Expanding continuous pharmaceutical manufacturing into the American market

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Continuous Manufacturing Overview

- Continuous Manufacturing is Lean
  - Fast - lead time of days
  - Simple - API formulation and drug product manufactured in one process
  - Higher quality - streamlined requirements

- Traditional Manufacturing is Rigid
  - Slow - lead time of months
  - Complex - API formulation and manufacturing across geographies
  - Lower quality - recall and regulatory risks

Short Supply Drug Market Entry

- Currently 2486 drugs on FDA short supply list

Vial or Injection Form

Reason for Shortage: Manufacturing, demand, or API/70 drug shortlist

High Feasibility

Generics Peptides Market Attractiveness

- USD 16.7 Billion overall peptide market size (2024)
- 5.7% Market Growth (CAGR 2023-2030)
- Metabolic disorders represent 35% of revenue:
  - Including diabetes, liver disease, NASH, etc.
- Generics have 40% revenue share of overall market
- A number of peptides are on the FDA short supply list, and either soon to be off-patent or already off-patent without a generic

- Large and growing market size
- Rise in chronic diseases fueling overall market growth, particularly in the US
- Loss of patents for many branded drugs key driver for generics growth
- Represents a strategic opportunity for new market entry

Generics Peptides Candidates

<table>
<thead>
<tr>
<th>Peptide Generic Name</th>
<th>Brand Name</th>
<th>Primary Indication</th>
<th>US Patent Expire</th>
<th>Generics on market?</th>
<th>Short Supply?</th>
<th>Est. 2023 USD Sales (2024)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Endocannabinoids</td>
<td>Pain, Pruritus</td>
<td>Hyperemesis, vomiting</td>
<td>no</td>
<td>no</td>
<td>40</td>
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<tr>
<td>Endothelins</td>
<td>Peptic ulcer disease</td>
<td>Dysautonomia, stroke, dementia</td>
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<td>no</td>
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<tr>
<td>Epitope receptors</td>
<td>Type 2 Diabetes</td>
<td>Obesity, diabetes</td>
<td>yes</td>
<td>yes</td>
<td>N/A</td>
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<tr>
<td>Epigenetic receptors</td>
<td>Neurodegenerative diseases</td>
<td>Inflammation, cancer</td>
<td>yes</td>
<td>yes</td>
<td>N/A</td>
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<tr>
<td>Extracellular domains</td>
<td>Oncology</td>
<td>Cancer, inflammation, infection</td>
<td>yes</td>
<td>yes</td>
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<tr>
<td>Geranamide receptors</td>
<td>Oncology</td>
<td>Cancer, inflammation, infection</td>
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<tr>
<td>Insulin-like growth factors</td>
<td>Oncology</td>
<td>Cancer, inflammation, infection</td>
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<td>yes</td>
<td>6,500</td>
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</tbody>
</table>

Peptides Overview

- Peptides are sequences of amino acids that do not require folding for function
- 45% of FDA-approved peptides are synthesized by liquid phase synthesis – technique which should integrate well with CP capabilities
- 80% of peptides are finished in vial or injectable form and are administered through parenteral injection
- Multiple startups and companies in the Boston area are exploring in-silico peptide drug development and Continuous is well positioned to be their CDMO partner
- Small batch sizes and iterative process for drug design play to CP's strengths

Retail and Generics Supply Chain

Retail Supply Chain

- Complex supply chain with many stakeholders
- Few players dominate with strong negotiation power
- Opaque contracts and high regulatory barriers

Generic Supply Chain

- $85B sales, $104B by 2024
- 89% of all US prescriptions
- Transparent but lower price points and margins in market
- Race to lowest cost results in poor quality, outsourced production, supply chain disruption, drug shortages

- Very attractive
- Lower market size
- Medium publicly impact
- Willing customers - significant enrollment and completion to reimbursement for hospitals

- Not attractive
- Medium market size
- Highly expensive and positive publicity
- Risk of further regulations
- Negative outcomes could lead tokeydown

- Slightly attractive
- Smaller market size
- Good publicity
- Widely used

Checklist:

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