The global cell line development service market is expected to reach **$1.7 billion** in revenue by **2028**.

North America is expected to command over a third of the market share.

62 of the 71 newly approved biopharmaceutical active ingredients in the last 4 years were recombinant proteins and of those, **84%** were from **mammalian cells**.

Cell line development is a **time-consuming** process – GMP grade cell lines are typically developed in **12-18 months**.

GMP certification can be **pricey** – for small biotechs (<20 employees), the FDA estimates initial costs of around **$26,000**, plus **$46,000** annually.

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**CLD Market [SMN] / Year**

<table>
<thead>
<tr>
<th>Year</th>
<th>CLD Market [SMN]</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>650</td>
</tr>
<tr>
<td>2020</td>
<td>700</td>
</tr>
<tr>
<td>2021</td>
<td>790</td>
</tr>
<tr>
<td>2022</td>
<td>1,700</td>
</tr>
</tbody>
</table>

**Biologics Type**

- **Transgenic**
- **Yeast**
- **Bacteria**
- **Mammalian Cells**
- **Other**
- **Recombinant Proteins**

**Cell Line**

- **9**

**Annual Cost of GMP Certification [$$]**

- **Large** (500 employees)
- **Small** (20 employees)