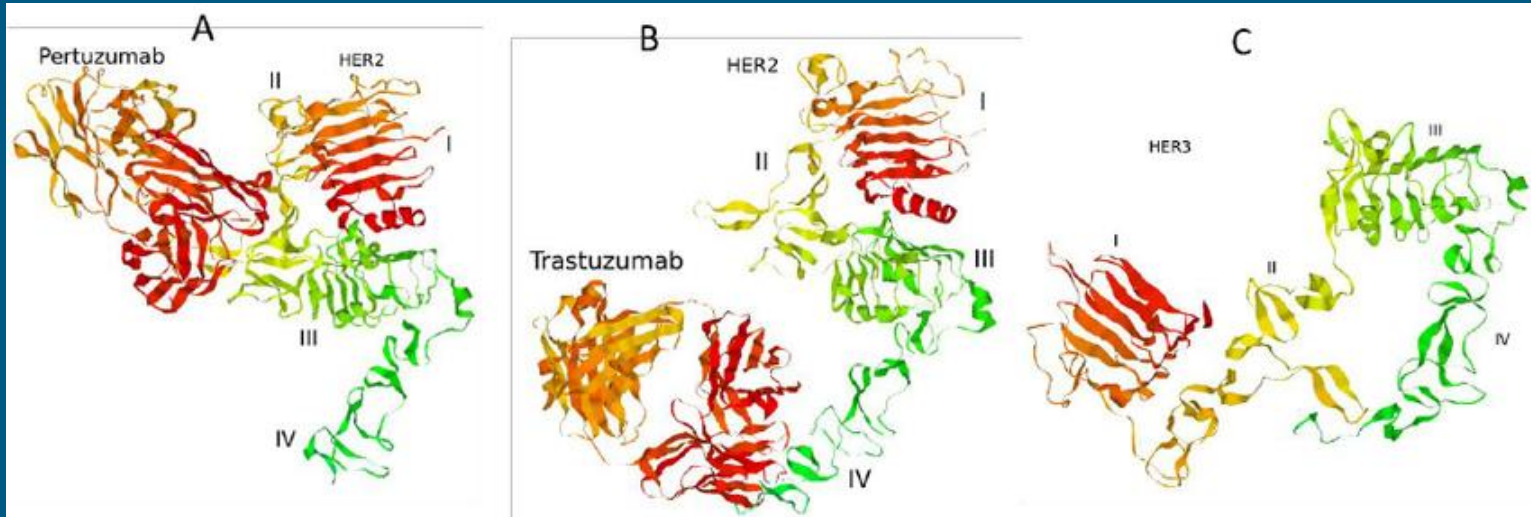




Local experience at DGH shows combination Pertuzumab and Herceptin nearly doubles PCR rate of Neo-adjuvant Chemotherapy (NAC) in HER2 positive breast cancer

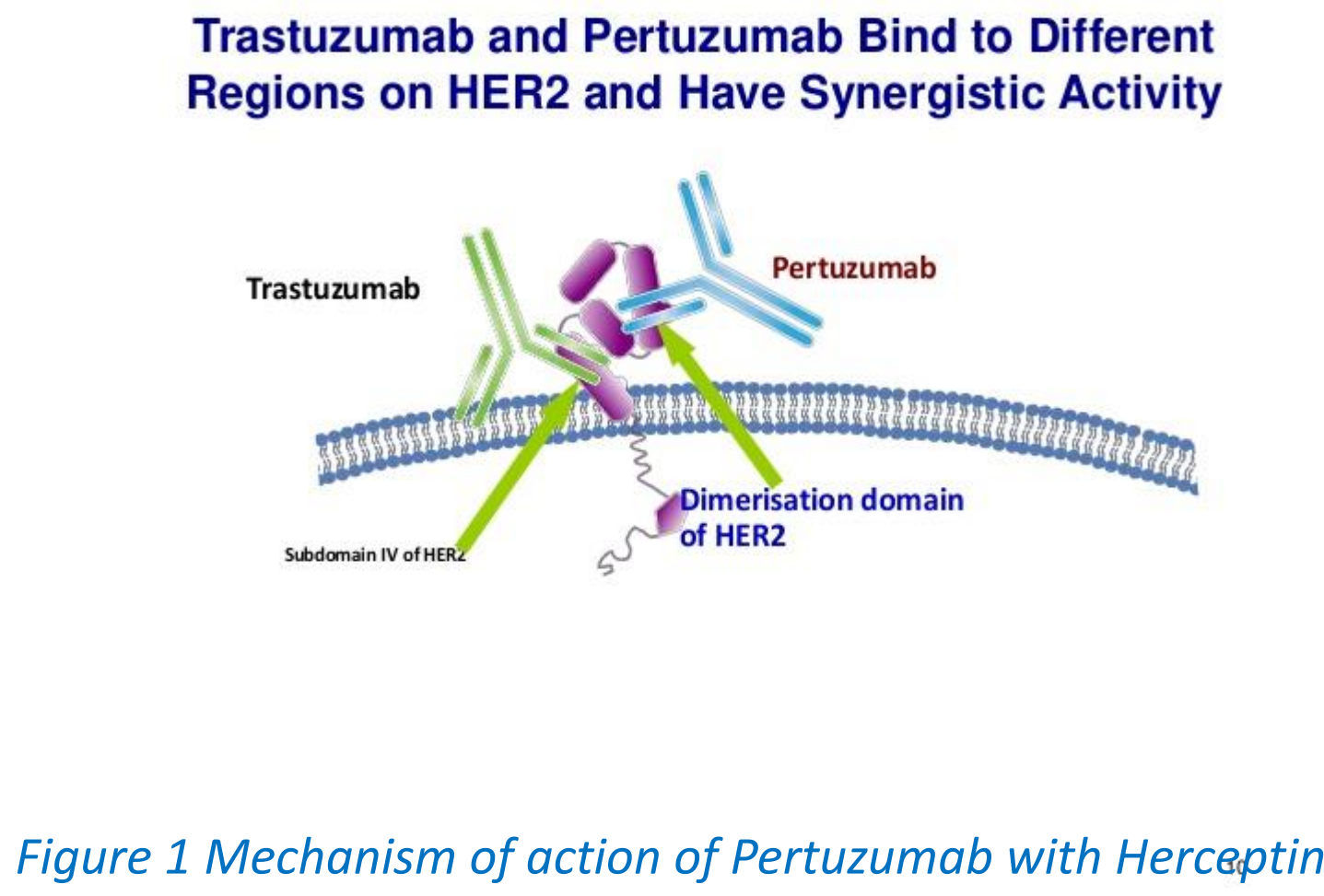


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INTRODUCTION

Combination Pertuzumab with Herceptin was introduced on NICE guidance as an option for the Neo-adjuvant treatment of HER2 positive breast cancer.

Previous studies have shown that combination therapy can improve PCR rate.



AIM

The aim of this study was to see the effect on PCR rate at Shrewsbury & Telford Hospital since the introduction of use of combination Pertuzumab with Herceptin in December 2016.

METHOD

A 3 year prospective study of all breast cancer patients at SATH receiving Neo-adjuvant chemotherapy from January 2015 to July 2018.

Data recorded included patient demographics, tumour subtypes, surgical treatment, and response to treatment.

Comparison was made between PCR rate pre and post introduction of Pertuzumab.

RESULTS

78 patients had NAC; 5 patients who had no surgery, 7 patients still having on-going treatment were excluded.

Median patient age was 53 years (range28-84), with median tumour size was 4.1cm.

46% of patients had Her2 positive breast cancer.

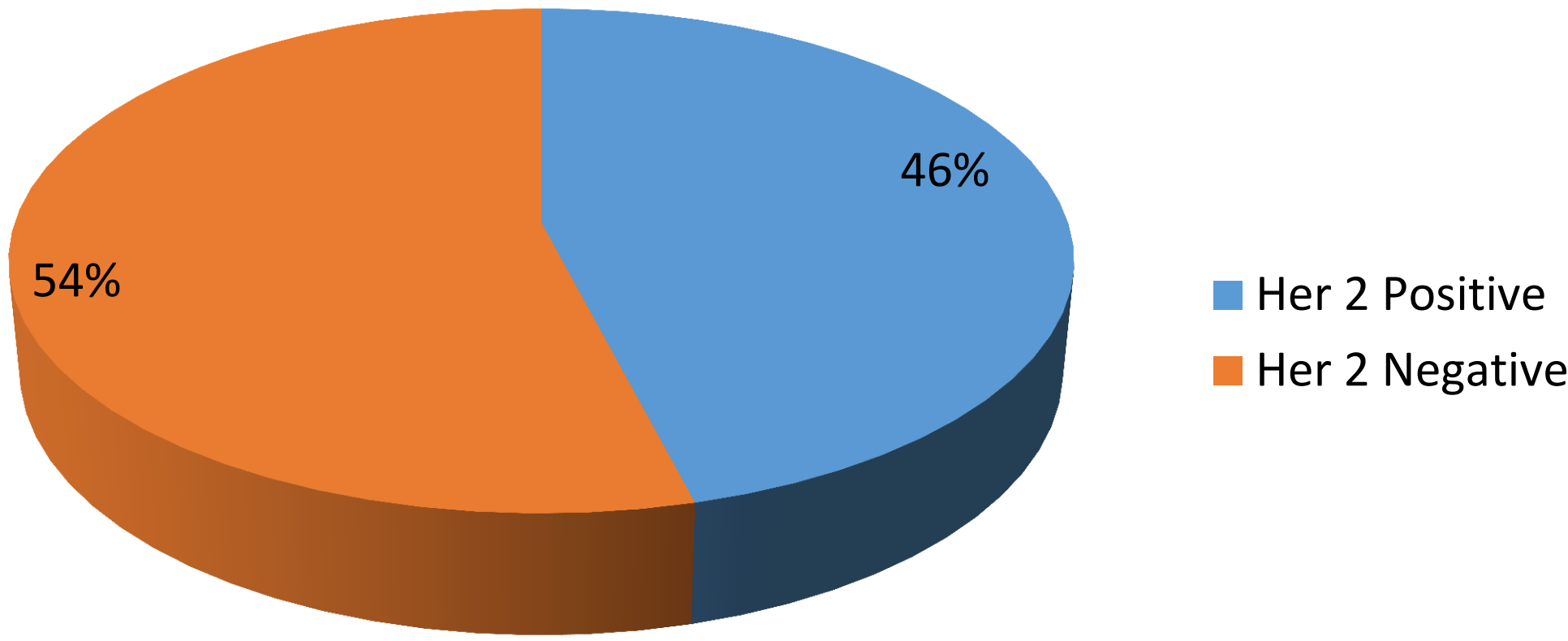


Figure 2 Tumour subtype, ratio of Her2 positive to Her 2 negative

Overall PCR rate was 31%.

All patients with PCR had ductal cancer and commonest subtype was ER+ve/Her2+ve, 60%.

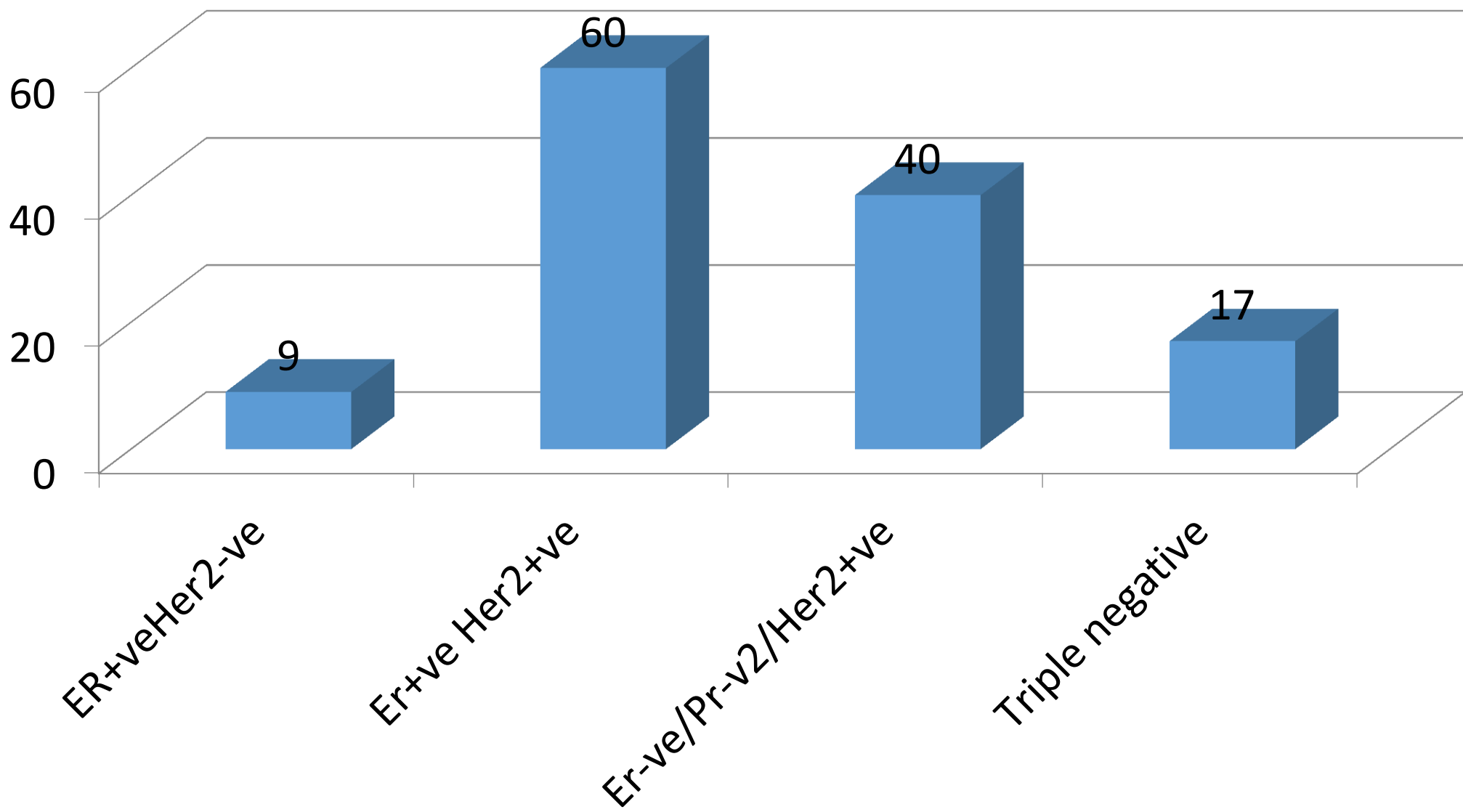


Figure 3 PCR rate by tumour subtype

Overall PCR rate for Her2+ve patients' pre pertuzumab was 50%, compared with post pertuzumab rate of 55%.

Total PCR for Her 2+ve patients pre pertuzumab comparing rate ypT0ypN0 to ypTisypN0 increased from 40% to 73% post pertuzumab.

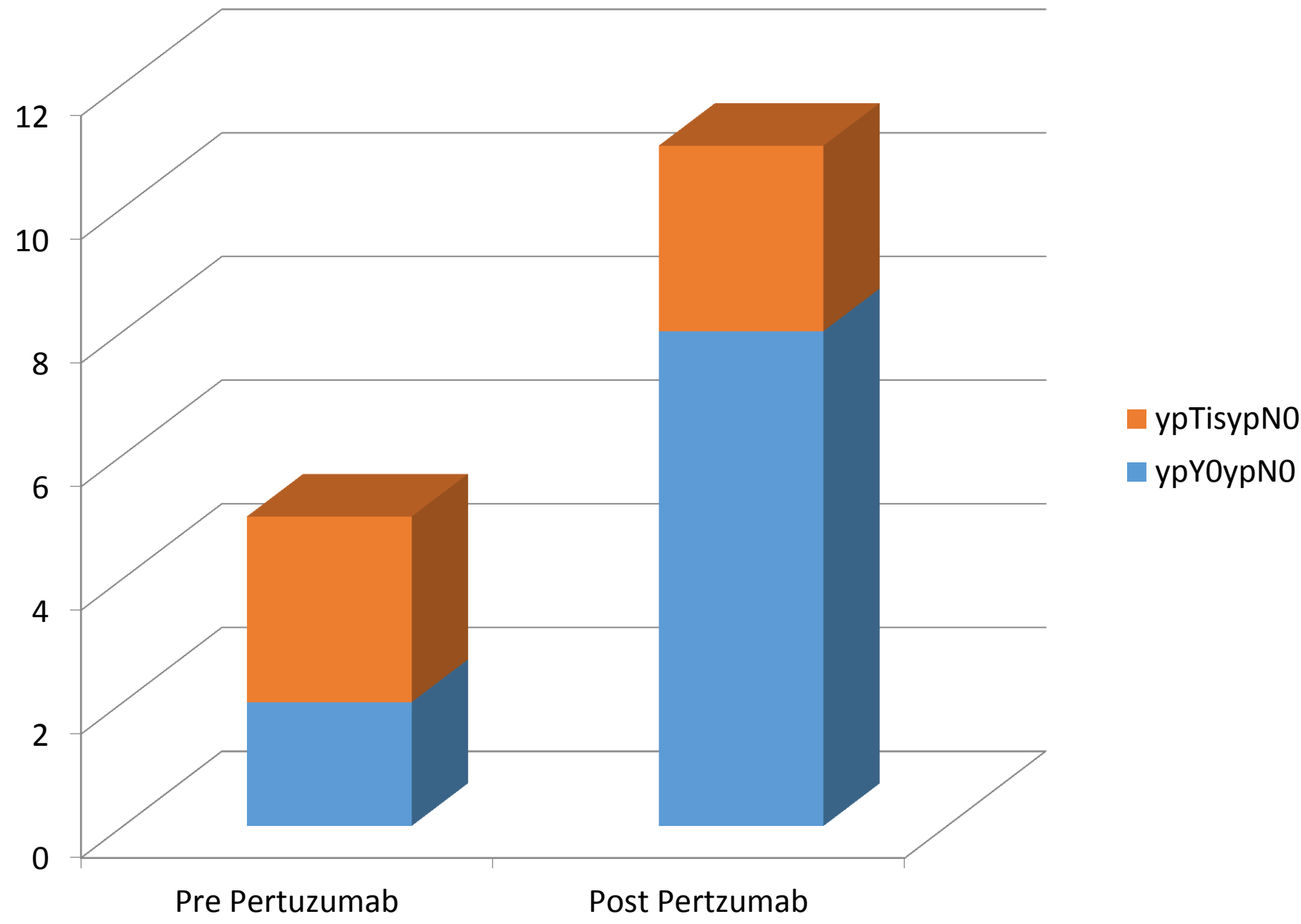


Figure 4 Total PCR rate pre/post pertuzumab

52 patients were node positive pre-chemotherapy, with 42% axillary node conversion from positive to negative.

Axillary node conversion was more likely in HER2 positive breast cancer 61%, compared with HER2 negative breast cancer 23%.

Axillary node conversion rate also increased with introduction of pertuzumab from 50% to 66%.

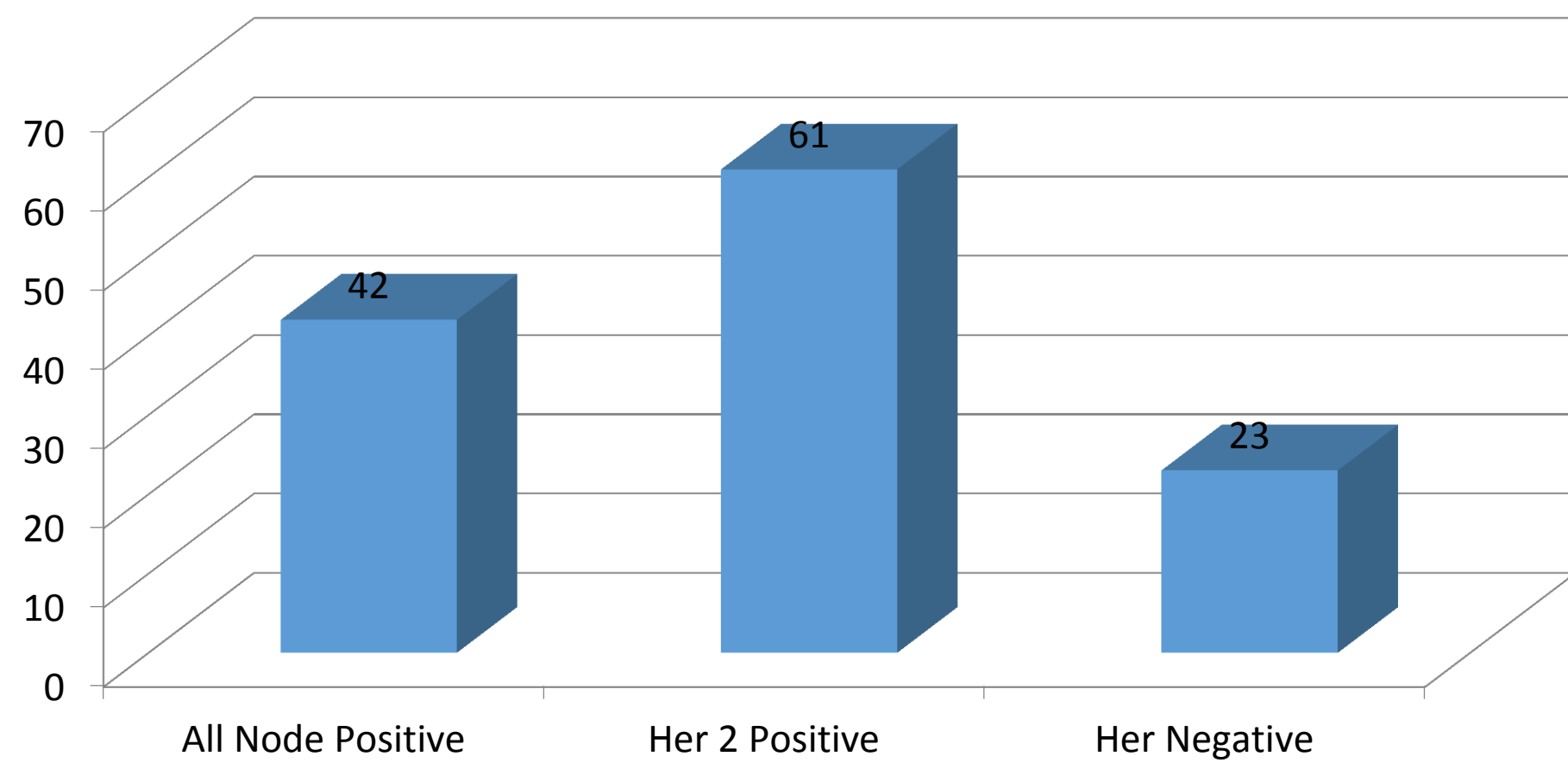


Figure 5 Axillary node conversion rate

CONCLUSIONS

Local experience in Shropshire shows that Combination Pertuzumab with Herceptin increases PCR rate for Neo-adjuvant Chemotherapy in both breast and axilla.

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Pertuzumab for the neo-adjuvant treatment of HER2-positive breast cancer Technology appraisal guidance [TA424] *NICE Guidance* December 2016

Wu Y et al. Significantly higher pathologic complete response after the concurrent use of trastuzumab and anthracycline-based neo-adjuvant chemotherapy for HER2-positive breast cancer: Evidence from a meta-analysis of randomized controlled trials. *Journal of Cancer* 2018;9(17):3168-3176. doi:10.7150/jca.24701.