Breast Cancer RESEARCH REVIEW™

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Issue 50 – 2026

In this issue:

Abbreviations used in this issue
CDK = cyclin-dependent kinase
DFS = disease-free survival
ER = oestrogen receptor
HER2 = human epidermal growth factor receptor-type 2
HR = hazard ratio
ILD = interstitial lung disease
OR = odds ratio
OS = overall survival
pCR = pathological complete response
PD-L1 = programmed death ligand 1
PFS = progression-free survival
RCT = randomised controlled trial
RT = radiation therapy
TNBC = triple-negative breast cancer

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Welcome to Issue 50 of Breast Cancer Research Review.

Findings from the RJBC 1501 trial in early TNBC show that adding adjuvant carboplatin to an anthracycline-taxane chemotherapy backbone improves OS in early TNBC. In the ASCENT-04/KEYNOTE-D19 trial, sacituzumab govitecan plus pembrolizumab resulted in significantly longer PFS than chemotherapy plus pembrolizumab among patients with previously untreated, PD-L1–positive, advanced TNBC. We conclude this issue with a study investigating the impact of interrupting tamoxifen during pregnancy and its impact on recurrence and survival outcomes among young women with breast cancer.

We hope you find the papers in this issue useful in your practice and welcome your comments and feedback.

Kind regards,

Dr David Okonji
davidokonji@researchreview.co.nz

Dr Alex Popadich
alexpopadich@researchreview.co.nz

Adjuvant epirubicin plus cyclophosphamide followed by taxanes with or without carboplatin in early-stage triple-negative breast cancer (RJBC 1501): A randomized phase III trial

Authors: Chen X et al.

Summary: The prospective, randomised controlled phase III RJBC 1501 study compared adjuvant epirubicin plus cyclophosphamide (EC) followed by taxanes (EC-T) to the same regimen plus carboplatin (EC-TCb) in 786 patients with early-stage TNBC with node-positive or node-negative (tumour size ≥1.0 cm) disease who had undergone definitive surgery. Patients were stratified by lymph node status and received four cycles of EC followed by four cycles of taxanes with or without carboplatin adjuvant chemotherapy. At a median follow-up of 4.52 years, 103 disease-free survival (DFS) events occurred (primary endpoint), 62 with EC-T and 41 with EC-TCb (HR 0.66; 95% CI 0.44-0.97; p = 0.034), with a 3-year DFS of 89.8% (95% CI 86.8-92.9) with EC-T and 93.1% (95% CI 90.5-95.7) with EC-TCb; EC-TCb was also associated with better distant DFS (HR 0.61; 95% CI 0.38-0.98, p = 0.040) and OS (HR 0.39; 95% CI 0.16-0.94; p = 0.029). Adverse events of grade 3-4 were more common with EC-TCb (49.9%) than EC-T (38.7%), primarily because of higher rates of neutropenia (47.0% vs 37.8%) and thrombocytopenia (4.5% vs 0%).

Comment (DO): The addition of carboplatin to an anthracycline-taxane chemotherapy backbone is an accepted standard of care, often recommended to those receiving neoadjuvant chemotherapy for early TNBC. It clearly increases complete pathological response (pCR) rates, and when pembrolizumab is added to this combination, there is an OS benefit. However, the optimal use of additional platinum-based agents in the adjuvant setting in early TNBC is unclear. As such, RJBC 1501 set out to answer this question. At the time this trial began recruiting (in 2016), neither carboplatin nor immunotherapy were routinely deployed as part of (neo)adjuvant therapy for TNBC and neither was adjuvant capecitabine utilised in those with non-pCR residual disease. The trial was exclusively undertaken in 19 centres in China, and took 7 years to complete recruitment of 786 patients. The patient cohort were not particularly of the highest risk (70% were node negative and approx. 50% had T1 disease). Furthermore, rather than weekly paclitaxel, approximately 75% received 3-weely docetaxel as their taxane of choice, alongside weekly carboplatin. Thus, not surprisingly, there were higher rates of neutropenia in the carboplatin group (47% vs 38%), although intriguingly neutropenic fever rates were comparable between both arms. In any case, there was a survival benefit conferred from the addition of carboplatin, likely driven by decreased rates of distant metastases (30 vs 13 events). **Key statement: Adding adjuvant carboplatin to an anthracycline-taxane chemotherapy backbone improves OS in early TNBC.**

Reference: J Clin Oncol. 2026;44(3):143-152
Abstract

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Sacituzumab govitecan plus pembrolizumab for advanced triple-negative breast cancer

Authors: Tolaney SM et al., for the ASCENT-04/KEYNOTE-D19 Clinical Trial Investigators

Summary: This multinational, randomised, controlled, open-label phase III trial compared sacituzumab govitecan plus pembrolizumab versus chemotherapy plus pembrolizumab in 443 women with PD-L1-positive, locally advanced, unresectable or metastatic TNBC. Patients receiving sacituzumab govitecan plus pembrolizumab exhibited a median PFS of 11.2 months (95% CI 9.3-16.7) versus 7.8 months (95% CI 7.3-9.3) in those receiving chemotherapy plus pembrolizumab (HR 0.65; 95% CI 0.51-0.84; p < 0.001). The objective response rate was 60% (95% CI 53-66) with sacituzumab govitecan plus pembrolizumab versus 53% (95% CI 46-60) with chemotherapy plus pembrolizumab; in those with a response, median durations of response were 16.5 months (95% CI 12.7-19.5) and 9.2 months (95% CI 7.6-11.3), respectively. Among sacituzumab govitecan plus pembrolizumab recipients, 71% experienced adverse events of grade ≥3 versus 70% of chemotherapy plus pembrolizumab recipients; treatment discontinuation because of adverse events occurred in 12% and 31%, respectively, while adverse events leading to death occurred in 3% of patients in both groups.

Comment (DO): ASCENT-04/KEYNOTE-D19 was a randomised open-label prospective phase III trial evaluating a first-line chemotherapy-free regimen against the prevailing standard of care combination for PD-L1 positive metastatic TNBC, i.e., chemotherapy plus immunotherapy. Rather than gemcitabine-carboplatin, the investigators reasonably chose taxane-carboplatin as their control arm. 18% of the study population had systemic therapy-resistant cancer (i.e., recurrent disease within 6-12 months after completion of curative/adjuvant treatment for early disease). The study met its primary endpoint: sacituzumab govitecan plus pembrolizumab modestly improving PFS by 3.2 months after a median follow-up of only 14 months. There was one signal indicating that the key secondary endpoint, OS, which is not yet mature, may turn out positive in the end: the median duration of response was almost twice as long with sacituzumab govitecan plus pembrolizumab compared with chemotherapy plus pembrolizumab (approx. 17% vs approx. 9 months). That being said, there is also a possibility that there will be no OS benefit seen with this approach. This is because the trial incorporated a cross-over design, allowing for the control arm to receive sacituzumab govitecan in the second line, where it is already known to provide a survival benefit, as per the very first ASCENT trial (Bardia A et al., J Clin Oncol. 2024). Finally, despite similar haematological toxicities (with the exception of anaemia) and dose interruption frequency, there was an inexplicably higher treatment discontinuation rate in the chemotherapy plus pembrolizumab arm (31% vs 12%). This is perplexingly difficult to make sense of, particularly when rates of any non-haematological grade adverse events were higher in the sacituzumab govitecan group, e.g., diarrhoea (70% vs 29%), nausea (68% vs 38%) and vomiting (29% vs 14%). **Key statement: Sacituzumab govitecan plus pembrolizumab is a potential new standard of care chemotherapy-free first-line treatment for PD-L1 positive metastatic TNBC. Nonetheless, it has "chemotherapy-like" side effects. Whether it confers an OS benefit will be key in determining whether it will ultimately replace chemotherapy plus pembrolizumab as the new standard of care in this setting.**

Reference: N Engl J Med. 2026;394(4):354-366
Abstract

Real-world safety and efficacy profiles of trastuzumab deruxtecan in patients with advanced breast cancer

Authors: Antonarelli G et al.

Summary: This single-centre, retrospective, observational cohort study assessed the use of trastuzumab deruxtecan in 112 patients with HER2+/low advanced breast cancer (median number of prior lines 3; prior antibody-drug conjugate in 58% vs 17% of patients with HER2+ vs HER2-low disease). At a median follow-up of 9 months, 12-month cumulative incidence of interstitial lung disease (ILD) was 13% (95% CI 7.2-20.6) with two grade 5 cases (2%). Multivariate analysis suggested a higher risk of ILD with prior immunotherapy (HR 3.22; 95% CI 1.06-9.72; p = 0.052) and smoking (HR 2.71; 95% CI 1.00-7.34; p = 0.062). Grade ≥3 neutropenia was reported in 9% of patients associated with a low neutrophil-to-lymphocyte ratio at cycle 3 day 1 (HR 0.10; 95% CI 0.02-0.53; p < 0.001). Real-world PFS was 21.82 months (95% CI 17.98 to not reached) in HER2+ and 6.90 months (95% CI 4.93-10.19) in and HER2-low patients.

Comment (DO): Traditionally, prospective phase III RCTs, have been, and still are considered the highest level of evidence. However, real-world data are gaining importance as an evidence base, which is a testament to this paper and many others like it that are now published in reputable peer-reviewed journals. This single-centre, retrospective, observational cohort study provides us with unique insights into the use and side effects of trastuzumab deruxtecan in contemporary clinical practice. Unfortunately, there weren't any elderly patients in their patient cohort (the oldest patient was 68 years old; overall median age 59 years). A quarter of the patients started off with an upfront level 1 dose reduction (4.4 mg/kg), presumably because of a sub-optimal performance status or extensive comorbidities. Despite this, and a one-in-three treatment-related dose reduction/discontinuation rate, it was reassuring to see that the real-world PFS of the HER2+ cohort (22 months) was similar to that seen in a comparable group from the registration RCT, DESTINY-Breast02 trial (19 months) (André F et al., Lancet 2023). Likewise, those with HER2-low disease had a similar real-world PFS (8 months) as those from the corresponding registration RCT, DESTINY-Breast04 (8 months) (Modi S et al., N Engl J Med. 2022). Moving away from an efficacy standpoint to a safety one, two potential new signals were highlighted in this paper. Both current smoking and previous immunotherapy exposure (probably in the small number of patients with ER-negative, HER2-low disease who received first-line chemoimmunotherapy for PD-L1-positive metastatic TNBC) were associated with at an increased risk of ILD. Nonetheless, it is encouraging to see that those who did develop grade 1 ILD were able to be successfully re-challenged, with only a 20% risk of recurrent ILD. This was not too dissimilar to the rate (33%) seen in the >2000-patient pooled analysis of ILD data from a suite of prospective DESTINY studies cutting across breast, lung and gastric metastatic tumour subtypes (Rugo HS et al., Ann Oncol. 2025). **Key statement: It appears reasonable to start trastuzumab deruxtecan at a lower dose if concerned about tolerance without significantly impacting long-term outcomes. Current smokers or those who have previously received immunotherapy may be at increased risk of ILD while on trastuzumab deruxtecan.**

Reference: ESMO Open 2025;10(11):105847
Abstract

INDEPENDENT COMMENTARY BY

Dr David Okonji
MB BCh (UK) FRCP(Lon) MRCPS(Glas) FRACP

David Okonji specialises in treating breast and urogenital cancers, as well as melanoma. He has a particular focus on cancer care in the elderly. David currently practises at Wellington Regional Hospital and also undertakes private practice at Bowen Hospital, Wellington. David is a Clinical Senior Lecturer at the University of Otago School of Medicine. He is actively involved in research as an investigator in clinical trials at Wellington Hospital and at Bowen Icon Cancer Centre. He is also an active member of the American Society of Clinical Oncology, the European Society of Medical Oncology, the Society of Geriatric Oncology, and a Fellow of the Royal College of Physicians in London.

Real-world patterns of post-progression treatment and outcomes in patients with HR+/HER2- advanced breast cancer treated with CDK4/6 inhibitors

Authors: Torrisi R et al.

Summary: This retrospective study examined patterns of post-progression outcomes in 452 patients (325 first line) with hormone receptor positive (HR+)/HER2- advanced breast cancer receiving endocrine therapy and a CDK4/6 inhibitor. Median PFS was 22.8 months; 29.7 months in the first-line setting. Multivariate analysis suggested that factors associated with outcomes included line of CDK4/6 inhibitor, *de novo* versus recurrent disease, visceral versus bone-only metastases, and primary endocrine resistance. Overall, 300 patients progressed with 250 patients receiving subsequent treatment (156 in the first-line cohort). A greater likelihood of receiving anthracycline or taxanes versus endocrine therapy with or without everolimus was associated with visceral progression and CDK4/6 inhibitor duration <12 months. Post-progression PFS and post-progression OS were better with endocrine therapy with or without everolimus and capecitabine over anthracycline or taxanes overall and in patients with visceral progression. Multivariate analysis indicated a benefit for endocrine therapy with or without everolimus and capecitabine, while visceral progression was significant only for post-progression OS. Capecitabine had better post-progression OS versus other treatments after progression to first post-CDK4/6 inhibitor treatment.

Comment (DO): There is no single ultimate second-line treatment recommendation for patients with HR+/HER2- advanced breast cancer who have received CDK4/6 inhibitors plus endocrine therapy in the first or second line. Furthermore, there has been a recent explosion of biomarker-driven treatment options in this space, often combining targeted therapy with endocrine therapy in a bid to overcome evolving resistance mechanisms triggered by patients' previous hormonal therapy-based treatment. However, these novel combinations are expensive. None are Pharmac approved and only a few are Medsafe licensed. This Italian retrospective series is in a real-world setting not too dissimilar to ours in New Zealand; therefore, this paper is quite relevant to our contemporary clinical practice. In this series, the choice of therapy was influenced by treatment duration on prior first-line CDK4/6 and the site of progression. Thus, those with a CDK4/6 inhibitor treatment duration of ≥12 months often received a further line of endocrine therapy; meanwhile, those with <12 months previous CDK4/6 inhibitor treatment duration would receive capecitabine chemotherapy if they had bone-only disease, whereas in those with visceral disease, anthracycline or taxane was favoured. Of particular note, a long CDK4/6 inhibitor treatment duration ≥12 months was associated with a favourable post-progression OS compared to <12 months (median approx. 28 months vs approx. 20 months); on the other hand, visceral progression was associated with an unfavourable post-progression OS. **Key statement: Duration of benefit with CDK4/6 inhibitor may be a surrogate for endocrine therapy sensitivity. Those with a duration of <12 months were not only more likely to receive chemotherapy post-progression but also have a poorer post-progression OS compared to those with a prior CDK4/6 inhibitor treatment duration of ≥12 months.**

Reference: Oncologist 2026;31(3):oyag003
Abstract

Concomitant radiation therapy and trastuzumab deruxtecan in metastatic breast cancer: Feasibility, safety, and outcomes from a real-life multicentre international cohort

Authors: Visani L et al.

Summary: This European, multinational, retrospective study assessed the use of trastuzumab deruxtecan concomitantly administered with or without radiation therapy (RT; most frequently [54.9%] to the central nervous system [CNS]) in 147 patients (median age 49 years) with metastatic breast cancer. Grade ≥3 adverse events occurred in 16.3 % of patients, with no difference between those receiving or not receiving RT (11.9 % vs 20.0%, respectively). Trastuzumab deruxtecan was permanently discontinued as a result of toxicity in 12.9% (RT recipients 11.9% vs and non-RT recipients 13.8%; non-significant). There was one case of symptomatic radionecrosis after intracranial RT. No adverse effect of concomitant RT was observed for PFS or OS.

Comment (DO): Trastuzumab deruxtecan improved OS in both HER2+ and HER2-low metastatic breast cancer, whether given as an early or later line of therapy and irrespective of the presence or absence of intracranial metastases. Therefore, it is likely that such patients who are living longer as a consequence of ongoing trastuzumab deruxtecan may, in their future disease course, require concomitant palliative RT for symptomatic relief or targeted high-dose ablative RT for oligoprogressive disease, especially in the brain. Therefore, it is important to understand whether such an approach is safe, hence the clinical relevance of this moderately sized, real-life, retrospective 147 patient, multinational, case-control study. Just under 50% of the cohort received RT immediately before or during trastuzumab deruxtecan administration; approximately 55% received RT to the CNS, with approximately 54% receiving ablative doses. Interesting, only one case of symptomatic CNS radionecrosis was reported, which is in stark contrast to the recent large pooled meta-analysis data suggesting a substantially increased risk with concomitant CNS-directed RT and trastuzumab deruxtecan (Sarfraz Z et al., J Clin Oncol. 2025). On the other hand, concomitant RT to lung metastases did not appear to increase rates of ILD, though the treated numbers were small (only 7 patients in both RT and non-RT cohort). **Key statement: This is the largest published retrospective case-control study thus far evaluating concomitant RT and trastuzumab deruxtecan in metastatic breast cancer. Although, it suggests that this approach is safe and feasible, the results ought to be interpreted with caution.**

Reference: Breast 2026;85:104691
Abstract

Ten-year survival after postmastectomy chest-wall irradiation in breast cancer

Authors: Kunkler IH et al., for the SUPREMO Trial Investigators

Summary: This multinational, randomised, phase III trial examined the inclusion (n = 808) or omission (n = 799) of chest-wall irradiation in women with intermediate-risk breast cancer treated with mastectomy, an axillary procedure, and systemic therapy. Over a median follow-up of 9.6 years, OS was 81.4% with chest-wall irradiation versus 81.9% with no chest-wall irradiation based on 10-year Kaplan-Meier estimates (HR 1.04; 95% CI 0.82-1.30). Overall, 29 patients had a chest-wall recurrence, 1.1% with irradiation and 2.5% without (HR 0.45; 95% CI 0.20-0.99). DFS survival was 76.2% versus 75.5% (HR 0.97; 95% CI 0.79-1.18), and distant metastasis-free survival was 78.2% and 79.2% (HR 1.06; 95% CI 0.86-1.31).

Comment (AP): Postmastectomy RT for intermediate-risk breast cancer (especially pN1 or high-risk pN0) has long been a grey area in our New Zealand practice, with guidelines and real-world use varying widely between centres. This large, international phase III trial (SUPREMO; n = 1607) randomised women with intermediate-risk, early breast cancer (pT1-3N1 or pT2-3N0 with grade 3 or lymphovascular invasion) to chest-wall irradiation or no irradiation after mastectomy and contemporary systemic therapy. At 10 years, OS was virtually identical (81.4% vs 81.9%), and DFS and distant metastasis-free survival were also similar. Chest-wall recurrence was lower with irradiation (1.1% vs 2.5%), but the absolute difference was less than 2%. In my experience, we often err on the side of caution and recommend chest-wall irradiation for most pN1 patients, especially if they're younger or have other risk factors. However, this study suggests that with modern systemic therapy, the absolute benefit for local control is small and does not translate into a survival advantage. The low recurrence rates in both arms are reassuring, but it's worth noting that the trial included a broad international population, and practice patterns (including systemic therapy use) may differ from what we see in Aotearoa. The biggest issue for me is that, while the study is robust and pragmatic, it doesn't provide granular subgroup data for Māori and Pasifika women, who often present with more aggressive disease and may have different recurrence risks. Additionally, the trial's follow-up, while long, may still underestimate late cardiac or recurrence rates, as well as secondary cancer risks from RT, which are particularly relevant for our younger patients. **Key statement: For most women with intermediate-risk breast cancer in Aotearoa, chest-wall irradiation after mastectomy offers minimal survival benefit, so a more individualised, patient-centred approach is justified.**

Reference: N Engl J Med. 2025;393(18):1771-1783
Abstract

Impact of population based breast density notification: Multisite parallel arm randomised controlled trial in BreastScreen

Authors: Nickel B et al.

Summary: This multicentre, parallel-arm RCT assessed data from an Australian population-based breast screening programme to determine the effect of notifying (notification of breast density plus written health literacy sensitive information [LIT 1], or link to online video-based health literacy sensitive information [LIT 2]) or not notifying 2401 women that they have mammographically dense breasts on psychosocial outcomes and health service use intentions. Women notified about their dense breasts felt more anxious (LIT 1 OR 1.30, 95% CI 1.08-1.57; LIT 2 OR 1.28; 95% CI 1.07-1.54) and confused (LIT 1 OR 1.92; 95% CI 1.58-2.33; LIT 2 OR 1.76; 95% CI 1.46-2.13) and had greater intention to talk to a GP about the screening results (LIT 1 relative risk ratio [RRR] 2.08; 95% CI 1.59-2.73; LIT 2 RRR 1.71; 95% CI 1.31-2.25) and to rely on the GP for supplemental screening advice (LIT 1 RRR 2.61; 95% CI 1.80-3.79; LIT 2 RRR 2.29; 95% CI 1.58-3.33). Most women did not intend to have supplemental screening (control 91.3%; LIT 1 78.9%; LIT 2 81.4%). Women who were notified about their breast density reported that they did not feel more informed (LIT 1 OR 0.83; 95% CI 0.68-1.01; LIT 2 OR 0.80; 95% CI 0.66-0.97).

Comment (AP): Breast density notification is a hot topic in Aotearoa, with growing pressure to follow the US and Australia in telling women if they have dense breasts after screening. In practice, we're already fielding more questions from women about what breast density means and whether they need extra tests. This multicentre, parallel-arm, RCT from Queensland, Australia (n = 2401) looked at the psychosocial impact and health service intentions of notifying women about their breast density as part of routine screening. Women with dense breasts were randomised to standard care (no notification), notification plus written information, or notification plus a video link. Compared to the control group, women who were notified felt more anxious (OR 1.30-1.28) and confused (OR 1.92-1.76), and were more likely to intend to see their GP about their results (RRR 2.08-1.71). However, most did not plan to seek extra screening, and those who were notified did not feel more informed to make decisions about their breast health. In my experience, many women in New Zealand are already confused about breast density, and GPs are often left to pick up the pieces without clear guidelines or funded pathways for supplemental imaging. This study really highlights the risk of increasing anxiety and health system burden without actually empowering women or improving outcomes. The increased confusion and reliance on GPs is a real concern, especially given the current strain on primary care. The biggest issue for me is that, while the study is well-designed and relevant, it doesn't address how notification might play out for Māori and Pasifika women, who already face barriers to screening and follow-up. There's also no data on whether notification actually leads to earlier cancer detection or improved survival, which is what really matters at the end of the day. **Key statement: Breast density notification should be paired with robust GP education and equitable access to follow-up imaging in Aotearoa, or we risk adding confusion and pressure to our health system without improving outcomes for women, especially those already facing barriers to care.**

Reference: BMJ. 2025;391:e083649
Abstract

INDEPENDENT COMMENTARY BY

Dr Aleksandra Popadich
BSc, MBChB, FRACS (General Surgery)

Dr Alex Popadich is a Breast, Endocrine and General Surgeon based in Wellington, working from Wakefield and Boulcott hospitals. Her main focus is surgical treatment of breast cancers and management of thyroid and parathyroid conditions. She is a member of the American Society of Breast Surgeons, the International Association of Endocrine Surgeons, the Australian and New Zealand Endocrine Surgeons and ANZ Breast Surgeons. Alex is also a senior lecturer at the University of Otago School of Medicine where she is actively involved in teaching medical students as well as in research.

The impact of breast density notification on interval cancer rates

Authors: Stone J et al.

Summary: This study used data from the BreastScreen Western Australia database (401,254 screening records for 235,333 clients) to examine interval cancer detection rates by breast density notification status and timing of diagnosis (0-12 vs 13-24 months). Overall, interval cancer rates were two- to six-fold higher in patients informed that they had dense breasts versus those not informed. Informed patients had higher 2016-18 age-standardised interval cancer rates (ASR) in the first year (28.2 per 10,000 client-years; 95% CI 12.9-66.0) versus the second year (20.6 per 10,000 client-years; 95% CI 13.2-55.8), particularly among those screening for the first time (ASR 32.7 per 10,000 client-years; 95% CI 6.9-111.2 vs 18.2 per 10,000 client-years; 95% CI 5.9-92.0). Rates for 2017-19 were similar (ASRs: 17.6 per 10,000 client-years; 95% CI 12.9-34.2 vs 15.7; 95% CI 11.0-35.5).

Comment (AP): In practice, we're already seeing more women asking about what breast density means for their cancer risk and whether they need extra tests, but the real-world impact of notification on outcomes and the health system is still unclear. This large, population-based study from Western Australia analysed over 400,000 screening records and compared interval cancer rates between women who were notified of having dense breasts and those who were not. The key finding was that interval cancer rates were two- to six-fold higher in women notified as having dense breasts, and that these rates were at least as high, if not higher, in the first 12 months after screening compared to 13-24 months. This pattern was particularly pronounced in women attending for their first screen. The authors suggest that notification may prompt earlier GP visits and possibly earlier diagnosis of interval cancers. A recent study from Australia has shown that detection of interval cancers and cancers in women who did not participate in breast screening leads to worse prognosis and more treatment (Edwards M et al., Ann Surg Oncol. 2025). So far, there is no RCT that shows survival benefit of more intense imaging, but some modelling studies suggest a possible improvement in survival. The biggest issue for me is that, while the study is robust and provides valuable real-world data, it doesn't address how notification might play out for Māori and Pasifika women, who already face barriers to screening and follow-up. **Key statement: Breast density notification may prompt earlier cancer detection, but without robust GP education and equitable access to follow-up imaging in Aotearoa we risk overloading our system and widening disparities; personalised, well-supported implementation is essential.**

Reference: J Med Imaging Radiat Oncol. 2026;Jan 21 [Epub ahead of print]
Abstract

Pathologic complete response rates in early-stage human epidermal growth factor 2 (HER2)-positive breast cancer treated with neoadjuvant chemotherapy and anti-HER2 therapy: A real-world experience

Authors: Mokfi R et al.

Summary: This retrospective study examined pCR rates and clinicopathological factors associated with improved response and survival in 140 patients (median age 49.5 years) with early HER2+ breast cancer (41.4% stage II; 58.6% stage III; 55% HR+) who received neoadjuvant anti-HER2 chemotherapy. After curative surgery, pCR was achieved in 51.4% of patients. Multivariate analysis identified independent predictors of pCR including age <50 years ($p = 0.043$), lymph node involvement ($p < 0.001$), cancer classified as nuclear grade 3 ($p < 0.001$), and antigen Kiel 67 (Ki67) ≥35% ($p < 0.001$). The 3-year PFS rate was 95.5% (95% CI 92.0-99.1) and the 3-year OS rate was 98.4% (95% CI 96.2-100). Patients achieving pCR had longer 3-year PFS versus those who did not (98.6% vs 92.3%; $p = 0.027$). The most frequent adverse events were fatigue (65.7%), anaemia (65.7%), and nausea/vomiting (55%). The most common grade 3/4 adverse events were fatigue (15.7%), nausea/vomiting (9.3%), and anaemia (7.8%); cardiac toxicity occurred in 7.1% of patients.

Comment (AP): Achieving pCR after neoadjuvant therapy is a key goal in early-stage HER2+ breast cancer, as it's strongly linked to better long-term outcomes. In New Zealand, we're increasingly using dual anti-HER2 therapy with chemotherapy in the neoadjuvant setting, but real-world data, especially outside of clinical trials, are still limited. This retrospective study from Morocco included 140 women with early-stage HER2+ breast cancer treated with neoadjuvant chemotherapy and anti-HER2 therapy between 2018 and 2022. The pCR rate was 51.4%, with younger age (<50 years), lymph node involvement, high tumour grade, and high Ki-67 all independently predicting higher pCR rates. Three-year PFS and OS were excellent (95.5% and 98.4%), and patients who achieved pCR had better PFS. In my experience, these pCR rates are in line with what we see in New Zealand, especially when dual anti-HER2 therapy is available. However, access to pertuzumab can still be variable across the country, and not all patients are able to receive the full recommended regimen. The biggest issue for me is that, while the study provides valuable real-world data, it's retrospective and from a single centre, so there's always a risk of selection bias and missing data. There's also no breakdown by ethnicity or socioeconomic status. The lack of long-term follow-up beyond 3 years also means we can't draw firm conclusions about late recurrences or survival. **Key statement: Dual anti-HER2 therapy with neoadjuvant chemotherapy achieves high pCR rates and excellent short-term outcomes, but in Aotearoa we must focus on equitable access and long-term follow-up, especially for Māori and Pasifika women, to ensure these benefits reach all our patients.**

Reference: Cureus 2025;17(12):e99779
Abstract

Impact of the interruption of tamoxifen for pregnancy on the recurrence and survival outcomes among young women with breast cancer

Authors: Cha CD et al.

Summary: This retrospective cohort study used data from the Korean National Health Insurance Service National Health Information Database to evaluate the impact of interrupting and resuming tamoxifen for pregnancy on recurrence and mortality in 32,378 women with invasive breast cancer treated with surgery (Group 1 interruption and resumption of tamoxifen [n = 126]; Group 2 interruption without resumption [n = 261]; Group 3 tamoxifen initiation after childbirth [n = 41]; control no interruption nor pregnancy [n =428]). After a median 8.5-year follow-up, Group 1 (HR 0.41; 95 % CI 0.22-0.76; $p = 0.005$) and Group 2 (HR 0.30; 95 % CI 0.18-0.50; $p < 0.001$) had lower risk of recurrence than controls. Multivariate analysis suggested that Group 2 also had better survival outcomes than controls (HR 0.18; 95% CI 0.08-0.41; < 0.001). Groups 1 and 2 had higher rates of full-term pregnancies, but Group 3 had a higher rate of abortion (23.8 % and 23.4 % vs 56.1 %, respectively).

Comment (AP): Fertility and pregnancy after breast cancer are increasingly important issues for our younger patients in Aotearoa, especially as more women are diagnosed at a younger age and want to plan for a family after treatment. The question of whether it's safe to interrupt tamoxifen to allow pregnancy is one that comes up often in clinic, but until recently, the evidence has been limited and mostly from overseas. This large, retrospective Korean cohort study looked at over 32,000 women aged 18-45 years with invasive breast cancer, focusing on those who interrupted tamoxifen for pregnancy and either resumed or did not resume therapy afterwards. Over a median follow-up of 8.5 years, women who interrupted tamoxifen for pregnancy, whether or not they resumed it, had lower risks of recurrence and mortality compared to age-matched controls who did not interrupt therapy or become pregnant. Full-term pregnancy rates were higher in those who interrupted tamoxifen, and abortion rates were lower compared to women who started tamoxifen only after childbirth. In my experience, many young women in New Zealand are understandably anxious about the risks of pausing tamoxifen, and we often have to balance the potential oncological risks with the very real desire for a family. These results are reassuring and align with the recent POSITIVE trial, suggesting that a carefully planned interruption of tamoxifen for pregnancy may be a safe option for selected women. However, it's important to remember that this is a retrospective study, and there may be selection bias; women who are well enough to consider pregnancy may already have a better prognosis. The biggest issue for me is that the study doesn't provide detail on tumour biology, ethnicity, or socioeconomic status, which are all highly relevant in our New Zealand context, particularly for Māori and Pasifika women who may have different risk profiles and face more barriers to fertility services and follow-up. **Key statement: Interrupting tamoxifen for pregnancy appears safe for selected young women.**

Reference: Breast 2026;85:104675
Abstract

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