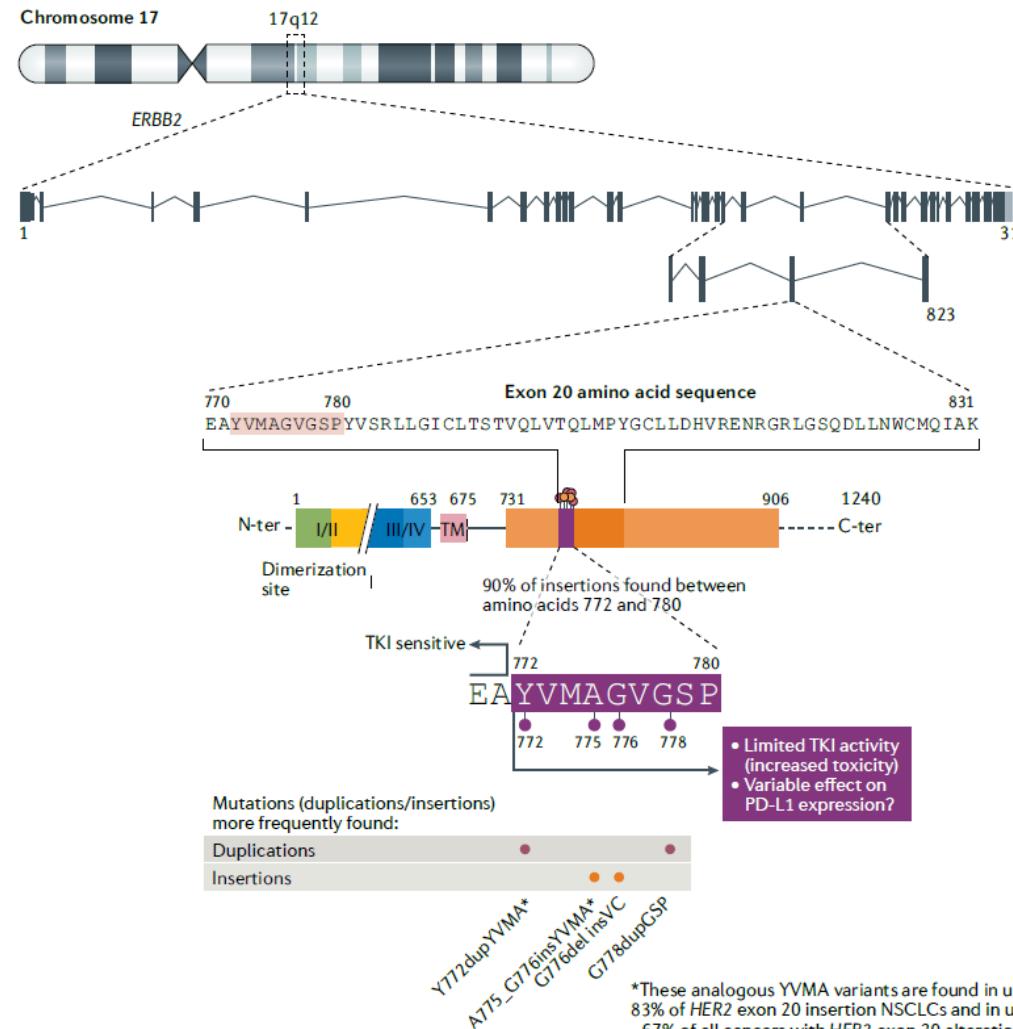


# Ba/F3 Model Carrying HER2 A775\_G776insYVMA C805S



2024.10

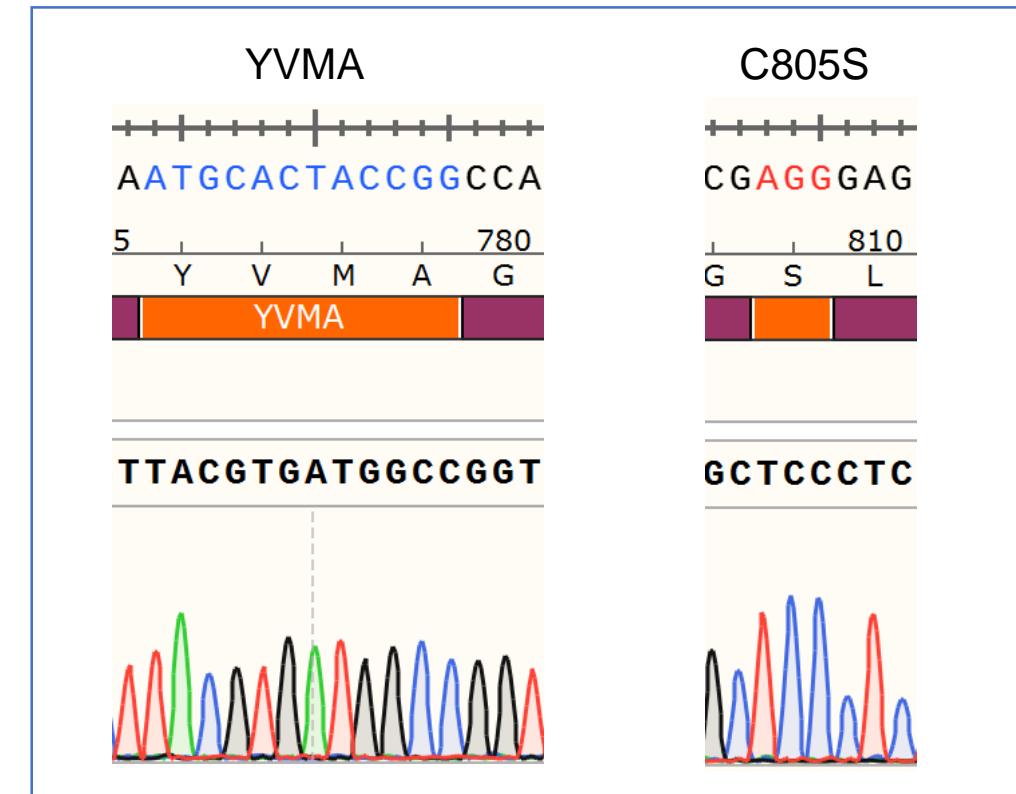
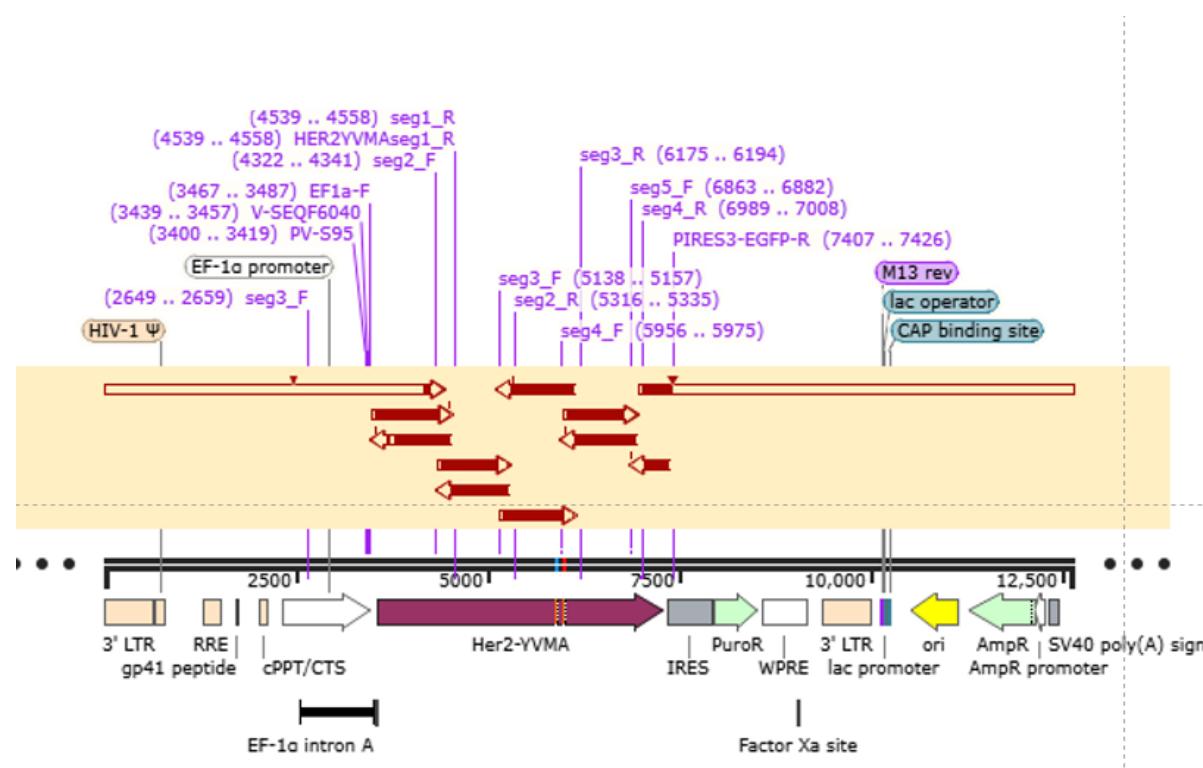
# HER2 exon20 YVMAins and C805S secondary mutation



- ERBB2 (or HER2) is associated with a limited range of exon 20 mutations, primarily consisting short duplications or insertions. Notably, 90% of these mutations occur between amino acids 772 and 780, with the YVMA insertion duplication variants being the most common.
- In recent years, ongoing research has led to the development of various treatment drugs targeting EGFR exon 20 insertions, such as poziotinib, luminespib, mobocertinib, etc.
- Secondary mutations in HER2 (C805S) that mediated acquired drug resistance in drug-sensitive EGFR or HER2 exon 20 insertion models.

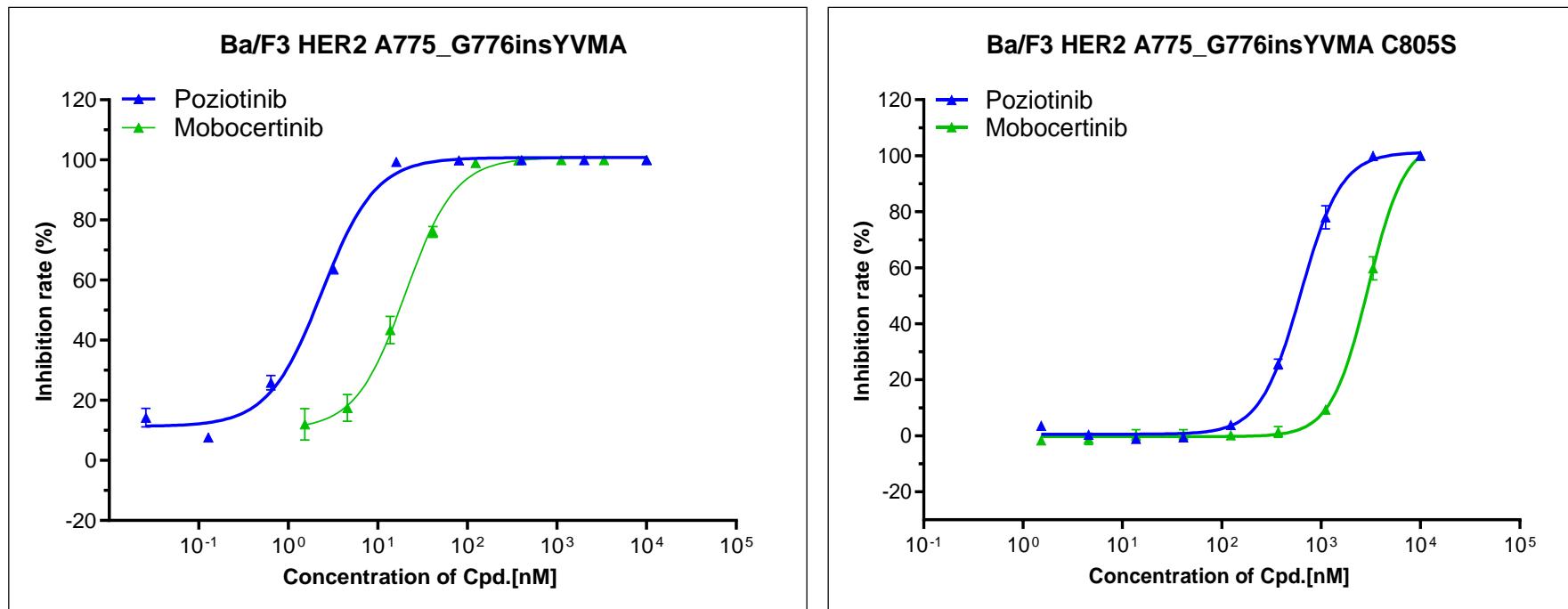
*Nature Reviews Clinical Oncology volume 19, pages51–69 (2022)*

# Establishment of Ba/F3 HER2 A775\_G776insYVMA C805S cell line



- The full length (3780bp) was validated by 6 pairs of primer. No unwanted mutation was detected.
- The identification results of interested region were shown in right figure.

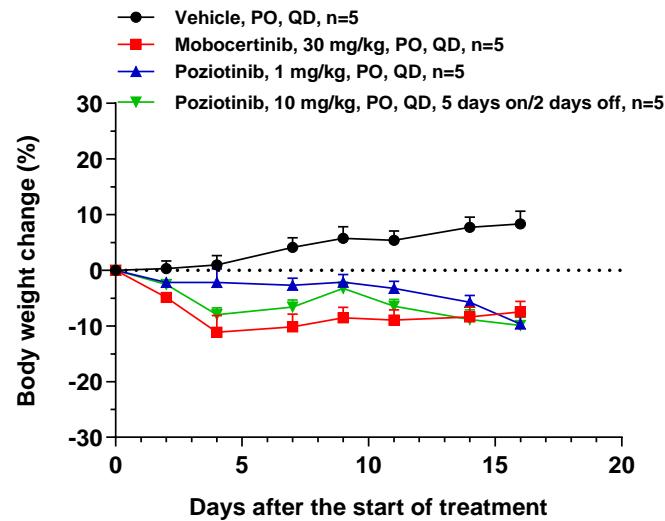
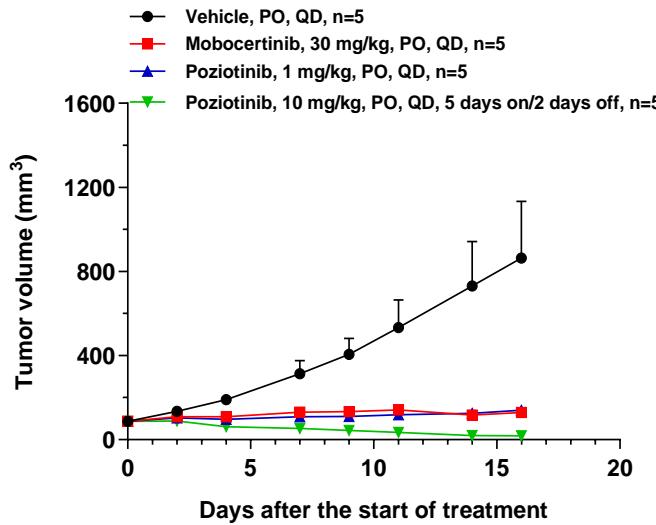
# Inhibitors in Ba/F3 HER2 A775\_G776insYVMA C805S cell line



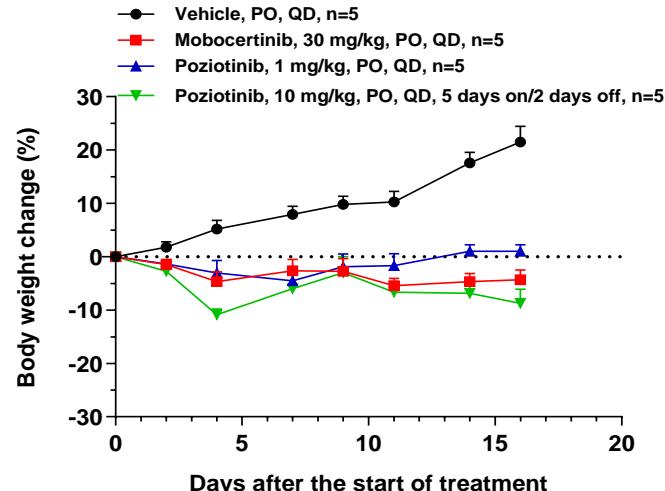
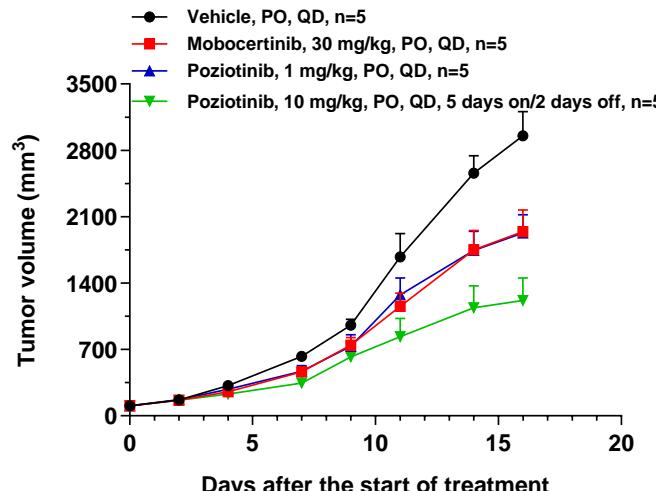
Compound	Cell line	AbsIC50 (nM)	RelIC50 (nM)	Bottom (%)	Top (%)
Poziotinib	Ba/F3 HER2 A775_G776insYVMA	1.97	2.38	7.68	100.00
	Ba/F3 HER2 A775_G776insYVMA C805S	613.31	623.90	-2.10	99.97
Mobocertinib	Ba/F3 HER2 A775_G776insYVMA	17.34	20.25	12.02	100.00
	Ba/F3 HER2 A775_G776insYVMA C805S	2842.10	2975.00	-2.67	99.92

# Inhibitors in Ba/F3 HER2 A775\_G776insYVMA C805S model

BaF3 HER2 A775\_G776insYVMA



BaF3 HER2 A775\_G776insYVMA C805S





# OUR COMMITMENT

## *Improving Health. Making a Difference.*

For questions and requests, please email to [Pharmacology-BD-Translation@wuxiapptec.com](mailto:Pharmacology-BD-Translation@wuxiapptec.com)



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