

Before You Invest:

Lessons From What Patient Data
Reveals About Drug Programs



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Case Study

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

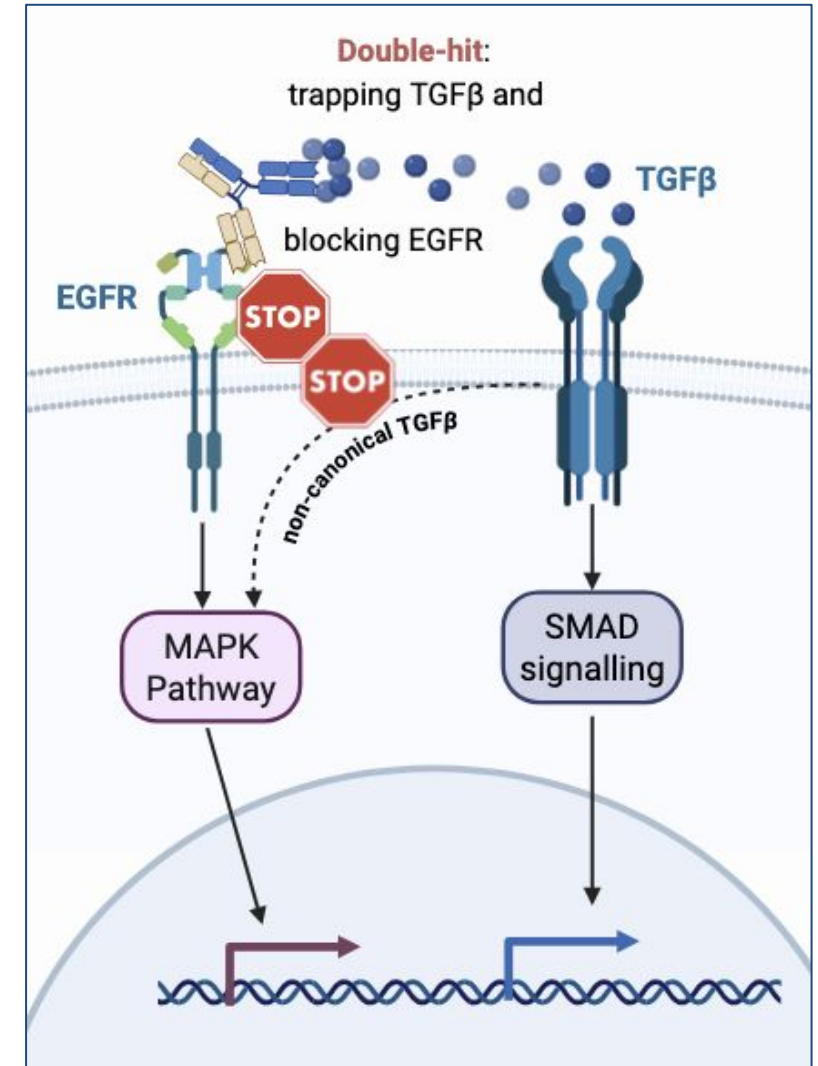
vs BiCara:

- 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

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>