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The Expression of ERE and NFkB & The Characterization of Stem Cell Properties in ER+ Breast Cancer Cell Lines.

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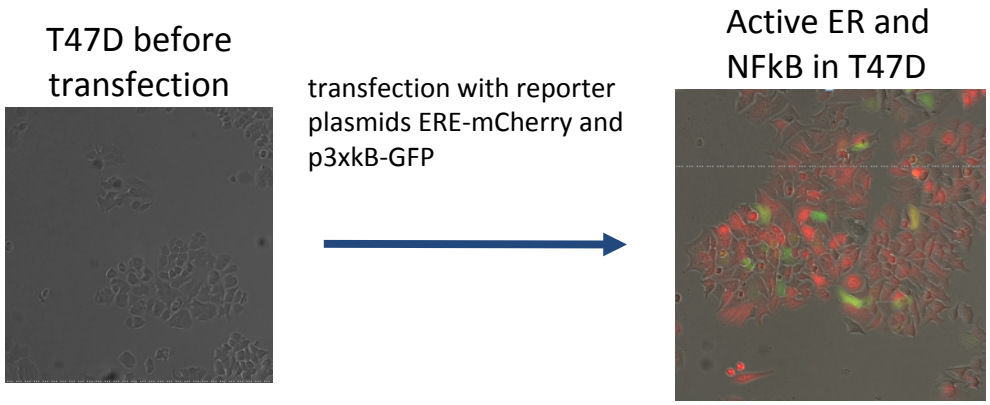
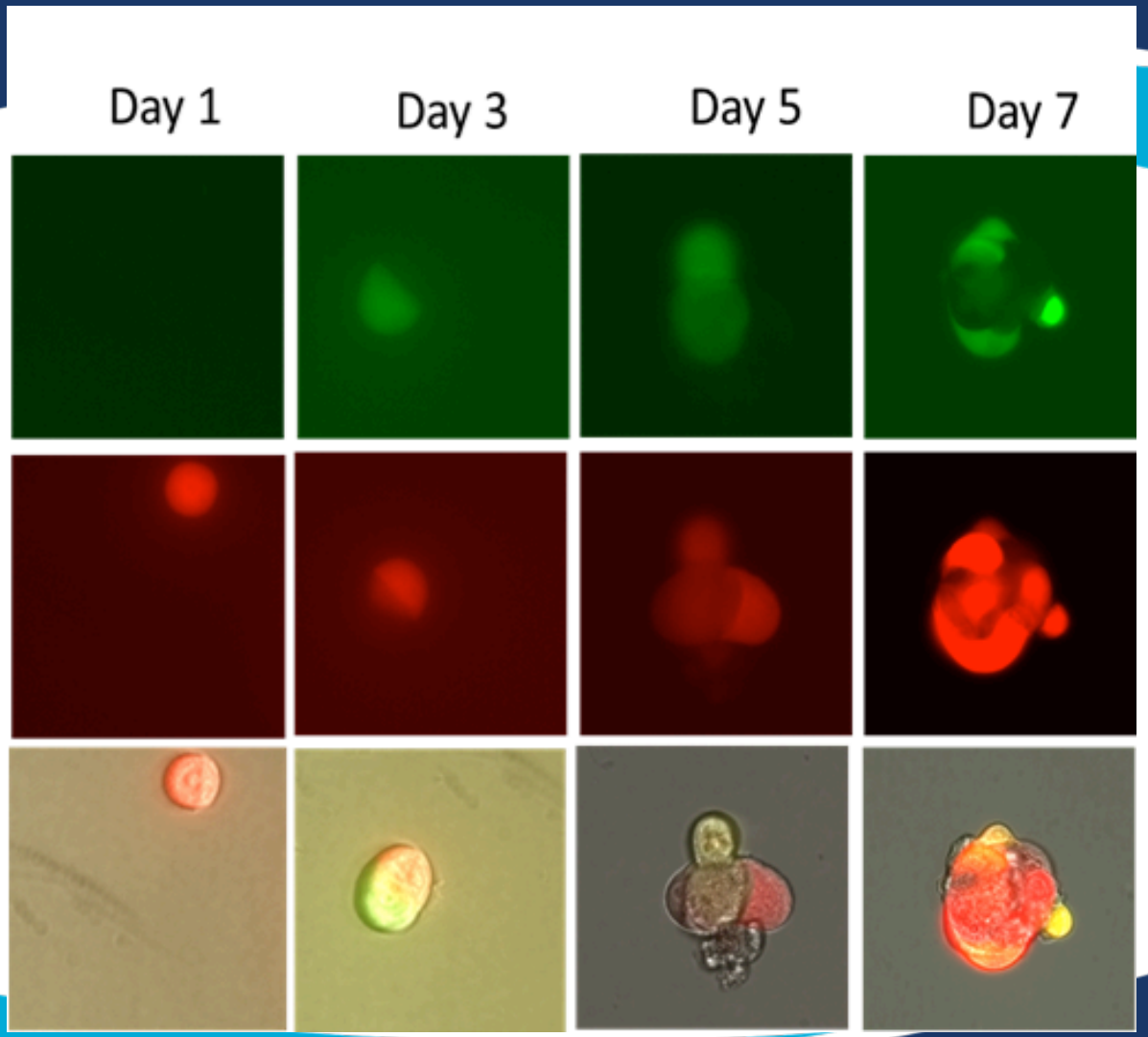
Background

- ER+ breast cancer
- Drug treatments resistance
- Stem cells
- NFkB/ER activity

Procedure



- **Cloning**: Cells were seeded 1 cell per well and grown. Each colony was given a number.
- **Mammosphere**: a cluster of breast cancer cells greater than 50µm in diameter
- **Aim**:
  - Analyze mammosphere forming efficiency (MFE)
    - (number of mammospheres on day 12* 100)/(total cells in a well on day 0)
  - Analyze ER/NFkB activity in ER+ BC cell line clones
  - Identify representative clone of bulk population



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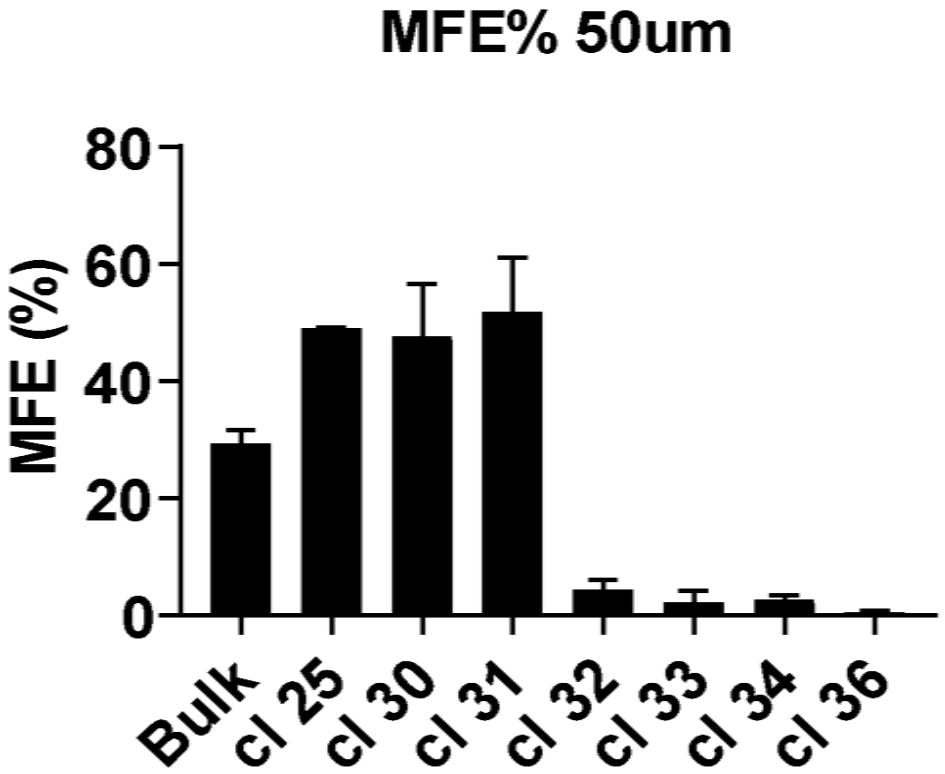
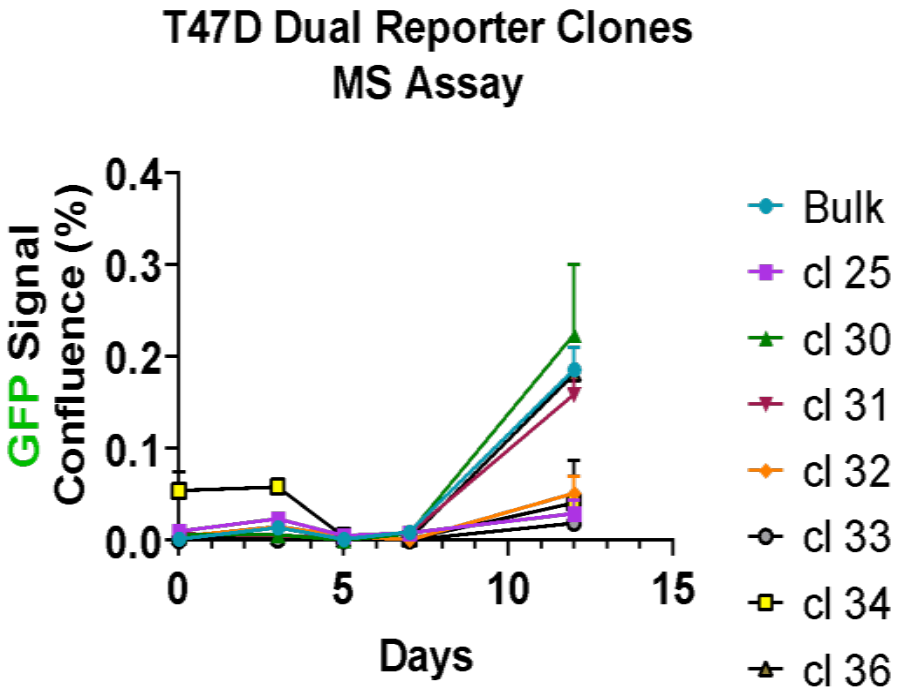
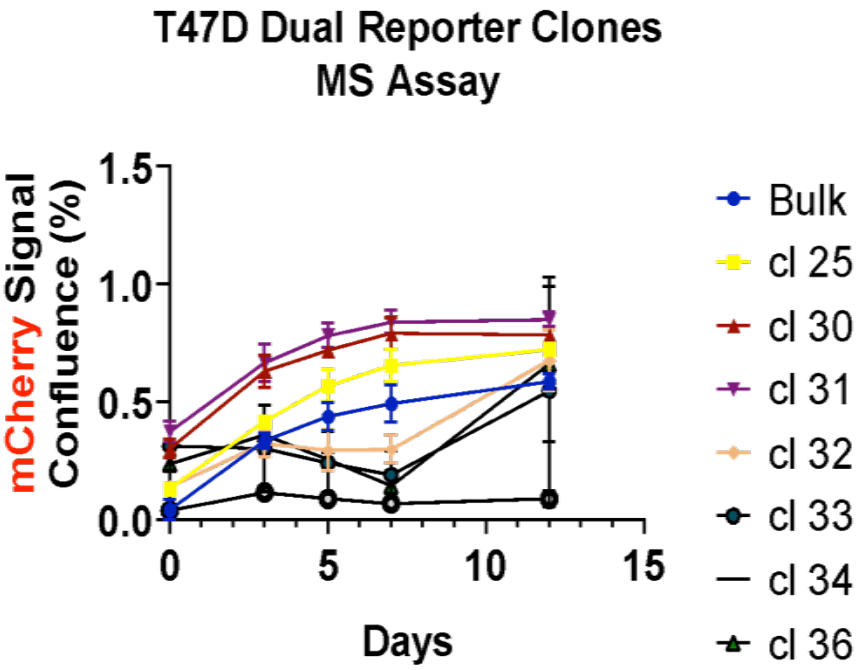
Mammosphere Forming Efficiency



Mammosphere Assay





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Conclusions

- Only three clone cell lines can form mammospheres.
- NFkB activity is similar to bulk in clone 30 and clone 31
- ER activity is higher in clones 25, 30, 31 than bulk
- Higher MFE in three clones can be a result of high activity of ER.
- Therefore, clones 30 and 31 are the best representatives of the bulk.

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Thank you!

A big thank you to Dr. Frasor and the whole lab at UIC for supporting me.

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