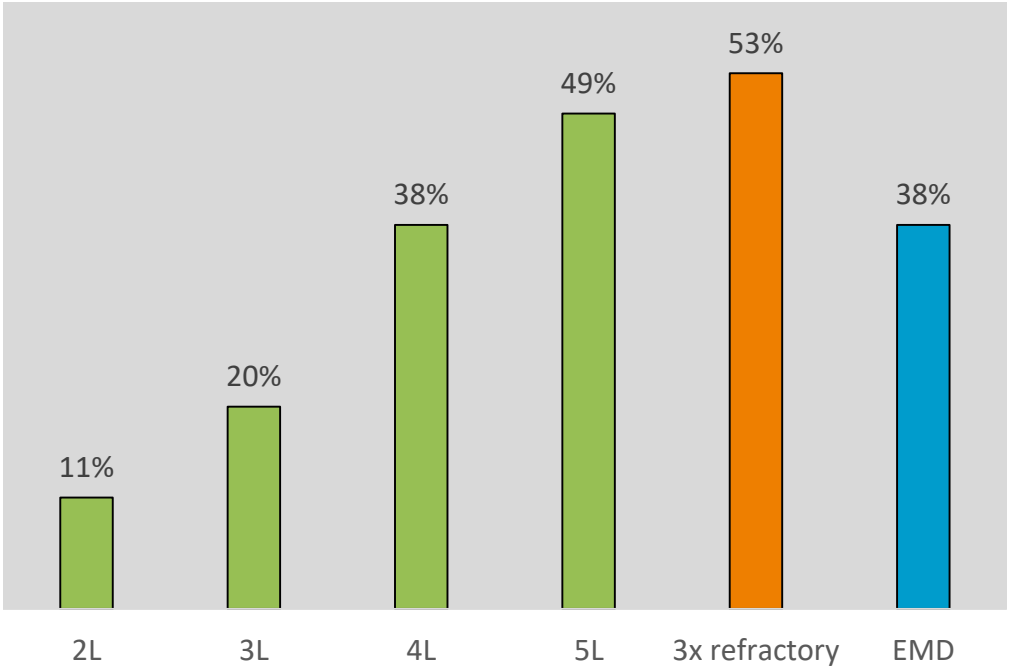
MELFLUFEN AWARENESS CONTINUES TO INCREASE IN US

MOMENTUM IS GROWING AFTER SCIENTIFIC MEETINGS

US Awareness of Melflufen



% MDs likely or very likely to use product X by line of therapy



Source: US physician market research, n=100

oncopeptides

NEWS FLOW
MAJOR MILESTONES

Q3 2020	Q4 2020	Q1 2021	Q2 2021
First patient in PORT study	Expanded Access Program (US) opened	First patient in OPD5	Submission cond. EU approval
First patient in Amyloidosis study	Intent to file for EU conditional approval	Results from PORT	Top-line results OCEAN
FDA Feedback PDUFA date	Loan agreement with EIB for € 40 M	Potential accelerated approval in US	EHA data update
OCEAN patient enrollment completed	IND filing for OPD5	Commercial launch in the US	Last patient in ANCHOR
	ASH abstract including ANCHOR data		Last patient in BRIDGE
	HORIZON publication Journal of Clin Onc		
	CMD end November		
	ANCHOR presentation at ASH		
	First patient in LIGHTHOUSE		

oncopeptides


ONE
oncopeptides