

# Kyprolis® (carfilzomib) for Injection and Blinatumomab

Pablo Cagnoni Onyx President

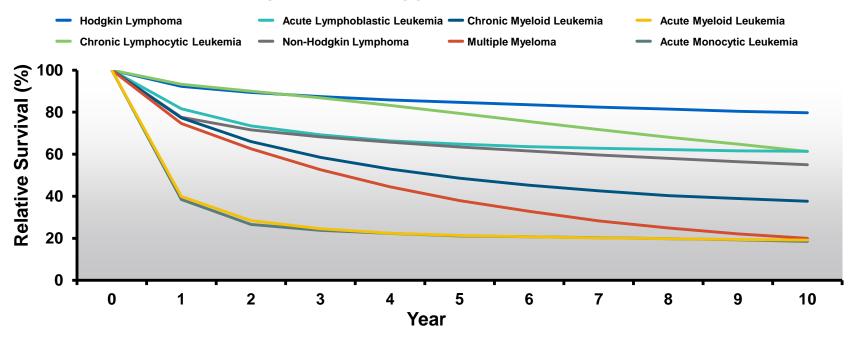




## Kyprolis® (carfilzomib) for Injection

# Significant Unmet Need Remains In Multiple Myeloma

### **Relative Survival by Cancer Type**

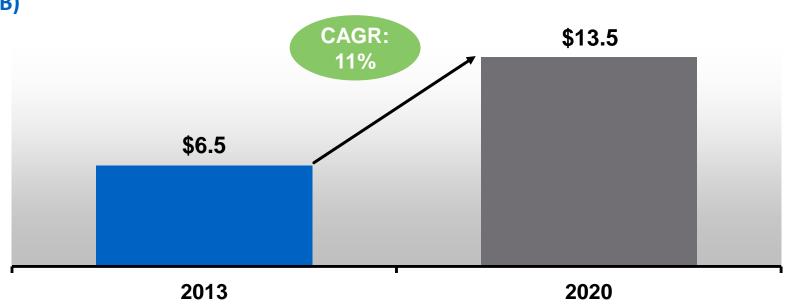


Sources: SEER, Cancer Facts & Figures 2014, American Cancer Society, 2014



### Global Myeloma Market to Double by 2020

## Global Market (\$B)

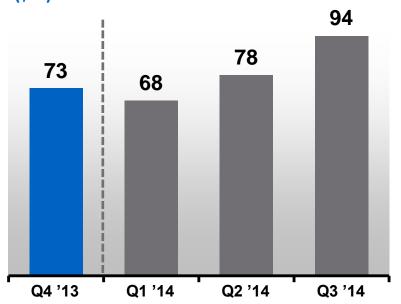






### **Quarterly Sales Are Increasing**

## **2014 YTD Sales: \$240M** (\$M)



## ~ 14,000 Patients Have Received Kyprolis® Commercially

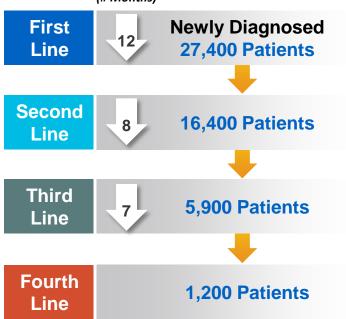
- Strong quarter-over-quarter growth
- Current indication based on Phase 2 single-arm data





### **Duration of Therapy Is Longer In Earlier Lines**

Current Duration of Therapy (# Months)



#### **Key Drivers for Growth**

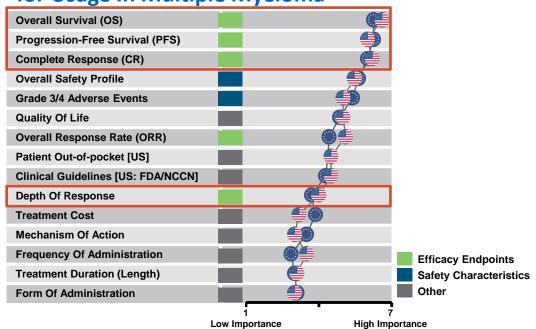
- Earlier treatment (smoldering, asymptomatic)
- Increase duration of therapy
- Reduce patient drop-off and increase number of patients by line
- Number of lines will increase as new therapies extend survival and more treatment options are needed

#### Source: Onyx market research



### **Efficacy Remains Primary Driver** of Treatment Choice

**Importance of Decision Drivers for Usage In Multiple Myeloma** 

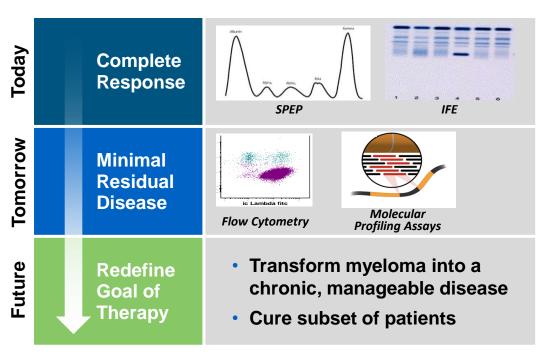


- Depth of response is evolving to become an important driver of treatment choice
  - Emergence of stringent complete response (sCR) and minimal residual disease (MRD) as goals
- Kyprolis® provides physicians the ability to achieve deep and durable responses

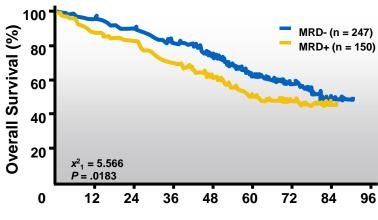
Source: Physician Treatment Goals Qual, January 2014



### The Future of Myeloma Treatment



## MRD: Depth of Response Impacts Outcome In Myeloma



J Clin Oncol. Vol 31, No 20, July 10, 2013

SPEP = simple protein electrophoresis; IFE = immuno-fixation



# ASPIRE Topline Results Support Expansion Into Relapsed Myeloma

Kyprolis® + Revlimid® + Low-Dose Dexamethasone (KRd) vs Revlimid® + Low-Dose Dexamethasone (Rd)

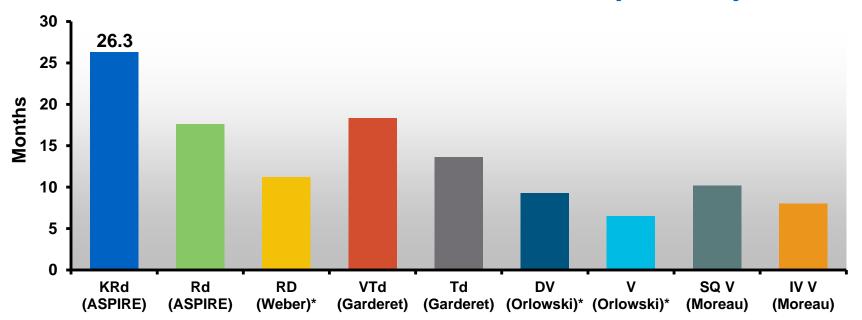
- Progression-free survival primary endpoint successfully met at interim analysis
  - Hazard ratio = 0.690 (95% CI: 0.570-0.834) P < 0.0001
  - 8.7 month difference in median PFS: 26.3 months in KRd arm vs 17.6 months in Rd arm
- Overall survival secondary endpoint data are not yet mature
  - Trend in favor of KRd that did not reach statistical significance
- Safety profile consistent with the current US Kyprolis<sup>®</sup> label, including rate of cardiac events
- Treatment discontinuation due to adverse events and on-study deaths were comparable between the two arms
- No new safety signals identified

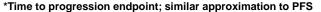
Results support hypothesis that Kyprolis® represents best-in-class proteasome inhibitor



# ASPIRE: Unprecedented PFS In Relapsed Myeloma With KRd

### **Phase 3 Studies Performed Across Relapsed Myeloma**

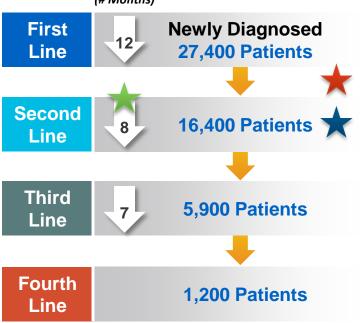






# Substantial Opportunity for Kyprolis<sup>®</sup> In Relapsed Myeloma

Current Duration of Therapy (# Months)



|   | ASPIRE   | Reason to Believe   |
|---|--|---|
| * | Increase duration of therapy in second line        | ASPIRE designed to treat patients with Kyprolis® for 18 months                  |
| * | Increase number of patients treated in second line | Effective, new option available in relapsed multiple myeloma                    |
| * | Increase second-line share                         | Physicians and patients believe in importance of depth and duration of response |

#### Source: Onyx market research



# Majority of Treatment Opportunities In Earlier Lines of Therapy

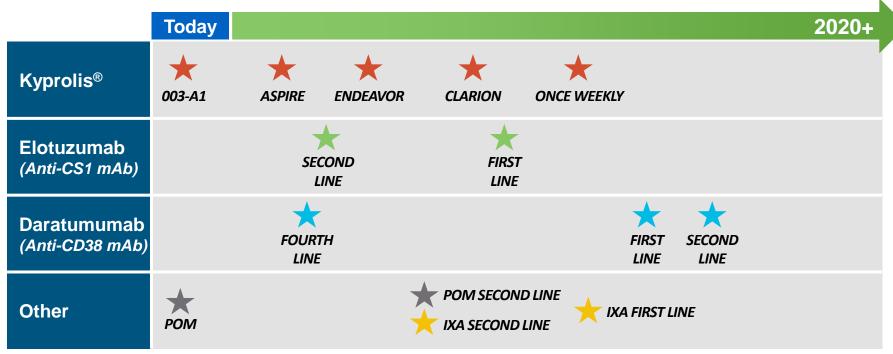
| Study  | Objectives  |
|--|---|
| Head-to-Head Phase 3s  | <ul> <li>Establish superiority to Velcade<sup>®</sup></li> <li>Establish Kyprolis<sup>®</sup> in early lines</li> </ul> |
| Second Line   First Line   First Line   ENDEAVOR Kd   CLARION KMP   ECOG KRd | <ul> <li>Further improve efficacy profile with higher dose</li> </ul>   |
| CHAMPION Phase 2   | <ul><li>Improve convenience</li><li>Establish high dose weekly</li></ul>  |
| Weekly Kd  | <ul> <li>ORR = 81% in Phase 1</li> <li>Phase 2 enrollment complete</li> </ul>   |
| Weekly Phase 3   | <ul> <li>Planning Phase 3 study</li> </ul>  |
| Weekly Kd  | r laining r hase 5 study  |

### MRD analyses ongoing in Onyx-sponsored trials



materially: Amgen disclaims any duty to update.

# Comprehensive Development Program to Establish Kyprolis® as Backbone of Therapy



Source: Clinicaltrials.gov

POM = Pomalyst<sup>®</sup>; IXA = ixazomib; mAb = monoclonal antibody



# Considerable Interest In Combining Kyprolis® With Novel Agents

| Company Collaborations        |                                  | Investigator-Sponsored Trials |  |
|-------------------------------|----------------------------------|-------------------------------|--|
| <b>gsk</b><br>GlaxoSmithKline | Afuresertib:<br>Phase 1, Phase 2 | SANOFI SAR650984: Phase 2b    |  |
|                               | Ibrutinib: Phase 1/2             | <b>Selinexor: Phase 1b</b>    |  |
| ARRAY<br>BIOPHARMA            | Filanesib: Phase 2               | Filanesib: Phase 1/2          |  |

More than 50 investigator-sponsored studies with Kyprolis®





## **Oprozomib**

### **Oprozomib: An Oral Proteasome Inhibitor**

| •  | Highly | y active | drug |
|----|--------|----------|------|
| ٠. | підііі | y active | arug |

- New stepped-up dosing
- Optimized formulation
- Improved GI tolerability

| Trial   | Phase 1 | Phase 2 |
|---|---------|---------|
| Hematologic malignancies, including Waldenström's macroglobulinemia |         |         |
| Relapsed and refractory multiple myeloma (OPOMd)                    |         |         |





### **Blinatumomab**

### **ALL Incidence In US and EU**

#### **ALL Incident Case Count (2012)**

#### **Total ALL Patients**

#### **Adult ALL**

4,436 Patients (48% of ALL)

#### **Adult B-Precursor ALL**

3,911 Patients (88% of Adult ALL)

#### **Adult Ph-Negative B-precursor ALL (First Line)**

3,011 Patients (67% of Adult ALL)

Adult Relapsed/Refractory Ph-Negative B-precursor ALL 2.056 Patients

#### **Breakdown by Geography**

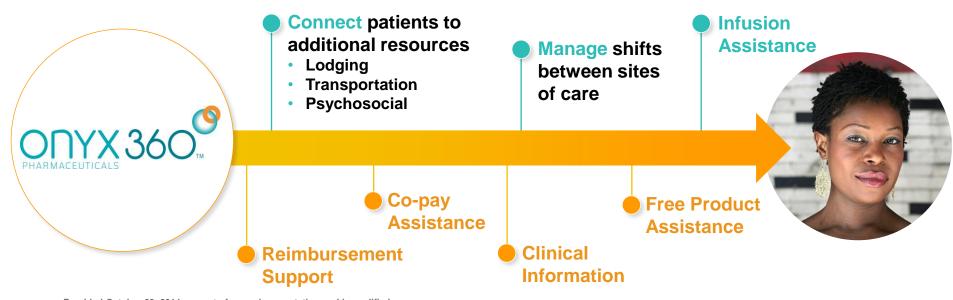
| breakdown by deograp           |                              |  |  |
|--------------------------------|------------------------------|--|--|
| <b>5</b> ,134                  | 4,078                        |  |  |
| 2,359<br>(46% of ALL)          | 2,077<br>(51% of ALL)        |  |  |
| 2,080                          | 1,831                        |  |  |
| 1,601                          | 1,410                        |  |  |
| 1,107<br>(47% of<br>Adult ALL) | 949<br>(46% of<br>Adult ALL) |  |  |

ALL = acute lymphoblastic leukemia; Ph- = Philadelphia negative Source: SEER database; Amgen research



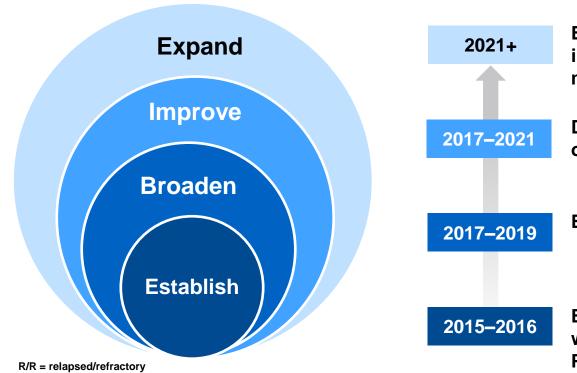
### **Addressing Unique Needs of ALL Patients**

## Leverage Onyx Expertise and Infrastructure In Hematology/Oncology





# Establish Blinatumomab In Adult R/R ALL and Develop Next Indications and Formulations



Expand with additional indications into other B-cell malignancies

Develop new formulations/mode of administration

Broaden blinatumomab use in ALL

Establish blinatumomab in ALL with initial launch\* in adult Philadelphia-negative R/R ALL

\*Following FDA approval
Provided October 28, 2014, as part of an oral presentation and is qualified

