

# Before You Invest:

Lessons From What Patient Data  
Reveals About Drug Programs



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## Case Study

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# The **EGFR-TGFbeta** competition with **EGFR-LGR5**

# \$8B

In September 2025, Genmab acquired Merus for its lead asset, an EGFR-LGR5 BiAb.

# \$0.6B

Invested in EGFR-TGFbeta BiCara's product.

## Superior product wins

The BiCara clinical trial is behind Merus.

But more importantly, Merus's clinical data was simply better:

- 63% response rate
- 79% alive at 12 months
- Works in HPV-positive AND HPV-negative patients

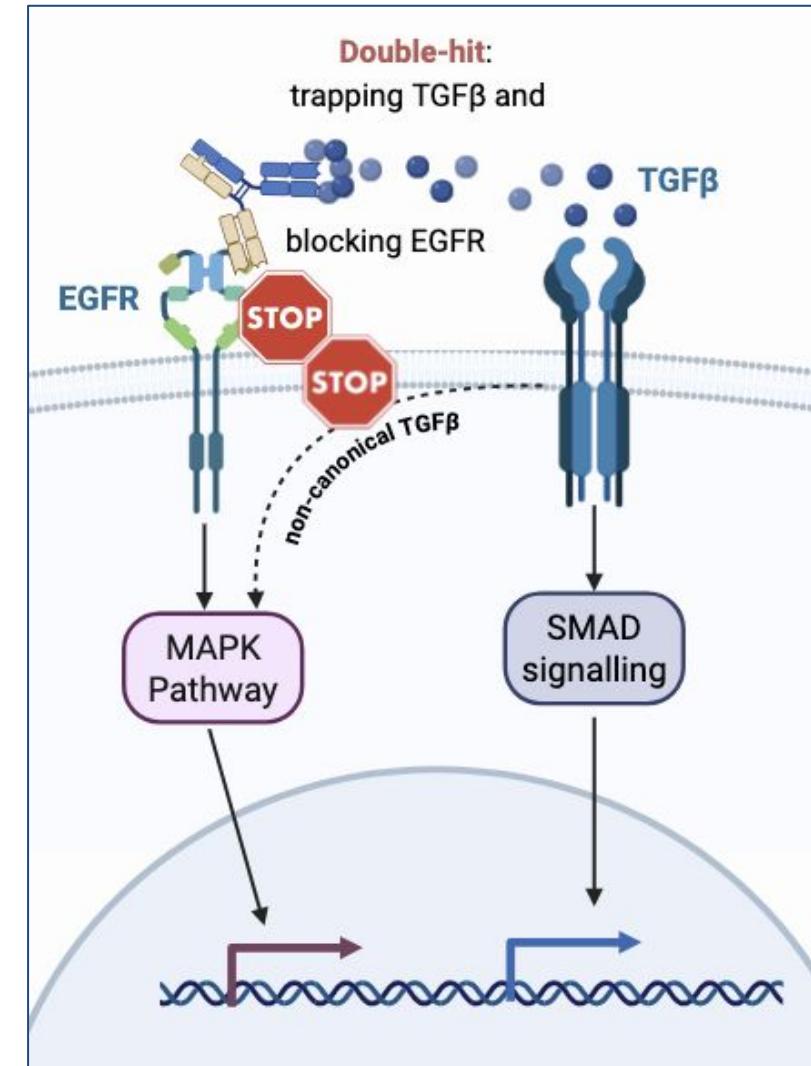
vs BiCara:

- 54% response rate
- 62% alive at 12 months
- Only works in HPV-negative patients  
(27% response in HPV-positive).

# What the Patient Data Revealed

Deep, AI-augmented analysis of patient data uncovered a dependency most likely undetectable in cell line models:

- Both products MoA are supported by patient data, but in a head-to-head comparison, **patient data favours Merus** in head and neck cancer
- Data suggests that the BiCara's product relies on a **double-hit** into the **MAPK signalling pathway**, the **right patients** should have been selected for such MoA.
- The **head and neck** is only **second strongest tissue** for **EGFR-TGFbeta**. BiCara could have increased the response rates and avoided head-to-head competition by selecting the most optimal tissue.



# The Take-Home Message: **Selecting the second-best tissue might be very expensive**



## The tissue matters

Selecting the second-best indication might be a strategic move to avoid fierce competition. But you have to be sure it's not getting from a frying pan into the fire.

## AI opportunity

Data, compute, and algorithms are here. Do expect from your AI team/partner selection of the best tissue, but also the assessment of the probability of success of your competitor's program.

Strategic Recommendations

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**From Insight to Action**

# Consult Patient Data for Reliable Outcomes:

- ✓ **Leverage Patient Data Early:** Assess your and your competitor's Probability of Success as early as possible.
- ✓ **Drug combinations can save the day:** Patient data identified opportunities for a combination of EGFR-TGFbeta product that could further improve response rates.
- ✓ **Translatable patient data:** Use patient data that are not coming from your clinical trial, then validate novel insights with your proprietary data.



Medicines intended to work in  
patients should be developed  
with patient data in mind.

For inspiration how this can be done check:

<https://www.gordion.bio/before-you-invest>