

The background of the slide is a microscopic image showing various cells. On the left, there is a large, blue, spherical cell with a textured surface. To its right, there are several green, elongated cells with pointed ends. Further right, there are two large, pink, spherical cells with a rough, textured surface. The background is dark with some green and blue hues, suggesting a biological or medical setting.

AMGEN[®]

Amgen's Search for Innovative Combination Products

Shawn P Davis, PhD
Principal Engineer, Device Strategy



Searching for Innovative Combination Products

“Any sufficiently advanced technology is indistinguishable from magic.”

- Arthur C. Clarke

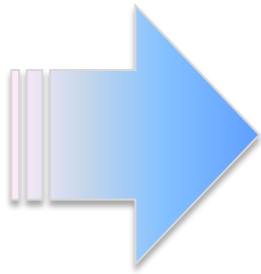
- What is Amgen looking for in combination products?
- How is Amgen finding products that meet our needs?
- Case study: Neulasta OnPro™ Kit
- Amgen as a preferred partner



Amgen's Search Must Balance Near and Long Term Needs While Recognizing Internal Evolution

- Amgen's perspective on devices has dramatically shifted

- Devices are a components to be sourced
- "We are not a device company."

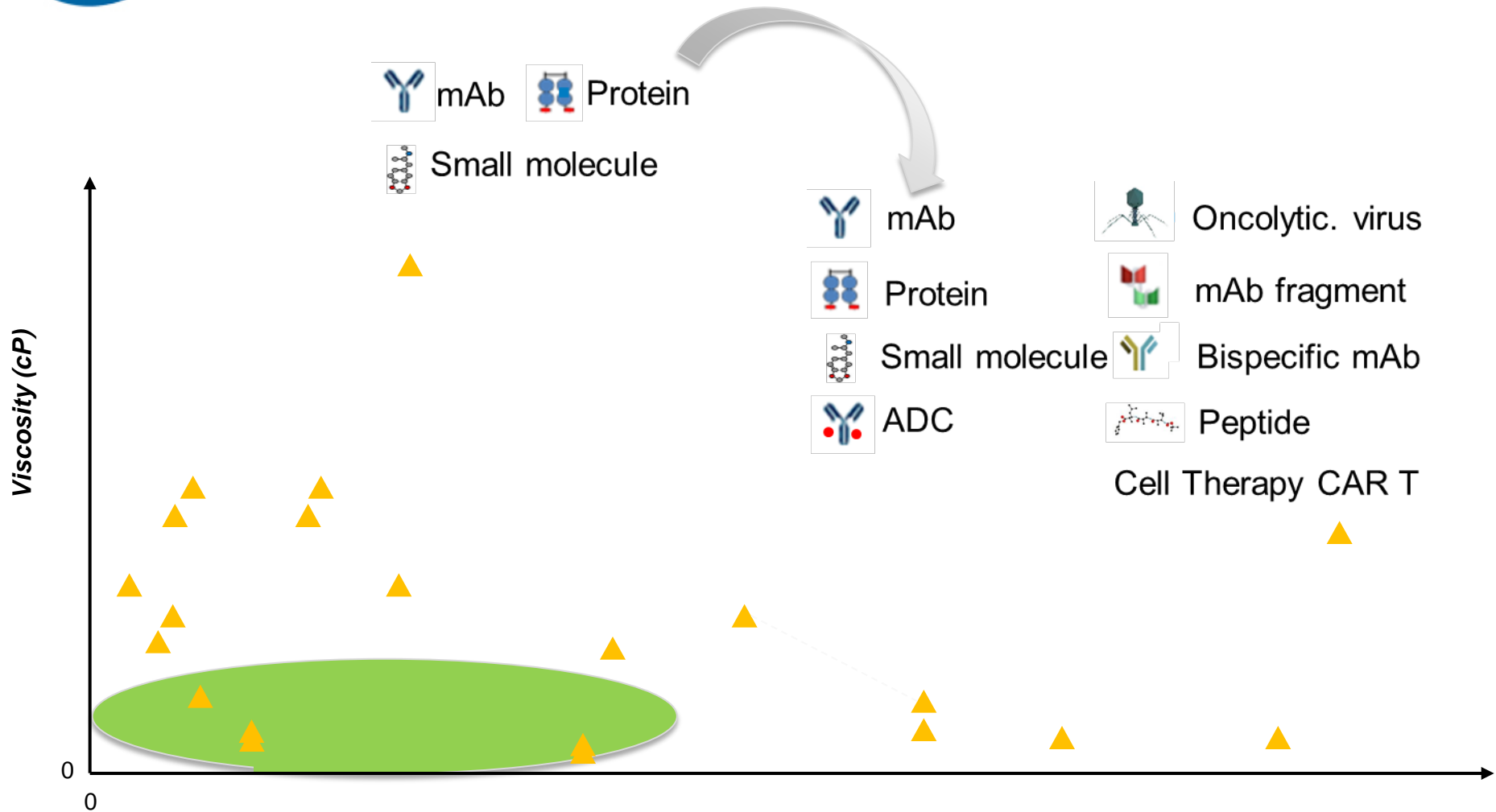


- Devices are integral to optimizing patient's experience and effectively delivering therapy
- "Amgen's pipeline is absolutely dependent on successful combination product commercialization..."

- Amgen must address near term capability gaps as well as long term strategic imperatives



Amgen's Rapidly Diversifying Portfolio is Creating New Challenges that Must be Addressed





Strategic Imperatives Drive Value from Launch to Life Cycle Management Across Portfolio

Drug Delivery Value Continuum

Broaden Range of Targets and Modalities	Enable Dose Administration by Intended User	Drive Efficiency	Improve Access & Increase New Patient Starts	Improve Persistence
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Minimize preparation requirements

Localize delivery

Improve cost-effectiveness of therapy delivery

Optimize dosing/administration

Support flexibility in site of care

Reduce significant impact on activities of daily life

Launch-Enabling Technology Value-Enhancing Technology



Identification and Evaluation of External Technologies is Central to Finding Solutions to Support our Portfolio

- Academic Research
- Conference Attendance
- Incubators

Technology Identification

Technology Evaluation

Technology Priorities

- Cross Functional Review
- Identifying Key Barriers to Success
- Structured Feasibility Programs

- Alternate Routes of Delivery
- Delivery of High Concentration Formulation to Minimize Dose Volume
- Improvements to Formulation Solubility and Stability
- Extending the Duration of Activity



Feasibility Evaluations Provide a Structured Manner to Explore the Technology, the Organization, and Partnership Structures

Our goal is to build partnerships, not to simply source products

- **Jointly discover** if the technology provides value to each organization and share the risk and reward of success
- **Fast fail** approach focused on key risk areas that might prevent success
- **Clear communication** of the process and the milestones for advancement

Preliminary Assessment

Integrated early assessment of a specific technology in the context of broader strategic initiatives

Full Assessment

Stage gate assessment leading to development, commercialization, and/or supply agreement

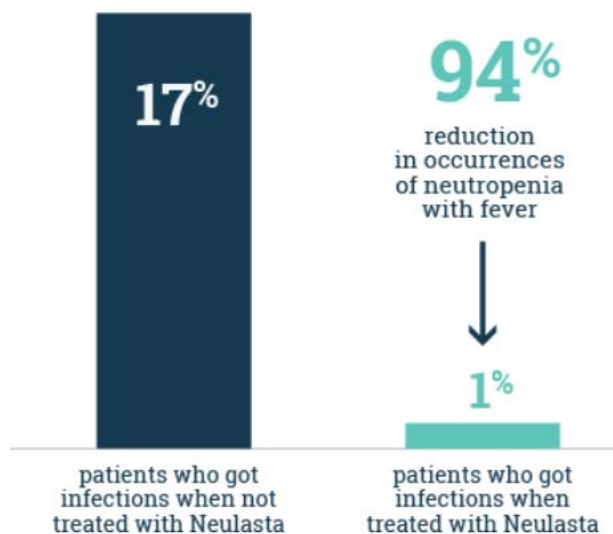
Business Case

Holistic report out with recommendation for path forward on a particular technology; framed in context of overall, long term strategy



Neulasta® Offers Significant Benefits to Patients When Administered as Prescribed

Neulasta® (pegfilgrastim) is a prescription medicine used to help reduce the chance of infection due to a low white blood cell count, in people with certain types of cancer (non-myeloid), who receive anti-cancer medicines (chemotherapy) that can cause fever and low blood cell count.



“You should not receive your dose of Neulasta® any sooner than 24 hours after you finish receiving your chemotherapy.”

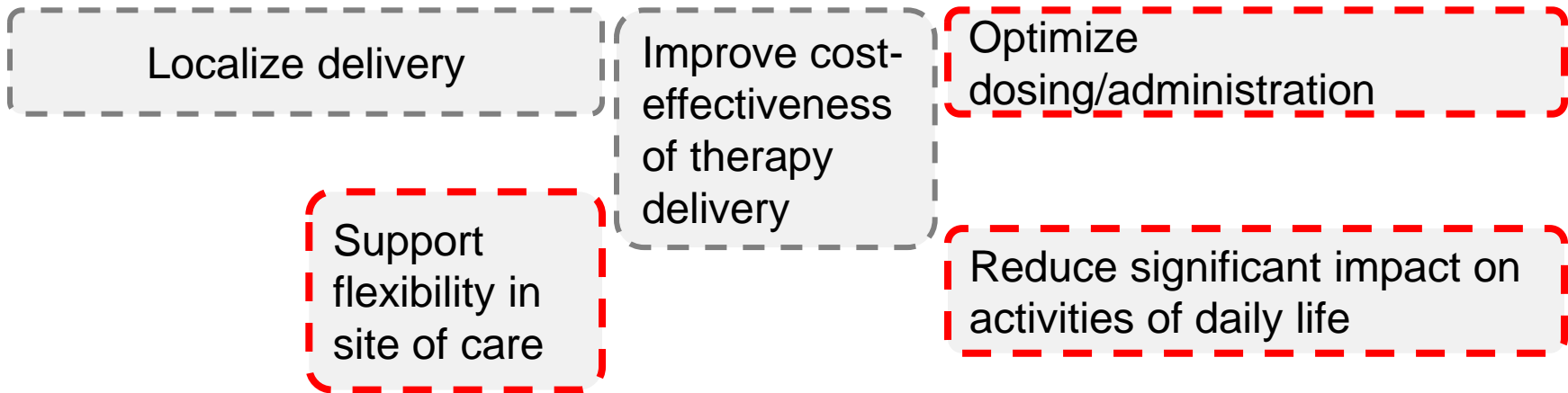


An Innovative Combination Product offers Multiple Opportunities to Drive Value to Neulasta® Patients

Drug Delivery Value Continuum

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Minimize preparation requirements



Launch-Enabling Technology Value-Enhancing Technology



Neulasta OnPro™ Kit Enables the Full Benefits of Neulasta® and Minimizes Patient Burden

- The programmable nature of Insulet's Omnipod allows precise control over the timing of Neulasta® delivery
 - On-body Injector for Neulasta®
 - Applied during chemotherapy visit (same day)
 - Initiates the Neulasta® delivery 27 hours after application
 - Avoids patients making a return trip to the physician to receive injection
- For the full story:
 - Tuesday, November 3: Room K, 13:45
 - Leveraging Device Technology to Transform User Experience-Scott Gibson





Amgen's Mission is to Serve Patients

We are actively seeking partners to help us drive value to the healthcare system and Amgen by improving patient outcomes through integrated combination product development.

- Drive **Value to the Health Care System** through an ecosystem of device technologies that improve patient outcomes
- Drive **Value to Amgen** by excelling in the face of competition and being seen as a preferred partner
- Realize the value through **Integrated Combination Product Development**