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Results: Two patients did not have an echocardiogram before starting treatment and an additional two patients had inadequate views to assess left ventricular ejection fraction (LVEF). 39/50 patients (78%) received anthracycline chemotherapy prior to anti-HER2 therapy and 16/39 (41%) had repeat echocardiograms after anthracycline exposure as recommended. 9/50 patients (18%) experienced a reduction in LVEF of ≥ 10 points during treatment. One patient was symptomatic and two patients discontinued therapy early. Three patients were discussed at the echocardiogram MDT and six patients had specialist cardiology input. Five patients were prescribed ACE inhibitors and three patients commenced beta blockers. Reduction in LVEF triggered an earlier repeat echocardiogram after 6–8 weeks in one patient.

Conclusion: These results demonstrate significant variation and lack of compliance with guidelines in the current baseline cardiac assessment, monitoring and management of patients on anti-HER2 therapy.

Together with a consultant cardiologist and senior cardiac physiologist, we plan to present these results locally and develop a dedicated cardio-oncology pathway to standardise patient care. The European Society of Cardiology position paper regarding the role of cardiovascular imaging in cancer patients receiving cardiotoxic therapies will be used as a framework [3].

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Breast Radiotherapy Consent Process in Kent Oncology Centre – a Patient's Perspective

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Purpose: Due to the COVID-19 pandemic, many oncology appointments became remote [1]. Consequently, consultations to discuss and consent for radiotherapy (RT) adopted a mix of face-to-face (F2F), video (V) and telephone (T) settings [2]. This service evaluation explored patients' appointment and consent process experiences.

Methods: Patient perspectives following breast RT consent consultations were prospectively collected using a peer-reviewed anonymised questionnaire provided on RT planning day (5 May to 12 July 2021) in Kent. Views on satisfaction with consultation setting (F2F, V or T), quality and clarity of information, support received and recommendations to future patients were sought.

Results: 55 women, aged 39–88 years (median 60.5) participated. F2F consultations predominated (64%) followed by T (31%) and V (4%). One patient received V and F2F. Only 10/55 (18%) patients were offered a choice of consultation setting, with 7 (70%) electing F2F. Overall patient satisfaction was high, but 'very satisfied' scores differed considerably between F2F and non-F2F consultations. 94% versus 63% were very satisfied with the consultation setting, 94% versus 84% with information amount, 89% versus 79% with information clarity, 100% versus 84% with the ability to ask questions, 94% versus 74% with perceived support and 92% versus 63% with the overall consent process, for F2F and non-F2F patients, respectively.

46 (84%) patients recommended F2F to others; 5 (9%) recommended T; none recommended V. Of 19 patients receiving T or V consultations, most (11 [58%]) recommended F2F.

Conclusion: Breast radiotherapy consultations continued mostly F2F, but a third of appointments were T or V, reflecting COVID-19 measures. Reassuring levels of patient satisfaction with most key aspects of the consultation were reported, but higher when F2F. Only a minority of patients had a choice of

consultation setting, preferring F2F when offered the choice. Most non-F2F patients would recommend F2F appointments to others. This highlights that future service planning should not be reliant on tele-medicine, as measures adopted in the pandemic may not be ideal to patients post-pandemic.

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Beyond First Line CDK4/6 Inhibitors (CDK4/6i) and Aromatase Inhibitors (AI) in Patients with Oestrogen Receptor Positive Metastatic Breast Cancer (ER+ MBC): The Guy's Cancer Centre Experience

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Purpose: The optimal treatment strategy following progression on first line (1L) CDK4/6i and AI in patients with ER+ MBC is uncertain [1]. We performed a single-institution retrospective review of patients who received 1L CDK4/6i to assess prescribing patterns and clinical responses to post-CDK4/6i treatment.

Methods: We identified 157 patients with ER+ HER2– MBC who received 1L CDK4/6i and AI treatment at Guy's Cancer Centre and three network hospitals between 1 February 2020 and 1 February 2021. Epidemiological and clinical data were collected, and a statistical analysis was performed (GraphPad Prism v9.2.0).

Results: At the point of data analysis, 57/157 (36%) patients had discontinued 1L CDK4/6i and AI, mostly due to disease progression (39/57 patients). 38 patients proceeded to second line (2L) therapy, of which 22 (58%) received chemotherapy (11 paclitaxel; 11 capecitabine), 12 (32%) endocrine treatment (ET) (7 fulvestrant; 4 exemestane/everolimus; 1 tamoxifen) and 4 (11%) other treatment or participated in clinical trials. Only 3 patients underwent next generation sequencing and none was identified with a PIK3CA mutation. The median PFS on 2L treatment (PFS2) was 23.4 (chemotherapy) versus 17.2 weeks (ET) (HR 0.57, 95% CI 0.17–1.92, $P = 0.27$). Of note, patients receiving 2L chemotherapy had progressed sooner on 1L CDK4/6i compared with patients receiving 2L endocrine treatment (PFS1 63.7 versus 89.7 weeks, HR 1.94, 95% CI 0.96–3.93, $P = 0.06$). Patients on 2L ET with fulvestrant achieved longer PFS compared with exemestane/everolimus (PFS2 not reached versus 10.9 weeks, respectively, HR 6.9, 95% CI 0.81–58.2, $P = 0.05$), although this observation was based on a very small sample.

Conclusion: Subsequent single or combination-based endocrine and chemotherapy strategies post-CDK4/6i are based on previous clinical trials that did not incorporate previous exposure to CDK4/6i. Recent studies encourage genomic screening and use of PI3K inhibitors [2], but further data on responses to subsequent treatment lines are needed to optimise the sequence of treatments and maximise the time to chemotherapy.

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Impact of the COVID-19 Pandemic in Treating Breast Cancer (BC) Patients Receiving Systemic Anti-cancer Treatment (SACT): The Guy's Cancer Centre Experience

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Purpose: The COVID-19 pandemic transformed cancer care, with oncologists trying to balance the benefits of SACT against the risk of COVID-19 infection and mortality. Our study compares the demographic and treatment characteristics of BC patients treated at Guy's Cancer Centre during the first wave of the pandemic with the same period in 2019.

Methods: We conducted a retrospective analysis of all BC patients who received SACT from 1 March 2020 until 31 May 2020 and compared the demographic (age, ethnicity, socioeconomic and performance status), cancer (stage) and SACT characteristics (type, intent and line of treatment) with those from the same period in 2019.

Results: In 2020, 571 BC patients received SACT during the study period, compared with 595 in 2019. Demographic characteristics were equally balanced between both years. The cancer stage, type of treatment and treatment paradigm were also similar (stage I–III: 49.8% versus 50.9%; chemotherapy: 29.8% versus 30.8%; palliative treatment: 49.9% versus 46.6%, in 2020 and 2019, respectively). However, a larger proportion of patients received first-line palliative treatment in 2020 compared with 2019 (38.6% versus 14.8%). The overall mortality rate was 3.15% in 2020 versus 4.36% in 2019. 11 BC patients were diagnosed with COVID-19 in 2020. From these patients, 10 were receiving chemotherapy and 7 were treated with palliative intent. 9 patients developed severe pneumonia and there was 1 COVID-19-related death.

Conclusion: Our study shows that there were no significant differences in patient characteristics during the first wave of the pandemic, compared with a similar period in 2019, although numerically fewer patients were treated in 2020 and there was a focus on first-line palliative treatment, rather than subsequent lines. Moreover, it demonstrated that SACT during the pandemic was relatively safe. However, this study might not reflect the decrease in the number of new referrals owing to the pandemic.

Preparing Breast Cancer Patients for Radiotherapy Treatment in the COVID-19 Era

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Purpose: Undergoing radiotherapy treatment for breast cancer can be a daunting and anxiety-provoking experience. Evidence shows that empowering patients with education prior to commencing treatment can have a positive impact on their anxiety levels [1,2]. We aimed to educate this patient cohort through the development of a video to reinforce information delivered at consultation regarding the treatment process and side-effects of breast radiotherapy.

Methods: We created a patient information video in collaboration with breast cancer patients, which is available to view on the Royal Free Hospital Trust website via the following link: <https://www.youtube.com/watch?v=58YtVyVsNlc&t=38s>. Audits were carried out to assess patient satisfaction and anxiety levels in breast cancer patients receiving radiotherapy before and after implementation of the video.

Results: Pre-video implementation data ($n = 25$): 36% (9/25) of patients reported feeling anxious about starting radiotherapy, 28% had neutral feelings and 36% had no anxiety. 68% (17/25) of patients felt they would benefit from an educational video. Post-video implementation data ($n = 29$): 72% of patients (21/29) watched the video, 95% of patients (20/21) would recommend the video to other patients, 85% found it helped prepare them for what to expect from radiotherapy, 33% (7/21) felt the video reduced their anxiety levels. Data collected post-onset of the COVID-19 pandemic in UK ($n = 15$): 66% of patients felt COVID-19 has negatively impacted their cancer treatment. The proportion of patients who watched the video increased from 58% to 80% pre- and post-onset of the COVID-19 pandemic.

Conclusion: Our video has been viewed 18 354 times at the time of writing, showing very encouraging patient engagement. It is an effective method of preparing a vulnerable population for radiotherapy from the safety of their

own home during the COVID-19 pandemic. Although only 33% felt it improved their anxiety levels, only 36% of patients had anxiety regarding treatment at any point.

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Adjuvant Endocrine Therapy for Pre-menopausal Women with Hormone Receptor Positive Early-stage Breast Cancer

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Purpose: Randomised trials of ovarian function suppression (OFS), with or without an aromatase inhibitor (AI) or tamoxifen, in pre-menopausal women with hormone positive early-stage breast cancer have shown conflicting results [1–3]. Uncertainty about optimal treatment may lead to variable prescribing in clinical practice.

Methods: Using electronic patient records, we conducted a retrospective audit of 133 consecutive patients prescribed adjuvant endocrine therapy from 2 January 2020 to 31 December 2020 at Bristol Haematology and Oncology Centre. Post-menopausal women and those with metastatic disease were excluded. Age, American Joint Committee on Cancer staging, tumour grade, receptor status and adjuvant chemotherapy treatments [4,5] were recorded as covariates.

Results: 112 patients were included in the study, with a median age of 44 years (IQR 40–47). 66.1% (74/112) received adjuvant chemotherapy, of whom 59.5% (44/74) were prescribed OFS. Of these, 75% also received an AI and 25% tamoxifen. 10/38 (26.3%) patients who did not receive chemotherapy were prescribed OFS with a similar proportional split between AI and tamoxifen (80% and 20%, respectively). OFS prescribing by age was: <35 years 8/8 (100%); 35–39 years 11/16 (68.8%); 40–44 years 18/37 (48.6%); 45–50 years 16/51 (31.4%). In stage I and II patients, OFS was used in 25.6% (10/39) and 49.0% (25/51), respectively, compared with 81.8% (18/22) in stage III (AI use with OFS: 70% (7/10), 92% (23/25) and 61.1% (11/18), respectively). There was little variation in rates of OFS or AI prescribing by HER-2 status.

Conclusion: There was greater prescribing of OFS in pre-menopausal women with higher stage breast cancer. These women were also more likely to have received chemotherapy. The use of OFS and choice of AI or tamoxifen was not affected by HER-2 status. We saw variation in prescribing according to treating physician, highlighting the requirement for local guidelines in the management of these patients.

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