The cost-saving impact of Recombinant Insulin

Realizing economic returns through improved productivity

Aim:

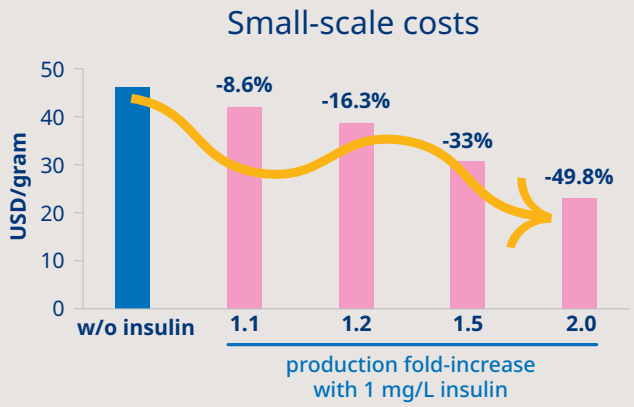
This analysis shows the costs implications associated with the production of mAb at both small and large-scales, and highlights the cost reduction resulting from the implementation of Recombinant Insulin in culture.

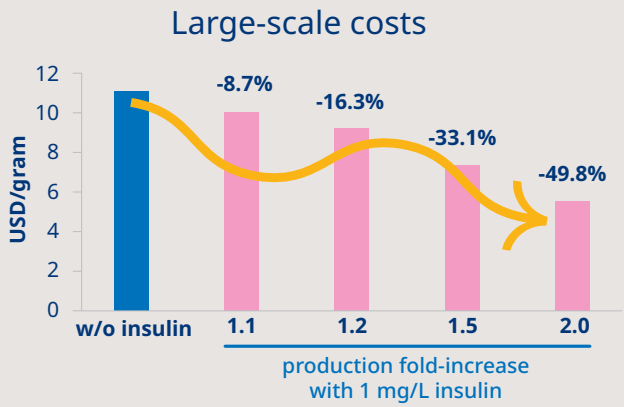
The following analysis is an illustrative example and does not reflect actual production figures.

Starting assumptions:

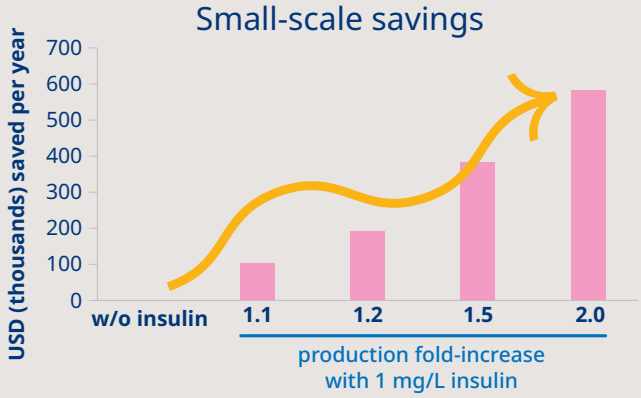
- mAb production level without insulin set at 3 g/L
- Recombinant Insulin added to the media at a concentration of 1 mg/L
- Insulin-induced fold-increase scenarios are 1.1, 1.2, 1.5, and 2.0-fold
- Two production scales: small scale (25 kg mAb/year) and large scale (250 kg mAb/year)
- The analysis only covers media-related costs. For the small-scale scenario, an average list price of 140 USD/L from various vendors is used, while for the large-scale scenario, a price of 35 USD/L is applied, based on public literature data.
- The cost of insulin is included into the calculation of cost reduction.

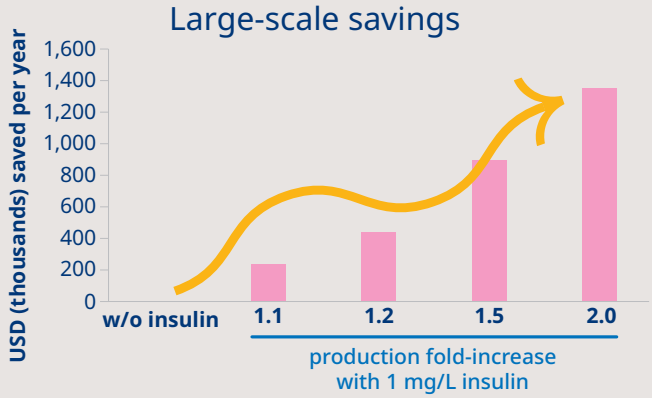
Decreasing costs for every gram of mAb produced





Results in cost savings for the annual production of mAb





TAKEAWAYS

- ✓ Insulin has minimal cost impact on the manufacturing of mAb, representing less than 1% of the total cell culture media costs.
- ✓ Even modest improvements in mAb production lead to substantial reduction in the overall manufacturing expenses.
- ✓ The addition of Recombinant Insulin offers a significant return on investment for both small and large-scale mAb production.

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