Building a Premier Oncology Biotech

Dr. Helen Torley, President and CEO

May 2019

Forward-Looking Statements

All of the statements in this presentation that are not statements of historical facts constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Examples of such statements include possible activity, benefits and attributes of PEGPH20, future product development and regulatory events and goals, anticipated clinical trial results and strategies, product collaborations, our business intentions and financial estimates and results, including projected revenue amounts. These statements are based upon management's current plans and expectations and are subject to a number of risks and uncertainties which could cause actual results to differ materially from such statements. A discussion of the risks and uncertainties that can affect these statements is set forth in the Company's annual and quarterly reports filed from time to time with the Securities and Exchange Commission under the heading "Risk Factors." The Company disclaims any intention or obligation to revise or update any forward-looking statements, whether as a result of new information, future events, or otherwise.

Two Engines for Growth

ENHANZE®

- Proven 'IV to Sub Q' Partnering Platform
- Accelerating Partner Investment for Approvals
- High Potential:
  ~$1B Annual Royalty Revenue Projection in 2027
  ~$1B in Lifetime Milestones

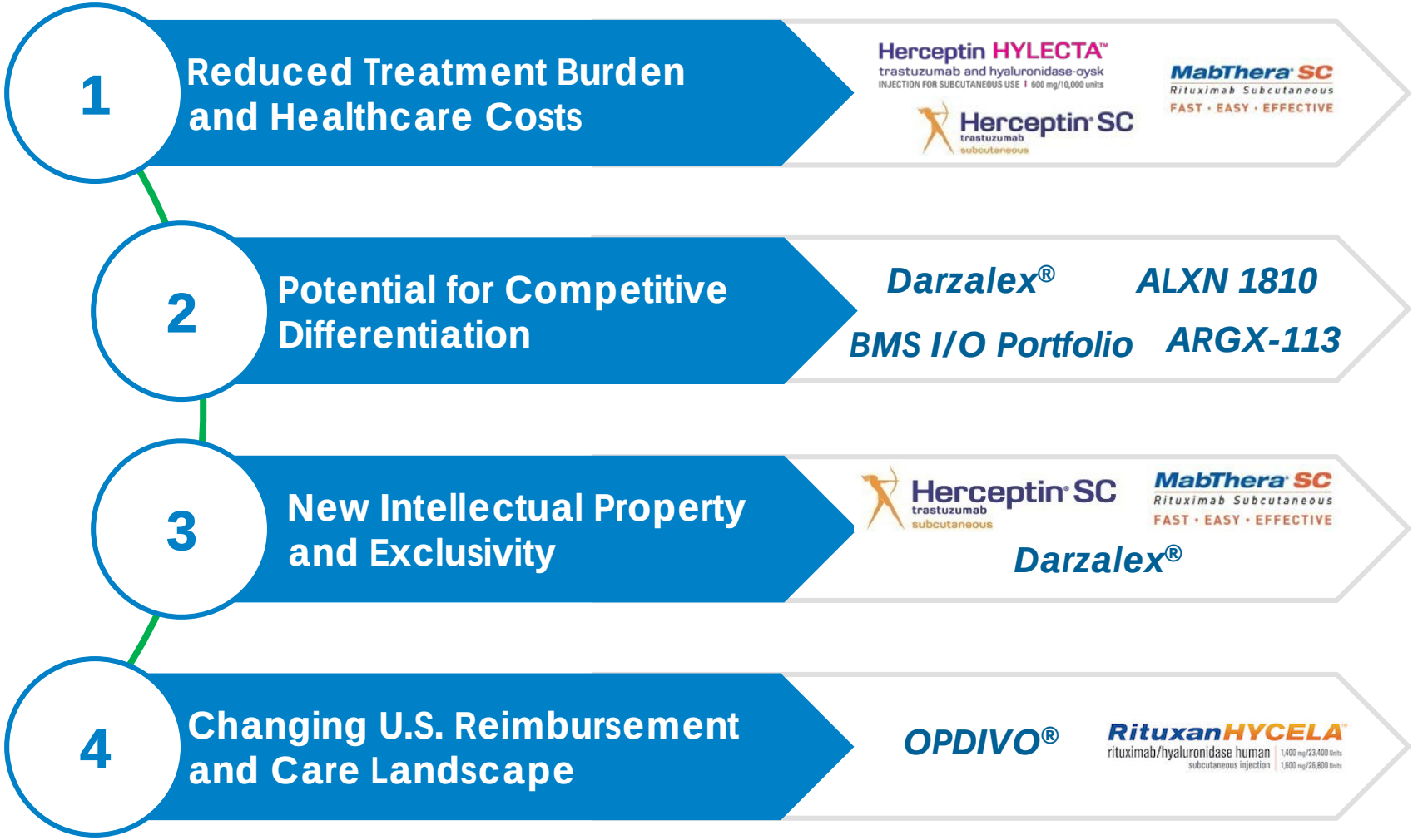
PEGPH20

- Late Stage Targeted Oncology Asset
- Phase 3 Data Readout Currently Projected in 2H 2019
- Potential ~$1B Global Pancreas Indication with Additional Pan-tumor Potential

Halozyme

ENHANZE®

ENHANZE® Offers Four Potential Paths for Differentiation and Value Creation for Partners



ENHANZE® High-Growth Business

9 Agreements signed to date:
Roche (Genentech), Baxalta, Pfizer, Janssen, Eli Lilly, Abbvie BMS, Alexion, and argenx

3 Approved Products

8 Targets in development today

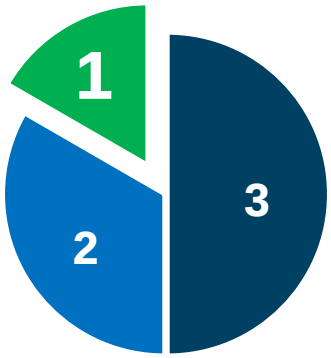
>20 Target slots available to current partners

Bristol-Myers Squibb Agreement Terms

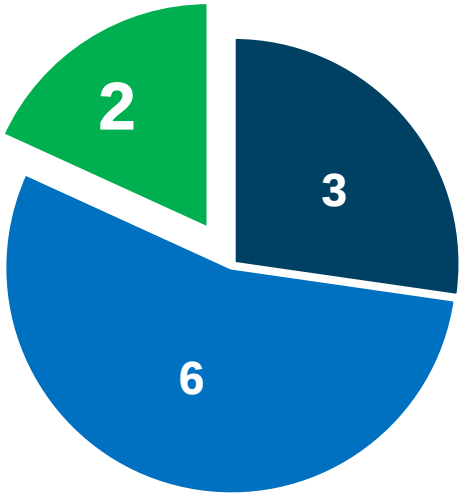
Number of Targets	11
Upfront	$105M
Milestones/ Target	$160M
Royalties	Mid-single digit average across all agreements

Near Term Catalysts:
Project 3 Potential Blockbuster Programs in Phase III in 2019

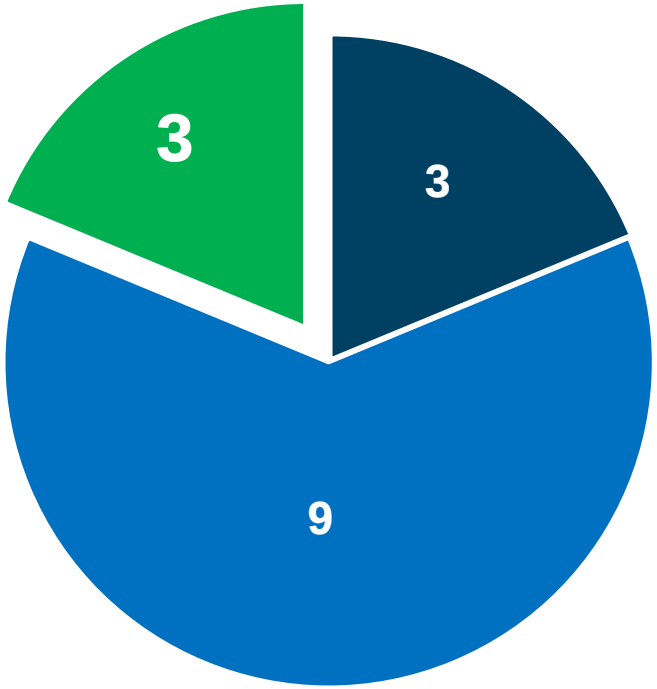
2017
6 Products



2018
11 Products



2019
15 Products(1)



- Approved and Commercialized
- Phase III
- Phase I

3 Commercialized Products

3 Products in Phase III

[1] Projected by year-end as of January 9, 2019

Three Products Successfully Commercialized in Global Markets

US	ROW
HyQvia [Immune Globulin Infusion 10% (Human) with Recombinant Human Hyaluronidase]	HyQvia [Immune Globulin Infusion 10% (Human) with Recombinant Human Hyaluronidase]
RituxanHYCELA rituximab/hyaluronidase human subcutaneous injection 1,400 mg/23,400 Units 1,600 mg/26,800 Units	MabThera SC Rituximab Subcutaneous FAST • EASY • EFFECTIVE
Herceptin HYLECTA™ trastuzumab and hyaluronidase-oysk INJECTION FOR SUBCUTANEOUS USE I 600 mg/10,000 units	Herceptin SC trastuzumab subcutaneous

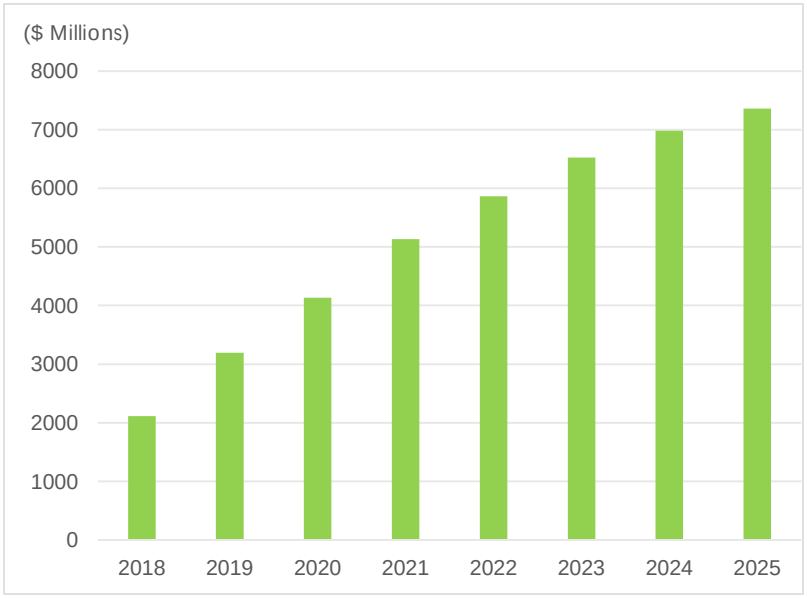
ENHANZE® Development Pipeline

	Partner	Product/Target		
Phase III in 2019	Janssen Undisclosed Roche	Darzalex® *Completing*	PERJETA® pertuzumab / Herceptin® trastuzumab *Ongoing*	Undisclosed *Initiating*
Phase I in 2019	BMS ALEXION Roche Lilly	Anti-CD73 TECENTRIQ® atezolizumab	OPDIVO®	ALXN1810 Undisclosed

PLUS 4 Potential New Phase I Starts in 2019

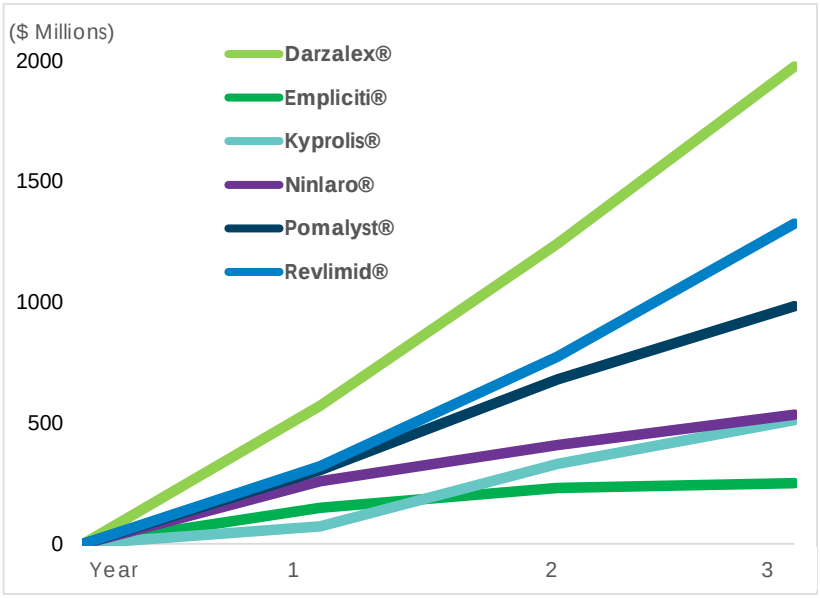
Daratumumab IV:
Blockbuster Multiple Myeloma Treatment

Analyst Estimates for Darzalex®



Source: Analyst estimates via Nasdaq IR Insight

Early Launch Data Compares Favorably with Other Multiple Myeloma Drug Launches



Source: Bloomberg, company press releases

Sell-side analysts estimate >$7 billion in sales by 2025

Daratumumab SC:
Potential Regulatory Submissions in 2H 2019

Potential Benefits of Subcutaneous Formulation[1]

- Faster infusion time being tested (3-5 minutes)[2] compared with 4-6 hour IV infusion, initially weekly
- Well tolerated with fewer infusion related reactions (IRRs) than with IV[3]

BLA/MAA Submission Timeline

- COLUMBA study in Relapsed and Refractory Multiple Myeloma
  - Achieved 2 primary endpoints: non-inferiority in Response Rate and C trough (reported 2/25)
- Janssen anticipates filing regulatory submissions in H2 2019[4]

Multiple Ongoing Phase 3 Trials[1] with ENHANZE®

[1] Genmab corporate presentations (Jeffries November 2018, R&D Update and 2018 ASH Data Review December 2018)
[2] Subcutaneous Delivery of Daratumumab in Patients with Relapsed or Refractory Multiple Myeloma Pavo, an Open-Label, Multicenter, Dose Escalation Phase 1b Study (*Blood* 2017)
[3] Subcutaneous Daratumumab in Patients With Relapsed or Refractory Multiple Myeloma: Part 2 Safety and Efficacy Update of the Open-label, Multicenter, Phase 1b Study (PAVO) Ajai Chari et al (ASH December 2018)
[4] Johnson and Johnson Pharmaceutical Business Review (September 13, 2018)

Perjeta®/Herceptin® Fixed Dose Combination with ENHANZE®: Potential Regulatory Submissions 2020

Potential Opportunity

- PERJETA® indicated for use with Herceptin® and chemotherapy for adjuvant treatment of patients with HER2+ early-stage breast cancer (EBC) at high risk of recurrence
- Target population size(2): ~72,000 in US and EU 5
- Strong IV adoption since launch: ~46% share in high risk early breast cancer in U.S.(1)

Value proposition of Perjeta®/Herceptin® Fixed Dose SC with ENHANZE (3)

Value proposition: Subcutaneous formulation (SC)[3]

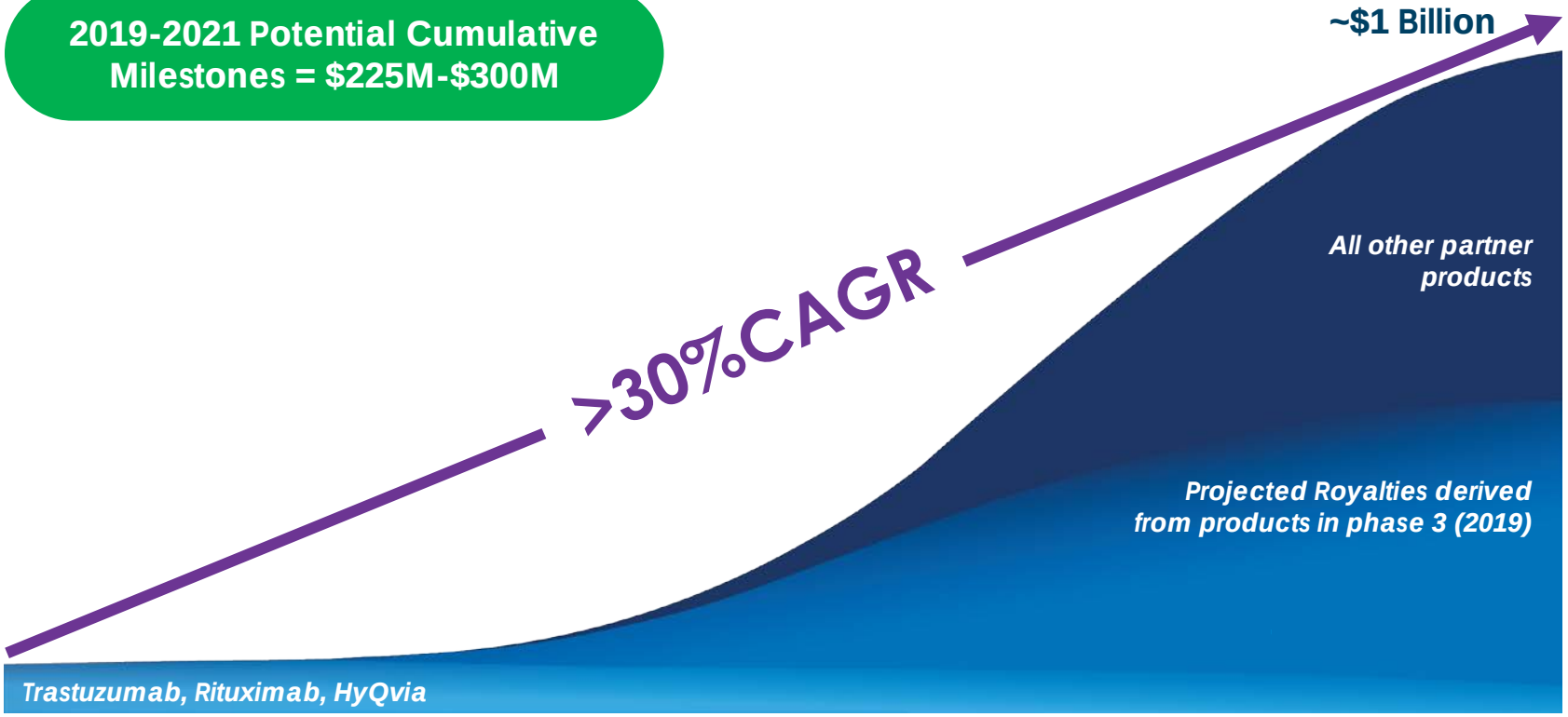
Reduced treatment burden	*Capacity/Resources*
5 min administration time	**Infusion chair** capacity constrained
At home administration potential	**Hospital staff** resources constrained

Herceptin + Perjeta Fixed Dose SC in Ph III trial

[1] Roche twelve-month 2018 results
[2] Roche presentation, Exane BNP Paribas Conference, June 2017. Datamonitor and internal estimates, US & EU5; Target population for Herceptin in adjuvant breast cancer (US & EU5)
[3] Roche Virtual Late Stage Pipeline Event 2018 presentation (September 13, 2019)

ENHANZE®:
~$1B Royalty Revenue Potential in 2027

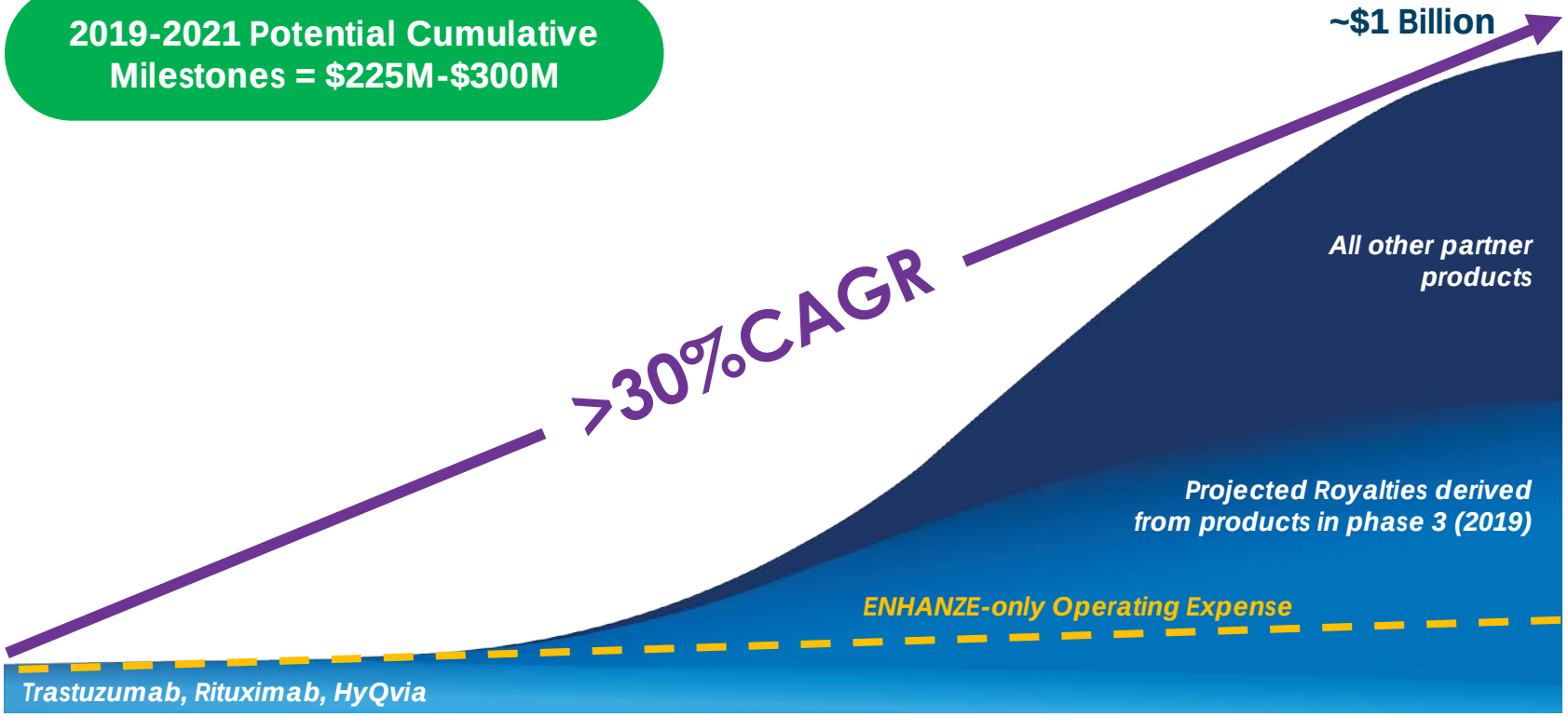
2019-2021 Potential Cumulative Milestones = $225M-$300M



Projection based on approved products and assumes global approval and launches for 7 additional products in multiple indications. Includes projections for subcutaneous versions of targets not currently approved or commercially available. Innovator revenues based on Bloomberg analyst projections, when available. Conversion rates based on Halozyme internal projections. Royalty revenue projection includes targets selected but not yet disclosed. Projected royalty revenue is not risk–adjusted.

ENHANZE®:
Royalties Exceed Pro Forma ENHANZE-only Operating Expenses

2019-2021 Potential Cumulative Milestones = $225M-$300M



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Accelerating ENHANZE® Growth

Existing Partnerships

- New collaboration signed with argenx in 1Q 2019 is first with development-stage biotech
- Daratumumab SC Regulatory Submissions in 2H 2019
- 12 Targets in Development in 2019

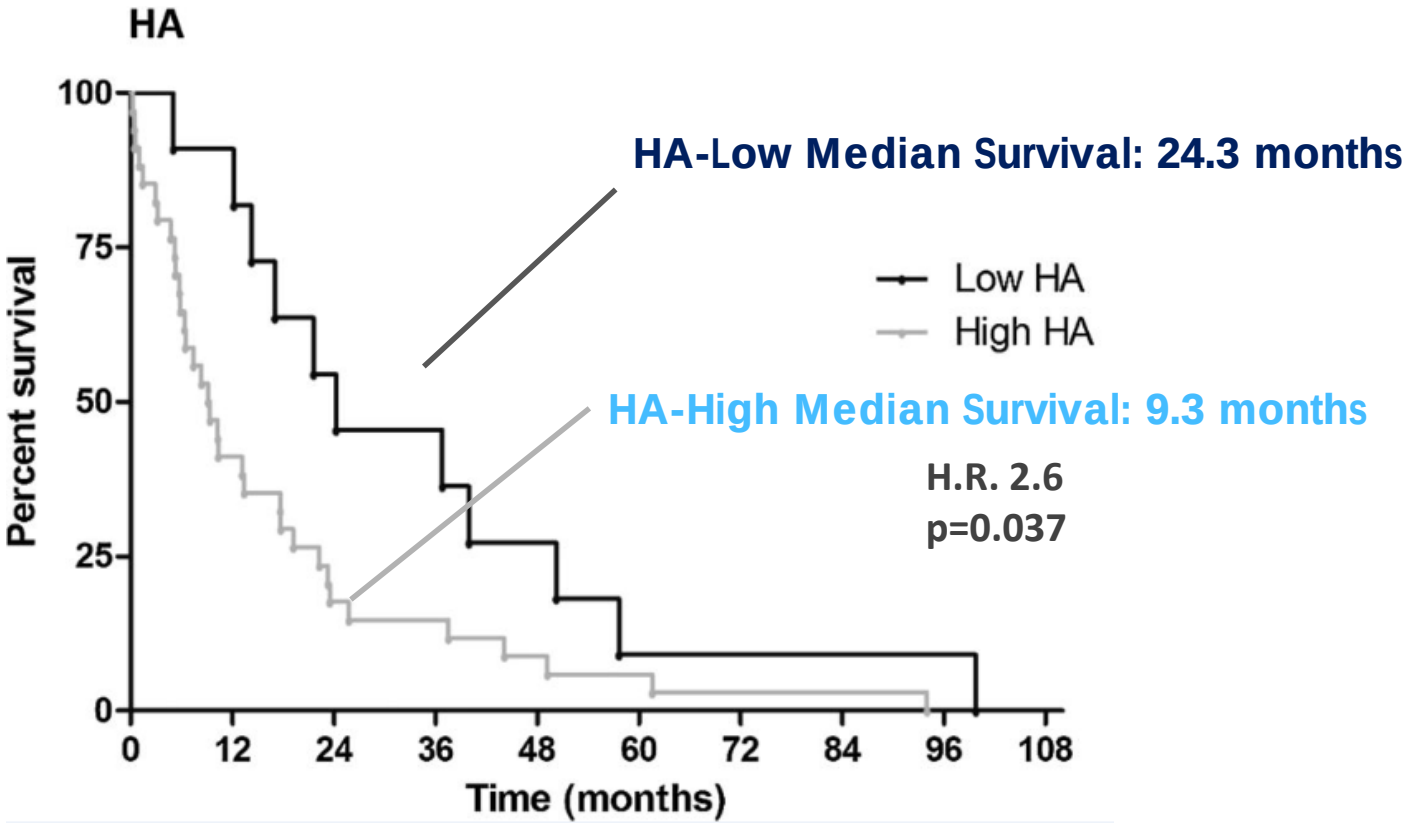
New Partnerships

- Potential in Oncology, Rare Diseases, Blood Disorders, Immunology, CNS and more
- Pool of Potential New Partners and Targets Remains Sizable

PEGPH20

Tumor HA Overexpression Associated with Shorter Survival in Pancreas Cancer

Retrospective Evaluation of Pancreatic Cancer Survival in ~50 Patients[1]

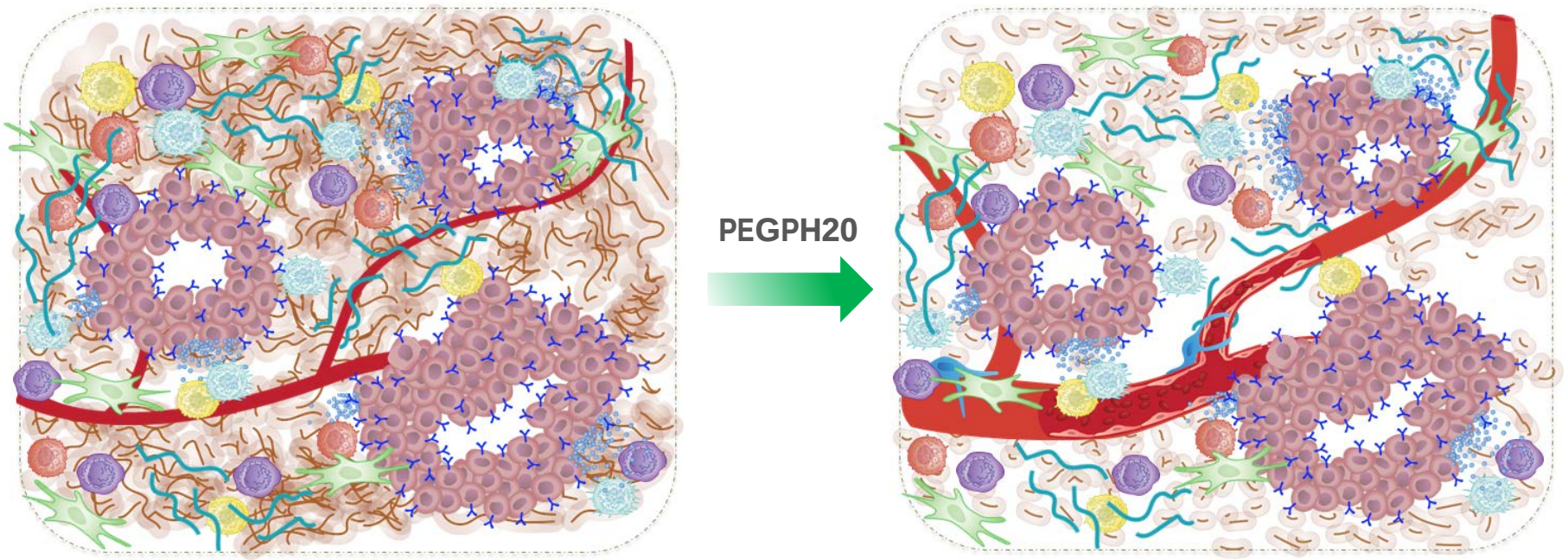


[1] Whatcott et al: Clin Cancer Res 2015, 21:3561-3568. HA staining by HABP. Scoring algorithm assessed percent staining and intensity.

PEGPH20 Targets Hyaluronan (HA) in the Tumor Microenvironment

In HA-High Tumor Animal Models, Removal of HA by PEGPH20 Demonstrated to:

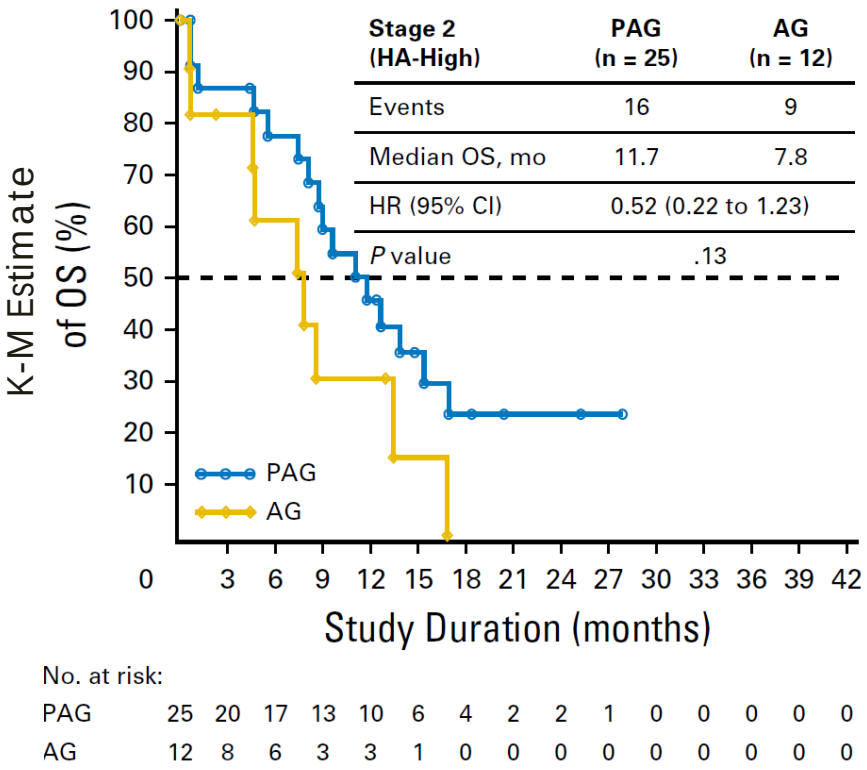
Decrease intratumoral pressure	Decompress vasculature	Increase perfusion	Increase access for therapeutics	Increase access for immune cells



Proprietary Test Developed in Phase II to Identify HA-High Patients for Phase III

- Partnered with Ventana for Companion Diagnostic
- Phase II Study HALO 202 key to develop Companion Diagnostic
  - 279 1L metastatic PDA
  - PEGPH20 plus Abraxane® and Gemcitabine versus Abraxane® and Gemcitabine alone
  - HA all-comers population
- Stage 1: identification of HA algorithm/cut point
  - >50% score =HA-high
- Stage II: validation of cut-point/ algorithm for Phase III
  - 37 of 133 patients HA-high

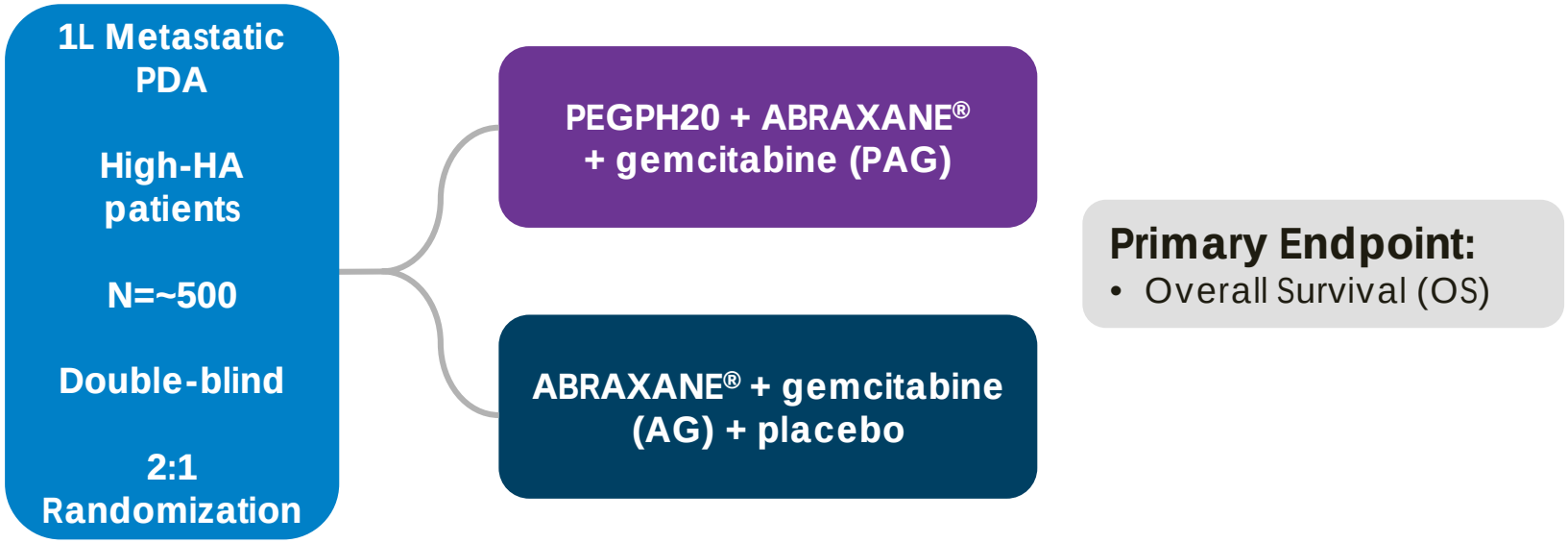
Analysis of OS in HA-High, Stage II HALO 202[1]



[1] HALO 202: Randomized Phase II Study of PEGPH20 Plus Nab-Paclitaxel/Gemcitabine Versus Nab-Paclitaxel/ Gemcitabine in Patients With Untreated, Metastatic Pancreatic Ductal Adenocarcinoma *Journal of Clinical Oncology*, Hingorani et al (December 2017)

Pancreas Cancer HALO-301:
Enrollment Complete with Approximately 500 Patients

Global Phase 3 Trial Now Fully Enrolled: ~500 Patients



Expect topline data in 2H 2019

Final Analysis Plan for HALO-301:
Single Primary Endpoint of Overall Survival

- Fixed sample size with target number of OS events: 330
- Mature dataset supporting best test of PEGPH20
  - All patient follow up of at least 8.5 months
  - <10% patients less than 13 months
- Well powered trial
  - 93% power for HR = 0.67
  - Minimal observable difference HR = 0.795 (e.g. median difference of 2.2 months)

~$1B Potential Opportunity in Pancreas Cancer

65,000

Annual Diagnosed Metastatic Pancreatic Ductal Adenocarcinoma (PDA) U.S. and EU 5(1)

25,000

Estimated Number of HA-High Patients

35–40% of Population(2)

Halozyme

[1] SEER 18 2006-2012, Globocan 2012, DRG Epidemiology data.
[2] Halozyme estimates for HA-High %.
[3] DRG Epidemiology data, Halozyme internal estimates.

Ongoing Studies Evaluating Pan-tumor Potential of PEGPH20

Combination	Tumor	Stage	Status
Checkpoint Inhibitors			
Atezolizumab (Tecentriq®) *Roche*	Pancreas Cancer (second-line)	Phase 1b Dose Finding Started 2H 2017	Enrollment completed
Atezolizumab (Tecentriq®)	Gall Bladder Cancer, Cholangiocarcinoma	Phase 1b Dose Expansion Initiated Q3 2018	Enrollment completed

2019 Financial Guidance

	May 2019
Net Revenue	$205M to $215M -Royalties of $72-74M
Operating Expenses	$265-$275M
Operating Expenses (excl. COGS)	$225-$235M
Operating Cash Burn	($45M) to ($55M)
Debt Repayment	~$90M
Year-end Cash	$210M to $220M

Outlook

- **Growing ENHANZE momentum**
  - ~$1 billion in annual royalty revenue potential by 2027
  - Multiple near-term catalysts in a high margin business

- Each pillar offers **strong potential upside**
  - ENHANZE: New deals *plus* up to $1 billion in lifetime milestones
  - PEGPH20: ~$1 billion global sales opportunity in pancreas cancer

- Each pillar has been incrementally **de-risked:**
  - ENHANZE: 3 approved products, recent FDA approval of Herceptin Hylecta™, Darzalex® SC regulatory submissions in 2H 2019
  - PEGPH20: HALO-301 fully enrolled

- Expect to end 2019 in **strong financial position**
  - Projected post-301 cash balance provides operational flexibility